



**Australian Government**

# **ACM10 Animal Care and Management**

**Release: 1.0**

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<b>SIRXMER004A Manage merchandise and store presentation .....</b>	<b>1914</b>
<b>TAADEL403A Facilitate individual learning.....</b>	<b>1922</b>
<b>TAADEL404B Facilitate work-based learning .....</b>	<b>1948</b>

## Modification History

### Version Modification History

Version	Release Date	Comments
1		Primary release

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## Preliminary Information

### Important Note to Users

Training Packages are not static documents; they are amended periodically to reflect the latest industry practices and are version controlled. It is essential that the latest version is always used.

### Check the version number before commencing training or assessment

This Training Package is Version 1 - check whether this is the latest version by going to the National Training Information Service ([www.ntis.gov.au](http://www.ntis.gov.au)) and locating information about the Training Package. Alternatively, contact AgriFood Skills Australia at <http://www.agrifoodskills.net.au> to confirm the latest version number.

### Explanation of version number conventions

The primary release Training Package is Version 1. When changes are made to a Training Package, sometimes the version number is changed and sometimes it is not, depending on the extent of the change. When a Training Package is reviewed it is considered to be a new Training Package for the purposes of version control, and is Version 1. Do not confuse the version number with the Training Packages national code (which remains the same during its period of endorsement).

### Version modification history

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	Release Date	Comments
1	11 November 2010	Primary release

ACM10 Animal Care and Management Training Package replaces and supersedes RUV04 Animal Care and Management Training Package.

## List of AQF Qualifications

### List of AQF Qualifications



<b>Qualification Code</b>	<b>Title</b>
ACM10110	Certificate I in Animal Studies
ACM20110	Certificate II in Animal Studies
ACM30110	Certificate III in Animal Studies
ACM30210	Certificate III in Animal Technology
ACM30310	Certificate III in Captive Animals
ACM30410	Certificate III in Companion Animal Services
ACM30510	Certificate III in Farriery
ACM40110	Certificate IV in Animal Control and Regulation
ACM40210	Certificate IV in Captive Animals
ACM40310	Certificate IV in Companion Animal Services
ACM40410	Certificate IV in Veterinary Nursing
ACM50110	Diploma of Animal Technology
ACM50210	Diploma of Veterinary Nursing (Surgical)
ACM50310	Diploma of Veterinary Nursing (Dental)
ACM50410	Diploma of Veterinary Nursing (Emergency and Critical Care)

## List of ALL Units within Training Package

Units of competency in this Training Package and their prerequisites

Note – the prerequisite column is only displayed if prerequisites exist.

<b>Code</b>	<b>Title</b>
ACMACR401A	Comply with animal control and regulation requirements
ACMACR402A	Assess and impound animals

ACMACR403A	Identify and respond to animal behaviour
ACMACR404A	Manage conflict situations within an animal control and regulation environment
ACMACR405A	Euthanase sick, injured or unwanted pound animals
ACMACR406A	Carry out pound procedures
ACMACR407A	Conduct community awareness programs
ACMACR408A	Coordinate seizure of animals
ACMACR409A	Prepare and present animal control and regulation case
ACMATE301A	Work within an animal technology facility
ACMATE302A	Carry out institution containment and exclusion procedures
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ACMATE304A	Conduct non-surgical procedures on animals
ACMATE305A	Conduct euthanasia of research animals
ACMATE501A	Manage compliance in animal technology
ACMATE502A	Manage and maintain the health of research animals
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ACMATE507A	Manage the parturition of transgenic mice or rats
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ACMCAN305A	Assist with capturing, restraining and moving animals

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ACMCAN307A	Rehabilitate native wildlife
ACMCAN308A	Release native animals to natural environment
ACMCAN309A	Develop institutional husbandry guidelines
ACMCAN310A	Assist with exhibit design and renovation planning
ACMCAN311A	Care for young animals
ACMCAN401A	Implement collection management
ACMCAN402A	Manage enclosures and exhibits
ACMCAN403A	Develop animal diets
ACMCAN404A	Develop, monitor and review behavioural management strategies
ACMCAN405A	Design and evaluate interpretive and learning programs
ACMCAN406A	Assist in establishing and maintaining a plantation
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ACMCAN502A	Develop and monitor collection management
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ACMCAS302A	Provide advice on companion animal selection and general care
ACMCAS303A	Provide advice on selection and care of aquatic animals
ACMCAS304A	Capture, handle and transport companion animals
ACMCAS305A	Maintain aquascapes and aquatic animals
ACMCAS306A	Provide grooming services for companion animal comfort
ACMCAS307A	Provide companion animal hydro-bathing services
ACMCAS401A	Manage compliance in the companion animal industry
ACMCAS402A	Manage and maintain aviaries and bird rooms

ACMCAS403A	Design, construct and maintain aquascapes
ACMCAS404A	Develop enrichment strategies for companion animals
ACMCAS405A	Purchase companion animal livestock
ACMCAS406A	Manage companion animal breeding
ACMCAS407A	Provide professional companion animal grooming services
ACMCAS408A	Manage the operation of a mobile hydro-bathing facility
ACMCAS409A	Provide training advice to companion animal owners
ACMCAS410A	Conduct companion animal training classes
ACMFAR301A	Handle horses safely in the provision of farriery services
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ACMFAR310A	Fit shoes to alleviate moderate faults and defects in horses
ACMFAR311A	Fit shoes to alleviate severe faults and defects in horses
ACMFAR312A	Accommodate special needs of particular horses through farriery techniques
ACMGAS101A	Investigate job opportunities in animal care and related industries
ACMGAS102A	Catch and handle a range of quiet animals
ACMGAS103A	Assist in the care of animals

ACMGAS201A	Work in the animal care industry
ACMGAS202A	Participate in workplace communications
ACMGAS203A	Complete animal care hygiene routines
ACMGAS204A	Feed and water animals
ACMGAS205A	Assist in health care of animals
ACMGAS206A	Provide basic first aid for animals
ACMGAS207A	Provide reception services for an animal care facility
ACMGAS208A	Source information for animal care needs
ACMGAS209A	Provide information on companion animals, products and services
ACMGAS210A	Prepare for and conduct a tour or presentation
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMGAS304A	Carry out simple breeding procedures
ACMGAS305A	Rescue animals and apply basic first aid
ACMGAS306A	Assist with conditioning animals
ACMINF301A	Comply with infection control policies and procedures in animal work
ACMMIC401A	Implant microchip in cats and dogs
ACMOHS201A	Participate in occupational health and safety processes
ACMOHS301A	Contribute to occupational health and safety processes
ACMOHS401A	Maintain occupational health and safety processes
ACMOHS501A	Manage occupational health and safety processes
ACMSPE301A	Provide basic care of amphibians

ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
ACMSUS201A	Participate in environmentally sustainable work practices
ACMSUS301A	Implement and monitor environmentally sustainable work practices
ACMVET201A	Carry out veterinary nursing reception duties
ACMVET202A	Carry out daily clinic routines
ACMVET203A	Assist with surgery preparation
ACMVET401A	Coordinate patient admission and discharge
ACMVET402A	Apply imaging routines
ACMVET403A	Perform clinic pathology procedures
ACMVET404A	Perform clinic office procedures
ACMVET405A	Carry out surgical nursing routines
ACMVET406A	Nurse animals
ACMVET407A	Carry out medical nursing routines
ACMVET408A	Coordinate and perform theatre routines

ACMVET409A	Provide specific animal care advice
ACMVET410A	Carry out veterinary dental nursing procedures
ACMVET411A	Prepare, deliver and review animal care education programs
ACMVET412A	Coordinate clinic promotional activities
ACMVET413A	Develop and implement specific clinic policies
ACMVET501A	Manage nursing requirements for specialised surgical procedures
ACMVET502A	Carry out post-operative nursing routines
ACMVET503A	Produce veterinary dental oral cavity radiographs
ACMVET504A	Provide veterinary dental nursing support for advanced veterinary dental surgery
ACMVET505A	Prepare for emergency response
ACMVET506A	Perform emergency procedures to sustain life
ACMVET507A	Provide nursing support for critical care surgery

### Imported units of competency in this Training Package

Code	Title	Origin
BSBFLM309C	Support continuous improvement systems and processes	BSB07
BSBFLM312B	Contribute to team effectiveness	BSB07
BSBHRM506A	Manage recruitment selection and induction processes	BSB07
BSBINM301A	Organise workplace information	BSB07
BSBRES401A	Analyse and present research information	BSB07
BSBSMB403A	Market the small business	BSB07
BSBSMB405A	Monitor and manage small business operations	BSB07
BSBSMB407A	Manage a small team	BSB07

BSBWOR402A	Promote team effectiveness	BSB07
HLTFA301B	Apply first aid	HLT07
LGAEHRR304B	Operate council pound facilities	LGA04
LGAPLEM405C	Provide assistance in carrying out building inspections	LGA04
MEM05004C	Perform routine oxy acetylene welding	MEM05
MEM05012C	Perform routine manual metal arc welding	MEM05
MEM05050B	Perform routine gas metal arc welding	MEM05
MEM18001C	Use hand tools	MEM05
MEM18002B	Use power tools/hand held operations	MEM05
MSL915002A	Schedule laboratory work for a small team	MSL09
MSL916001A	Develop and maintain laboratory documentation	MSL09
MSL916003A	Supervise laboratory operations in work/functional area	MSL09
MSL916005A	Manage complex projects	MSL09
MSL922001A	Record and present data	MSL09
MSL924001A	Process and interpret data	MSL09
MSL933001A	Maintain the laboratory/field workplace fit for purpose	MSL09
MSL973001A	Perform basic tests	MSL09
MSL973002A	Prepare working solutions	MSL09
MSL973004A	Perform aseptic techniques	MSL09
MSL973007A	Perform microscopic examination	MSL09
MSL973008A	Perform histological procedures	MSL09
MSL974007A	Undertake environmental field-based monitoring	MSL09
MSL974011A	Prepare tissue and cell cultures	MSL09
PSPGOV404B	Develop and implement work unit plans	PSP04
PSPPM401B	Design simple projects	PSP04



PSPREG404C	Investigate non-compliance	PSP04
PSPREG405B	Act on non-compliance	PSP04
RTC3310A	Operate specialised machinery and equipment	TBA
RTD2101A	Apply animal trapping techniques	RTD02
RTD2502A	Maintain wildlife habitat refuges	RTD02
RTD3125A	Respond to wildlife emergencies	RTD02
RTD4402A	Define the pest problem in a local area	RTD02
RTD4406A	Implement pest management action plans	RTD02
RTE3407A	Identify and report unusual disease or plant pest signs	RTE03
RTE3904A	Keep records for a primary production business	RTE03
SIRXCCS001A	Apply point-of-sale handling procedures	SIR07
SIRXFIN001A	Balance point-of-sale terminal	SIR07
SIRXICT001A	Operate retail technology	SIR07
SIRXICT003A	Operate retail information technology systems	SIR07
SIRXINV001A	Perform stock control procedures	SIR07
SIRXINV002A	Maintain and order stock	SIR07
SIRXINV005A	Control inventory	SIR07
SIRXMER002A	Coordinate merchandise presentation	SIR07
SIRXMER004A	Manage merchandise and store presentation	SIR07
TAADEL403B	Facilitate individual learning	TAA04
TAADEL404B	Facilitate work-based learning	TAA04

## Mapping to Previous Training Package

<b>Mapping to Previous Training Package</b>		
<b>Mapping of qualifications RUV04 to ACM10</b>		
<b>RUV04 qualification code and title</b>	<b>ACM10 qualification code and title</b>	<b>Mapping details</b>
RUV10104 Certificate I in Animal Studies	ACM10110 Certificate I in Animal Studies	Not equivalent. Units revised to reduce duplication, new units added and packaging rules changed.
RUV20104 Certificate II in Animal Studies	ACM20110 Certificate II in Animal Studies	Not equivalent. New units added to reduce duplication, units deleted, sustainability unit added and packaging rules changed.
	ACM30110 Certificate III in Animal Studies	New qualification
RUV30104 Certificate III in Animal Technology	ACM30210 Certificate III in Animal Technology	Not equivalent. Generic units introduced to reduce duplication, units deleted, sustainability unit added and packaging rules changed.
RUV30204 Certificate III in Captive Animals	ACM30310 Certificate III in Captive Animals	Not equivalent. Generic units introduced to reduce duplication, units deleted, sustainability unit added and packaging rules changed.
RUV30304 Certificate III in Companion Animal Services	ACM30410 Certificate III in Companion Animal Services	Not equivalent. Generic units introduced to reduce duplication, units deleted, sustainability unit added and packaging rules changed.
	ACM30510 Certificate III in Farriery	New qualification
RUV40104 Certificate IV in Animal Control and Regulation	ACM40110 Certificate IV in Animal Control and Regulation	Not equivalent. Sustainability unit added. However technical outcomes remain the same.
RUV40204 Certificate IV in Captive Animals	ACM40210 Certificate IV in Captive Animals	Not equivalent. Units revised, sustainability unit added and packaging rules changed.
RUV40304 Certificate	ACM40310 Certificate	Not equivalent. New units added, units

<b>Mapping to Previous Training Package</b>		
IV in Companion Animal Services	IV in Companion Animal Services	revised, sustainability unit added and packaging rules changed.
RUV40404 Certificate IV in Veterinary Nursing	ACM40410 Certificate IV in Veterinary Nursing	Not equivalent. New units added, units deleted, sustainability unit added and packaging rules changed. However, technical outcomes remain the same.
RUV50104 Diploma of Animal Technology	ACM50110 Diploma of Animal Technology	Not equivalent. New units added, units revised, sustainability unit added and packaging rules changed.
RUV50204 Diploma of Veterinary Nursing (Surgical)	ACM50210 Diploma of Veterinary Nursing (Surgical)	Not equivalent. New units added, units revised and packaging rules changed. However, technical outcomes remain the same.
RUV50304 Diploma of Veterinary Nursing (Dental)	ACM50310 Diploma of Veterinary Nursing (Dental)	Not equivalent. New units added, units revised and packaging rules changed. However, technical outcomes remain the same.
RUV50404 Diploma of Veterinary Nursing (Emergency and Critical Care)	ACM50410 Diploma of Veterinary Nursing (Emergency and Critical Care)	Not equivalent. New units added, units revised and packaging rules changed. However, technical outcomes remain the same.

<b>Mapping to Previous Training Package</b>				
<b>Mapping of units of competency RUV04 to ACM10</b>				
<b>RUV04 unit code</b>	<b>RUV04 unit title</b>	<b>ACM10 unit code</b>	<b>ACM10 unit title</b>	<b>Mapping details</b>
RUV4201A	Comply with animal control and regulation requirements	ACMACR401A	Comply with animal control and regulation requirements	Unit equivalent RUV4201A
RUV4202A	Assess and impound animals	ACMACR402A	Assess and impound animals	Unit equivalent RUV4202A

<b>Mapping to Previous Training Package</b>				
RUV4203A	Identify and respond to animal behaviour	ACMACR403A	Identify and respond to animal behaviour	Unit equivalent RUV4203A
RUV4204A	Manage conflict situations in an animal control and regulation environment	ACMACR404A	Manage conflict situations within an animal control and regulation environment	Unit equivalent RUV4204A
RUV4205A	Euthanase sick, injured or unwanted pound animals	ACMACR405A	Euthanase sick, injured or unwanted pound animals	Unit equivalent RUV4205A
RUV4206A	Carry out pound procedures	ACMACR406A	Carry out pound procedures	Unit equivalent RUV4206A
RUV4207A	Conduct community awareness programs	ACMACR407A	Conduct community awareness programs	Unit equivalent RUV4207A
RUV4208A	Coordinate seizure of animals	ACMACR408A	Coordinate seizure of animals	Unit equivalent RUV4208A
RUV4209A	Prepare and present animal control and regulation case	ACMACR409A	Prepare and present animal control and regulation case	Unit equivalent RUV4209A
RUV3306A	Work within an animal technology institution	ACMATE301A	Work within an animal technology facility	Unit updated and equivalent RUV3306A
RUV3301A	Carry out	ACMATE302	Carry out	Unit updated

<b>Mapping to Previous Training Package</b>				
	institution containment and exclusion procedures	A	institution containment and exclusion procedures	and equivalent RUV3301A
RUV3307A	Prepare for and monitor anaesthesia in animals	ACMATE303 A	Prepare for and monitor anaesthesia in animals	Unit updated and equivalent RUV3307A
		ACMATE304 A	Conduct non-surgical procedures on animals	New unit no equivalent RUV04
RUV3302A	Conduct euthanasia of research animals	ACMATE305 A	Conduct euthanasia of research animals	Unit updated and equivalent RUV3302A
RUV5304A	Manage compliance in animal technology	ACMATE501 A	Manage compliance in animal technology	Unit updated and new element added 'Manage the negotiation of approval for non-standard laboratory practices and specific projects'. Not equivalent.
RUV5305A	Manage and maintain the health of research animals	ACMATE502 A	Manage and maintain the health of research animals	Unit updated and equivalent RUV5305A
RUV5302A	Carry out post-mortem examination of a research animal	ACMATE503 A	Carry out post-mortem examination of a research animal	Unit updated and equivalent RUV5302A

<b>Mapping to Previous Training Package</b>				
RUV5308A	Administer anaesthesia and perform surgery on animals for scientific purposes	ACMATE504 A	Administer anaesthesia and perform surgery on animals for scientific purposes	Unit updated and equivalent RUV5308A
RUV5301A	Carry out breeding procedures	ACMATE505 A	Carry out advanced breeding procedures	Unit substantially revised. Not equivalent
RUV5303A	Manage nutrition of research animals			Unit deleted. Content and outcomes covered in ACMGAS303A but not equivalent
RUV5306A	Plan an animal technology facility			Unit deleted
RUV5307A	Manage laboratory procedures			Unit deleted. Replaced with imported MSL09 Laboratory Training Package units MSL915002 A Schedule laboratory work for a small team, MSL916001 A Develop and maintain laboratory documentation, MSL916003 A Supervise

<b>Mapping to Previous Training Package</b>				
				laboratory operations in work/functional areas
		ACMATE507 A	Manage the parturition of transgenic mice or rats	New unit no equivalent RUV04
RUV3402A	Work within a captive animal institution	ACMCAN30 1A	Work within a captive animal facility	Unit revised. New element added 'Comply with captive animal interaction policies and procedures. Not equivalent
RUV3403A	Prepare and present information to the public	ACMCAN30 2A	Prepare and present information to the public	Unit updated and equivalent RUV3403A
RUV3404A	Assist with collection management	ACMCAN30 3A	Support collection management	Unit revision to elements and performance criteria. Not equivalent
RUV3406A	Prepare and maintain animal housing	ACMCAN30 4A	Prepare and maintain animal housing	Unit revision to elements and performance criteria, maintenance routines and pest control added. Not equivalent
RUV3410A	Capture, restrain and	ACMCAN30	Assist with capturing,	Unit revised and

<b>Mapping to Previous Training Package</b>				
	assist in moving animals	5A	restraining and moving animals	equivalent RUV3410A
RUV3412A	Monitor animal reproduction	ACMCAN306A	Monitor animal reproduction	Unit revised and equivalent RUV3412A
RUV3401A	Rehabilitate and release native wildlife			Unit deleted and replaced with ACMCAN307A and ACMCAN308A separating rehabilitation and release outcomes.
		ACMCAN307A	Rehabilitate native wildlife	New unit no equivalent RUV04
		ACMCAN308A	Release native animals to natural environment	New unit no equivalent RUV04
RUV3405A	Develop an institutional husbandry manual	ACMCAN309A	Develop institutional husbandry guidelines	Unit title, elements and performance criteria changed. Not equivalent
RUV3407A	Maintain exhibits and assist with their design	ACMCAN310A	Assist with exhibit design and renovation planning	Unit revised and equivalent RUV3407A
RUV3411A	Care for young animals	ACMCAN311A	Care for young animals	Unit revised and equivalent



<b>Mapping to Previous Training Package</b>				
				RUV3411A
RUV4402A	Implement collection management	ACMCAN401A	Implement collection management	Unit revised and equivalent RUV4402A
RUV4403A	Manage enclosures and exhibits	ACMCAN402A	Manage enclosures and exhibits	Unit updated and new element added 'Supervise enclosure and exhibit staff'. Not equivalent
RUV4404A	Develop animal diets	ACMCAN403A	Develop animal diets	Unit revised and equivalent RUV4404A
RUV4406A	Develop, monitor and review behavioural management strategies	ACMCAN404A	Develop, monitor and review behavioural management strategies	Unit revised and equivalent RUV4406A
RUV4401A	Design and evaluate interpretive and learning programs	ACMCAN405A	Design and evaluate interpretive and learning programs	Unit revised and equivalent RUV4401A
RUV4405A	Assist in establishing and maintaining a plantation	ACMCAN406A	Assist in establishing and maintaining a plantation	Unit revised and equivalent RUV4405A
RUV5401A	Design and develop enclosures and exhibits	ACMCAN501A	Contribute to enclosure and exhibit design or renovation projects	Unit revised and elements modified to ensure outcomes are achievable.

<b>Mapping to Previous Training Package</b>				
				Not equivalent
RUV5402A	Develop and monitor collection management	ACMCAN502A	Develop and monitor collection management	Unit revised and equivalent RUV5402A
RUV3503A	Work effectively in the companion animal industry	ACMCAS301A	Work effectively in the companion animal industry	Unit revised and equivalent RUV3503A
RUV3501A	Provide advice on companion animal selection and general care	ACMCAS302A	Provide advice on companion animal selection and general care	Unit revised and equivalent RUV3501A
RUV3502A	Provide advice on selection and care of aquatic animals	ACMCAS303A	Provide advice on selection and care of aquatic animals	Unit revised and equivalent RUV3502A
RUV3506A	Capture, handle and transport companion animals	ACMCAS304A	Capture, handle and transport companion animals	Unit revised and equivalent RUV3506A
RUV3509A	Maintain aquascapes and aquatic animals	ACMCAS305A	Maintain aquascapes and aquatic animals	Unit revised and equivalent RUV3509A
		ACMCAS306A	Provide grooming services for companion animal comfort	New unit no equivalent RUV04

<b>Mapping to Previous Training Package</b>				
		ACMCAS307 A	Provide companion animal hydro-bathing services	New unit no equivalent RUV04
RUV4510A	Provide companion animal hydro-bathing services			Unit deleted and replaced with two new units ACMCAS307 A Provide companion animal hydro-bathing services and ACMCAS408 A Manage the operation of a mobile hydro-bathing facility for companion animals
RUV4501A	Manage compliance in the companion animal industry	ACMCAS401 A	Manage compliance in the companion animal industry	Unit revised and equivalent RUV4501A
RUV4502A	Hand-rear companion animals			Unit deleted as outcome covered by ACMCAN31 1A Care for young animals and ACMGAS30 6A Assist with conditioning animals

<b>Mapping to Previous Training Package</b>				
RUV4503A	Develop diets for companion animals			Unit deleted as outcome covered by ACMGAS30 3A Plan for and provide nutritional requirements for animals
RUV4504A	Manage and maintain aviaries and bird rooms	ACMCAS402 A	Manage and maintain aviaries and bird rooms	Unit revised and equivalent RUV4504A
RUV4505A	Design, construct and maintain aquascapes	ACMCAS403 A	Design, construct and maintain aquascapes	Unit revised and equivalent RUV4505A
RUV4506A	Develop enrichment strategies for companion animals	ACMCAS404 A	Develop enrichment strategies for companion animals	Unit revised and equivalent RUV4506A
RUV4507A	Purchase companion animal livestock	ACMCAS405 A	Purchase companion animal livestock	Unit revised and equivalent RUV4507A
RUV4508A	Manage companion animal breeding	ACMCAS406 A	Manage companion animal breeding	Unit revised and equivalent RUV4508A
RUV4509A	Provide professional companion animal grooming services	ACMCAS407 A	Provide professional companion animal grooming services	Unit revised and equivalent RUV4509A
		ACMCAS408 A	Manage the operation of a mobile	New unit no equivalent RUV04

<b>Mapping to Previous Training Package</b>				
			hydro-bathing facility	
RUV4511A	Provide training advice to companion animal owners	ACMCAS409 A	Provide training advice to companion animal owners	Unit revised and equivalent RUV4511A
RUV4512A	Conduct companion animal training classes	ACMCAS410 A	Conduct companion animal training classes	Unit revised and equivalent RUV4512A
		ACMFAR301 A	Handle horses safely in the provision of farriery services	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR302 A	Work effectively as a farrier in the equine industries	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR303 A	Perform routine day-to-day farriery activities	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR304 A	Respond to emergencies and apply essential first aid in the equine	New unit transferred from Victorian accredited course.

<b>Mapping to Previous Training Package</b>				
			industries	Equivalent
		ACMFAR305 A	Perform welding tasks using a forge	New unit transferred from Victorian accredited course. Title changed to and unit amended to cover various forge fuels, not just fire. Equivalent
		ACMFAR306 A	Maintain, repair and manufacture hand tools used in farriery	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR307 A	Make standard shoes for a range of horses	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR308 A	Determine foot care and shoeing plans for horses	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR309 A	Fit shoes for normal healthy horses	New unit transferred from Victorian accredited course.

<b>Mapping to Previous Training Package</b>				
				Equivalent
		ACMFAR310 A	Fit shoes to alleviate moderate faults and defects in horses	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR311 A	Fit shoes to alleviate severe faults and defects in horses	New unit transferred from Victorian accredited course. Equivalent
		ACMFAR312 A	Accommodate special needs of particular horses through farriery techniques	New unit transferred from Victorian accredited course. Equivalent
RUV1101A	Prepare for animal care work			Unit deleted, content covered in ACMOHS201A Participate in occupational health and safety processes and ACMGAS202A Participate in workplace communications
		ACMGAS10 1A	Investigate job opportunities	New unit no equivalent RUV04

<b>Mapping to Previous Training Package</b>				
			in animal care and related industries	
RUV1102A	Support animal care work			Unit deleted to reduce duplication of units
RUV1103A	Support animal care cleaning activities			Unit deleted to reduce duplication of units
RUV1104A	Maintain the animal care workplace			Unit deleted to reduce duplication of units
		ACMGAS10 2A	Catch and handle a range of quiet animals	New unit no equivalent RUV04
		ACMGAS10 3A	Assist in the care of animals	New unit no equivalent RUV04
RUV2101A	Work in the animal care industry	ACMGAS20 1A	Work in the animal care industry	Unit substantially revised with OHS element removed. Not equivalent
RUV2105A	Participate in workplace communications	ACMGAS20 2A	Participate in workplace communications	Unit revised equivalent RUV2105A
RUV2103A	Assist with general animal care			Unit deleted, outcomes covered by ACMGAS20 3A Complete animal care hygiene



<b>Mapping to Previous Training Package</b>				
				routines and ACMGAS20 5A Assist in health care of animals
		ACMGAS20 3A	Complete animal care hygiene routines	New unit no equivalent RUV04
RUV2104A	Provide food and water for animals			Unit deleted, outcomes covered by ACMGAS20 4A Feed and water animals
RUV2106A	Assist with food preparation			Unit deleted, outcomes covered by ACMGAS20 4A Feed and water animals
		ACMGAS20 4A	Feed and water animals	New unit equivalent RUV2104A and RUV2106A
		ACMGAS20 5A	Assist in health care of animals	New unit no equivalent RUV04
RUV2107A	Provide basic first aid for animals	ACMGAS20 6A	Provide basic first aid for animals	Unit revised and equivalent RUV2107A
		ACMGAS20 7A	Provide reception services for an animal care facility	New unit no equivalent RUV04
		ACMGAS20	Source	New unit no

<b>Mapping to Previous Training Package</b>				
		8A	information for animal care needs	equivalent RUV04
RUV2501A	Provide information on companion animals, products and services	ACMGAS209A	Provide information on companion animals, products and services	Unit changed to generic animal studies unit as applicable across industry sectors. Equivalent RUV2501A
RUV2401A	Prepare for and conduct a tour or presentation	ACMGAS210A	Prepare for and conduct a tour or presentation	Unit changed to generic animal studies unit as applicable across industry sectors. Equivalent RUV2401A
RUV3303ARUV3409ARUV3504A	Monitor and maintain animal health and wellbeing Monitor and maintain animal health Monitor and maintain health of companion animals	ACMGAS301A	Maintain and monitor animal health and wellbeing	New unit replacing and equivalent to each of the industry sector units RUV3303A, RUV3409A and RUV3504A
RUV3304ARUV3414ARUV3505A	Provide behavioural enrichment for research animals Identify	ACMGAS302A	Provide enrichment for animals	New unit replacing and equivalent to each of the industry sector units

<b>Mapping to Previous Training Package</b>				
	behavioural needs and implement improved husbandry Provide enrichment for companion animals			RUV3304A, RUV3414A and RUV3505A
RUV3408ARUV3508ARUV4503A	Prepare animal diets and monitor feeding Prepare companion animal diets and monitor feeding Develop diets for companion animals	ACMGAS303A	Plan for and provide nutritional requirements for animals	New unit replacing and equivalent to each of the industry sector units RUV3408A, RUV3508A and RUV4503A
RUV3305A	Carry out simple breeding procedures			Unit deleted, outcomes covered in ACMGAS304A but not equivalent
RUV3507A	Carry out companion animal breeding procedures			Unit deleted, outcomes covered in ACMGAS304A but not equivalent
		ACMGAS304A	Carry out simple breeding procedures	New unit no equivalent RUV04
RUV2108A	Rescue	ACMGAS30	Rescue	Revised unit,

<b>Mapping to Previous Training Package</b>				
	animals and provide basic animal care	5A	animals and apply basic first aid	AQF level and elements changed. Not equivalent
RUV3413A	Condition animals	ACMGAS306A	Assist with conditioning animals	Unit changed to generic animal studies unit as applicable across industry sectors. Title, elements and performance criteria changed. Not equivalent
		ACMINF301A	Comply with infection control policies and procedures in animal work	New unit no equivalent RUV04
		ACMMIC401A	Implant microchip in cats and dogs	New unit no equivalent RUV04
RUV2102A	Follow OHS procedures in an animal care environment	ACMOHS201A	Participate in occupational health and safety processes	New unit contextualised from National OHS guideline unit. Equivalent RUV2102A
RUV3101A	Carry out workplace OHS procedures	ACMOHS301A	Contribute to occupational health and safety processes	New unit contextualised from National OHS guideline unit. Equivalent

<b>Mapping to Previous Training Package</b>				
				RUV3101A
RUV4101A	Implement and monitor the organisation's OHS program	ACMOHS401A	Maintain occupational health and safety processes	New unit contextualised from National OHS guideline unit. Not equivalent RUV4101A
		ACMOHS501A	Manage occupational health and safety processes	New unit contextualised from National OHS guideline unit. No equivalent RUV04
		ACMSPE301A	Provide basic care of amphibians	New unit no equivalent RUV04
		ACMSPE302A	Provide basic care of birds	New unit no equivalent RUV04
		ACMSPE303A	Provide basic care of common native mammals	New unit no equivalent RUV04
		ACMSPE304A	Provide basic care of dogs	New unit no equivalent RUV04
		ACMSPE305A	Provide basic care of domestic cats	New unit no equivalent RUV04
		ACMSPE306A	Provide basic care of marine fish	New unit no equivalent RUV04
		ACMSPE307	Provide basic	New unit no

<b>Mapping to Previous Training Package</b>				
		A	care of freshwater fish	equivalent RUV04
		ACMSPE308 A	Provide basic care of marine aquatic invertebrates	New unit no equivalent RUV04
		ACMSPE309 A	Provide basic care of terrestrial and freshwater invertebrates	New unit no equivalent RUV04
		ACMSPE310 A	Provide basic care of mammals	New unit no equivalent RUV04
		ACMSPE311 A	Provide basic care of non-venomous reptiles	New unit no equivalent RUV04
		ACMSPE312 A	Provide basic care of rodents and rabbits	New unit no equivalent RUV04
		ACMSUS201 A	Participate in environmentally sustainable work practices	New unit contextualised from BSBSUS201 A. No equivalent RUV04
		ACMSUS301 A	Implement and monitor environmentally sustainable work practices	New unit contextualised from BSBSUS301 A. No equivalent RUV04

<b>Mapping to Previous Training Package</b>				
RUV2601A	Carry out veterinary reception duties	ACMVET201A	Carry out veterinary nursing reception duties	Unit updated and equivalent RUV2601A
RUV2602A	Carry out daily clinic routines	ACMVET202A	Carry out daily clinic routines	Unit updated and equivalent RUV2602A
RUV2603A	Assist with surgery preparations	ACMVET203A	Assist with surgery preparation	Unit updated and equivalent RUV2603A
RUV4601A	Coordinate patient admission and discharge	ACMVET401A	Coordinate patient admission and discharge	Unit updated and equivalent RUV4601A
RUV4602A	Apply radiographic routines	ACMVET402A	Apply imaging routines	Unit updated to expand range of imaging technologies. Not equivalent
RUV4603A	Perform clinic pathology procedures	ACMVET403A	Perform clinic pathology procedures	Unit updated and equivalent RUV4603A
RUV4604A	Perform clinic office procedures	ACMVET404A	Perform clinic office procedures	Unit updated and equivalent RUV4604A
RUV4605A	Carry out surgical nursing routines	ACMVET405A	Carry out surgical nursing routines	Unit updated and equivalent RUV4605A
RUV4606A	Nurse animals	ACMVET406A	Nurse animals	Unit updated and

<b>Mapping to Previous Training Package</b>				
				equivalent RUV4606A
RUV4607A	Carry out medical nursing routines	ACMVET407 A	Carry out medical nursing routines	Unit updated and equivalent RUV4607A
RUV4608A	Coordinate and perform theatre routines	ACMVET408 A	Coordinate and perform theatre routines	Unit updated and equivalent RUV4608A
RUV4609A	Provide specific animal care advice	ACMVET409 A	Provide specific animal care advice	Unit updated and equivalent RUV4609A
RUV4610A	Carry out veterinary dental nursing procedures	ACMVET410 A	Carry out veterinary dental nursing procedures	Unit updated and equivalent RUV4610A
RUV4611A	Prepare, deliver and review animal care education programs	ACMVET411 A	Prepare, deliver and review animal care education programs	Unit updated and equivalent RUV4611A
RUV4612A	Coordinate clinic promotional activities	ACMVET412 A	Coordinate clinic promotional activities	Unit updated and equivalent RUV4612A
RUV4613A	Develop and implement specific clinic policies	ACMVET413 A	Develop and implement specific clinic policies	Unit updated and equivalent RUV4613A
RUV5601A	Manage nursing requirements for specialised surgical	ACMVET501 A	Manage nursing requirements for specialised surgical	Unit updated and equivalent RUV5601A



<b>Mapping to Previous Training Package</b>				
	procedures		procedures	
RUV5602A	Carry out postoperative nursing routines	ACMVET502 A	Carry out post-operative nursing routines	Unit updated and equivalent RUV5602A
RUV5603A	Produce veterinary dental oral cavity radiographs	ACMVET503 A	Produce veterinary dental oral cavity radiographs	Unit updated and equivalent RUV5603A
RUV5604A	Provide veterinary dental nursing support for advanced veterinary dental surgery	ACMVET504 A	Provide veterinary dental nursing support for advanced veterinary dental surgery	Unit updated and equivalent RUV5604A
RUV5605A	Prepare for emergency response	ACMVET505 A	Prepare for emergency response	Unit updated and equivalent RUV5605A
RUV5606A	Perform emergency procedures to sustain life	ACMVET506 A	Perform emergency procedures to sustain life	Unit updated and equivalent RUV5606A
RUV5607A	Provide nursing support for critical care surgery	ACMVET507 A	Provide nursing support for critical care surgery	Unit updated and equivalent RUV5607A

### Mapping to Previous Training Package

#### Mapping of imported units RUV04 to ACM10

<b>RUV04 import code</b>	<b>RUV04 import title</b>	<b>ACM10 import code</b>	<b>ACM10 import title</b>	<b>Origin</b>	<b>Notes on changes</b>
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<b>Mapping to Previous Training Package</b>					
BSBFLM309A	Support continuous improvement systems and processes	BSBFLM309C	Support continuous improvement systems and processes	BSB07	Updated and equivalent
BSBFLM304A	Participate in work teams	BSBFLM312B	Contribute to team effectiveness	BSB07	BSBFLM304A superseded - equivalent
BSBHR506A	Manage recruitment, selection and induction processes	BSBHRM506A	Manage recruitment, selection and induction processes	BSB07	Updated and equivalent
BSBCMN305A	Organise workplace information	BSBINM301A	Organise workplace information	BSB07	Updated and equivalent
BSBCMN405A	Analyse and present research information	BSBRES401A	Analyse and present research information	BSB07	Updated and equivalent
BSBSBM403A	Promote the business	BSBSMB403A	Market the small business	BSB07	Updated and equivalent
BSBSBM405A	Monitor and manage business operations	BSBSMB405A	Monitor and manage small business operations	BSB07	Updated and equivalent
BSBSBM407A	Manage a small team	BSBSMB407A	Manage a small team	BSB07	Updated and equivalent
BSBFLM404A	Lead work teams	BSBWOR402A	Promote team effectiveness	BSB07	BSBFLM404A superseded - equivalent
RTC2704A	Provide basic first aid	HLTFA301B	Apply first aid	HLT07	Replaced RTC unit with HLT07 Health Training Package unit

<b>Mapping to Previous Training Package</b>					
LGAEHRR304 A	Operate and maintain council pound facilities	LGAEHRR304 B	Operate council pound facilities	LGA04	Equivalent
LGAPLEM405 A	Provide assistance in carrying out building inspections	LGAPLEM405 C	Provide assistance in carrying out building inspections	LGA04	Unit redeveloped. This unit is not equivalent to LGAPLEM405 B. Elements of competency relating to processing and approving permits to build have been removed.
		MEM05004C	Perform routine oxy acetylene welding	MEM0 5	New import
		MEM05012C	Perform routine manual metal arc welding	MEM0 5	New import
		MEM05050B	Perform routine gas metal arc welding	MEM0 5	New import
		MEM18001C	Use hand tools	MEM0 5	New import
		MEM18002B	Use power tools/hand held operations	MEM0 5	New import
		MSL915002A	Schedule laboratory work for a small team	MSL09	New import

<b>Mapping to Previous Training Package</b>					
		MSL916001A	Develop and maintain laboratory documentation	MSL09	New import
		MSL916003A	Supervise laboratory operations in work/functional areas	MSL09	New import
		MSL916005A	Manage complex projects	MSL09	New import
		MSL922001A	Record and present data	MSL09	Not equivalent - new AQF2 unit - part replaces PMLDATA300A
PMLDATA300A	Process and record data	MSL924001A	Process and interpret data	MSL09	Equivalent to PMLDATA300A changed to AQF4 level
PMLMAIN300A	Maintain the laboratory fit for purpose	MSL933001A	Maintain the laboratory/field workplace fit for purpose	MSL09	Equivalent - revised to make applicable to construction and materials testing (CMT) and other 'non wet' sectors
PMLTEST300A	Perform basic tests	MSL973001A	Perform basic tests	MSL09	Equivalent
PMLTEST303A	Prepare working solutions	MSL973002A	Prepare working solutions	MSL09	Equivalent
PLMTEST305A	Perform aseptic techniques	MSL973004A	Perform aseptic techniques	MSL09	Equivalent

<b>Mapping to Previous Training Package</b>					
PMLTEST301 A	Perform biological laboratory procedures	MSL973007A	Perform microscopic examination	MSL09	Not equivalent - part replacement PMLTEST301A
PMLTEST301 A	Perform biological laboratory procedures	MSL973008A	Perform histological procedures	MSL09	Not equivalent - part replacement PMLTEST301A
		MSL974007A	Undertake environmental field-based monitoring	MSL09	New import
		MSL974011A	Prepare tissue and cell cultures	MSL09	New import – prerequisite MSL973004A Perform aseptic techniques
PSPGOV404A	Develop and implement work unit plans	PSPGOV404B	Develop and implement work unit plans	PSP04	Equivalent - replaces PSPGOV404A with minor changes
PSPPM401A	Develop a project	PSPPM401B	Design simple projects	PSP04	Equivalent - replaces PSPPM401A with minor changes
PSPREG404B	Investigate non-compliance with legislation	PSPREG404C	Investigate non-compliance	PSP04	Equivalent - replaces PSPREG404B - title change reflects alteration to include compliance with standards, regulations etc, as well as legislation

<b>Mapping to Previous Training Package</b>					
PSPREG405A	Act on non-compliance with legislation	PSPREG405B	Act on non-compliance	PSP04	Equivalent - replaces PSPREG405A - title change reflects alteration to include compliance with standards, regulations etc, as well as legislation
RTC3310A	Operate specialised machinery and equipment	RTC3310A	Operate specialised machinery and equipment	RTD02	Equivalent
RTD2101A	Apply animal trapping techniques	RTD2101A	Apply animal trapping techniques	RTD02	Equivalent
RTD2502A	Maintain wildlife habitat refuges	RTD2502A	Maintain wildlife habitat refuges	RTD02	Equivalent
RTD3125A	Respond to wildlife emergencies	RTD3125A	Respond to wildlife emergencies	RTD02	Equivalent
RTD4402A	Define the pest problems in a local area	RTD4402A	Define the pest problems in a local area	RTD02	Equivalent
RTD4406A	Implement pest management action plans	RTD4406A	Implement pest management action plans	RTD02	Equivalent
		RTE3407A	Identify and report unusual disease or plant pest signs	RTE03	New import
		RTE3904A	Keep records	RTE03	New import

<b>Mapping to Previous Training Package</b>					
			for a primary production business		
WRRCS2B	Apply point of sale handling procedures	SIRXCCS001A	Apply point of sale handling procedures	SIR07	Equivalent
WRRF1B	Balance register / terminal	SIRXFIN001A	Balance point of sale terminal	SIR07	Equivalent
WRRCA1B	Operate retail equipment	SIRXICT001A	Operate retail technology	SIR07	Equivalent
WRRCA5B	Operate retail information technology systems	SIRXICT003A	Operate retail information technology systems	SIR07	Equivalent
WRR11B	Perform stock control procedures	SIRXINV001A	Perform stock control procedures	SIR07	Not equivalent - unit based on WRR11B
		SIRXINV002A	Maintain and order stock	SIR07	New import
WRR05B	Control inventory	SIRXINV005A	Control inventory	SIR07	Equivalent
WRRM3B	Coordinate merchandising presentation	SIRXMER002A	Coordinate merchandising presentation	SIR07	Equivalent
WRR01B	Manage merchandise and store presentation	SIRXMER004A	Manage merchandising and store presentation	SIR07	Equivalent
BSZ404A	Train small groups	TAADEL403A	Facilitate individual learning	TAA04	Not equivalent
BSZ404A	Train small groups	TAADEL404B	Facilitate work-based learning	TAA04	Not equivalent

## **Explanation of the review date**

The review date (shown on the title page and in the header of each page) indicates when the Training Package is expected to be reviewed in the light of changes such as changing technologies and circumstances. The review date is not an expiry date. Endorsed Training Packages and their components remain current until they are reviewed or replaced.

## **Overview**

### **What is a Training Package?**

A Training Package is an integrated set of nationally endorsed competency standards, assessment guidelines and Australian Qualifications Framework (AQF) qualifications for a specific industry, industry sector or enterprise.

Each Training Package:

- provides a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enables nationally recognised qualifications to be awarded through direct assessment of workplace competencies
- encourages the development and delivery of flexible training which suits individual and industry requirements
- encourages learning and assessment in a work-related environment which leads to verifiable workplace outcomes.

### **How do Training Packages fit within the National Skills Framework?**

The National Skills Framework applies nationally, is endorsed by the Ministerial Council for Vocational and Technical Education, and comprises the Australian Quality Training Framework 2007 (AQTF 2007), and Training Packages endorsed by the National Quality Council (NQC).

### **How are Training Packages developed?**

Training Packages are developed by Industry Skills Councils or enterprises to meet the identified training needs of specific industries or industry sectors. To gain national endorsement of Training Packages, developers must provide evidence of extensive research, consultation and support within the industry area or enterprise.

### **How do Training Packages encourage flexibility?**

Training Packages describe the skills and knowledge needed to perform effectively in the workplace without prescribing how people should be trained.



Training Packages acknowledge that people can achieve vocational competency in many ways by emphasising what the learner can do, not how or where they learned to do it. For example, some experienced workers might be able to demonstrate competency against the units of competency, and even gain a qualification, without completing a formal training program.

With Training Packages, assessment and training may be conducted at the workplace, off-the-job, at a training organisation, during regular work, or through work experience, work placement, work simulation or any combination of these.

### **Who can deliver and assess using Training Packages?**

Training and assessment using Training Packages must be conducted by a Registered Training Organisation (RTO) that has the qualifications or specific units of competency on its scope of registration, or that works in partnership with another RTO, as specified in the AQTF 2007.

Training Packages are made up of mandatory components endorsed by the NQC, and optional support materials.

### **Training Package Endorsed Components**

The nationally endorsed components include the Competency Standards, Assessment Guidelines and Qualifications Framework. These form the basis of training and assessment in the Training Package and, as such, they must be used.

## **Competency Standards**

Each unit of competency identifies a discrete workplace requirement and includes the knowledge and skills that underpin competency as well as language, literacy and numeracy; and occupational health and safety requirements. The units of competency must be adhered to in training and assessment to ensure consistency of outcomes.

### **Assessment Guidelines**

The Assessment Guidelines provide an industry framework to ensure all assessments meet industry needs and nationally agreed standards as expressed in the Training Package and the AQTF 2007. The Assessment Guidelines must be followed to ensure the integrity of assessment leading to nationally recognised qualifications.

### **Qualifications Framework**

Each Training Package provides details of those units of competency that must be achieved to award AQF qualifications. The rules around which units of competency can be combined to make up a valid AQF qualification in the Training Package are referred to as the "packaging rules". The packaging rules must be followed to ensure the integrity of nationally recognised qualifications issued.

### **Training Package Support Materials**

The endorsed components of Training Packages are complemented and supported by optional support materials that provide for choice in the design of training and assessment to meet the needs of industry and learners.

Training Package support materials can relate to single or multiple units of competency, an industry sector, a qualification or the whole Training Package. They tend to fall into one or more of the categories illustrated below.

Training Package support materials are produced by a range of stakeholders such as RTOs, individual trainers and assessors, private and commercial developers and Government agencies.

Where such materials have been quality assured through a process of "noting" by the NQC, they display the following official logo. Noted support materials are listed on the National Training Information Service (NTIS), together with a detailed description and information on the type of product and its availability < [www.ntis.gov.au](http://www.ntis.gov.au) >

It is not compulsory to submit support materials for noting; any resources that meet the requirements of the Training Package can be used.

### **Training Package, Qualification and Unit of Competency Codes**

There are agreed conventions for the national codes used for Training Packages and their components. Always use the correct codes, exactly as they appear in the Training Package, **and with the code always before the title.**

### **Training Package Codes**

Each Training Package has a unique five-character national code assigned when the Training Package is endorsed, for example ACM10. The first three characters are letters identifying the Training Package industry coverage and the last two characters are numbers identifying the year of endorsement.

### **Qualification Codes**

Within each Training Package, each qualification has a unique eight-character code, for example ACM10110. Qualification codes are developed as follows:

- the first three letters identify the Training Package;
- the first number identifies the qualification level (noting that, in the qualification titles themselves, arabic numbers are **not** used);

- the next two numbers identify the position in the sequence of the qualification at that level; and
- the last two numbers identify the year in which the qualification was endorsed. (Where qualifications are added after the initial Training Package endorsement, the last two numbers may differ from other Training Package qualifications as they identify the year in which those particular qualifications were endorsed.)

### **Unit of Competency Codes**

Within each Training Package, each unit of competency has a unique code. Unit of competency codes are assigned when the Training Package is endorsed, or when new units of competency are added to an existing endorsed Training Package. Unit codes are developed as follows:

- a typical code is made up of 12 characters, normally a mixture of uppercase letters and numbers, as in ACMACR401A;
- the first three characters signify the Training Package - ACM10 - in the above example and up to eight characters, relating to an industry sector, function or skill area, follow;
- the last character is always a letter and identifies the unit of competency version. An "A" at the end of the code indicates that this is the original unit of competency. "B", or another incremented version identifier means that minor changes have been made. Typically this would mean that wording has changed in the range statement or evidence guide, providing clearer intent; and
- where changes are made that alter the outcome, a new code is assigned and the title is changed.

### **Training Package, Qualification and Unit of Competency Titles**

There are agreed conventions for titling Training Packages and their components. Always use the correct titles, exactly as they appear in the Training Package, and with the code always placed before the title.

#### **Training Package Titles**

The title of each endorsed Training Package is unique and relates the Training Packages broad industry coverage.

#### **Qualification Titles**

The title of each endorsed Training Package qualification is unique. Qualification titles use the following sequence:

- first, the qualification is identified as either Certificate I, Certificate II, Certificate III, Certificate IV, Diploma, Advanced Diploma, Vocational Graduate Certificate, or Vocational Graduate Diploma;
- this is followed by the words "in" for Certificates I to IV, and "of" for Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma;

- then, the industry descriptor, for example Telecommunications; and
- then, if applicable, the occupational or functional stream in brackets, for example (Computer Systems).

For example:

- ACM10110 Certificate I in Animal Studies

### **Unit of Competency Titles**

Each unit of competency title is unique. Unit of competency titles describe the competency outcome concisely, and are written in sentence case.

For example:

- ACMACR401A Comply with animal control and regulation requirements

## Historical and General Information

### Background to the Animal Care and Management Training Package

#### RUV98 Veterinary Nursing Training Package

The first Veterinary Nursing Training Package (RUV98) was endorsed in June 1998, and became the basis of vocational education and training (VET) for the veterinary nursing industry in Australia.

#### RUV04 Animal Care and Management Training Package

In September 2000 the review of the RUV98 Training Package began and was endorsed by the National Quality Council in February 2004.

Phase one resulted in a report highlighting proposed changes to the current RUV98 units of competency and qualifications as well as additional qualifications and units of competency for other industry sectors to be developed in phase two.

The title of the Training Package was also changed from Veterinary Nursing to Animal Care and Management. This change was required to service a wide range of jobs and roles that form part of the broader animal care and management industry. The key industry sectors included in RUV04 are:

- animal control and regulation
- animal technology
- captive animals
- companion animal services
- veterinary nursing.

RUV04 was endorsed in February 2004 with a review date of 27 February 2007.

#### Development of ACM10 Animal Care and Management Training Package

In November 2005 the Board of the Agri-Food Industry Skills Council (now AgriFood Skills Australia) approved the initiation of the RUV04 Animal Care and Management Training Package Phase 1 Review – Environmental Scan that was completed in September 2006.

In 2006, a separate environmental scan was initiated, following several requests to AgriFood Skills Australia for the inclusion of national training standards for the farriery trade. A national survey was conducted in collaboration with the two Farrier National Industry Associations, state branches and relevant registered training

organisations (RTOs) resulting in unanimous support for the inclusion of the Victorian accredited Certificate III in Farriery (Trade) Course into the Animal Care and Management Training Package.

Phase 2 of the RUV04 Training Package review began in February 2009.

**ACM10 – Summary of changes**

ACM10 Animal Care and Management Training Package is based on a comprehensive review of industry trends and feedback on RUV04 from industry employers, employees, past and present students as well as training providers. Refer to Appendix 1 for details of the development process and stakeholders involved.

**Redevelopment changes**

The Phase 2 development work is based on the findings and recommendations of the Phase 1 Environmental Scan as well as additional feedback received following the distribution of a Phase 2 Working Paper in March 2009 to stakeholders nationally. This has resulted in the following amendments to the Training Package.

<b>New Industry Sector</b>	Farriery
<b>Qualifications</b>	<p>Thirteen revised and two new qualifications. Amendments include:</p> <ul style="list-style-type: none"> <li>• packaging changes applied to increase flexibility and redefine content to be more specific to industry outcome requirements</li> <li>• maintaining and revising the Certificate I in Animal Studies to reduce duplication across units and provide an entry level pathway for Indigenous and other equity groups. This revision was strongly supported by WA, NSW and SA</li> <li>• introducing a new generic Certificate III in Animal Studies to address gaps where industry sector qualifications do not provide the required flexibility for other identified outcome requirements, e.g. Indigenous Animal Health Care Workers, Assistant Animal Control Officers. This was strongly supported by WA, NSW and SA</li> <li>• introducing Certificate III in Farriery trade qualification</li> <li>• incorporating industry defined Employability Skills Summaries</li> </ul>

	<ul style="list-style-type: none"> <li>• ensuring compliance with revised COAG packaging criteria requiring one third or more of total units to be electives and one sixth of elective units can be to be imported from within the parent/host Training Package, other Training Packages and accredited courses. All the ACM10 Animal care and management Training Package qualification packaging rules comply with the COAG requirement, with the following exceptions:             <ul style="list-style-type: none"> <li>• Certificate III in Farriery which is a recognised traditional trade qualification</li> <li>• Veterinary Nursing Certificate IV and Diplomas which require specific clinical outcomes and are linked to industrial awards and in Western Australian to legislation requirements.</li> </ul> </li> </ul>
<p><b>Skill Sets</b></p>	<p>Six industry identified Skills Sets introduced, aligned to either state or territory legislation and/or regulatory requirements or to address other industry requirements and provide additional flexibility for learners to progress to achieving a related qualification, these are:</p> <ul style="list-style-type: none"> <li>• Microchip Implantation for Dogs and Cats Skill Set</li> <li>• Native Amphibian Rehabilitation Skill Set</li> <li>• Native Bird Rehabilitation Skill Set</li> <li>• Native Mammal Rehabilitation Skill Set</li> <li>• Native Reptile Rehabilitation Skill Set</li> <li>• Preventative Biosecurity Skill Set.</li> </ul>
<p><b>Units of Competency</b></p>	<p>One hundred and thirty ACM coded units in total (79 revised and 51 new units). Twenty eight RUV04 units deleted. Fifty four units imported from other Training Packages. Unit revisions and development included:</p> <ul style="list-style-type: none"> <li>• remapping units to ensure identified skills and knowledge gaps are embedded, e.g. genetics, anatomy and physiology</li> <li>• explicitly embedding employability skills to ensure appropriate and meaningful inclusion</li> <li>• developing twelve species-specific units</li> <li>• introducing generic cross-sector units to reduce sector duplication where outcomes have been deemed by industry as identical</li> </ul> <p>replacing three RUV04 OHS units with four contextualised national OHS guidelines units to incorporate specific</p>



	<p>animal care and welfare context requirements</p> <ul style="list-style-type: none"> <li>• introducing two environmental sustainability units contextualised from the Business Services Training Package units of competency to incorporate specific animal care and welfare context requirements</li> <li>• introducing infection control unit to address industry biosecurity requirements</li> <li>• introducing microchip unit to support state and/or territory regulatory requirements</li> <li>• introducing two new animal technology transgenic (genetically modified) breeding units to address industry identified technical skill gaps</li> <li>• revising imported units, updating to latest versions and introducing new units where required.</li> </ul>
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**Code changes**

During the initial stages of Phase 2 questions were raised regarding the significance of the RUV coding. After consideration, and in line with other Training Packages, the Training Package code was changed to ACM to better reflect the coverage of this package.

The unit coding was also changed to an alpha system to provide a better method for industry employers, employees, potential learners and other stakeholders to recognise industry and generic field codes. These changes were fully supported during the consultation and validation processes.

**Units of competency coding changes**

The table below maps the generic and industry sector alpha field codes for ACM10 to the previous RUV numerical codes.

<i>RUV04 coding</i>	<i>ACM10 coding</i>	<i>Sector/competency field</i>
RUVx2xxA	ACR	Animal control and regulation
RUVx3xxA	ATE	Animal technology
RUVx4xxA	CAN	Captive animals
RUVx5xxA	CAS	Companion animal services
n/a	FAR	Farriery

RUVx1xxA	GAS	General animal studies
n/a	INF	Infection control
n/a	MIC	Microchipping
RUVxxx1A	OHS	Occupational health and safety
n/a	SPE	Species specific
n/a	SUS	Environmental sustainability
RUVx6xxA	VET	Veterinary nursing

### Application of the field codes

The six generic unit of competency fields that are packaged in the Animal Studies qualifications and across industry sector qualifications are:

- general animal studies
- infection control
- microchipping
- occupational health and safety
- species specific
- environmental sustainability.

The six industry sector unit of competency fields are:

- animal control and regulation
- animal technology
- captive animals
- companion animal services
- farriery
- veterinary nursing.

The following example breakdown for ACMATE301A outlines the coding structure adopted for all the ACM10 units of competency.

ACM = the Parent Training Package for this unit

ATE = the relevant industry sector this unit applies to

3 = the initial qualification aligned AQF level

01 = the first unit in this industry sector

A = this is the original unit of competency.

## **Interpreting**

### **Addition of mandatory sustainability units**

In line with AgriFood Skills Australia Board agreed policy, sustainability units are to be included in the core and elective banks of all qualifications, the two ACM sustainability units have been incorporated in the animal care and management qualifications.

As a result the number of core units has been increased by one in a number of existing qualifications, which requires that the revised qualifications be deemed 'not equivalent'. The impact on delivery and funding should be minimal. Feedback from the National Reference Group (NRG) and other stakeholders is that delivery of the sustainability component can be integrated with existing units and co-assessed.

### **Industry priorities and expectations**

Industry representatives and RTOs consider that the expanded coverage and improved flexibility will enhance uptake of recognised training in many sectors.

The introduction of Skill Sets has been welcomed by a number of state/territory regulatory authorities, who are planning to link Skill Sets to the relevant legislation and regulations e.g. microchipping and native animal rehabilitation.

### **Impact of changes**

No changes have been made to the previous version of the units of competency or qualifications that will cause significant impacts to RTOs. As a full review of a Training Package results in coding changes, there is minimal impact from the revised coding format.

The new general animal studies units developed to reduce duplication across existing general and sector-specific units of competency have been mapped and in most cases are equivalent to previous units. Other existing units have been revised to improve their currency and reflect feedback from users. The bulk of the revised units of competency are equivalent to the units of competency in the previous version of the Training Package. This information is included in the '*Mapping to previous Training Package*' section of this document.

Other than the addition of a sustainability unit of competency in the core groups for

some existing qualifications, the revised qualifications are considered equivalent in technical content. This information is included in the *'Mapping to previous Training Package'* section of this document.

The ACM30510 Certificate III in Farriery replaces a Victorian accredited course which is currently delivered in most states/territories of Australia under licence. As the new qualification is deemed equivalent to the accredited course, there should be minimal impact experienced by RTOs who currently have this course on their scope.

The ACM30110 Certificate III in Animal Studies is a new general qualification and will require some development work before RTO implementation.

The new Skill Sets comprise new units and revised units. In the case of microchipping and native animal rehabilitation, some RTOs currently deliver similar courses on a fee for service basis. Therefore, there should be minimal effort required to add these Skill Sets to their current scope.

Implementation of ACM10 Animal Care and Management Training Package is expected in all states and territories. Many RTOs throughout Australia are delivering the previous version of the Animal Care and Management Training Package. These RTOs will now be able to expand their delivery to take advantage of the wider range of units, Skill Sets and qualifications. The trend of uptake and interest by enterprise RTOs is likely to continue. Feedback indicates this is particularly the case in the animal technology and captive animal sectors. In addition, the Northern Territory has indicated plans to expand Indigenous delivery at Certificate I, II and III in Animal Studies levels.

State and Territory Training Authorities (STAs), RTOs and industry stakeholders have been consulted during the development process and have been kept informed of the changes.

AgriFood Skills Australia is not aware of any issues that need addressing to ensure successful implementation. It is expected RTOs with scope of existing RUV04 qualifications will seek extension of scope for the revised qualifications.

## Introduction to the Industry

### Introduction to the Industry

#### Introduction to the Animal Care and Management Industry

Working with animals is an increasingly popular career choice. Many people begin working with animals at an early age – they may instinctively have a desire to care for animals and for some, a hobby turns into a fulfilling career.

For others, working with animals is a rewarding career change that allows them to fulfil a lifelong dream. A more mature person searching for a career working with animals, may have no animal welfare experience and not be sure where to start in terms of which career with animals to follow. Having good work experience, life skills and being able to demonstrate a genuine interest in animal welfare, is a good starting point.

The animal care and management industry offers a wide and diverse range of career opportunities and pathways, both within and across industry sectors. The industry sectors represented in ACM10 Animal Care and Management Training Package are:

- animal control and regulation
- animal technology
- captive animals
- companion animal services
- farriery
- veterinary nursing.

The industry provides work opportunities in all parts of Australia, the majority through small business enterprises employing between one and three staff. It is difficult to provide an accurate estimation of the industry workforce, due to no single statistical collection point for employment data. As an example of the size of the industry, the pet industry provides employment for over 44,000 people, both directly and indirectly covering full-time, part-time and casual positions.

The workforce comprises workers drawn from a wide variety of backgrounds, including Indigenous and workers with language backgrounds other than English. Women are well represented in the workforce across the majority of industry sectors. As an example, in 2000 the Australian Bureau of Statistics (ABS) published a report on veterinary services throughout Australia and found that veterinary science is a female dominated occupation, with 73% of all persons working in veterinary practices being female.

## Introduction to the Industry

There is also an extensive volunteer workforce. As an example, the NSW Wildlife Council (NWC) is the state's peak body representing over 4,000 wildlife rescuers throughout NSW and the Queensland RSPCA operates with the assistance of 2,000 volunteers.

Overseeing compliance with federal, state and/or territory legislation is a significant requirement for all industry enterprises. Sector compliance areas include but are not limited to:

- animal health, welfare and ethical obligations
- biosecurity and quarantine procedures
- care and use of animals for scientific purposes
- duty of care to workers
- euthanasia of animals
- local government regulations
- microchipping
- occupational health and safety (OHS) responsibilities
- protection of native wildlife
- radiography
- use and application of therapeutic and controlled substances
- use of firearms
- waste handling and disposal including biological hazardous waste.

### Industry Sector Profiles

#### Animal control and regulation

Animal control and regulation (also known as urban animal management) is a function provided by local and state/territory governments. It provides a community management service comprising four elements – regulation, education, information and infrastructure.

Animal control and regulation aims to facilitate relationships between pets, their owners and the general community by educating the public in responsible pet ownership, enforcing relevant legislation and regulations as well as minimising pet nuisance.

Workers in this sector are involved with handling all kinds of animals and may have to deal with critical animal welfare issues as well as some uniquely sensitive public rights matters. Their work incorporates significant public health, welfare and amenity elements and is often complicated by a range of emotional stresses.

## Introduction to the Industry

According to the Rural Training Council of Australia, animal regulation encompasses positions, such as pound manager, ranger, community officer, urban animal controller/manager, pest animal officer, regulatory services manager and animal inspector.

In Victoria there are 82 Department of Primary Industry/RSPCA inspectors and 297 council officers (of which 125 are rural based). These numbers are growing annually both in real terms and by replacement of officers who leave for promotion or other reasons.

The amount of time devoted to the animal management role by local government employees varies considerably according to the size of the employer. Animal management duties may be specialised positions for some council rangers, while others simultaneously carry out roles as diverse as parking enforcement, health and building compliance, heavy vehicle enforcement and noxious weeds inspection.

Identified associated pathways include animal welfare inspectors, council animal control officers, generalist council rangers, pastures protection officers, national parks and wildlife officers, maritime/marine enforcement officers, veterinary staff, pet shop owners and zoo staff.

### Animal technology

Animal technology incorporates the management, breeding and care of animals in biomedical research or production institutions or facilities. Animal technicians at a junior level are involved in the care and husbandry of animals. Senior technicians often move into highly specialised fields with a high degree of autonomy and expertise in areas such as management, surgery techniques or research. The technician must care for and manage animals whilst working strongly with researchers and within the constraints set by the animal ethics committee.

Technicians play a major role in educating researchers on the conditions under which animals are held and which may affect the results of their studies.

Animal technicians are employed in all states and territories of Australia where they work as part of a licensed scientific establishment in a field or laboratory setting. Highly skilled animal facility managers and hard working technicians are constantly in high demand and, as the increase in government spending and importance of biomedical research is promoted, it is only likely to increase demand for technicians in industry. Sources of employment include research institutions, such as the

## Introduction to the Industry

Commonwealth Scientific and Industrial Research Organisation (CSIRO), government veterinary laboratories, universities, major hospitals, animal breeding establishments and zoos.

Workers in this sector must be knowledgeable in and have the ability to recognise any signs of pain, distress and illness specific to a wide variety of species as well as assist with the breeding, care and husbandry of the species. General knowledge of surgery techniques, mathematical skills, anatomy and biology (specifically genetics) are also required. All technicians play a major role in recordkeeping covering a wide range of requirements, such as routine husbandry, health monitoring and disease, physical environmental factors, fertility, fecundity, morbidity and mortality and genetic constitution.

Facility managers must take responsibility for legislative compliance and the management and day-to-day care of animals in holding and breeding facilities as well as liaising between investigators and government bodies, vets, quarantine personnel, teachers and facility staff. They must ensure that personnel in their facility receive appropriate OHS training and maintain a high standard of personal and workplace hygiene including procedures for protection from zoonoses. Training in the use of equipment, such as autoclaves and cage washers as well as grief management, are also required.

Research using animals has various broad aims which include:

- improving the health and wellbeing of people
- improving the health and welfare of entertainment, recreation, sport and service animals, and of animals used to provide therapeutic support
- improving the health, welfare and productivity of farm animals and other production animals
- finding better ways to preserve, protect and manage a range of animal species (especially endangered and native animals) to maintain a balance that is ecologically and well adapted to the Australian environment
- developing more humane and effective pest control methods to protect endangered animals and plants from the species that threatens them and to prevent damage to the environment
- broadening the foundations of biological science, including our knowledge and understanding of life processes in all animal species.

The knowledge gained about animals and people through research needs to be passed on, now and in the future, to those who are or who will become:

- doctors, nurses and other human health professionals
- animal care personnel, veterinarians, farmers, conservation managers, zoo keepers and others engaged in animal-related activities



## Introduction to the Industry

- school, vocational educators and university lecturers; and researchers in animal-based science
- anyone interested in how their own body works or in what the welfare needs of animals are, and those interested in the coexistence of animals and people.

### Captive animals

Working with captive animals involves the management and care of animals within captive environments. Animal keepers and/or carers are employed throughout Australia and work in zoos, wildlife parks and shelters, aquaria and theme parks. They provide expert care and management of captive animals usually as part of an integrated team.

Animal keepers have a wide range of practical skills and knowledge, including general animal care and management, preparing and maintaining animal housing, preparing animal diets and monitoring feeding. They may also monitor and maintain animal health, monitor animal reproduction, and assist with capturing, restraining and moving animals. In addition, animal keepers may also be involved in identifying behavioural traits, implementing improved husbandry, rehabilitating and releasing native wildlife, and in preparing and presenting information to the public.

Caring for sick, injured and orphaned wildlife is a task that requires skill and commitment. The NSW Wildlife Information Rescue and Education Service (WIRES) operates from 30 branches spread throughout NSW with approximately 2000 volunteer carers. Queensland has more than 2000 wildlife volunteer carers. According to WIRES there is an acute shortage of volunteers and foster families to nurse wild animals back to health so they could be returned to the wild.

Membership of the Zoo and Aquarium Association (ZAA) includes 75 zoos, aquariums and other wildlife facilities in Australia, New Zealand and the South Pacific. This includes institutions that are government-owned, not-for-profit trusts and privately-owned for profit zoos and aquariums. Australian member institutions:

- employ over 2,600 staff
- enjoy the services of over 1600 volunteers
- have a 300,000 strong public support membership base
- including flow-on economic value, contribute approximately \$510 million to the economy.

### Companion animal services

The companion animal services sector embraces a wide range of diverse, and in many cases, specialised operations. This sector includes pet shops, boarding kennels and catteries, companion animal training, grooming and breeding establishments, mobile

## Introduction to the Industry

animal care facilities, animal training, behaviour, natural therapies, working animals (guide dogs, drug dogs, therapy assistance in hospitals and nursing homes), mobile farms and educational programs/talks/displays.

According to the Australian Companion Animal Council Inc ([www.acac.org.au/pet\\_care.html](http://www.acac.org.au/pet_care.html)):

- the incidence of pet ownership in Australia is one of the highest in the world, with an estimated 63% of Australia's 6.6 million households owning some kind of pet (53% owning a cat or dog)
- some 13.1 million Australians are associated with pets
- the pet care industry gives employment to more than 44,000 people, both directly and indirectly covering full-time, part-time and casual positions
- with few exceptions the pet care and services industry consists of enterprises classified as small businesses, operating as sole traders and employing on average between one and three staff
- total consumer expenditure on pet care products and services in 2005 was estimated at \$4.6 billion
- in 2007, 37.1 million pets were owned throughout Australia, including 3.7 million dogs and 2.2 million cats. In addition, there are approximately 20 million fish, 7.8 million birds and around 3 million other pets including horses, rabbits, guinea pigs and other small animals.

Companion animal services career opportunities include positions, such as animal handler, animal trainer, assistant dog trainer, cattery attendant, groomer, kennel attendant, pet exerciser, pet funeral operator, pet shop/aquarium assistant/manager, pet transporter, security dog handler, animal breeder, abandoned animal shelter manager, stablehand and farm assistants, as well as reptile industry and specialised marine aquarium animals for pet shop retail.

Workers in this sector are involved in the care of a variety of animals and are routinely involved in tasks like feeding, maintaining hygiene, maintaining housing, grooming and providing information to the public on products and services.

They are required to have a range of skills to carry out tasks, such as providing basic first aid to animals, providing advice on the selection and care of companion animals and aquatic animals, preparing diets and monitoring feeding, carrying out companion animal breeding procedures, capturing, handling and transporting companion animals, operating retail equipment and information technology systems, and performing stock control procedures. In addition, they are required to have knowledge of legal and ethical responsibilities appropriate to the sector.

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### Farriery

Farriery, or care of horses and similar animals' feet, is an ancient craft, believed to have been practised first in the Roman Empire.

A farrier is a specialist in equine hoof care, including the trimming and balancing of a horse's hoof. A farrier is a skilled craftsman with a sound knowledge of both theory and practice of the craft, capable of shoeing all types of equine (or similar) feet, whether normal or defective, of making shoes to suit all types of work and working conditions, and of devising corrective measures to compensate for faulty limb action. A farrier couples a sub-set of the blacksmith's skills (fabricating, adapting, and adjusting metal shoes) with a sub-set of veterinary medicine (knowledge of the anatomy and physiology of the lower limb) to address the care of the horse's feet. Farriery is hard and physical work, often outdoors in all weathers. It is practiced on animals, some of which may be fractious.

Additional tasks for the farrier include dealing with injured and/or diseased hooves and application of special shoes for racing, training, performance or 'cosmetic' purposes. In cases of horses with certain diseases or injuries, special reparative procedures may be needed for the hooves, followed by the construction and fitting of special shoes. This specialist work is usually undertaken in consultation with veterinarians involved with hoof care.

Most farriers travel to their customers' premises or competition venues to work. Farriers carry a mobile workshop of tools (which they must maintain) and stock with them.

As most farriers are self-employed, success depends on providing a good service to existing customers and encouraging new customers. The Master Farriers Association (MFA) and the Australian Farriers and Blacksmiths Association (AFBA) are the two national farrier professional bodies in Australia, with affiliate branches in most states/territories.

According to the ABS 2001 Census report there were 814 farriers working in Australia (768 male and 46 female). This figure appears low given the anecdotal feedback received during the Phase 1 Environmental Scan.

In terms of education, a farrier can either have completed a trade certificate course, have been apprenticed to a qualified farrier, have learnt the trade from another unqualified farrier or be self taught.

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In 1996, national competency standards were introduced and subsequently replaced by the Victorian accredited Certificate III in Farriery (Trade) which is the current course delivered in most states and territories.

There is no legal requirement in Australia for a farrier to be registered before commercially shoeing horses (as there is in England). However, in some states/territories farriers must be registered to work at thoroughbred or harness race tracks.

### Veterinary nursing

Veterinary nurses work in veterinary practices and animal hospitals, animal welfare organisations, research and teaching institutions, zoos, wildlife parks or appropriate government bodies. The work involves providing support to veterinarians in the management and care of animals receiving treatment and may include the management of human, financial and technical resources.

They are skilled in undertaking a range of diagnostic tests, medical treatments and minor surgical procedures under the supervision of a veterinarian. They may also play a significant role in the education of owners about responsible pet ownership, and maintaining the health and wellbeing of their pets.

Work undertaken by a veterinary nurse can include coordinating patient admission and discharge, providing grief support, applying radiographic routines, performing pathology procedures and tests, caring for hospitalised animals, carrying out medical nursing routines, and coordinating and performing theatre routines. They may also assist with post-mortem examinations, maintaining veterinary inventory, providing specific animal care advice, including health, product, nutritional and behaviour advice, maintaining practice accounts and developing and implementing specific clinic policies. Nurses may also carry out some business management responsibilities such as supervising the work of others, balancing the practice's accounts, and training other staff.

According to the ABS Veterinary Services Survey (2000) at the end of June 2000, there were:

- 1,792 veterinary practices in Australia, operating from a total of 2,325 locations with:
  - 1,153 in capital cities
  - 1,172 in other locations:

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- of these practices approximately 70% of income was generated from the treatment of companion animals and 10% from farm/production animals
- 13,218 were persons working in the veterinary services industry:
  - permanent employees totalled 8,489 and accounted for 64% of total employment:
    - 5,732 persons were permanent full-time employees
    - 2,757 persons were permanent part-time employees
  - the remaining employment comprised 1,797 working proprietors and partners and 2,933 casuals
- females accounted for 73% (9,646 persons) of the persons working in the industry, and 77% of the permanent employees
- nurses (5,667 persons) accounted for 43% of employment, of whom 97% were females.

The Veterinary Nursing Council of Australia (VNCA) is the peak industry body with approximately 1,300 members nationally. The VNCA in conjunction with the Australian Veterinary Association established an industry accreditation scheme based on the RUV04 Training Package. The *Accredited Veterinary Nursing Scheme* identified a need for recognition of an individual nurse's competence, currency and dedication to the veterinary nursing profession.

## Qualifications Framework

### The Australian Qualifications Framework

#### What is the Australian Qualifications Framework?

A brief overview of the Australian Qualifications Framework (AQF) follows. For a full explanation of the AQF, see the *AQF Implementation Handbook*.

[http://www.aqf.edu.au/Portals/0/Documents/Handbook/AQF\\_Handbook\\_07.pdf](http://www.aqf.edu.au/Portals/0/Documents/Handbook/AQF_Handbook_07.pdf)

The AQF provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the vocational education and training (VET) sector it assists national consistency for all trainees, learners, employers and providers by enabling national recognition of qualifications and Statements of Attainment.

Training Package qualifications in the VET sector must comply with the titles and guidelines of the AQF. Endorsed Training Packages provide a unique title for each AQF qualification which must always be reproduced accurately.

#### Qualifications

Training Packages can incorporate the following eight AQF qualifications.

- Certificate I in ...

- Certificate II in ...
- Certificate III in ...
- Certificate IV in ...
- Diploma of ...
- Advanced Diploma of ...
- Vocational Graduate Certificate of ...
- Vocational Graduate Diploma of ...

On completion of the requirements defined in the Training Package, a Registered Training Organisation (RTO) may issue a nationally recognised AQF qualification. Issuance of AQF qualifications must comply with the advice provided in the *AQF Implementation Handbook* and the AQTF 2010 *Essential Standards for Initial and Continuing Registration*.

### **Statement of Attainment**

A Statement of Attainment is issued by a Registered Training Organisation when an individual has completed one or more units of competency from nationally recognised qualification(s)/courses(s). Issuance of Statements of Attainment must comply with the advice provided in the current *AQF Implementation Handbook* and the AQTF 2010 *Essential Standards for Initial and Continuing Registration*.

Under the AQTF 2010, RTOs must recognise the achievement of competencies as recorded on a qualification or Statement of Attainment issued by other RTOs. Given this, recognised competencies can progressively build towards a full AQF qualification.

### **AQF Guidelines and Learning Outcomes**

The *AQF Implementation Handbook* provides a comprehensive guideline for each AQF qualification. A summary of the learning outcome characteristics and their distinguishing features for each VET related AQF qualification is provided below.

## **Certificate I**

### *Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities most of which may be routine and predictable.

Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

### *Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks given clear direction

receive and pass on messages/information.

## **Certificate II**

### *Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of operations to be applied.

Performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes.

Applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.

#### *Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;

take limited responsibility for own outputs in work and learning.

### **Certificate III**

#### *Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and competencies would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the selection of equipment, services or contingency measures and within known time constraints.

Applications may involve some responsibility for others. Participation in teams including group or team co-ordination may be involved.

#### *Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate some relevant theoretical knowledge
- apply a range of well-developed skills
- apply known solutions to a variety of predictable problems
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information, using discretion and judgement
- take responsibility for own outputs in work and learning

take limited responsibility for the output of others.

## Certificate IV

### *Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and competencies would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance are involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills. Applications involve responsibility for, and limited organisation of, others.

### *Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts
- apply solutions to a defined range of unpredictable problems
- identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas
- identify, analyse and evaluate information from a variety of sources
- take responsibility for own outputs in relation to specified quality standards

take limited responsibility for the quantity and quality of the output of others.

## Diploma

### *Characteristics of Learning Outcomes*

Breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and co-ordination.

The self directed application of knowledge and skills, with substantial depth in some areas where judgment is required in planning and selecting appropriate equipment, services and techniques for self and others.

Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team co-ordination may be involved.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

### *Distinguishing Features of Learning Outcomes*

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas
- analyse and plan approaches to technical problems or management requirements



- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations
  - evaluate information, using it to forecast for planning or research purposes
  - take responsibility for own outputs in relation to broad quantity and quality parameters
- take some responsibility for the achievement of group outcomes.

## Advanced Diploma

### *Characteristics of Learning Outcomes*

Breadth, depth and complexity involving analysis, design, planning, execution and evaluation across a range of technical and/or management functions including development of new criteria or applications or knowledge or procedures.

The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved.

Applications involve significant judgement in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

### *Distinguishing Features of Learning Outcomes*

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of specialised knowledge with depth in some areas
- analyse, diagnose, design and execute judgements across a broad range of technical or management functions
- generate ideas through the analysis of information and concepts at an abstract level
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills
- demonstrate accountability for personal outputs within broad parameters

demonstrate accountability for personal and group outcomes within broad parameters.

## Vocational Graduate Certificate

### Characteristics of competencies or learning outcomes

- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Substantial breadth and complexity involving the initiation, analysis, design, planning, execution and evaluation of technical and management functions in highly varied and highly specialised contexts.

- Applications involve making significant, high-level, independent judgements in major broad or planning, design, operational, technical and management functions in highly varied and specialised contexts. They may include responsibility and broad-ranging accountability for the structure, management and output of the work or functions of others.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

#### Distinguishing features of learning outcomes

- Demonstrate the self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major broad or technical and management functions in highly varied and highly specialised contexts.
- Generate and evaluate ideas through the analysis of information and concepts at an abstract level.
- Demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills in complex contexts.
- Demonstrate responsibility and broad-ranging accountability for the structure, management and output of the work or functions of others.

### **Vocational Graduate Diploma**

#### Characteristics of competencies or learning outcomes

- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Substantial breadth, depth and complexity involving the initiation, analysis, design, planning, execution and evaluation of major functions, both broad and highly specialised, in highly varied and highly specialised contexts.
- Further specialisation within a systematic and coherent body of knowledge.
- Applications involve making high-level, fully independent, complex judgements in broad planning, design, operational, technical and management functions in highly varied and highly specialised contexts. They may include full responsibility and accountability for all aspects of work and functions of others, including planning, budgeting and strategy development.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

#### Distinguishing features of learning outcomes

- Demonstrate the self-directed development and achievement of broad and highly specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major functions, both broad and within highly varied and highly specialised contexts.
- Generate and evaluate complex ideas through the analysis of information and concepts at an abstract level.
- Demonstrate an expert command of wide-ranging, highly specialised, technical, creative or conceptual skills in complex and highly specialised or varied contexts.
- Demonstrate full responsibility and accountability for personal outputs.

- Demonstrate full responsibility and accountability for all aspects of the work or functions of others, including planning, budgeting and strategy.

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## Qualification Pathways

The following pathways charts are provided to show the types of pathways into and from qualifications that are possible with this Training Package. For more information about qualifications and pathways contact AgriFood Skills Australia (<http://www.agrifoodskills.net.au>).

The following pathways chart is provided to show the types of pathways into and from qualifications that are possible with this Training Package. For more information about qualifications and pathways contact AgriFood Skills Australia, [www.agrifoodskills.net.au](http://www.agrifoodskills.net.au).

Flexible qualification pathways are available through ACM10 Animal Care and Management Training Package. The following pathways chart is provided to show the types of pathways into and from qualifications that are possible. In the chart, solid arrows show direct relationships between qualifications, dashed arrows indicate there is some relationship and dotted arrows indicate there is no relationship. These arrows simply indicate that learners may progress from one qualification to another by building on acquired skills and knowledge and do not necessarily infer that one qualification is required for entry to another.

Additional pathways between qualifications may be structured through recognition assessment in line with Packaging Rules for qualifications.

### VET in Schools

Registered Training Organisations should contact relevant jurisdictional agencies responsible for establishing and authorising recognised VET in Schools pathways.

### Australian Apprenticeships

Qualifications suited to Australian Apprenticeship pathways are identified in the qualification notes. RTOs should contact relevant jurisdictional agencies to clarify available support for implementation of these qualifications.

For further information relating to the ACM10 Animal Care and Management Training Package and available qualification pathways please contact:

#### **AgriFood Skills Australia**

PO Box 5450 Kingston ACT 2604

Telephone: 02 6163 7200

Facsimile: 02 6163 7299

Email: [reception@agrifoodskills.net.au](mailto:reception@agrifoodskills.net.au)

Website: [www.agrifoodskills.net.au](http://www.agrifoodskills.net.au)

## **Skill Sets**

### **Definition**

Skill sets are defined as single units of competency, or combinations of units of competency from an endorsed Training Package, which link to a licence or regulatory requirement, or defined industry need.

### **Wording on Statements of Attainment**

Skill sets are a way of publicly identifying logical groupings of units of competency which meet an identified need or industry outcome. Skill sets are not qualifications.

Where skill sets are identified in a Training Package, the Statement of Attainment can set out the competencies a person has achieved in a way that is consistent and clear for employers and others. This is done by including the wording "these competencies meet [insert skill set title or identified industry area] need" on the Statement of Attainment. This wording applies only to skill sets that are formally identified as such in the endorsed Training Package. See the 2007 edition of the AQF Implementation Handbook for advice on wording on Statements of Attainment the updated version is expected to be available on the AQFAB website [www.aqf.edu.au](http://www.aqf.edu.au) during September 2007 and in print in October 2007.

### **Skill Sets in this Training Package**

In response to a range of industry defined requirements during the two phases of the ACM10 Animal Care and Training Package review six Skills Sets have been developed. These are:

- Microchip Implantation for Dogs and Cats Skill Set
- Native Amphibian Rehabilitation Skill Set
- Native Bird Rehabilitation Skill Set
- Native Mammal Rehabilitation Skill Set
- Native Reptile Rehabilitation Skill Set
- Preventative Biosecurity Skill Set.

The microchip and native animal rehabilitation Skills Sets link to various state and/or territory legislation and regulation requirements. Due to the Training Package Developers Handbook criteria that Skill Sets cannot include elective units the ACM10 National Reference Group unanimously supported packaging four native animal rehabilitation skill sets. These are required to cater for the different state/territory species specific priorities, for example, in Western Australia their priority may be native reptiles, whereas in NSW the priority may be native birds and mammals.

The Preventative Biosecurity Skill Set has been developed to address critical industry infection control requirements. This is specifically linked to industry concerns following the outbreak of Equine Influenza in 2007 and a number of Hendra Virus outbreaks in Queensland which sadly resulted in human deaths. The RTE03 Rural Production Training Package includes units of competency that link to emergency disease response, however, there are no units of competency across Training Packages that aim to train all people who work with animals in preventative infection control procedures. This Skill Set will be beneficial for government agencies, such as Departments of Primary Industry who are currently running infection control prevention training programs in Queensland and NSW, as well as employers to skill existing and new workers.

Microchip Implantation for Dogs and Cats Skill Set	
Those wishing to gain the relevant skills and knowledge required to be registered as a state or territory 'approved microchip implanter for cats and dogs'. It will be necessary to check with your relevant state or territory department for current licensing, legislative or regulatory requirements before undertaking this Skill Set.	
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMOHS301A	Contribute to occupational health and safety processes
ACMMIC401A	Implant microchip in cats and dogs
These units may provide credit towards:	
<ul style="list-style-type: none"> <li>• ACM30110 Certificate III in Animal Studies</li> <li>• ACM30310 Certificate III in Captive Animals</li> <li>• ACM30410 Certificate III in Companion Animal Services</li> </ul>	
<ul style="list-style-type: none"> <li>• ACM40410 Certificate IV in Veterinary Nursing</li> </ul>	
These units of competency from the ACM10 Animal Care and Management Training Package meet state and/or territory regulatory requirements for recognition as an 'approved microchip implanter for cats and dogs'.	
Native Amphibian Rehabilitation Skill Set	
Those working as native wildlife carers in the animal care and management industry.	
Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.	
ACMOHS201A	Participate in occupational health and safety processes

ACMGAS305A	Rescue animals and apply basic first aid	
ACMCAN305A	Assist with capturing, restraining and moving animals	
ACMCAN307A	Rehabilitate native wildlife	
ACMCAN308A	Release native animals to natural environment	
ACMCAN311A	Care for young animals	
ACMSPE301A	Provide basic care for amphibians	
These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.		
These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.		
Native Bird Rehabilitation Skill Set		
Those working as native wildlife carers in the animal care and management industry.		
Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.		
ACMOHS201A	Participate in occupational health and safety processes	
ACMGAS305A	Rescue animals and apply basic first aid	
ACMCAN305A	Assist with capturing, restraining and moving animals	
ACMCAN307A	Rehabilitate native wildlife	
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals
	ACMSPE302A	Provide basic care for birds
Pathway	These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.	
Suggested words for statement of	These units of competency from the ACM10 Animal	

attainment	Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.	
Native Mammal Rehabilitation Skill Set		
Target group	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>	
Units	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals
	ACMSPE303A	Provide basic care for common native mammals
Pathway	<p>These units of competency may provide credit towards ACM30310</p> <p>Certificate III in Captive Animals.</p>	
Suggested words for statement of attainment	These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.	

Native Reptile Rehabilitation Skill Set		
Target group	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>	
Units	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals
	ACMSPE311A	Provide basic care for non-venomous reptiles
Pathway	<p>These units of competency may provide credit towards ACM30310</p> <p>Certificate III in Captive Animals.</p>	
Suggested words for statement of attainment	<p>These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.</p>	
Preventative Biosecurity Skill Set		
Target group	<p>Those working across a broad spectrum of enterprises or sectors, where animal care is provided, and compliance with preventative biosecurity procedures is</p>	



	essential.	
Units	ACMINF301A	Comply with infection control policies and procedures in animal work
	ACMSUS201A	Participate in environmentally sustainable work practices
	RTE3407A	Identify and report unusual disease or plant pest signs
Pathway	<p>These units of competency may provide credit towards:</p> <ul style="list-style-type: none"> <li>• ACM30110 Certificate III in Animal Studies</li> <li>• ACM30310 Certificate III in Captive Animals</li> <li>• ACM30410 Certificate III in Companion Animal Services</li> <li>• ACM40410 Certificate IV in Veterinary Nursing.</li> </ul>	
Suggested words for statement of attainment	These units of competency from the ACM10 Animal Care and Management Training Package meet the essential industry requirements related to compliance with infection control procedures.	

## History

<b>History</b>
ACM10 Animal Care and Management Training Package replaces and supersedes RUV04 Animal Care and Management Training Package.

## Employability Skills

### Employability Skills replacing Key Competency information from 2006

In May 2005, the approach to incorporate Employability Skills within Training Package qualifications and units of competency was endorsed. As a result, from 2006 Employability Skills will progressively replace Key Competency information in Training Packages.

## Background to Employability Skills

Employability Skills are also sometimes referred to as generic skills, capabilities or Key Competencies. The Employability Skills discussed here build on the Mayer Committee's Key Competencies, which were developed in 1992 and attempted to describe generic competencies for effective participation in work.

The Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI), produced the *Employability Skills for the Future* report in 2002 in consultation with other peak employer bodies and with funding provided by the Department of Education, Science and Training (DEST) and the Australian National Training Authority (ANTA). Officially released by Dr Nelson (Minister for Education, Science and Training) on 23 May 2002, copies of the report are available from the DEST website at:

[http://www.dest.gov.au/archive/ty/publications/employability\\_skills/index.htm](http://www.dest.gov.au/archive/ty/publications/employability_skills/index.htm).

The report indicated that business and industry now require a broader range of skills than the Mayer Key Competencies Framework and featured an Employability Skills Framework identifying eight Employability Skills\*:

- communication
- teamwork
- problem solving
- initiative and enterprise
- planning and organising
- self-management
- learning
- technology.

The report demonstrated how Employability Skills can be further described for particular occupational and industry contexts by sets of facets. The facets listed in the report are the aspects of the Employability Skills that the sample of employers surveyed identified as being important work skills. These facets were seen by employers as being dependent both in their nature and priority on an enterprise's business activity.

\*Personal attributes that contribute to employability were also identified in the report but are not part of the Employability Skills Framework.

### Employability Skills Framework

The following table contains the Employability Skills facets identified in the report *Employability Skills for the Future*.

Skill	Facets
	Aspects of the skill that employers identify as important. The nature and application of these facets will vary depending on industry and job

	type.
<b>Communication</b> that contributes to productive	<ul style="list-style-type: none"> <li>• listening and understanding</li> <li>• speaking clearly and directly</li> </ul>
and harmonious relations across employees and customers	<ul style="list-style-type: none"> <li>• writing to the needs of the audience</li> <li>• negotiating responsively</li> <li>• reading independently</li> <li>• empathising</li> <li>• using numeracy effectively</li> <li>• understanding the needs of internal and external customers</li> <li>• persuading effectively</li> <li>• establishing and using networks</li> <li>• being assertive</li> <li>• sharing information</li> <li>• speaking and writing in languages other than English</li> </ul>
<b>Teamwork</b> that contributes to productive working relationships and outcomes	<ul style="list-style-type: none"> <li>• working across different ages irrespective of gender, race, religion or political persuasion</li> <li>• working as an individual and as a member of a team</li> <li>• knowing how to define a role as part of the team</li> <li>• applying teamwork to a range of situations e.g. futures planning and crisis problem solving</li> <li>• identifying the strengths of team members</li> <li>• coaching and mentoring skills, including giving feedback</li> </ul>
<b>Problem solving</b> that contributes to productive outcomes	<ul style="list-style-type: none"> <li>• developing creative, innovative and practical solutions</li> <li>• showing independence and initiative in identifying and solving problems</li> <li>• solving problems in teams</li> <li>• applying a range of strategies to problem solving</li> <li>• using mathematics, including budgeting and</li> </ul>

	<p>financial management to solve problems</p> <ul style="list-style-type: none"> <li>• applying problem-solving strategies across a range of areas</li> <li>• testing assumptions, taking into account the context of data and circumstances</li> <li>• resolving customer concerns in relation to complex project issues</li> </ul>
<p><b>Initiative and enterprise</b> that contribute to innovative outcomes</p>	<ul style="list-style-type: none"> <li>• adapting to new situations</li> <li>• developing a strategic, creative and long-term vision</li> <li>• being creative</li> <li>• identifying opportunities not obvious to others</li> <li>• translating ideas into action</li> <li>• generating a range of options</li> <li>• initiating innovative solutions</li> </ul>
<p><b>Planning and organising</b> that contribute to long and short-term strategic planning</p>	<ul style="list-style-type: none"> <li>• managing time and priorities - setting time lines, coordinating tasks for self and with others</li> <li>• being resourceful</li> <li>• taking initiative and making decisions</li> <li>• adapting resource allocations to cope with contingencies</li> <li>• establishing clear project goals and deliverables</li> <li>• allocating people and other resources to tasks</li> <li>• planning the use of resources, including time management</li> <li>• participating in continuous improvement and planning processes</li> <li>• developing a vision and a proactive plan to accompany it</li> </ul>
	<ul style="list-style-type: none"> <li>• predicting - weighing up risk, evaluating alternatives and applying evaluation criteria</li> <li>• collecting, analysing and organising information</li> <li>• understanding basic business systems and their relationships</li> </ul>

<p><b>Self-management</b> that contributes to employee satisfaction and growth</p>	<ul style="list-style-type: none"> <li>• having a personal vision and goals</li> <li>• evaluating and monitoring own performance</li> <li>• having knowledge and confidence in own ideas and visions</li> <li>• articulating own ideas and visions</li> <li>• taking responsibility</li> </ul>
<p><b>Learning</b> that contributes to ongoing improvement and expansion in employee and company operations and outcomes</p>	<ul style="list-style-type: none"> <li>• managing own learning</li> <li>• contributing to the learning community at the workplace</li> <li>• using a range of mediums to learn - mentoring, peer support and networking, IT and courses</li> <li>• applying learning to technical issues (e.g. learning about products) and people issues (e.g. interpersonal and cultural aspects of work)</li> <li>• having enthusiasm for ongoing learning</li> <li>• being willing to learn in any setting - on and off the job</li> <li>• being open to new ideas and techniques</li> <li>• being prepared to invest time and effort in learning new skills</li> <li>• acknowledging the need to learn in order to accommodate change</li> </ul>
<p><b>Technology</b> that contributes to the effective carrying out of tasks</p>	<ul style="list-style-type: none"> <li>• having a range of basic IT skills</li> <li>• applying IT as a management tool</li> <li>• using IT to organise data</li> <li>• being willing to learn new IT skills</li> <li>• having the OHS knowledge to apply technology</li> <li>• having the appropriate physical capacity</li> </ul>

### Employability Skills Summary

An Employability Skills Summary exists for each qualification. Summaries provide a lens through which to view Employability Skills at the qualification level and capture the key aspects or facets of the Employability Skills that are important to the job roles covered by the qualification. Summaries are designed to assist trainers and assessors to identify and include important industry application of Employability Skills in learning and assessment strategies.

The following is important information for trainers and assessors about Employability Skills Summaries.

- Employability Skills Summaries provide examples of how each skill is applicable to the job roles covered by the qualification.
- Employability Skills Summaries contain general information about industry context which is further explained as measurable outcomes of performance in the units of competency in each qualification.
- The detail in each Employability Skills Summary will vary depending on the range of job roles covered by the qualification in question.
- Employability Skills Summaries are not exhaustive lists of qualification requirements or checklists of performance (which are separate assessment tools that should be designed by trainers and assessors after analysis at the unit level).
- Employability Skills Summaries contain information that may also assist in building learners' understanding of industry and workplace expectations.

## Industry Requirements for Employability Skills

### Industry Requirements for Employability Skills

The ACM10 Animal Care and Management Training Package seeks to ensure that industry-endorsed Employability Skills are explicitly embedded in units of competency. The application of each skill and the level of detail included in each part of the unit will vary according to the specific industry sector requirements and the nature of the unit of competency. This means that Employability Skills are:

- embedded in units of competency as part of the other performance requirements that make up the competency as a whole
- explicitly described within units of competency to enable Training Package users to identify accurately the performance requirements of each unit with regards to Employability Skills.

ACM10 Animal Care and Management Training Package also seeks to ensure that Employability Skills are well-defined and written into units of competency so that they are apparent, clear and can be delivered and assessed as an essential component of unit work outcomes.

#### *For example:*

*Animal technicians* undertake animal technology functions within biomedical research or production environments. It is a key role of technicians to recognise and report non-conformance and maintain security and confidentiality of all client/institute/facility data and information. They generally work under strict operating procedures and must be able to access, record and present information

## Industry Requirements for Employability Skills

accurately. Initiative and planning is required at all levels.

*Veterinary nurses* working in a veterinary clinic or practice must be able to communicate with all team members and clients in a professional manner. They generally work under strict clinical conditions and must be able to recognise their own shortcomings and seek advice and assistance when required.

## Assessment Guidelines

### Introduction

These Assessment Guidelines provide the endorsed framework for assessment of units of competency in this Training Package. They are designed to ensure that assessment is consistent with the AQTF 2007. Assessments against the units of competency in this Training Package must be carried out in accordance with these Assessment Guidelines.

### Assessment System Overview

This section provides an overview of the requirements for assessment when using this Training Package, including a summary of the AQTF 2007 requirements; licensing/registration requirements; and assessment pathways.

### Benchmarks for Assessment

Assessment within the National Skills Framework is the process of collecting evidence and making judgments about whether competency has been achieved to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the relevant endorsed unit of competency.

In the areas of work covered by this Training Package, the endorsed units of competency are the benchmarks for assessment. As such, they provide the basis for nationally recognised Australian Qualifications Framework (AQF) qualifications and Statements of Attainment issued by Registered Training Organisations (RTOs).

### Australian Quality Training Framework Assessment Requirements

Assessment leading to nationally recognised AQF qualifications and Statements of Attainment in the vocational education and training sector must meet the requirements of the AQTF as expressed in the AQTF 2007 *Essential Standards for Registration*.

The AQTF 2007 *Essential Standards for Registration* can be downloaded from <[www.training.com.au/aqtf2007](http://www.training.com.au/aqtf2007)>. The following points summarise assessment requirements.

### Registration of Training Organisations

Assessment must be conducted by, or on behalf of, an RTO formally registered by a State or Territory Registering/Course Accrediting Body in accordance with the AQTF 2007 *Essential Standards for Registration*. The RTO must have the specific units of competency and/or AQF qualifications on its scope of registration.

## **Quality Training and Assessment**

Each RTO must provide quality training and assessment across all its operations. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

## **Assessor Competency Requirements**

Each person involved in training, assessment or client service must be competent for the functions they perform. See the AQTF 2007 *Essential Standards for Registration*, Standard 1, for assessor (and trainer) competency requirements.

## **Assessment Requirements**

The RTOs assessments, including RPL, must meet the requirements of the relevant endorsed Training Package. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

## **Assessment Strategies**

Each RTO must have strategies for training and assessment that meet the requirements of the relevant Training Package or accredited course and are developed in consultation with industry stakeholders. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

## **National Recognition**

Each RTO must recognise the AQF qualifications and Statements of Attainment issued by any other RTO. See the AQTF 2007 *Essential Standards for Registration*, Condition of Registration 7: Recognition of qualifications issued by other RTOs.

## **Access and Equity and Client Outcomes**

Each RTO must adhere to the principles of access and equity and maximise outcomes for its clients. See the AQTF 2007 *Essential Standards for Registration*, Standard 2.

## **Monitoring Assessments**

Training and/or assessment provided on behalf of the RTO must be monitored to ensure that it is in accordance with all aspects of the Essential Standards for Registration. See the AQTF 2007 *Essential Standards for Registration*, Standard 3.

## **Recording Assessment Outcomes**

Each RTO must manage records to ensure their accuracy and integrity. See the AQTF 2007 *Essential Standards for Registration*, Standard 3.

## **Issuing AQF Qualifications and Statements of Attainment**

Each RTO must issue AQF qualifications and Statements of Attainment that meet the requirements of the current AQF Implementation Handbook and the endorsed Training Packages within the scope of its registration. An AQF qualification is issued once the full requirements for a qualification, as specified in the nationally endorsed Training Package are met. A Statement of Attainment is issued when an individual has completed one or more units of competency from nationally recognised qualification(s)/course(s). See the AQTF 2007 and the 2007 edition of the AQF Implementation Handbook-available on the AQFAB website < [www.aqf.edu.au](http://www.aqf.edu.au) >.

This section provides information on licensing/registration requirements for this Training Package, with the following important disclaimer.



*Licensing and registration requirements that apply to specific industries, and VET, vary between each state and territory and can regularly change. The developers of this Training Package and DEEWR consider that the licensing/registration requirements described in this section apply to RTOs, assessors or candidates with respect to this Training Package. While reasonable care has been taken in its preparation, the developers of this Training Package and DEEWR cannot guarantee that the list is definitive or accurate at the time of reading; the information in this section is provided in good faith on that basis.*

Contact the relevant state or territory department(s) to check if the licensing/registration requirements described below still apply, and to check if there are any others with which you must comply. For further information contact AgriFood Skills Australia at [www.agrifoodskills.net.au](http://www.agrifoodskills.net.au)

**Requirements for RTOs including Assessors**

In order to conduct training and assessment for statutory licensing, other industry registration or regulatory requirements, RTOs and assessors must meet the requirements outlined in the following chart, in addition to the AQTF requirements.

**Licensing/Registration Requirements**

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**Requirements for RTOs including Assessors**

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Reference	License/Registration/ Regulation	Jurisdiction	Requirements
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All qualifications and units of competency	Animal welfare legislation, regulations and codes of practice	Federal as well as all states and territories	RTO and workers should consult with the relevant regulatory authority before undertaking this work
Preventative Biosecurity Skill Set and units of competency ACMATE302A ACMINF301A	Biosecurity and quarantine legislation and regulations	Federal as well as all states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
Certificate IV and Diplomas in Veterinary Nursing	Veterinary Practitioners Board registration	Western Australia	RTO and workers should consult with the relevant regulatory authority before undertaking this work
Unit of competency ACMMIC401A	Microchip implantation	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
Units of competency ACMVET402A ACMVET503A	Radiography	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
Units of Competency ACMACR408A ACMATE305A	Euthanasia of animals	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
Native Animal Rehabilitation Skill Sets and associated units of competency	Native animal rehabilitation permits	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
Units of competency ACMACR408A ACMATE305A	Firearms licence	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work
A range of units of competency	Use, application and storage of therapeutic and controlled substances	All states and territories	RTO and workers should consult with relevant regulatory authority before undertaking this work

Specifically Animal Technology units of competency. Generally all units in Training Package due to use of animals for teaching purposes	Care and use of animals for scientific purposes	Federal as well as all states and territories	RTO and workers should consult with relevant regulatory authority/ies before undertaking this work
Certificate III in Farriery	To practice as a farrier on racecourses in some states or territories	State or Territory Rules of Racing	RTO and workers should consult with relevant regulatory authority before undertaking this work

### Requirements for Assessors

Assessors will be required to meet the AQTF requirements. This includes meeting the required licensing, registration or regulatory requirements as well as demonstrated technical competency for the ACM units assessed.

### Requirements for Candidates

### Requirements for RTOs

RTOs need to take into account a range of considerations when designing assessment strategies. In particular, the majority of units have been written with a focus on a workplace assessment environment. Where this is obligatory it is identified in the unit of competency.

Wherever possible integrated (holistic) assessment is the preferred means of assessment. Holistic assessment should reflect the grouping of competencies as they would be demonstrated in an actual work role. The context of assessment is defined in each unit of competency.

### Design of assessment

The design of assessment needs to ensure that all aspects of competency are covered:

- task skills (performance of individual tasks)
- job/role environment skills (deals with the responsibilities and expectations of the workplace)
- relevant underpinning knowledge

and where qualification levels require:

- task management skills (managing a number of different tasks within the job)
- contingency management skills (responding to problems, breakdowns and changes in

routine).

### **Evidence gathering methods**

Evidence gathering methods must be gender and culturally-inclusive and take into account the language, literacy and numeracy skills of both candidate and assessor. Assessors may consider:

- incorporating a range of assessment techniques
- integrating the assessment of units related to the performance of 'whole of work' tasks, roles or functions
- using a holistic approach which combines knowledge, understanding, problem-solving, technical skills and applications to new situations into the assessment process
- assessing in the workplace (wherever possible), using familiar skills and materials
- eliminating any unnecessary reading or written assessment (if these skills are not required to do the job, they should not be part of the assessment)
- ensuring understanding of questions by rephrasing to clarify and using the language and terms of the job and the workplace
- encouraging the candidate to ask questions to clarify instructions
- providing clarification of purpose and process of assessment
- considering cultural and gender issues when setting up the assessment.

### **Workplace assessment considerations**

Where assessment is occurring in the workplace, assessors should consult on the assessment process with the parties involved. Candidates should be briefed on the process of making judgements against the standards and made to feel as relaxed as possible.

The assessment should take place over a reasonable length of time so that the candidate has the opportunity to demonstrate work responsibility and contingency management. Third-party reports of workplace performance, if available, are helpful for this.

Consider the other staff in the workplace likely to be affected by the process. All staff directly or indirectly involved in the process should be briefed on the factors which will impact on them, such as duration or changes in work routine.

Ensure that assessment is as compatible as possible with the normal pattern of work and causes minimal disruption. Assessment resources for this Training Package should provide ways in which to address these matters.

### **Assessment in a simulated environment**

Where assessment is occurring out of the workplace, it is important to ensure that:

- the assessment takes place in a situation as close as possible to workplace reality

- all aspects of competency are assessed
- the assessment takes place over a reasonable length of time so that the candidate has the opportunity to demonstrate work responsibility and contingency management (third-party reports of workplace performance, if available, are helpful for this)
- equipment, resources and documents used in assessment closely reflect workplace reality.

It is critical that the designer of the simulation is thoroughly familiar with the application of the competency and is experienced in current and relevant workplace practices. The simulation or assessment environment must provide opportunities to:

- demonstrate use of required equipment and other resources
- show the complexity of dealing with multiple tasks
- reflect time pressures and deadlines
- involve prioritising among competing tasks
- deal with customers/clients, including difficult ones
- work with others in a team
- communicate with diverse groups
- find, discuss and test solutions to problems
- explore animal health, welfare and ethical issues
- explore health and safety issues
- answer practically-oriented, applied knowledge questions
- show the level of verbal and written expression sufficient for, but not exceeding, the work requirements.

### **Training and assessment in remote and regional areas**

Training and assessing candidates in remote and regional areas present a range of challenges. These include:

- lack of numbers preventing the establishment of traditional class sizes
- physical remoteness of some communities, where access to training facilities is limited
- scarcity of trainers with the required industry experience
- scarcity of physical training resources (e.g. current and emerging technology).

Some options for overcoming these challenges include:

- partnerships between RTOs to establish classes, i.e. programs delivered on a regional rather than local basis
- delivering certain units by distance mode
- partnerships between industry and RTOs to share resources and personnel
- partnerships between schools and RTOs
- recruiting suitably qualified workplace supervisors to oversee instruction and assessment on the job
- travelling to remote workplaces to provide instruction and assessment
- use of technology (e.g. email, video demonstration, CDs and internet) and self-paced resources

- use of block release delivery methodology.

### **Training and assessment for schools**

Implementation of ACM10 Animal Care and Management Training Package within the school sector needs to ensure the following:

- currency of skills and knowledge of those charges with training and assessing students
- access to industry-current equipment, facilities and training resources so that students acquire a realistic view of the realities and conditions within the workplace
- comprehensive coverage of underpinning skills and knowledge as delineated within the units of competency
- appropriateness of learning and assessment experiences to ensure that these are current and realistic.

It is recommended that delivery of qualifications in schools should only include Certificates I and II.

### **Pathways**

The competencies in this Training Package may be attained in a number of ways including through:

- formal or informal education and training
- experiences in the workplace
- general life experience, and/or
- any combination of the above.

Assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a learning and assessment pathway, an assessment-only or recognition pathway, or a combination of the two as illustrated in the following diagram.

Each of these assessment pathways leads to full recognition of competencies held - the critical issue is that the candidate is competent, not how the competency was acquired.

Assessment, by any pathway, must comply with the assessment requirements set out in the Assessment Guidelines of the Training Package and the AQTF 2007.

### **Learning and Assessment Pathways**

Usually, learning and assessment are integrated, with assessment evidence being collected and feedback provided to the candidate at anytime throughout the learning and assessment process.

Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.

Learning and assessment pathways to suit Australian Apprenticeships have a mix of formal structured training and structured workplace experience with formative assessment activities through which candidates can acquire and demonstrate skills and knowledge from the relevant units of competency.

### **Assessment-Only or Recognition of Prior Learning Pathway**

Competencies already held by individuals can be formally assessed against the units of competency in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In an assessment-only or Recognition of Prior Learning (RPL) pathway, the candidate provides current, quality evidence of their competency against the relevant unit of competency. This process may be directed by the candidate and verified by the assessor, such as in the compilation of portfolios; or directed by the assessor, such as through observation of workplace performance and skills application, and oral and/or written assessment. Where the outcomes of this process indicate that the candidate is competent, structured training is not required. The RPL requirements of the AQTF 2007 must be met (Standard 1).

As with all assessment, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed unit of competency. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples. The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In judging evidence, the assessor must ensure that the evidence of prior learning is:

- authentic (the candidate's own work)
- valid (directly related to the current version of the relevant endorsed unit of competency)
- reliable (shows that the candidate consistently meets the endorsed unit of competency)
- current (reflects the candidate's current capacity to perform the aspect of the work covered by the endorsed unit of competency), and
- sufficient (covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

The assessment only or recognition of prior learning pathway is likely to be most appropriate in the following scenarios:

- candidates enrolling in qualifications who want recognition for prior learning or current competencies
- existing workers
- individuals with overseas qualifications
- recent migrants with established work histories
- people returning to the workplace, and
- people with disabilities or injuries requiring a change in career.

### **Combination of Pathways**

Where candidates for assessment have gained competencies through work and life experience and gaps in their competence are identified, or where they require training in new areas, a combination of pathways may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competency. Once current competency is identified, a structured learning and assessment program ensures that the candidate acquires the required additional competencies identified as gaps.



## Assessor Requirements

This section identifies the mandatory competencies for assessors, and clarifies how others may contribute to the assessment process where one person alone does not hold all the required competencies.

### Assessor Competencies

The AQTF 2007 specifies mandatory competency requirements for assessors. For information, Standard 1, Element 1.4 from the AQTF 2007 *Essential Standards for Registration* follows:

1.4	<i>Training and assessment is delivered by trainers and assessors who:</i>
a)	<i>have the necessary training and assessment competencies as determined by the National Quality Council or its successors</i>
b)	<i>have the relevant vocational competencies at least to the level being delivered or assessed</i>
c)	<i>continue developing their vocational and training and assessment competencies to support continuous improvements in the delivery of the RTO's services.</i>

## Designing Assessment Tools

This section provides an overview on the use and development of assessment tools.

### Use of Assessment Tools

Assessment tools provide a means of collecting the evidence that assessors use in making judgments about whether candidates have achieved competency.

There is no set format or process for the design, production or development of assessment tools. Assessors may use prepared assessment tools, such as those specifically developed to support this Training Package, or they may develop their own.

### Using Prepared Assessment Tools

If using prepared assessment tools, assessors should ensure these are benchmarked, or mapped, against the current version of the relevant unit of competency. This can be done by checking that the materials are listed on the National Training Information Service < [www.ntis.gov.au](http://www.ntis.gov.au)>. Materials on the list have been noted by the National Quality Council as meeting their quality criteria for Training Package support materials.

## Developing Assessment Tools

When developing assessment tools, assessors must ensure that they:

- are benchmarked against the relevant unit or units of competency
- are reviewed as part of the continuous improvement of assessment strategies as required under Standard 1 of the AQTF 2007
- meet the assessment requirements expressed in Standard 1 of the AQTF 2007.

A key reference for assessors developing assessment tools is TAA04 Training and Assessment Training Package and the unit of competency TAAASS403A *Develop assessment tools*. There is no set format or process for the design, production or development of assessment materials.

### Conducting Assessment

This section details the mandatory assessment requirements and provides information on equity in assessment including reasonable adjustment.

### Assessment Requirements

Assessments must meet the criteria set out in the AQTF 2007 Essential Standards for Registration.

For information, the mandatory assessment requirements from Standard 1 from the AQTF 2007 *Essential Standards for Registration* are as follows:

1.5	<i>Assessment, including Recognition of Prior Learning:</i>
	<i>a) meets the requirements of the relevant Training Package or accredited course,</i>
	<i>b) is conducted in accordance with the principles of assessment and the rules of evidence, and</i>
	<i>c) meets workplace and, where relevant, regulatory requirements.</i>

### Assessment of Employability Skills

Employability Skills are integral to workplace competency. As such they must be considered in the design, customisation, delivery and assessment of vocational education and training programs in an integrated and holistic way, as represented diagrammatically below.

Employability Skills are embedded and explicit within each unit of competency. Training providers must use Employability Skills information in order to design valid and reliable training and assessment strategies. This analysis could include:

- reviewing units of competency to locate relevant Employability Skills and determine how they are applied within the unit
- analysing the Employability Skills Summary for the qualification in which the unit or units are packaged to help clarify relevant industry and workplace contexts and the application of Employability Skills at that qualification outcome
- designing training and assessment to address Employability Skills requirements.

For more information on Employability Skills in AgriFood Skills Australia Training Packages go to the AgriFood Skills Australia website at <http://www.agrifoodskills.net.au>.

### **Access and Equity**

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements specified in this Training Package: training and assessment must be bias-free.

Under the rules for their development, Training Packages must reflect and cater for the increasing diversity of Australia's VET clients and Australia's current and future workforce. The flexibilities offered by Training Packages should enhance opportunities and potential outcomes for all people so that we can all benefit from a wider national skills base and a shared contribution to Australia's economic development and social and cultural life.

### **Reasonable adjustments**

It is important that education providers take meaningful, transparent and reasonable steps to consult, consider and implement reasonable adjustments for students with disability.

Under the *Disability Standards for Education 2005*, education providers must make reasonable adjustments for people with disability to the maximum extent that those adjustments do not cause that provider unjustifiable hardship. While "reasonable adjustment" and "unjustifiable hardship" are different concepts and involve different considerations, they both seek to strike a balance between the interests of education providers and the interests of students with and without disability.

An adjustment is any measure or action that a student requires because of their disability, and which has the effect of assisting the student to access and participate in education and training on the same basis as students without a disability. An adjustment is reasonable if it achieves this purpose while taking into account factors such as the nature of the student's disability, the views of the student, the potential effect of the adjustment on the student and others who might be affected, and the costs and benefits of making the adjustment.

An education provider is also entitled to maintain the academic integrity of a course or program and to consider the requirements or components that are inherent or essential to its nature when assessing whether an adjustment is reasonable. There may be more than one adjustment that is reasonable in a given set of circumstances; education providers are required to make adjustments that are reasonable and that do not cause them unjustifiable hardship.

See Part 4, Chapter 2 of the *Training Package Development Handbook* (DEST, September 2007) for more information on reasonable adjustment, including examples of adjustments.

### Assessment for equity groups

It is important that assessment processes take into account a diversity of individual needs and learning styles related to disability, race, socio-economic status, gender, language, ethnicity, geographical isolation, sexuality, work commitments and family responsibilities.

Some inclusive assessment practices which will enhance the learning of all students include:

- know what, in particular, you are assessing, and make this clear to students
- create assessment activities in which students have the opportunity to link their learning to what they already know
- make your expectations clear
- make explicit the way in which competency will be assessed, both in discussion with the class beforehand and prior to any assessment activities
- provide alternative pathways to stated outcomes: allow for flexibility in approach, organisation and assessment. The greater the diversity of methods of assessment, the fairer the process for the greatest number of students

- make accommodations based on individual circumstance and need. Remember that students may need the opportunity to experiment to find the adaptation or accommodation which best meets their learning needs
- include self-assessment as a component of the course. Self-assessment involves discussion with students about the criteria according to which they assess their own performance and the level of performance required for different levels
- discuss assessment alternatives with staff with previous experience teaching students with disabilities. You (and your department) should regularly review any alternative arrangements to ensure that these meet both the student's needs (which may change over time) and stated course outcomes.

### **Assessment for Indigenous learners**

There is evidence that Aboriginal and Torres Strait Islander people, both traditional and contemporary, approach learning differently from the Western intellectual tradition, which is relevant to effective training and assessment. It is understood that Aboriginal and Torres Strait Islander people may:

- learn better in groups than individually
- learn better in the surroundings of their community than in an institutional environment
- prefer oral communications to written forms
- learn on the basis of trial and error in the presence of an experienced person in preference to concept building approaches
- have a highly-developed sense of spatial relations by which they learn; hence stories, maps and pictures would be preferable to oral explanations.

To be effective, it is necessary that training and assessment recognises, adopts and practises appropriate delivery and assessment approaches.

Trainers and assessors who are not Aboriginal or Torres Strait Islanders need information on aspects of Aboriginal and Torres Strait Islander culture. They need to work closely with Aboriginal and Torres Strait Islander people to adopt practices that reflect Aboriginal and Torres Strait Islander approaches. The community should be asked to identify experts to provide information and to assist with assessment of relevant protocols, for example, where required.

There are a number of ways an RTO can establish and maintain culturally appropriate training and assessment practices, including:

- ensuring a high proportion of Aboriginal and Torres Strait Islander participation in all aspects of planning, development, delivery and evaluation
- establishing and maintaining a collaborative relationship with local Aboriginal and Torres Strait Islander communities
- as a mainstream (non-Indigenous) RTO, establishing auspice relationships with

Aboriginal and Torres Strait Islander organisations and individuals, including direct and indirect involvement of persons identified as appropriate by the local community

- ensuring ongoing training of non-Aboriginal and Torres Strait Islander staff at all levels of the RTO, delivered by Aboriginal and Torres Strait Islander personnel.

A flexible approach to assessment will be required by RTOs in order to meet the requirements of Aboriginal and Torres Strait Islander organisations and individuals under this domain within the ACM10 Animal Care and Management Training Package. Principles that underpin assessment include:

- assessment should be transparent, i.e. clearly seen and understood by the candidate and others
- assessment should empower the candidate on the basis of consent, self-assessment and responsibility for the process
- assessment should involve designated community experts working in collaboration with RTO assessors in order to provide appropriate recognition of cultural and community skills and knowledge
- assessments must provide constructive feedback to candidates and support for further competency development.

Assessors may exercise limited discretion in response to organisational or individual requirements, but any changes must not alter the meaning or integrity of the unit of competency. *Refer to the section on Competency Standards for more information.*

### **Assessment for people with a disability**

A disability presents some impairment to everyday activity. Some people with a disability do not have any impairments resulting from their disability. For example, a person who has a hearing impairment which is compensated for by a hearing aid may function without any adjustments. While some people with a disability may have an impairment because of the environment, not the disability itself. For example, hearing loss can be accentuated in a room with loud, competing noise and poor acoustics.

A disability may affect or relate to a range of human functions, including mobility, stamina, lifting ability, memory, vision, hearing, speech, comprehension and mood swings. This may be due to accidents, illnesses or birth.

It is important to remember that it is not the disability itself that should be of interest but its impact on the student's ability to access material and demonstrate knowledge.

Training providers have a legal obligation under the Disability Standards for Education to ensure that students who have a disability are able to access and participate in

education without experiencing discrimination. The information provided below is aimed at assisting teachers/trainers to meet the reasonable adjustment needs of people who have a disability.

### **Adjustments in training and assessment**

An open mind, common sense and tailoring to individual circumstances will, as often as not, ensure individuals achieve the standards that employers and training providers expect. Reasonable adjustments need only be that – reasonable. It is about identifying what adjustments might reasonably be made and how they may be put into place.

Training and assessment can be made more appropriate and fairer for a person who has a disability through attitude, preparation and application.

### **Attitude**

The attitude of others is often the greatest barrier for people who have a disability. While most people who have a disability will only ever require minor adjustments to ensure learning is positive, some will require additional support. There are many support agencies that can provide advice, however teachers/trainers may need to take additional time to ensure their teaching/training meets the learning support needs of the individual concerned.

Positive language creates an atmosphere of mutual respect, which is essential to learning. For example, using language that identifies learners as people rather than language that identifies them by one of their characteristics conveys that the person is more important than the characteristic, such as the difference between a ‘person who has an intellectual disability’ and an ‘intellectually disabled person’. A person who has an intellectual disability could also be identified by a range of equally important characteristics – height, age, sporting interests, etc. However, the term ‘intellectually disabled person’ refers to the disability as the major, and often only, defining characteristic.

### **Preparation**

It is important to identify any functional issues arising from the nature and extent of a person’s disability. This can usually be done by discussing such issues with the individual. In most cases, this consultation will identify reasonable adjustment needs which can be put into place. There are many simple things that teachers/trainers can do to make reasonable adjustments to enable individuals who have a disability to succeed in training and assessment. In some cases, professional support may be required.

### **Application**

Once reasonable adjustments have been implemented it is important to monitor and evaluate what has been done to ensure the best environment for continuous learning

because:

- adjustments may only need to be temporary, i.e. mechanisms may only need to be in place during an induction period or due to a temporary disability, in which case evaluation will ensure appropriateness without the need for ongoing monitoring
- adjustments may need reinforcing – when adjustments need to be ongoing, monitoring may reinforce patterns of behaviour in order for them to become ‘natural’
- adjustments may need improving – where adjustments are ongoing or substantial, a commitment to continuous improvement is recommended through monitoring.

In most cases an informal discussion with the person concerned may be all that is necessary. However, should adjustments be substantial, or a learner not be acquiring competence at a

reasonable rate, a more formal process may be required. This may include:

- performance indicators – training providers, learners and employers should have agreed indicators of performance which can be measured and monitored
- independent support – a third party, independent of the training and/or assessment environment, may need to be involved
- experimentation – if existing adjustments are not proving satisfactory, creative solutions may be needed
- continuing review – formal monitoring is encouraged if adjustments are changed or if substantial adjustments are necessary.

For further information on training and assessment for people with specific needs, the DEEWR website has information about the National Disability Coordination Officer Program, which ‘provides information, coordination and referral services for people with a disability interested in or enrolled in post-school education and training’ ([www.deewr.gov.au](http://www.deewr.gov.au)). The Disability Education Standards Guidance Notes can also be accessed at on the DEEWR web site at:

[www.deewr.gov.au/Schooling/DisabilityStandardsforEducation/Documents/Disability\\_Standards\\_Education\\_Guidance\\_Notes.pdf](http://www.deewr.gov.au/Schooling/DisabilityStandardsforEducation/Documents/Disability_Standards_Education_Guidance_Notes.pdf).

**Reasonable adjustment**

Below are some of the practical things that can be done as part of providing reasonable adjustment to learners with specific support needs to enable them to undertake training and assessment. Clearly, each case will be different and will need to be discussed with the person and in some cases expert help will be needed, at least in the initial stages.

Type of disability	Reasonable adjustment
Acquired brain injury	<ul style="list-style-type: none"> <li>• Memory aids (posters and notes)</li> </ul>



	<ul style="list-style-type: none"> <li>• Reflective listening skills</li> <li>• Stress minimisation</li> <li>• Time and patience.</li> </ul>
Hearing impairment	<ul style="list-style-type: none"> <li>• Audio loops for people using hearing aids</li> <li>• Plain English documents</li> <li>• Fire and alarm systems with flashing lights</li> <li>• Sign language interpreters</li> <li>• Telephone typewriters.</li> </ul>
Intellectual disability	<ul style="list-style-type: none"> <li>• Additional time</li> <li>• Assessment which is appropriate to the skill (i.e. avoiding written assessment for practical tasks)</li> <li>• Mentors</li> <li>• Plain English documents</li> <li>• Practical learning sessions</li> <li>• Repetition of learning exercises.</li> </ul>
Mobility impairment	<ul style="list-style-type: none"> <li>• Access to aids, such as for holding documents</li> <li>• Adjustable tables</li> <li>• Lifting limits</li> <li>• Note-taking support</li> <li>• Verbal rather than written presentations</li> <li>• Personal computers</li> <li>• Wheelchair access.</li> </ul>
Psychiatric disability	<ul style="list-style-type: none"> <li>• Identification and avoidance of stresses</li> <li>• Ongoing rather than formal assessments</li> <li>• Reflective listening skills</li> <li>• ‘Time-out’ breaks in assessment.</li> </ul>
Speech impairment	<ul style="list-style-type: none"> <li>• Information summaries</li> <li>• Stress minimisation</li> <li>• Time and patience</li> <li>• Written rather than verbal opportunities</li> <li>• Additional writing time for assignments and tests.</li> </ul>
Vision impairment	<ul style="list-style-type: none"> <li>• Audiotapes</li> <li>• Braille translations</li> <li>• Enlarged computer screen images</li> <li>• Enlarged text and images</li> <li>• Good lighting or reading lamps</li> <li>• Guide dog provision</li> <li>• Informing the person before moving furniture</li> <li>• Voice synthesisers on computers.</li> </ul>
<ul style="list-style-type: none"> <li>• Training and assessment resources and information for equity groups</li> </ul> <p>The following references provide a range of information and resources related to</p>	

training and assessment for equity groups.

- The Australian Disability Clearing House on Education and Training [www.adcet.edu.au](http://www.adcet.edu.au) website includes resources and articles about the training and assessment of people with a disability.
- Information source for Aboriginal and/or Torres Strait Islander people training and assessment include: National Aboriginal and Torres Strait Education website: [www.natsiew.nexus.edu.au](http://www.natsiew.nexus.edu.au) . In addition most State and Territory Education Departments have an Aboriginal and/or Torres Strait Islander Unit who may be able to provide advice and information.
- The Working with Diversity web site at [www.westone.gov.au/workingwithdiversity](http://www.westone.gov.au/workingwithdiversity) includes a range of resources including:
  - *Working with diversity: A Guide to Equity and the AQTF*
  - *Working with diversity: Quality Training for Indigenous Australians*
  - *Working with diversity: Quality Training for People with a Disability*
- Other relevant, up to date resources may be available in the resources section of the Skills area of the Department of Education, Employment and Workplace Relations at [www.deewr.gov.au](http://www.deewr.gov.au).
- Other informative resources include:

LiteracyNet at [www.literacynet.deewr.gov.au](http://www.literacynet.deewr.gov.au). The site contains key information about Australian adult literacy activities and links to a range of additional program, professional development, resource and research sites.

## Contacts

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## Competency Standards

### What is competency?

The broad concept of industry competency concerns the ability to perform particular tasks and duties to the standard of performance expected in the workplace. Competency requires the application of specified skills, knowledge and attitudes relevant to effective participation in an industry, industry sector or enterprise.

Competency covers all aspects of workplace performance and involves performing individual tasks; managing a range of different tasks; responding to contingencies or breakdowns; and, dealing with the responsibilities of the workplace, including working with others. Workplace competency requires the ability to apply relevant skills, knowledge and attitudes consistently over time and in the required workplace situations and environments. In line with this concept of competency Training Packages focus on what is expected of a competent individual in the workplace as an outcome of learning, rather than focussing on the learning process itself.

Competency standards in Training Packages are determined by industry to meet identified industry skill needs. Competency standards are made up of a number of units of competency each of which describes a key function or role in a particular job function or occupation. Each unit of competency within a Training Package is linked to one or more AQF qualifications.

### **Contextualisation of Units of Competency by RTOs**

Registered Training Organisation (RTOs) may contextualise units of competency to reflect local outcomes required. Contextualisation could involve additions or amendments to the unit of competency to suit particular delivery methods, learner profiles, specific enterprise equipment requirements, or to otherwise meet local needs. However, the integrity of the overall intended outcome of the unit of competency must be maintained.

Any contextualisation of units of competency in this endorsed Training Package must be within the bounds of the following advice. In contextualising units of competency, RTOs:

- must not remove or add to the number and content of elements and performance criteria
- may add specific industry terminology to performance criteria where this does not distort or narrow the competency outcomes
- may make amendments and additions to the range statement as long as such changes do not diminish the breadth of application of the competency and reduce its portability, and/or
- may add detail to the evidence guide in areas such as the critical aspects of evidence or resources and infrastructure required where these expand the breadth of the competency but do not limit its use.

### **Components of Units of Competency**

The components of units of competency are summarised below, in the order in which they appear in each unit of competency.

#### **Unit Title**

The unit title is a succinct statement of the outcome of the unit of competency. Each unit of competency title is unique, both within and across Training Packages.

#### **Unit Descriptor**

The unit descriptor broadly communicates the content of the unit of competency and the skill area it addresses. Where units of competency have been contextualised from units of competency from other endorsed Training Packages, summary information is provided. There may also be a brief second paragraph that describes its relationship with other units of competency, and any licensing requirements.

#### **Employability Skills statement**

A standard Employability Skills statement appears in each unit of competency. This statement directs trainers and assessors to consider the information contained in the Employability Skills Summary in which the unit of competency is packaged.

### **Prerequisite Units (optional)**

If there are any units of competency that must be completed before the unit, these will be listed.

### **Application of the Unit**

This sub-section fleshes out the unit of competency's scope, purpose and operation in different contexts, for example, by showing how it applies in the workplace.

### **Competency Field (Optional)**

The competency field either reflects the way the units of competency are categorised in the Training Package or denotes the industry sector, specialisation or function. It is an optional component of the unit of competency.

### **Sector (optional)**

The industry sector is a further categorisation of the competency field and identifies the next classification, for example an elective or supervision field.

### **Elements of Competency**

The elements of competency are the basic building blocks of the unit of competency. They describe in terms of outcomes the significant functions and tasks that make up the competency.

### **Performance Criteria**

The performance criteria specify the required performance in relevant tasks, roles, skills and in the applied knowledge that enables competent performance. They are usually written in passive voice. Critical terms or phrases may be written in bold italics and then defined in range statement, in the order of their appearance in the performance criteria.

### **Required Skills and Knowledge**

The essential skills and knowledge are either identified separately or combined. Knowledge identifies what a person needs to know to perform the work in an informed and effective manner. Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome.

### **Range Statement**

The range statement provides a context for the unit of competency, describing essential operating conditions that may be present with training and assessment, depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts. As applicable, the meanings of key terms used in the performance criteria will also be explained in the range statement.

### **Evidence Guide**

The evidence guide is critical in assessment as it provides information to the Registered Training Organisation (RTO) and assessor about how the described competency may be demonstrated. The evidence guide does this by providing a range of evidence for the assessor to make determinations, and by providing the assessment context. The evidence guide describes:

- conditions under which competency must be assessed including variables such as the assessment environment or necessary equipment
- relationships with the assessment of any other units of competency
- suitable methodologies for conducting assessment including the potential for workplace simulation
- resource implications, for example access to particular equipment, infrastructure or situations
- how consistency in performance can be assessed over time, various contexts and with a range of evidence, and expectations at the AQF qualification level involved

### **Employability Skills in units of competency**

The detail and application of Employability Skills facets will vary according to the job-role requirements of each industry. In developing Training Packages, industry stakeholders are consulted to identify appropriate facets of Employability Skills which are incorporated into the relevant units of competency and qualifications.

Employability Skills are not a discrete requirement contained in units of competency (as was the case with Key Competencies). Employability Skills are specifically expressed in the context of the work outcomes described in units of competency and will appear in elements, performance criteria, range statements and evidence guides. As a result, users of Training Packages are required to review the entire unit of competency in order to accurately determine Employability Skills requirements.

### **How Employability Skills relate to the Key Competencies**

The eight nationally agreed Employability Skills now replace the seven Key Competencies in Training Packages. Trainers and assessors who have used Training Packages prior to the introduction of Employability Skills may find the following comparison useful.

<b>Employability Skills</b>	<b>Mayer Key Competencies</b>
Communication	Communicating ideas and information
Teamwork	Working with others and in teams
Problem solving	Solving problems Using mathematical ideas and techniques
Initiative and enterprise	
Planning and organising	Collecting, analysing and organising information

	Planning and organising activities
Self-management	
Learning	
Technology	Using technology

When analysing the above table it is important to consider the relationship and natural overlap of Employability Skills. For example, using technology may involve communication skills and combine the understanding of mathematical concepts.

### Explicitly embedding Employability Skills in units of competency

This Training Package seeks to ensure that industry-endorsed Employability Skills are explicitly embedded in units of competency. The application of each skill and the level of detail included in each part of the unit will vary according to industry requirements and the nature of the unit of competency.

Employability Skills must be both explicit and embedded within units of competency. This means that Employability Skills will be:

- embedded in units of competency as part of the other performance requirements that make up the competency as a whole
- explicitly described within units of competency to enable Training Packages users to identify accurately the performance requirements of each unit with regards to Employability Skills.

This Training Package also seeks to ensure that Employability Skills are well-defined and written into units of competency so that they are apparent, clear and can be delivered and assessed as an essential component of unit work outcomes.

The following table contains examples of embedded Employability Skills for each component of a unit of competency. Please note that in the examples below the bracketed skills are provided only for clarification and will not be present in units of competency within this Training Package.

### Example Employability Skills unit

Unit component	Example of embedded Employability Skill
<b>Unit Title</b>	Prepare for and conduct a tour or presentation (communication, planning and organising)
<b>Unit Descriptor</b>	This unit of competency covers the process of providing basic information to customers on companion animal training, grooming and/or breeding establishments, and on products

	and services in a range of companion animal settings (communication)
<b>Element</b>	Contribute to project planning and implementation (communication, planning and organising)
<b>Performance Criteria</b>	Personal work practices comply with organisational policies, procedures and guidelines (self-management)
<b>Range Statement</b>	Feedback sources may include education specialist advisory groups (communication, teamwork, problem solving)
<b>Required Skills and Knowledge</b>	<p>Suggest modifications to behavioural enrichment programs to improve animal comfort and learning opportunities (initiative and enterprise)</p> <p>Work as part of a team and in close working arrangements with the supervising</p>
	<p>veterinarian (teamwork)</p> <p>Use computer software applicable in the clinic including word processing, accounting and database patient records (self-management, learning, technology)</p>
<b>Evidence Guide</b>	Competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time to cover a variety of circumstances, cases and responsibilities (self-management, planning and organising)

## Competency Standards - Industry Contextualisation

### Competency Standards - Industry Contextualisation

#### ACM10 contextualisation guidelines

ACM10 Animal Care and Management Training Package is relevant to the broad spectrum of Australian industries where animal care is required, and users are encouraged to customise qualifications and contextualise units of competency to suit their enterprise or sector purposes, provided that the customisation rules are followed.

Customisation of this Training Package may be achieved by:

- choosing appropriate electives from units of competency provided in this Training Package
- importing elective units of competency from other Training Packages or accredited courses
- contextualising units of competency to better suit an enterprise or industry context.

The export of units to other Training Packages is encouraged provided the following rules are observed.

#### Choosing appropriate electives

The electives listed in ACM10 Animal Care and Management Training Package provide for skill development in all areas identified by industry representatives during consultations.

Most qualifications are able to be customised since candidates are able to choose particular combinations of elective units of competency to suit their individual needs or work context.

#### Importing elective units from other Training Packages or accredited courses

To achieve maximum cross-industry application, the packaging rules enable units of competency to be imported from any Training Package or accredited course that is directly relevant to the candidate's current or intended animal care work environment. In providing this flexibility it is incumbent on RTOs to ensure that the integrity of qualifications in the ACM10 Animal Care and Management Training Package is maintained. The following guidelines for importing units of competency apply.

- Imported units of competency must relate to the core functions or roles in the candidate's current or intended animal care work environment (for example, animal technology procedures, front line management, workplace training).
- The original title and code for the imported unit of competency must be retained.



## Competency Standards - Industry Contextualisation

- Imported units of competency must come from other endorsed Training Packages or accredited courses.
- Imported units of competency must align to the qualification level outlined in the relevant qualification packaging rules.

### Exporting competencies to other Training Packages

ACM10 Animal Care and Management Training Package has application across a wide range of industries where animal care is required. All ACM10 Animal Care and Management Training Package units of competency may be imported to other Training Packages provided that:

- the original unit of competency code and unit title are retained
- they are only contextualised to the extent outlined in the *section on Competency Standards*
- the user advises the appropriate Industry Skills Council (ISC) in writing of the specific units of competency exported to enable input during future revisions and ongoing communication.

### Contextualisation of units of competency

ACM10 Animal Care and Management Training Package units of competency are able to be used in a wide range of industry sectors and enterprises. To enable this, contextualising of the units of competency is actively encouraged provided the requirements outlined in the *section on Competency Standards* are met.

## Appendices

### Appendices

#### Appendix 1: Development of ACM10

##### Phase 1 consultation process – March to September 2006

In November 2005 the Board of Agri-Food Industry Skills Council (now AgriFood Skills Australia) approved the initiation of the RUV04 Animal Care and Management Training Package Phase 1 Review – Environmental Scan. The project began in March 2006.

The project was managed by AgriFood Skills Australia and a National Project Steering Committee (PSC). The terms of reference were to:

- oversee the general progress of the project to ensure it was managed effectively and

- efficiently
- confirm consultation strategy
  - review and confirm the recommendations and actions based on stakeholder feedback
  - assess and confirm project deliverables and timelines
  - validate processes and outcomes at the appropriate stages during the project.

The individuals and enterprises/organisations represented on the PSC are set out in the following table:

Name	Enterprise/organisation
Jane Brownbill (Chair)	AgriFood Industry Skills Council
Ursula Alexander-Smith	Veterinary Nurses Council of Australia
Lorna Citer	Animal Health Australia
Julia Crawford	Australian Veterinarian Association
Kathi Eland	Department Employment Science and Training – VET Quality Branch
Geoff Gower	Pet Industry Association of Australia
Tracy Helman	Peter MacCallum Cancer Centre – Melbourne
Michele Jackson	At.All.Events Pty Limited – AgriFood Project Review Consultant
David Jones	Torrens Valley TAFE SA
Charlie Manolis	Cocodylus, Darwin
Stephen McGill	Western Sydney Institute of TAFE NSW
Russell McMurray	Department of Primary Industries – Victoria
Narelle Maxwell	Training Coordinator, RSPCA NSW
Joanne Morris	Western Australia State Training Authority
Judith Nettleingham	AgriFood Industry Skills Council
Margaret Rose	Animal Welfare Advisory Committee
Allan Sheridan	Department of Agriculture, Fisheries and Forestry
Graham Thompson	Northern Territory Primary Industries Training Advisory

	Committee
Philip Walsh	Em-Four Pty Ltd – Director of Courses and Programs – RTO specialising in Enforcement Management, Field Operations and Urban Regulation
Jenny Wardrop	AgriFood Industry Skills Council Project Manager
Heidi Wenk	Biotechnology and Animal Sciences, Box Hill TAFE VIC

The Environmental Scan used a range of research methods which met the requirements of the AgriFood Skills Australia Project Brief and DEST (now Department of Education, Employment and Workplace Relations – DEEWR) guidelines.

The research methodology included:

- desk audit of RUV04 and related Training Packages and historical data
- targeted research through surveys, semi-structured interviews and teleconferences with provider networks
- consultation and advice received from AgriFood Equity Evaluator
- consultation with representatives from Animal Care and Management industry groups and related industry stakeholders
- ongoing web-based research and liaison with consultants working on other AgriFood Skills Australia projects relevant to the RUV04 review.

Changes to Australian Government policy and procedures requiring the incorporation of employability skills, identification and removal of unnecessary duplication across and within units of competency, access and equity and template adherence were key considerations during this phase.

**Industry stakeholder consultation**

Three structured questionnaires were developed and distributed via the PSC and animal care and management (ACM) eAlert Groups and other industry networks. In excess of 400 questionnaires were distributed to employers and those working in ACM sectors, training providers and other industry stakeholders. One hundred responses were received as well as papers and other feedback information provided by industry and RTO representatives. The survey analysis and outcomes discussion paper formed the basis for further stakeholder input and development of the draft Phase 1 – Environmental Scan which was signed-off by the PSC in September 2006.

Communication mechanisms included:

- ACM eAlert Group established, with over 400 industry and related contacts, to provide general updates and request further feedback

- telephone and email contact with many stakeholders to discuss aspects of the review
- AgriFood Skills Australia website project overview updates, including 'provide feedback' section
- PSC teleconferences
- face-to-face meetings with a range of industry sector groups, including:
  - Primary Skills Victoria and ACM Training Provider Network preliminary meeting
  - Initial PSC meeting
  - TAFE NSW ACM Head Teacher Network
  - Primary Skills Victoria – ACM Technical session
  - National Industry Advisory Group for Veterinary Nursing
  - National Animal Health Training Steering Committee
  - NSW Animal Welfare Advisory Committee
  - Pet Industry Association of Australia
  - NSW Rural and Related Industry Training Advisory Committee- ACM Standing Committee.

### **Farriery Phase 1**

A similar process was undertaken for the farriery environmental scan process. In consultation with the Master Farriers Association (MFA) and the Australian Farriers and Blacksmiths Association (AFBA), an industry advisory group was formed in May 2006. The advisory group was made of representatives from the national and state affiliates of the two farriery associations as well as RTOs and state/territory training advisory bodies (ITABs).

In September 2006 the Industry Advisory Group unanimously supported integration of the Victorian accredited Certificate III in Farriery (Trade) course into the Animal Care and Management Training Package.

### **Phase 2 consultation and validation process – February 2009 to April 2010**

Phase 2 was managed by AgriFood Skills Australia, in conjunction with a new National Reference Group (NRG). The terms of reference were to:

- oversee the general progress of the project to ensure it was managed effectively and efficiently
- confirm consultation strategy
- review and confirm the recommendations and actions based on stakeholder feedback
- assess and confirm project deliverables and timelines
- validate processes and outcomes at the appropriate stages during the project
- confirm project deliverables are 'fit for purpose' and ready for presentation to begin the ISC Training Package Quality Audit Process.

The individuals and enterprises/organisations represented on the NRG are set out in the following

table:

Name	Enterprise/organisation
Julia Crawford	National Industry Advisory Group for Veterinary Nursing and Australian Veterinarian Association
Heidi Wenk	Box Hill Institute of TAFE, Course Coordinator Captive Animals
Tracy Helman	Victoria Department of Primary Industries, Bureau of Animal Welfare
Nicole Bourne	Operations Coordinator, Pets Galore – Pet Industry Association of Australia Queensland representative
Tammy Pavelic	Department of Education, Employment and Workplace Relations DEEWR (observer)
Cheryl Bald	DFEEST SA, Senior Project Officer (STA representative)
David Greentree	AgriFood Skills Australia
Michele Jackson	At.All.Events Pty Limited – Project Consultant ACM Training Package Review

An RUV04 Review Working Paper was distributed to stakeholders listed in the AgriFood Skills Australia database in March 2009. Following feedback on the review paper a round of face-to-face state consultation meetings were conducted in Victoria, South Australia, Queensland, New South Wales and Western Australia. Two teleconferences were held with the Northern Territory Primary Industries Training Advisory Council.

Feedback received from these processes was then used to inform the development of new units of competency, revision of existing units and qualifications with the assistance of:

- a range of technical experts across the ACM industry sectors
- representatives of RTOs who already offer current qualifications and/or are intending to offer new qualifications

Drafts of all units of competency and qualifications were then posted on the AgriFood Skills Australia website for validation and stakeholders were advised by email about how to access the site and provide feedback. Another round of face-to-face meetings were held in New South Wales, Victoria, Queensland and South Australia as well as a number of teleconferences with other stakeholder groups. In all, validation draft feedback was received from over 100 industry, RTO, Industry Advisory Bodies and STA stakeholders.

This feedback was used to further refine the units and qualifications in conjunction with a range of technical experts prior to final editing.

The final drafts of the new units and qualifications have been validated and signed-off by all major stakeholders (both industry and RTOs) with no outstanding or unresolved issues. Validation and acceptance of final drafts was undertaken via the AgriFood website and email.

The following individuals and organisations participated in the development process. The contribution of their expertise and input is greatly appreciated.

<b>Name</b>	<b>Organisation</b>	<b>State</b>
Jenny Arkle	Animal Health Australia	ACT
Dr Peter Gibbs	National Industry Advisory Group for Veterinary Nursing (NIAG)/Australian Veterinary Association/Yass and Canberra Veterinary Hospitals	ACT/NSW
Barnie Rogers	Western Sydney Institute of TAFE (Richmond)	NSW
Ben Rochester	Western Sydney Institute of TAFE (Bankstown)	NSW
Brad McKenzie	Taronga Training Institute, Taronga Conservation Society Australia	NSW
Chris McKinnon	New England Institute of TAFE	NSW
Christine Sercombe	Western Sydney Institute of TAFE (Richmond College)	NSW
Deb Ryan	Dog Grooming Australia	NSW
Diane Ryan	NSW Dept of Primary Industries	NSW
Donna Schofield	Sydney Institute of TAFE	NSW
Dr Deborah Neutze	Australian Veterinary Association/NSW NIAG	NSW
Dr Joanne Sillince	Pet Industry Association of Australia	NSW
Dr Julia Crawford	National Industry Advisory Group for Veterinary Nursing (NIAG)/Australian Veterinary Association	NSW
Dr Peter Gibbs	National Industry Advisory Group for Veterinary Nursing (NIAG)/Australian Veterinary Association	NSW
Dr Phillip Brain	National Industry Advisory Group for Veterinary Nursing	NSW

	(NIAG)/Australian Veterinary Association	
Gary Zohrab	New England Institute of TAFE	NSW
Gerard Lim	Western Sydney Institute of TAFE (Bankstown)	NSW
Graeme Phipps	Western Sydney Institute of TAFE (Richmond College)	NSW
Graeme Phipps	Western Sydney Institute of TAFE (Richmond)	NSW
Greg Bryant	Sydney Institute of TAFE	
Greg Stuart	New England Institute of TAFE	NSW
Helen Power	Veterinary Nurses Council of Australia/National Industry Advisory Group for Veterinary Nursing/NSW Rural and Related PITAB	NSW
Joan Pracey	Western Sydney Institute of TAFE (Richmond)	NSW
Laurie Fletcher	Hunter Institute of TAFE	NSW
Laurie Milner	Western Sydney Institute of TAFE (Richmond)	NSW
Malcolm France	Australian and NZ Society for Laboratory Animal Science	NSW
Margaret Murdoch	Western Sydney Institute of TAFE (Bankstown)	NSW
Melissa Weltman	AgriFood Skills Australia Industry Liaison Officer	NSW
Melissa Wyatt	Taronga Training Institute, Taronga Conservation Society Australia	NSW
Mia Collins	Hunter Institute of TAFE	NSW
Michael Bourke	TAFE NSW Training and Education Support – Industry Skills Unit	NSW
Narelle Maxwell	RSPCA NSW	NSW
Neely Hopkins	NSW Division, Veterinary Nurses Council of Australia	NSW
Phil Harvey	New England Institute of TAFE	NSW
Rachel Milne	Western Institute of TAFE	NSW
Rebecca-Lea Reilly	The Children's Hospital Westmead Transgenic Facility	NSW
Ronnie Yap	Department of Education and Training (VETAB)	NSW

Sandra Vodic	Illawarra Institute of TAFE	NSW
Sandie Brown	Macquarie University	NSW
Sean Le	Department of Education and Training (VETAB)	NSW
Stephen McGill	Western Sydney Institute of TAFE (Richmond)	NSW
Terry Ly	Sydney Institute of TAFE	NSW
Ken Howlett	NT Primary Industry Training Advisory Council	NT
Marianne St Clair	NT Primary Industry Training Advisory Council	NT
Laurie Zio	Department of Education and Training (STA)	NT
Barbara Bishop	Queensland Rural Industry Training Council	QLD
Bob Ward	Rural Skills Australia	QLD
Di Edelman	Dept of Primary Industries and Fisheries	QLD
Dr Bruce Rich	Queensland Rural Industry Training Council	QLD
Dr Gaille Perry	Brisbane North Institute of TAFE/Delta Society Australia	QLD
Dr Peter Chamberlain	University of QLD/Chamberlain Vet Service Pty Ltd	QLD
Dr Sue Fowkes	Australian Veterinarians Association/Brisbane North Institute of TAFE	QLD
Dr Trish Clarke	University of QLD/Australian Veterinarian Association	QLD
Helen Egan	Australian Agriculture College Corporation	QLD
Janine Temple	Animal Industry Resource Centre	QLD
Jim Watson	Metropolitan South Institute of TAFE	QLD
Jodie Swan	Greencross Vet Clinic/Australian Agriculture College/Veterinary Nursing Council of Australia	QLD
Kerry Haynes-Lovell	Brisbane North Institute of TAFE/Australia Regional Association of Zoological Parks and Aquaria Association	QLD
Mark Pace	University of Queensland	QLD
Michele John	Department of Education and Training (STA)	QLD



Nicole Bourne	Pet Industry Association of Australia/Pets Galore	QLD
Renee Chamberlain	Metropolitan South Institute of TAFE	
Sheila Thompson	Queensland Rural Industry Training Council	QLD
Suzanne Cassidy	Queensland Institute of Medical Research/Australia and New Zealand Laboratory Animal Association	QLD
Walter Joyce	Department Education and Training (STA)	QLD
Yvon Wigley	Queensland Rural Industry Training Council	QLD
Andrea Lewis	RSPCA	SA
Andrew Bartlett	University of Adelaide	SA
Ann Horne	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Cheryl Bald	SA DEEFST	SA
David Jones	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Deb Kelly	Animal Welfare Unit	SA
Evie Verdini Fensom	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Helen Smith	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Ian Hough	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Janet Piwen	Animal Welfare League	SA
Jo Kennedy	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Jo Powell	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Karen Moore	TAFE SA Training Products and Curriculum Unit	SA
Leanne Page	Animal Welfare League	SA
Lewis Vaughan	TAFE SA Gilles Plains Institute Veterinary and Applied	SA

	Science	
Lindell Andrews	Adelaide Zoo/Royal Zoological Society of SA	SA
Margaret Davidson	TAFE SA Training Products and Curriculum Unit	SA
Mark Cody	SA Primary Industries Skills Council	SA
Vicky Whiteway	Royal Zoological Society	SA
Wendy Wajer	TAFE SA Gilles Plains Institute Veterinary and Applied Science	SA
Debra Doherty	Skills Tasmania (STA)	TAS
Michael McGee	Skills Tasmania (STA)	TAS
Marylou Conway	Department of Primary Industries, Parks, Water and Environment	TAS
Patsy Davies???	Department of Primary Industries, Parks, Water and Environment	TAS
Alanna Kirley	Goulburn Ovens Institute of TAFE	VIC
Andrew Naughton	Ludwig Institute	VIC
Andrew Young	Australian Pet Super Store/Pet Industry Association of Australia	VIC
Bev Drake	Werribee Open Range Zoo	VIC
Dr Bill Harkin	Australian Veterinary Association	VIC
Catheryn O'Brien	Walter and Eliza Hall Institute of Medical Research	VIC
Cathy Pawsey	Victoria Dept of Primary Industries – Bureau of Animal Welfare	VIC
Celia Turnbull	Goulburn Ovens Institute of TAFE	VIC
Chris Jarvinen	Peter MacCallum Cancer Centre	VIC
Christina Ramsauer	Box Hill Institute of TAFE	VIC
Dan Maloney	Zoos Victoria	VIC
David Berry	The Lost Dogs' Home	VIC
Deahnn Johnson	Victoria University/Lost Dogs Home	VIC

Deb Dyson	Box Hill Institute of TAFE/Zoos Victoria	VIC
Dr Rod Salter	Australian Veterinary Dental Society/Melbourne Veterinary Referral Centre	VIC
Dr Susan Maastricht	Box Hill Institute of TAFE	VIC
Dr Trish Stewart	Box Hill Institute of TAFE/Australian Veterinary Association	VIC
Elaine Major	Walter and Eliza Hall Institute of Medical Research	VIC
Elisa Borg	University of Melbourne	VIC
Elke Tapley	Knox City Council/Australian Institute of Animal Management	VIC
Erin Robb	Box Hill Institute of TAFE	VIC
Greg Gordon	Victoria University	VIC
Gill Carter	Walter and Eliza Hall Institute of Medical Research	VIC
Gordon Griffin	Rural Skills Australia	VIC
Graham Farley	Equitarian Equine Dentistry	VIC
Grant Moro	Primary Skills Victoria	VIC
Greg Hallinan	Primary Skills Victoria	VIC
Hans Van Heesben	Australia Dog Training Academy	VIC
Heidi Wenk	Box Hill Institute of TAFE	VIC
Igor Grattan	Australian Services Union	VIC
Jane Bindloss	Veterinary Nurses Council of Australia	VIC
Jennifer Buttress	Northern Melbourne Institute TAFE	VIC
Jenny Davis	Melbourne University	VIC
Julia Fyfe	Box Hill Institute of TAFE	VIC
Julie Merryfull	Walter and Eliza Hall Medical Research Centre	VIC
Kate Bryce	Primary Industry Curriculum Maintenance Manager	VIC

Kathy Hanzinikolas	Walter and Eliza Hall Institute of Medical Research	VIC
Katrina Miller	National Dog Trainers Federation	VIC
Kim Huett	Box Hill Institute TAFE	VIC
Leanne McCleary	Victoria University	VIC
Liz Hoffmann	Woofpurnay Vet Hospital/Australian College of Applied Animal Studies	VIC
Lorraine Jolly	Zoos Victoria	VIC
Louise O'Gormann	Northern Melbourne Institute of TAFE	VIC
Magdy Sourial	Australian Animal Technicians Association	VIC
Melanie Asquith	Peter MacCallum Cancer Centre	VIC
Michelle McMurtrie	Monash Medical Centre Animal Facilities	VIC
Monika Generowiz	Monash Medical Centre Animal Facilities	VIC
Naomi Friede	Department of Primary Industries, Bureau of Animal Welfare	VIC
Peter Courtenay	Melbourne Zoo	VIC
Sam McCurdy	Box Hill Institute of TAFE	VIC
Sandra Simpson	Box Hill Institute of TAFE	VIC
Selma Gotsbacher	Victoria University	VIC
Shane Willis	Aquarium Industries Pty Ltd	VIC
Simon Parker	Hume City Council	VIC
Sophie Agius	Murdock Children's' Research Institute	VIC
Terese Johns	Walter and Eliza Hall Institute and Industry Advisory Group	VIC
Tracy Helman	Victoria Dept of Primary Industries – Bureau of Animal Welfare	VIC
Trish Stewart	Box Hill Institute TAFE	VIC
Ursula	Veterinary Nurses Council of Australia/AgriFood Rural	VIC

Alexander-Smith	and Related Standing Committee	
Alison Lyons	Australian Veterinary Association, WA Division	WA
Andrea Thygesen	Primary Industries and Personal Services, Curriculum Support Services Network	WA
Anne Holder	Swan Institute of TAFE	WA
Christine Sparham	Primary Industries and Personal Services, Curriculum Support Services Network	WA
Deborah Lavery	Swan Institute of TAFE	WA
Dr Beverley Taylor	Swan Institute of TAFE	WA
Dr Kay Jansen	Swan Institute of TAFE	WA
Dr Neville Robertson	National Industry Advisory Group for Veterinary Nursing (NIAG)/Australian Veterinary Association	WA
Dr Sue Godfrey	Veterinary Surgeons' Board	WA
Dr Sue Jordan	Primary Industry Training Advisory Council	WA
Glenys Essex	Department of Education and Training (Apprenticeships)	WA
Gwen Dasborough	WA Assistance Dogs Inc	WA
Kay Gerard	Primary Industry Training Advisory Council	WA
Ken Storrs	Challenger Institute of TAFE	WA
Kerry Barnyard	Swan Institute of TAFE	WA
Lauren Pike	Veterinary Nurses Council of Australia	WA
Lisa Kerwick	Swan Institute of TAFE	WA
Lucinda Pita	Department Education and Training (STA)	WA
Melissa Vanhoe	Swan Institute of TAFE	WA
Pam Smith	Perth Zoo	WA
Paul Davey	Grantham St Vet Clinic/Australian Veterinary Association	WA
Ron Fleming	Racing and Wagering WA	WA
Sherry Stephen	Animal Resources Centre	WA

Vicky Whiteway	Royal Zoological Society	WA
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## ACM10110 Certificate I in Animal Studies

### Modification History

Not applicable.

### Description

This qualification covers work activities undertaken by a cross-section of animal care and management enterprises. It is a general pre-vocational qualification aimed for inclusion in a VET in Schools program or as an entry point into the industry.

### Job roles

Job role titles covered by this qualification may include:

- Assistant animal care worker
- Assistant animal shelter attendant
- Assistant kennel hand
- Assistant cattery attendant.
- 

### Pathways Information

#### Pathways into the qualification

Pathways into this qualification may be:

- by direct entry and without prior animal care skill or knowledge
- through a school vocational studies program combined with work experience.

This qualification is suited to Australian Apprenticeship pathways.

#### Pathways from the qualification

After achieving this qualification, candidates may undertake:

- ACM20110 Certificate II in Animal Studies.
- 

### Licensing/Regulatory Information

#### Licensing, Legislative, Regulatory or Certification Considerations

Units of competency in this qualification do not require a licence or certification.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• apply numeracy skills to workplace requirements</li> <li>• communicate information about problems with work</li> <li>• complete all reporting as required</li> <li>• receive and relay oral and written messages</li> <li>• read and apply workplace procedures and instructions.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• contribute to monitoring the health and welfare of animals</li> <li>• identify own role and responsibilities within a team</li> <li>• share workplace information</li> <li>• work as a team member</li> <li>• work with persons of different ages, genders, races, religions and political persuasion.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• identify common problems and take required action</li> <li>• follow workplace safety and animal care and management procedures</li> <li>• recognise and report any workplace hazards</li> <li>• report difficulties in handling animals</li> <li>• verify/clarify work tasks or directions if unsure.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• distinguish between urgent and non-urgent tasks</li> <li>• take appropriate corrective action to routine work problems</li> <li>• select appropriate equipment.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• identify work requirements</li> <li>• identify work priorities</li> <li>• identify and use relevant personal protective equipment</li> <li>• organise work area to maintain safe and hygienic standards</li> <li>• organise relevant equipment, materials and tools</li> <li>• plan work activities to meet daily work requirements.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• follow OHS practices</li> <li>• identify personal responsibilities and work requirements</li> <li>• identify safety requirements for working in animal care industry</li> <li>• keep the work area clean and tidy at all times</li> <li>• manage time and plan activity to meet own work requirements</li> </ul>



<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
	<ul style="list-style-type: none"> <li>• monitor the quality of own work against required workplace standards</li> <li>• seek assistance from other team members where appropriate.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• attend training or skill development activities</li> <li>• assess own ability to meet job requirements</li> <li>• check work outcomes against workplace standards and identify inconsistencies</li> <li>• identify own skill requirements and seek skill development if required</li> <li>• listen to feedback and advice of supervisors</li> <li>• self-check numerical information.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• use manual handling technologies in the workplace</li> <li>• use work tools, machines and equipment safely and according to workplace procedures.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **seven (7) units** of competency must be achieved as specified below.

- Complete **five (5) CORE** units
- Complete **two (2) ELECTIVE** units

#### **CORE: Complete the following five (5) units**

ACMGAS101A	Investigate job opportunities in animal care and related industries
ACMGAS102A	Catch and handle a range of quiet animals
ACMGAS103A	Assist in the care of animals
ACMGAS202A	Participate in workplace communications
ACMOHS201A	Participate in occupational health and safety processes

**ELECTIVE: Complete two (2) units from ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate I or II and be relevant to work undertaken in the animal care and management industry.

## ACM20110 Certificate II in Animal Studies

### Modification History

Not applicable.

### Description

This qualification is a general pre-vocational qualification aimed for inclusion in a VET in Schools program or as an entry point into the animal care and management industry. It is highly recommended that whilst undertaking this qualification the learner should seek to gain a period of work placement or work experience in an animal care environment and/or workplace.

### Job roles

Job role titles covered by this qualification may include:

- Animal care attendant
- Animal shelter attendant
- Kennel hand
- Cattery attendant
- Pet shop attendant
- Assistant dog groomer.
- 

### Pathways Information

#### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry, including VET in Schools
- after achieving ACM10110 Certificate I in Animal Studies
- limited vocational training and/or work experience.

This qualification is suited to Australian Apprenticeship pathways.

#### Pathways from the qualification

After achieving this qualification candidates may undertake:

- ACM30110 Certificate III in Animal Studies
- ACM30210 Certificate III in Animal Technology
- ACM30310 Certificate III in Captive Animals

- ACM30410 Certificate III in Companion Animal Services
- ACM40410 Certificate IV in Veterinary Nursing.
- 

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>• apply numeracy skills to workplace requirements</li> <li>• communicate information about problems with work</li> <li>• communicate information relating to OHS</li> <li>• complete work forms and required written documentation</li> <li>• demonstrate effective and appropriate interpersonal skills</li> <li>• interpret and apply workplace procedures and instructions</li> <li>• share workplace information</li> <li>• use communication and information technologies to support work operations.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• assist with monitoring the health and welfare of animals</li> <li>• identify own role and responsibilities within a team</li> <li>• identify team goals</li> <li>• maintain health and safety of work area for self and others</li> <li>• provide assistance to others in the work area</li> <li>• share work-related information</li> <li>• work as part of a team</li> <li>• work with persons of different ages, genders, races, religions and political persuasion.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• check performance of machines and equipment and identify signs of faulty operations</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• identify and apply health and safety issues relating to work in the animal care and management industry</li> <li>• identify and report any workplace hazards</li> <li>• identify workplace problems and make contributions to their solution</li> <li>• monitor workplace activities and identify and report non-compliances</li> <li>• report difficulties in handling animals.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• ask questions regarding requirements and expectations</li> <li>• assess quality of work on an ongoing basis</li> <li>• gather and interpret information to support safe and efficient work</li> <li>• make suggestions for continuous improvement</li> <li>• provide feedback on procedures and processes</li> <li>• record basic information on the quality and other indicators of work outcomes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• identify and report issues affecting ability to meet work outcomes</li> <li>• identify and use relevant personal protective equipment</li> <li>• identify work requirements and work load priorities</li> <li>• organise work area to maintain housekeeping standards</li> <li>• plan work activities to meet daily work requirements</li> <li>• select and organise relevant equipment and tools.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• accept responsibility for quality of own work</li> <li>• apply safe animal handling and work practices</li> <li>• identify personal responsibilities</li> <li>• keep the work area clean and tidy at all times</li> <li>• monitor own work and maintain work efficiency</li> <li>• participate in OHS practices</li> <li>• plan to meet required work outcomes of self and team</li> <li>• recognise own shortcomings and seek advice and assistance from supervisors.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• assess own competencies in meeting job requirements</li> <li>• attend training or skill development activities</li> <li>• identify own skill requirements and seek skill development if required</li> <li>• listen to feedback and advice of supervisors.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• use manual handling technologies in the workplace</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

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|  | <ul style="list-style-type: none"> <li>• use work tools, machines and equipment safely and effectively.</li> </ul> |
|--|--|

**Packaging Rules****Packaging Rules**

A total of **twelve (12) units** of competency must be achieved as specified below.

- Complete **seven (7) CORE** units
- Complete **three (3) ELECTIVE** units from Group A
- Complete **two (2) ELECTIVE** units from Group A and/or Group B

**CORE: Complete the following seven (7) units**

ACMOHS201A	Participate in occupational health and safety processes
ACMGAS201A	Work in the animal care industry
ACMGAS202A	Participate in workplace communications
ACMGAS203A	Complete animal care hygiene routines
ACMGAS204A	Feed and water animals
ACMGAS205A	Assist in health care of animals
ACMSUS201A	Participate in environmentally sustainable work practices

**ELECTIVE:****Group A: Complete three (3) units from the following list**

ACMGAS206A	Provide basic first aid for animals
ACMGAS207A	Provide reception services for an animal care facility
ACMGAS208A	Source information for animal care needs

ACMGAS206A	Provide basic first aid for animals
ACMGAS209A	Provide information on companion animals, products and services
ACMGAS210A	Prepare for and conduct a tour or presentation
ACMVET201A	Carry out veterinary nursing reception duties
ACMVET202A	Carry out daily clinic routines
ACMVET203A	Assist with surgery preparation
HLTFA301B	Apply first aid

**Group B: Complete two (2) units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate II or III and be relevant to work undertaken in the animal care and management sector. Suggested units are:

ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits

## ACM30110 Certificate III in Animal Studies

### Modification History

Not applicable.

### Description

This qualification is a general industry qualification for persons operating at an assistant level and undertaking animal care functions in an animal care workplace. It is highly recommended that whilst undertaking this qualification, the learner should have access to a companion animal workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job Roles

Job role titles covered by this qualification may include:

- Animal care receptionist and support officer
- Animal control and regulation assistant
- Animal health officer on indigenous communities
- Animal shelter assistant
- Assistant animal welfare officer.
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### Pathways Information

#### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeship pathways.

#### Pathways from the qualification

After achieving this qualification, candidates may undertake specific industry stream qualifications at Certificate IV or Diploma level that define higher-level job functions.



## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• complete standard documentation</li> <li>• confirm relevant industry and workplace requirements</li> <li>• provide relevant work-related information to others</li> <li>• ensure records are accurate and legible</li> <li>• establish effective working relationships with colleagues</li> <li>• support team communication practices</li> <li>• understand personal and team requirements of relevant industry and workplace standards, regulations and policies</li> <li>• use communication technologies efficiently.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion</li> <li>• explain and implement work team reporting requirements</li> <li>• monitor work team tasks in accordance with regulatory and workplace requirements</li> <li>• provide support to team members</li> <li>• undertake appropriate and effective communication with team members.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• evaluate skill requirements of work tasks</li> <li>• identify risks and implement risk control measures</li> <li>• implement animal care and management procedures</li> <li>• monitor and anticipate problems that may arise during workplace operations, including hazards and risks and take appropriate action to report or solve the problems within scope of responsibilities</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• provide problem solving support to team members</li> <li>• use assertive communication and/or conflict resolution skills to manage situations with clients who are distressed or in conflict with animal welfare or care directions</li> <li>• use problem solving techniques to determine work requirements.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• contribute to and promote continuous improvement processes</li> <li>• identify non-conformances to standards and take appropriate action</li> <li>• identify, assess and act on existing and potential risks</li> <li>• monitor and adjust activity in response to operational variations</li> <li>• rectify problems promptly and appropriately</li> <li>• seek and provide feedback on procedures and processes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• contribute to continuous improvement and planning processes</li> <li>• determine work requirements in order to complete in appropriate timeframes</li> <li>• ensure work equipment, materials and tools are ready and available for required tasks</li> <li>• plan work tasks for self and others as required</li> <li>• report and assist with implementing contingency plan promptly when incidents occur.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• conduct regular housekeeping activities to maintain a clean and hygienic work area</li> <li>• identify and apply safety procedures, including the use of protective equipment</li> <li>• maintain currency of relevant, work-related information</li> <li>• manage work load priorities and timelines</li> <li>• monitor information in work area</li> <li>• monitor own work against quality standards and identify areas for improvement</li> <li>• understand own work activities and responsibilities.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• assess competencies in meeting job requirements</li> <li>• maintain skill and knowledge currency</li> <li>• participate in meetings to inform work practices</li> <li>• recognise limits of own expertise and seek skill development if required.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **twelve (12) units** of competency must be achieved as specified below.

- Complete **seven (7) CORE** units
- Complete **five (5) ELECTIVE** units

#### **CORE: Complete the following seven (7) units**

ACMGAS202A	Participate in workplace communications
ACMGAS203A	Complete animal care hygiene routines
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMINF301A	Comply with infection control policies and procedures in animal work
ACMOHS301A	Contribute to occupational health and safety processes
ACMSUS201A	Participate in environmentally sustainable work practices

**ELECTIVE: Complete five (5) units from within ACM10 or from any other national endorsed Training Package or accredited course.** Units selected must be aligned to Certificate II, III or IV and be relevant to work undertaken in an animal care and management industry sector. Suggested units are:

ACMCAN311A	Care for young animals
ACMGAS207A	Provide reception services for an animal care facility
ACMGAS302A	Provide enrichment for animals
ACMGAS304A	Carry out simple breeding procedures
ACMSPE301A	Provide basic care of amphibians

ACMCAN311A	Care for young animals
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
BSBINM301A	Organise workplace information
BSBFLM312B	Contribute to team effectiveness
HLTFA301B	Apply first aid

# ACM30210 Certificate III in Animal Technology

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons operating at a junior or assistant level and undertaking animal technology functions within a biomedical research or production environment. It is highly recommended that whilst undertaking this qualification, the learner should have access to an animal technology workplace through either paid employment or significant periods of work placement or work experience blocks.

### Job roles

Job roles and titles covered by this qualification include:

- Animal technician
- Laboratory animal technician
- Technical officer
- Field technician.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- vocational training, work experience or skills recognition.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification candidates may undertake ACM50110 Diploma of Animal Technology that defines higher level job functions.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

Regulatory compliance with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes applies to some units of competency. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• complete standard documentation</li> <li>• confirm relevant industry and workplace requirements</li> <li>• provide relevant work-related information to others</li> <li>• ensure records are accurate and legible</li> <li>• establish effective working relationships with colleagues</li> <li>• support team communication practices</li> <li>• understand personal and team requirements of relevant industry and workplace standards, regulations and policies</li> <li>• use communication technologies efficiently.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion</li> <li>• monitor work team tasks in accordance with regulatory and workplace requirements</li> <li>• provide support to team members</li> <li>• undertake appropriate and effective communication with team members.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• evaluate skill requirements of work tasks</li> <li>• identify risks and implement risk control measures</li> <li>• implement animal care and management procedures</li> <li>• monitor and anticipate problems that may arise during workplace operations, including hazards and risks and take appropriate action to report or solve the problems within scope of responsibilities</li> <li>• provide problem solving support to team members</li> <li>• use assertive communication and/or conflict resolution skills to manage situations with clients who are distressed or in conflict with animal welfare or care directions</li> <li>• use problem solving techniques to determine work</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	requirements.
Initiative and enterprise	<ul style="list-style-type: none"> <li>• contribute to and promote continuous improvement processes</li> <li>• identify non-conformance to standards and take appropriate action</li> <li>• identify, assess and act on existing and potential risks</li> <li>• monitor and adjust activity in response to operational variations</li> <li>• rectify problems promptly and appropriately</li> <li>• seek and provide feedback on procedures and processes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• contribute to continuous improvement and planning processes</li> <li>• determine work requirements in order to complete in appropriate timeframes</li> <li>• ensure work equipment, materials and tools are ready and available for required tasks</li> <li>• plan work tasks for self and others as required</li> <li>• report and assist with implementing contingency plan promptly when incidents occur.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• conduct regular housekeeping activities to maintain a clean and hygienic work area</li> <li>• identify and apply safety procedures, including the use of personal protective equipment</li> <li>• maintain currency of relevant, work-related information</li> <li>• manage work load priorities and timelines</li> <li>• monitor information in work area</li> <li>• monitor own work against quality standards and identify areas for improvement</li> <li>• understand own work activities and responsibilities.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• maintain skill and knowledge currency</li> <li>• participate in meetings to inform work practices</li> <li>• recognise limits of own expertise and seek skill development if required.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

**Packaging Rules****Packaging Rules**

A total of **eighteen (18) units** of competency must be achieved as specified below.

- Complete **twelve (12) CORE** units
- Complete **six (6) ELECTIVE** units.

**CORE: Complete the following twelve (12) units**

ACMATE301A	Work within an animal technology facility
ACMATE302A	Carry out institution containment and exclusion procedures
ACMATE303A	Prepare for and monitor anaesthesia in animals
ACMATE304A	Conduct non-surgical procedures on animals
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMGAS304A	Carry out simple breeding procedures
ACMOHS301A	Contribute to occupational health and safety processes
ACMSPE312A	Provide basic care of rodents and rabbits
ACMSUS201A	Participate in environmentally sustainable work practices
MSL973004A	Perform aseptic techniques

**ELECTIVE: Complete six (6) units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate II, III or IV and be relevant to work undertaken in the animal technology sector. Suggested units are:

ACMATE305A	Conduct euthanasia of research animals
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals



ACMATE305A	Conduct euthanasia of research animals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMVET203A	Assist with surgery preparation
HLTFA301B	Apply first aid
MSL922001A	Record and present data
MSL933001A	Maintain the laboratory/field workplace fit for purpose
MSL973001A	Perform basic tests
MSL973002A	Prepare working solutions
MSL973007A	Perform microscopic examination
MSL973008A	Perform histological procedures
RTC3310A	Operate specialised machinery and equipment

# ACM30310 Certificate III in Captive Animals

## Modification History

Not applicable.

## Description

This qualification is a general industry qualification for persons operating at pre-trade level and undertaking animal care functions in a captive animal facility or institution. It is highly recommended that whilst undertaking this qualification, the learner should have access to a captive animal workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

Job roles and titles covered by this qualification may include:

- Trainee keeper
- Pre-trade keeper
- Assistant keeper
- Animal care attendant
- Wildlife animal carer.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake ACM40210 Certificate IV in Captive Animals that defines higher level job functions.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• complete standard documentation</li> <li>• confirm relevant industry and workplace requirements</li> <li>• provide relevant work-related information to others</li> <li>• ensure records are accurate and legible</li> <li>• establish effective working relationships with colleagues</li> <li>• support team communication practices</li> <li>• understand personal and team requirements of relevant industry and workplace standards, regulations and policies</li> <li>• use communication technologies efficiently.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion</li> <li>• explain and implement work team reporting requirements</li> <li>• monitor work team tasks in accordance with regulatory and workplace requirements</li> <li>• provide support to team members</li> <li>• undertake appropriate and effective communication with team members.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• evaluate skill requirements of work tasks</li> <li>• identify risks and implement risk control measures</li> <li>• implement animal care and management procedures</li> <li>• monitor and anticipate problems that may arise during workplace operations, including hazards and risks and take appropriate action to report or solve the problems within scope of responsibilities</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• provide problem solving support to team members</li> <li>• use assertive communication and/or conflict resolution skills to manage situations with clients who are distressed or in conflict with animal welfare or care directions</li> <li>• use problem solving techniques to determine work requirements.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• contribute to and promote continuous improvement processes</li> <li>• identify non-conformances to standards and take appropriate action</li> <li>• identify, assess and act on existing and potential risks</li> <li>• monitor and adjust activity in response to operational variations</li> <li>• rectify problems promptly and appropriately</li> <li>• seek and provide feedback on procedures and processes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• contribute to continuous improvement and planning processes</li> <li>• determine work requirements in order to complete in appropriate timeframes</li> <li>• ensure work equipment, materials and tools are ready and available for required tasks</li> <li>• plan work tasks for self and others as required</li> <li>• report and assist with implementing contingency plan promptly when incidents occur.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• conduct regular housekeeping activities to maintain a clean and hygienic work area</li> <li>• identify and apply safety procedures, including the use of protective equipment</li> <li>• maintain currency of relevant, work-related information</li> <li>• manage work load priorities and timelines</li> <li>• monitor information in work area</li> <li>• monitor own work against quality standards and identify areas for improvement</li> <li>• understand own work activities and responsibilities.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• assess competencies in meeting job requirements</li> <li>• maintain skill and knowledge currency</li> <li>• participate in meetings to inform work practices</li> <li>• recognise limits of own expertise and seek skill development if required.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **sixteen (16) units** of competency must be achieved as specified below.

- Complete **eleven (11) CORE** units
- Complete **five (5) ELECTIVE** units.

#### **CORE: Complete the following eleven (11) units**

ACMCAN301A	Work within a captive animal facility
ACMCAN302A	Prepare and present information to the public
ACMCAN303A	Support collection management
ACMCAN304A	Prepare and maintain animal housing
ACMCAN305A	Assist with capturing, restraining and moving animals
ACMCAN306A	Monitor animal reproduction
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMOHS301A	Contribute to occupational health and safety processes
ACMSUS201A	Participate in environmentally sustainable work practices

#### **ELECTIVE: Complete five (5) elective units.**

**Of these units at least three (3) units must be selected from the units listed below and two (2) additional units may be selected from within ACM10 or from any other national endorsed Training Package or accredited course.** Units selected must be aligned to Certificate II, III or IV and be relevant to work undertaken in the captive animal sector.

ACMATE302A	Carry out institution containment and exclusion procedures
ACMCAN307A	Rehabilitate native wildlife

ACMATE302A	Carry out institution containment and exclusion procedures
ACMCAN308A	Release native animals to natural environment
ACMCAN309A	Develop institutional husbandry guidelines
ACMCAN310A	Assist with exhibit design and renovation planning
ACMCAN311A	Care for young animals
ACMGAS305A	Rescue animals and apply basic first aid
ACMGAS306A	Assist with conditioning animals
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
RTD2502A	Maintain wildlife habitat refuges
RTD3125A	Respond to wildlife emergencies

# ACM30410 Certificate III in Companion Animal Services

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons operating within a companion animal organisation. It is highly recommended that whilst undertaking this qualification, the learner should have access to a companion animal workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

Job role titles covered by this qualification may include:

- Pet shop/aquarium assistant
- Kennel attendant
- Cattery attendant
- Assistant dog trainer
- Pet exerciser
- Assistant grooming attendant.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake ACM40310 Certificate IV in Companion Animal Services that defines higher level job functions.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• complete standard documentation</li> <li>• confirm relevant industry and workplace requirements</li> <li>• provide relevant work-related information to others</li> <li>• ensure records are accurate and legible</li> <li>• establish effective working relationships with colleagues</li> <li>• support team communication practices</li> <li>• understand personal and team requirements of relevant industry and workplace standards, regulations and policies</li> <li>• use communication technologies efficiently.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion</li> <li>• explain and implement work team reporting requirements</li> <li>• monitor work team tasks in accordance with regulatory and workplace requirements</li> <li>• provide support to team members</li> <li>• undertake appropriate and effective communication with team members.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• evaluate skill requirements of work tasks</li> <li>• identify risks and implement risk control measures</li> <li>• implement animal care and management procedures</li> <li>• monitor and anticipate problems that may arise during workplace operations, including hazards and risks, and take appropriate action to report or solve the problems within scope of responsibilities</li> </ul>



**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• provide problem solving support to team members</li> <li>• use assertive communication and/or conflict resolution skills to manage situations with clients who are distressed or in conflict with animal welfare or care directions</li> <li>• use problem solving techniques to determine work requirements.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• contribute to and promote continuous improvement processes</li> <li>• identify non-conformances to standards and take appropriate action</li> <li>• identify, assess and act on existing and potential risks</li> <li>• monitor and adjust activity in response to operational variations</li> <li>• rectify problems promptly and appropriately</li> <li>• seek and provide feedback on procedures and processes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• contribute to continuous improvement and planning processes</li> <li>• determine work requirements in order to complete in appropriate timeframes</li> <li>• ensure work equipment, materials and tools are ready and available for required tasks</li> <li>• plan work tasks for self and others as required</li> <li>• report and assist with implementing contingency plan promptly when incidents occur.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• conduct regular housekeeping activities to maintain a clean and hygienic work area</li> <li>• identify and apply safety procedures, including the use of personal protective equipment</li> <li>• maintain currency of relevant, work-related information</li> <li>• manage work load priorities and timelines</li> <li>• monitor information in work area</li> <li>• monitor own work against quality standards and identify areas for improvement</li> <li>• understand own work activities and responsibilities.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• assess competencies in meeting job requirements</li> <li>• maintain skill and knowledge currency</li> <li>• participate in meetings to inform work practices</li> <li>• recognise limits of own expertise and seek skill development if required.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **fifteen (15) units** of competency must be achieved as specified below.

- Complete **six (6) CORE** units
- Complete **six (6) ELECTIVE** units from Group A
- Complete **three (3) ELECTIVE** units from Group A and/or B.

#### **CORE: Complete the following six (6) CORE units**

ACMCAS301A	Work effectively in the companion animal industry
ACMGAS203A	Complete animal care hygiene routines
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMINF301A	Comply with infection control policies and procedures in animal care work
ACMOHS301A	Contribute to occupational health and safety processes
ACMSUS201A	Participate in environmentally sustainable work practices

#### **ELECTIVE**

#### **Group A: Complete six (6) units from the following list**

ACMCAS302A	Provide advice on companion animal selection and general care
ACMCAS303A	Provide advice on selection and care of aquatic animals
ACMCAS304A	Capture, handle and transport companion animals
ACMCAS305A	Maintain aquascapes and aquatic animals
ACMCAS306A	Provide grooming services for companion animal comfort
ACMCAS307A	Provide companion animal hydro-bathing services
ACMGAS207A	Provide reception services for an animal care facility

ACMCAS302A	Provide advice on companion animal selection and general care
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMGAS304A	Carry out simple breeding procedures
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits

**Group B: Complete three (3) additional ELECTIVE units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate II, III or IV level and be relevant to work undertaken in a companion animal services sector. Suggested units are:

BSBFLM309C	Support continuous improvement systems and processes
BSBFLM312B	Contribute to team effectiveness
BSBINM301A	Organise workplace information
SIRXCCS001A	Apply point-of-sale handling procedures

BSBFLM309C	Support continuous improvement systems and processes
SIRXFIN001A	Balance point-of-sale terminal
SIRXICT001A	Operate retail technology
SIRXICT003A	Operate retail information technology systems
SIRXINV001A	Perform stock control procedures
SIRXMER002A	Coordinate merchandise presentation
SIRXMER004A	Manage merchandise and store presentation

## ACM30510 Certificate III in Farriery

### Modification History

Not applicable.

### Description

This qualification provides a trade outcome in farriery. It relates to the work activities undertaken by a farrier who is engaged or employed to provide foot care services to horses with limited supervision in a defined range of varied contexts that may be complex and non-routine. The duties require judgement and the ability to accurately communicate information concerning horse health related to foot care and performance to owners as well as the ability to interpret and relay information covering a variety of circumstances.

### Job role

The job role and title covered by this qualification includes:

- Farrier.
- 

### Pathways Information

#### Pathways into the qualification

- direct entry
- vocational training and/or work experience or skills recognition.

This qualification is suited to Australian Apprenticeship pathways.

#### Pathways from the qualification

After achieving this qualification, candidates may undertake higher level study for further pathway advancement.

### Licensing, Legislative, Regulatory or Certifications Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Licensing/Regulatory Information

Not applicable.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• complete standard documentation</li> <li>• confirm relevant industry and workplace requirements</li> <li>• provide relevant work-related information to others</li> <li>• ensure records are accurate and legible</li> <li>• establish effective working relationships with colleagues</li> <li>• support team communication practices</li> <li>• understand personal and team requirements of relevant industry and workplace standards, regulations and policies</li> <li>• use communication technologies efficiently.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion</li> <li>• explain and implement work team reporting requirements</li> <li>• monitor work team tasks in accordance with regulatory and workplace requirements</li> <li>• provide support to team members</li> <li>• undertake appropriate and effective communication with team members.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• evaluate skill requirements of work tasks</li> <li>• identify risks and implement risk control measures</li> <li>• implement animal care and management procedures</li> <li>• monitor and anticipate problems that may arise during workplace operations, including hazards and risks and take appropriate action to report or solve the problems within scope of responsibilities</li> <li>• provide problem solving support to team members</li> <li>• use assertive communication and/or conflict resolution skills to manage situations with clients who are distressed or in conflict with animal welfare or care directions</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• use problem solving techniques to determine work requirements.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• contribute to and promote continuous improvement processes</li> <li>• identify non-conformances to standards and take appropriate action</li> <li>• identify, assess and act on existing and potential risks</li> <li>• monitor and adjust activity in response to operational variations</li> <li>• rectify problems promptly and appropriately</li> <li>• seek and provide feedback on procedures and processes.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• contribute to continuous improvement and planning processes</li> <li>• determine work requirements in order to complete in appropriate timeframes</li> <li>• ensure work equipment, materials and tools are ready and available for required tasks</li> <li>• plan work tasks for self and others as required</li> <li>• report and assist with implementing contingency plan promptly when incidents occur.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• conduct regular housekeeping activities to maintain a clean and hygienic work area</li> <li>• identify and apply safety procedures, including the use of personal protective equipment</li> <li>• maintain currency of relevant, work-related information</li> <li>• manage work load priorities and timelines</li> <li>• monitor information in work area</li> <li>• monitor own work against quality standards and identify areas for improvement</li> <li>• understand own work activities and responsibilities.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• ask questions to expand own knowledge</li> <li>• assess competencies in meeting job requirements</li> <li>• maintain skill and knowledge currency</li> <li>• participate in meetings to inform work practices</li> <li>• recognise limits of own expertise and seek skill development if required.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use information technology devices as required</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **twenty one (21) units** of competency must be achieved as specified below.

- Complete **twenty one (21) CORE** units.

### CORE: Complete the following twenty one (21) units

ACMFAR301A	Handle horses safely in the provision of farriery services
ACMFAR302A	Work effectively as a farrier in the equine industries
ACMFAR303A	Perform routine day-to-day farriery activities
ACMFAR304A	Respond to emergencies and apply essential first aid in the equine industries
ACMFAR305A	Perform welding tasks using a forge
ACMFAR306A	Maintain, repair and manufacture hand tools used in farriery
ACMFAR307A	Make standard shoes for a range of horses
ACMFAR308A	Determine foot care and shoeing plans for horses
ACMFAR309A	Fit shoes for normal healthy horses
ACMFAR310A	Fit shoes to alleviate moderate faults and defects in horses
ACMFAR311A	Fit shoes to alleviate severe faults and defects in horses
ACMFAR312A	Accommodate special needs of particular horses through farriery techniques
ACMOHS301A	Contribute to occupational health and safety processes
ACMSUS301A	Implement and monitor environmentally sustainable work practices
MEM05004C	Perform routine oxy acetylene welding
MEM05012C	Perform routine manual metal arc welding
MEM05050B	Perform routine gas metal arc welding



ACMFAR301A	Handle horses safely in the provision of farriery services
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
RTE3904A	Keep records for a primary production business
SIRXINV002A	Maintain and order stock

# ACM40110 Certificate IV in Animal Control and Regulation

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons undertaking animal control and regulatory functions. Animal control and regulation (also known as urban animal management) is a function provided by local and state/territory governments. It provides a community management service comprising four elements - regulation, education, information and infrastructure. It is highly recommended that whilst undertaking this qualification, the learner should have access to an animal control and regulation workplace through either paid employment or substantial periods of work placement or work experience blocks.

## Job roles

The job role that this qualification describes is an animal management officer undertaking animal control and regulatory functions.

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- after achieving ACM30110 Certificate III in Animal Studies
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake higher level study for further pathway advancement. These pathways may include undertaking Diploma qualifications from the LGA04 Local Government Training Package and/or graduate level study.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• applying numeracy skills to workplace requirements</li> <li>• complete workplace documentation and records</li> <li>• communicate with all team members in a professional manner</li> <li>• demonstrate effective and appropriate documentation, communication and interpersonal skills when dealing with internal and external clients</li> <li>• develop work instructions, specifications and procedures</li> <li>• use a range of communication technologies to support work operations.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• work cooperatively with people of different ages, gender, race or religion</li> <li>• liaise with and provide support to other team members</li> <li>• demonstrate leadership skills</li> <li>• identify and manage performance required to meet internal and external customer needs in own work and teamwork</li> <li>• maintain organisational processes and provide problem solving support to others.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• investigate problem causes</li> <li>• identify, rectify or report potential and actual problems associated with work operations</li> <li>• identify factors which may affect the service to be provided</li> <li>• use material and operational knowledge to solve problems</li> <li>• use numeracy skills to solve problems</li> <li>• identify hazards and suggest control measures</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• monitor animal welfare and safety practices in the workplace.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• assist in the implementation of continuous improvement processes</li> <li>• gather and analyse feedback on products, procedures and services</li> <li>• determine and act on situations requiring further information or problem solving</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• access, interpret and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• participate in continuous improvement and planning processes</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• demonstrate time management skills</li> <li>• source and prepare materials and resources and ensure availability to support work operations</li> <li>• schedule and sequence work to maximise safety and productivity.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• interpret and apply relevant Acts and regulations</li> <li>• keep the work area clean and hygienic at all times</li> <li>• monitor own work and work of team and identify and act on any quality issues</li> <li>• manage own time to meet deadlines</li> <li>• implement and monitor workplace procedures and instructions.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>• identify own training needs and seek skill development if required</li> <li>• implement learning activities as appropriate to ensure achievement of specified work requirements</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use computer software applications effectively</li> <li>• work with machines and workplace technology safely and according to workplace standards</li> <li>• help others use technology efficiently and safely</li> <li>• ensure readiness, operational efficiency and safety of workplace technology.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **fourteen (14) units** of competency must be achieved as specified below.

- Complete **nine (9) CORE** units
- Complete **five (5) ELECTIVE** units.

#### CORE: Complete the following **nine (9) units**

ACMACR401A	Comply with animal control and regulation requirements
ACMACR402A	Assess and impound animals
ACMACR403A	Identify and respond to animal behaviour
ACMACR404A	Manage conflict situations within an animal control and regulation environment
ACMACR406A	Carry out pound procedures
ACMACR409A	Prepare and present animal control and regulation case
ACMOHS401A	Maintain occupational health and safety processes
PSPREG404C	Investigate non-compliance
PSPREG405B	Act on non-compliance

#### ELECTIVE: Complete **five (5) elective units**.

**Of these units at least three (3) units must be selected from the units listed below and two (2) additional units may be selected from within ACM10 or from any other national endorsed Training Package or accredited course.** Units selected must be aligned to Certificate III, IV or Diploma and be relevant to work undertaken in the animal control and regulation sector.

ACMACR405A	Euthanase sick, injured or unwanted pound animals
ACMACR407A	Conduct community awareness programs
ACMACR408A	Coordinate seizure of animals

ACMACR405A	Euthanase sick, injured or unwanted pound animals
ACMSUS301A	Implement and monitor environmentally sustainable work practices
BSBINM301A	Organise workplace information
LGAEHRR304B	Operate council pound facilities
LGAPLEM405C	Provide assistance in carrying out building inspections
PSPGOV404B	Develop and implement work unit plans
PSPPM401B	Design simple projects
RTD2101A	Apply animal trapping techniques
RTD4402A	Define the pest problem in a local area
RTD4406A	Implement a pest management action plan

# ACM40210 Certificate IV in Captive Animals

## Modification History

Not applicable.

## Description

This qualification is a general industry qualification for persons operating at a senior keeper level and undertaking animal care functions within zoo, wildlife or theme park environments. It is highly recommended that whilst undertaking this qualification, the learner should have access to a captive animal workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

Job roles and titles covered by this qualification may include:

- Senior keeper
- Post-trade keeper
- Wildlife care operator/manager.
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## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM30310 Certificate III in Captive Animals
- vocational training and/or work experience or skills recognition.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake higher level study for further pathway advancement.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• apply numeracy skills to workplace requirements</li> <li>• complete workplace documentation and records</li> <li>• communicate with all team members in a professional manner</li> <li>• demonstrate effective and appropriate documentation, communication and interpersonal skills when dealing with internal and external clients</li> <li>• develop work instructions, specifications and procedures</li> <li>• use a range of communication technologies to support work operations.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• work cooperatively with people of different ages, gender, race or religion</li> <li>• liaise with and provide support to other team members</li> <li>• demonstrate leadership skills</li> <li>• identify and manage performance required to meet internal and external customer needs in own work and teamwork</li> <li>• maintain organisational processes and provide problem solving support to others.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• investigate problem causes</li> <li>• identify, rectify or report potential and actual problems associated with work operations</li> <li>• identify factors which may affect the service to be provided</li> <li>• use material and operational knowledge to solve problems</li> <li>• use numeracy skills to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• monitor animal welfare and safety practices in the workplace.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• assist in the implementation of continuous improvement processes</li> </ul>



**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>gather and analyse feedback on products, procedures and services</li> <li>determine and act on situations requiring further information or problem solving</li> <li>provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>access, interpret and apply technical information</li> <li>analyse data and information to determine implications for work operations</li> <li>participate in continuous improvement and planning processes</li> <li>identify hazards and implement appropriate hazard control measures</li> <li>demonstrate time management skills</li> <li>source and prepare materials and resources and ensure availability to support work operations</li> <li>schedule and sequence work to maximise safety and productivity.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>interpret and apply relevant Acts and regulations</li> <li>keep the work area clean and hygienic at all times</li> <li>monitor own work and work of team and identify and act on any quality issues</li> <li>manage own time to meet deadlines</li> <li>implement and monitor workplace procedures and instructions.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>assess work data and information to identify areas for improved performance</li> <li>be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>identify own training needs and seek skill development if required</li> <li>implement learning activities as appropriate to ensure achievement of specified work requirements</li> <li>gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>use computer software applications effectively</li> <li>work with machines and workplace technology safely and according to workplace standards</li> <li>help others use technology efficiently and safely</li> <li>ensure readiness, operational efficiency and safety of workplace technology.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **twenty (20) units** of competency must be achieved as specified below.

- Complete **thirteen (13) CORE** units
- Complete **four (4) ELECTIVE** units from Group A
- Complete **three (3) ELECTIVE** units from Group B.

### CORE: Complete the following thirteen (13) units

ACMCAN301A	Work within a captive animal facility
ACMCAN302A	Prepare and present information to the public
ACMCAN303A	Support collection management
ACMCAN304A	Prepare and maintain animal housing
ACMCAN305A	Assist with capturing, restraining and moving animals
ACMCAN306A	Monitor animal reproduction
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMCAN402A	Manage enclosures and exhibits
ACMCAN404A	Develop, monitor and review behavioural management strategies
ACMOHS401A	Maintain occupational health and safety processes
TAADEL404B	Facilitate work-based learning

### ELECTIVE:

#### Group A: Complete four (4) units from the following list

ACMCAN401A	Implement collection management
ACMCAN403A	Develop animal diets

ACMCAN401A	Implement collection management
ACMCAN405A	Design and evaluate interpretive and learning programs
ACMCAN406A	Assist in establishing and maintaining a plantation
ACMCAN501A	Contribute to enclosure and exhibit design or renovation projects
ACMCAN502A	Develop and monitor collection management
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
ACMSUS301A	Implement and monitor environmentally sustainable work practices
BSBRES401A	Analyse and present research information
TAADEL403A	Facilitate individual learning

**Group B: Complete three (3) additional units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate IV or Diploma and be relevant to work undertaken in the captive animal sector.



# ACM40310 Certificate IV in Companion Animal Services

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons operating within a companion animal organisation. It is highly recommended that whilst undertaking this qualification, the learner should have access to a companion animal workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

Job roles and titles covered by this qualification may include:

- Pet shop/aquarium manager
- Companion animal trainer/behaviourist
- Companion animal breeder
- Companion animal groomer
- Boarding kennel or cattery manager
- Animal shelter supervisor/manager
- Pet minding and exercise operator
- Mobile hydro-bathing operator.
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## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM30110 Certificate III in Animal Studies
- after achieving ACM30310 Certificate III in Companion Animal Services
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake higher level study for further pathway advancement.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, an individual unit of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• applying numeracy skills to workplace requirements</li> <li>• complete workplace documentation and records</li> <li>• communicate with all team members in a professional manner</li> <li>• demonstrate effective and appropriate documentation, communication and interpersonal skills when dealing with internal and external clients</li> <li>• develop work instructions, specifications and procedures</li> <li>• use a range of communication technologies to support work operations.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• work cooperatively with people of different ages, gender, race or religion</li> <li>• liaise with and provide support to other team members</li> <li>• demonstrate leadership skills</li> <li>• identify and manage performance required to meet internal and external customer needs in own work and teamwork</li> <li>• maintain organisational processes and provide problem solving support to others.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• investigate problem causes</li> <li>• identify, rectify or report potential and actual problems associated with work operations</li> <li>• identify factors which may affect the service to be provided</li> <li>• use material and operational knowledge to solve problems</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• use numeracy skills to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• monitor animal welfare and safety practices in the workplace.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• assist in the implementation of continuous improvement processes</li> <li>• gather and analyse feedback on products, procedures and services</li> <li>• determine and act on situations requiring further information or problem solving</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• access, interpret and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• participate in continuous improvement and planning processes</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• demonstrate time management skills</li> <li>• source and prepare materials and resources and ensure availability to support work operations</li> <li>• schedule and sequence work to maximise safety and productivity.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• interpret and apply relevant Acts and regulations</li> <li>• keep the work area clean and hygienic at all times</li> <li>• monitor own work and work of team and identify and act on any quality issues</li> <li>• manage own time to meet deadlines</li> <li>• implement and monitor workplace procedures and instructions.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>• identify own training needs and seek skill development if required</li> <li>• implement learning activities as appropriate to ensure achievement of specified work requirements</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use computer software applications effectively</li> <li>• work with machines and workplace technology safely and according to workplace standards</li> <li>• help others use technology efficiently and safely</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>ensure readiness, operational efficiency and safety of workplace technology.</li> </ul>
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**Packaging Rules****Packaging Rules**

A total of **thirteen (13) units** of competency must be achieved as specified below.

- Complete **three (3) CORE** units
- Complete **six (6) ELECTIVE** units from Group A
- Complete **four (4) ELECTIVE** units from Group A and/or B.

**CORE: Complete the following three (3) units**

ACMCAS401A	Manage compliance in the companion animal industry
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMOHS401A	Maintain occupational health and safety processes

**ELECTIVE****Group A: Complete six (6) units from the following list**

ACMCAN311A	Care for young animals
ACMCAS402A	Manage and maintain aviaries and bird rooms
ACMCAS403A	Design, construct and maintain aquascapes
ACMCAS404A	Develop enrichment strategies for companion animals
ACMCAS405A	Purchase companion animal livestock
ACMCAS406A	Manage companion animal breeding
ACMCAS407A	Provide professional companion animal grooming services



ACMCAN311A	Care for young animals
ACMCAS408A	Manage the operation of a mobile hydro-bathing facility
ACMCAS409A	Provide training advice to companion animal owners
ACMCAS410A	Conduct companion animal training classes
ACMGAS306A	Assist with conditioning animals
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
ACMSUS301A	Implement and monitor environmentally sustainable work practices
ACMVET411A	Prepare, deliver and review animal care education programs

**Group B: Complete four (4) units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificate III, IV or Diploma and be relevant to work undertaken in the companion animal services sector. Suggested units are:

BSBSMB403A	Market the small business
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BSBSMB403A	Market the small business
BSBSMB405A	Monitor and manage small business operations
BSBSMB407A	Manage a small team
BSBWOR402A	Promote team effectiveness
SIRXINV005A	Control inventory
SIRXMER004A	Manage merchandise and store presentation
TAADEL403A	Facilitate individual learning
TAADEL404B	Facilitate work-based learning

# ACM40410 Certificate IV in Veterinary Nursing

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons operating as veterinary nurses within veterinary clinics. Candidates should expect that access to a veterinary clinic whilst undertaking study for this qualification will be essential for meeting assessment requirements. Access may be through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

The job role that this qualification describes includes:

- Veterinary nurse.
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## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM20110 Certificate II in Animal Studies
- vocational training and/or work experience across a range of work settings.

This qualification is suited to Australian Apprenticeships pathways.

### Pathways from the qualification

After achieving this qualification candidates may undertake:

- ACM50210 Diploma in Veterinary Nursing (Surgery)
- ACM50310 Diploma in Veterinary Nursing (Dental)
- ACM50410 Diploma in Veterinary Nursing (Emergency and Critical Care)
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## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is a direct link between this qualification and approval to perform veterinary nursing duties under the Western Australian (WA) Veterinary Surgeons Act 1960 as amended. The WA Veterinary Surgeons Board must approve qualified persons to carry out the duties of veterinary nurses and must authorise persons enrolled in approved courses to perform the duties of trainee veterinary nurses. Candidates should confirm the regulatory requirements that apply in their relevant state or territory. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• apply numeracy skills to workplace requirements</li> <li>• complete workplace documentation and records</li> <li>• communicate with all team members in a professional manner</li> <li>• demonstrate effective and appropriate documentation, communication and interpersonal skills when dealing with internal and external clients</li> <li>• use a range of communication technologies to support work operations.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• work cooperatively with people of different ages, gender, race or religion</li> <li>• liaise with and provide support to other team members</li> <li>• demonstrate leadership skills</li> <li>• identify and manage performance required to meet internal and external customer needs in own work and teamwork</li> <li>• maintain organisational processes and provide problem solving support to others.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• investigate problem causes</li> <li>• identify, rectify or report potential and actual problems associated with work operations</li> <li>• identify factors which may affect the service to be provided</li> <li>• use material and operational knowledge to solve problems</li> <li>• use numeracy skills to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• monitor animal welfare and safety practices in the workplace.</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

Initiative and enterprise	<ul style="list-style-type: none"> <li>• assist in the implementation of continuous improvement processes</li> <li>• gather and analyse feedback on products, procedures and services</li> <li>• determine and act on situations requiring further information or problem solving</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• analyse data and information to determine implications for work operations</li> <li>• participate in continuous improvement and planning processes</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• demonstrate time-management skills</li> <li>• source and prepare materials and resources and ensure availability to support work operations</li> <li>• schedule and sequence work to maximise safety and productivity.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• interpret and apply relevant Acts and regulations</li> <li>• keep the work area clean and hygienic at all times</li> <li>• monitor own work and work of team and identify and act on any quality issues</li> <li>• manage own time to meet deadlines</li> <li>• implement and monitor workplace procedures and instructions</li> <li>• recognise own shortcomings and seek advice and assistance from supervisors.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>• identify own training needs and seek skill development if required</li> <li>• implement learning activities as appropriate to ensure achievement of specified work requirements</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• use computer software applications effectively</li> <li>• work with machines and workplace technology safely and according to workplace standards</li> <li>• help others use technology efficiently and safely</li> <li>• ensure readiness, operational efficiency and safety of workplace technology.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of **twenty three (23) units** of competency must be achieved as specified below.

- Complete **nineteen (19) CORE** units
- Complete **four (4) ELECTIVE** units.

#### CORE: Complete the following **nineteen (19) units**

ACMGAS202A	Participate in workplace communications
ACMGAS204A	Feed and water animals
ACMGAS205A	Assist in health care of animals
ACMGAS208A	Source information for animal care needs
ACMINF301A	Comply with infection control policies and procedures in animal work
ACMOHS301A	Contribute to occupational health and safety processes
ACMVET201A	Carry out veterinary nursing reception duties
ACMVET202A	Carry out daily clinic routines
ACMVET203A	Assist with surgery preparation
ACMVET401A	Coordinate patient admission and discharge
ACMVET402A	Apply imaging routines
ACMVET403A	Perform clinic pathology procedures
ACMVET404A	Perform clinic office procedures
ACMVET405A	Carry out surgical nursing routines
ACMVET406A	Nurse animals
ACMVET407A	Carry out medical nursing routines

ACMGAS202A	Participate in workplace communications
ACMVET408A	Coordinate and perform theatre routines
ACMVET409A	Provide specific animal care advice
ACMVET410A	Carry out veterinary dental nursing procedures

**ELECTIVE: Complete four (4) additional ELECTIVE units from from ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to Certificates III or IV and be relevant to work undertaken in the veterinary nursing sector. Suggested units are:

ACMMIC401A	Implant microchip in cats and dogs
ACMVET411A	Prepare, deliver and review animal care education programs
ACMVET412A	Coordinate clinic promotional activities
ACMVET413A	Develop and implement specific clinic policies
ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles
ACMSPE312A	Provide basic care of rodents and rabbits
ACMSUS301A	Implement and monitor environmentally sustainable work practices

ACMMIC401A	Implant microchip in cats and dogs
HLTFA301B	Apply first aid



# ACM50110 Diploma of Animal Technology

## Modification History

Not applicable.

## Description

This qualification is the industry qualification for persons aiming to operate at a senior or managerial level and undertaking animal technology functions within a biomedical research or production environment. It is highly recommended that while undertaking this qualification, the learner should have access to an animal technology workplace through either paid employment or substantial periods of work placement or work experience blocks.

### Job roles

Job role titles covered by this qualification may include:

- Animal technology manager
- Facility manager
- Animal technologist
- Animal house manager
- Supervising animal technician.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM30110 Certificate III in Animal Studies
- after achieving ACM30210 Certificate III in Animal Technology
- vocational training, work experience or skills recognition.

### Pathways from the qualification

After achieving this qualification candidates may undertake graduate level study to provide advanced skills and knowledge for further pathway advancement.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

Regulatory compliance with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes applies to some units of competency. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• analyse and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• communicate with all people at all levels of the organisation in a professional manner</li> <li>• complete a range of workplace documentation and records</li> <li>• select communication technologies to support work operations</li> <li>• demonstrate effective and appropriate communication and interpersonal skills when dealing with people</li> <li>• develop work instructions, specifications and procedures</li> <li>• select and apply documentation, communication and interpersonal strategies when dealing with internal and external clients</li> <li>• select communication methods according to priority, cost and audience needs.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• determine performance required to meet internal and external customer needs</li> <li>• facilitate team achievements</li> <li>• lead cooperative work relations with people of different ages, gender, race or religion</li> <li>• manage organisational processes and provide problem solving support to others</li> <li>• provide leadership.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• identify and address potential and actual problems associated with work operations or in achieving work outcomes</li> <li>• investigate problem causes and implement corrective strategies</li> <li>• identify environmental features, regulations, legislative requirements and other factors which may affect the process or</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• service to be provided</li> <li>• use material and process knowledge to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• analyse animal welfare and safety practices.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• determine and act on situations requiring further information or problem solving</li> <li>• determine information gathering requirements to monitor work processes and procedures</li> <li>• determine quality and other indicators of work outcomes</li> <li>• identify efficient production processes</li> <li>• implement continuous improvement processes</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• demonstrate time-management skills</li> <li>• determine resource requirements</li> <li>• determine work timelines and quality service targets</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• optimise work processes.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• analyse implications of relevant Acts and regulations on work practices</li> <li>• conduct work reviews to determine improvement requirements</li> <li>• determine workplace procedures and instructions</li> <li>• monitor work operations and identify and act on any quality and performance issues</li> <li>• manage own time to meet deadlines.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>• develop learning opportunities</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice</li> <li>• identify own training needs and seek skill development if required</li> <li>• maintain currency of industry skill and knowledge.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• ensure readiness and operational efficiency of workplace technology</li> <li>• help others use technology efficiently and safely</li> <li>• select computer software applications to perform work operations</li> <li>• work with technology safely and according to workplace</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

standards.

**Packaging Rules****Packaging Rules**

A total of **twenty-three (23) units** of competency must be achieved as specified below.

- Complete **fifteen (15)** CORE units
- Complete **five (5)** ELECTIVE units from Group A
- Complete **three (3)** ELECTIVE units from Group B.

**CORE: Complete the following fifteen (15) units**

ACMATE301A	Work within an animal technology facility
ACMATE302A	Carry out institution containment and exclusion procedures
ACMATE303A	Prepare for and monitor anaesthesia in animals
ACMATE304A	Conduct non-surgical procedures on animals
ACMATE305A	Conduct euthanasia of research animals
ACMATE501A	Manage compliance in animal technology
ACMATE502A	Manage and maintain the health of research animals
ACMGAS301A	Maintain and monitor animal health and wellbeing
ACMGAS302A	Provide enrichment for animals
ACMGAS303A	Plan for and provide nutritional requirements for animals
ACMGAS304A	Carry out simple breeding procedures
ACMOHS501A	Manage occupational health and safety processes
ACMSPE312A	Provide basic care of rodents and rabbits
MSL973004A	Perform aseptic techniques

ACMATE301A	Work within an animal technology facility
MSL924001A	Process and interpret data

**ELECTIVE****Group A: Complete five (5) units from the following list**

ACMATE503A	Carry out post-mortem examination of a research animal
ACMATE504A	Administer anaesthesia and perform surgery on animals for scientific purposes
ACMATE505A	Carry out advanced breeding procedures
ACMATE507A	Manage the parturition of transgenic mice or rats
ACMCAN404A	Develop, monitor and review behavioural management strategies
ACMSUS301A	Implement and monitor environmentally sustainable work practices
BSBRES401A	Analyse and present research information
MSL915002A	Schedule laboratory work for a small team
MSL916001A	Develop and maintain laboratory documentation
MSL916003A	Supervise laboratory operations in work/functional area
MSL916005A	Manage complex projects
MSL974007A	Undertake environmental field-based monitoring
MSL974011A	Prepare tissue and cell cultures <i>*(prerequisite MSL973004A Perform aseptic techniques)</i>

**Group B: Complete three (3) additional ELECTIVE units from within ACM10 or from any other nationally endorsed Training Package or accredited course.** Units selected must be aligned to qualifications at Certificate III or higher level and be relevant to work undertaken in an animal technology sector. Suggested units are:

ACMSPE301A	Provide basic care of amphibians
ACMSPE302A	Provide basic care of birds

ACMSPE301A	Provide basic care of amphibians
ACMSPE303A	Provide basic care of common native mammals
ACMSPE304A	Provide basic care of dogs
ACMSPE305A	Provide basic care of domestic cats
ACMSPE306A	Provide basic care of marine fish
ACMSPE307A	Provide basic care of freshwater fish
ACMSPE308A	Provide basic care of marine aquatic invertebrates
ACMSPE309A	Provide basic care of terrestrial and freshwater invertebrates
ACMSPE310A	Provide basic care of mammals
ACMSPE311A	Provide basic care of non-venomous reptiles

# ACM50210 Diploma of Veterinary Nursing (Surgical)

## Modification History

Not applicable.

## Description

This qualification is the industry standard for veterinary nurses who provide specialised surgical nursing support for registered specialist veterinarians performing specialised surgical procedures within veterinary clinics or hospitals.

Candidates undertaking study for this qualification should expect that access through paid employment within a veterinary clinic or hospital where a registered specialist performs specialised surgical procedures will be essential for meeting assessment requirements of some units.

The Diploma of Veterinary Nursing (Surgical) is extremely complex and requires access and exposure to an extensive range of specialised surgical procedures, including intrathoracic, internal fixation, external fixation, soft tissue, ophthalmic, skin grafting, oncological surgery, advanced corrective orthopaedics and which may require advanced anaesthetic monitoring. It also requires access to a veterinary clinic or hospital where specialised surgical procedures are performed; veterinary surgeons that perform specialised surgical procedures; patients and clients requiring specialised surgical procedures; and the equipment, instruments and resources required to perform specialised surgical procedures.

## Job role

The job role that this qualification describes includes:

- Veterinary surgical nurse.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM40409 Certificate IV in Veterinary Nursing
- vocational training and/or work experience related to veterinary nursing.

### Pathways from the qualification

After achieving the ACM50210 Diploma of Veterinary Nursing (Surgical), candidates may undertake professional development activities in areas of benefit to their workplace and their personal aspirations.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is a direct link between this qualification and approval to perform veterinary nursing duties under the Western Australian (WA) Veterinary Surgeons Act 1960 as amended. The WA Veterinary Surgeons Board must approve qualified persons to carry out the duties of veterinary nurses and must authorise persons enrolled in approved courses to perform the duties of trainee veterinary nurses. Candidates should confirm the regulatory requirements that apply in their relevant state or territory. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• analyse and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• communicate with all people at all levels of the organisation in a professional manner</li> <li>• complete a range of workplace documentation and records</li> <li>• select communication technologies to support work operations</li> <li>• demonstrate effective and appropriate communication and interpersonal skills when dealing with people</li> <li>• develop work instructions, specifications and procedures</li> <li>• select and apply documentation, communication and interpersonal strategies when dealing with internal and external clients</li> <li>• select communication methods according to priority, cost and audience needs.</li> </ul>



**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

Teamwork	<ul style="list-style-type: none"> <li>• determine performance required to meet internal and external customer needs</li> <li>• facilitate team achievements</li> <li>• lead cooperative work relations with people of different ages, gender, race or religion</li> <li>• manage organisational processes and provide problem solving support to others</li> <li>• provide leadership.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• identify and address potential and actual problems associated with work operations or in achieving work outcomes</li> <li>• investigate problem causes and implement corrective strategies</li> <li>• identify environmental features, regulations, legislative requirements and other factors which may affect the process or service to be provided</li> <li>• use material and process knowledge to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• analyse animal welfare and safety practices.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• determine and act on situations requiring further information or problem solving</li> <li>• determine information gathering requirements to monitor work processes and procedures</li> <li>• determine quality and other indicators of work outcomes</li> <li>• identify efficient production processes</li> <li>• implement continuous improvement processes</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• demonstrate time-management skills</li> <li>• determine resource requirements</li> <li>• determine work timelines and quality service targets</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• optimise work processes.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• analyse implications of relevant Acts and regulations on work practices</li> <li>• conduct work reviews to determine improvement requirements</li> <li>• determine workplace procedures and instructions</li> <li>• monitor work operations and identify and act on any quality and performance issues</li> <li>• manage own time to meet deadlines.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<p>encourage workplace learning</p> <ul style="list-style-type: none"> <li>• develop learning opportunities</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice</li> <li>• identify own training needs and seek skill development if required</li> <li>• maintain currency of industry skill and knowledge.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• ensure readiness and operational efficiency of workplace technology</li> <li>• help others use technology efficiently and safely</li> <li>• select computer software applications to perform work operations</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

**Packaging Rules****Packaging Rules**

A total of **fourteen (14) units** of competency must be achieved as specified below.

- Complete **fourteen (14) CORE** units.

**CORE: Complete the following fourteen (14) units**

ACMOHS401A	Maintain occupational health and safety processes
ACMSUS301A	Implement and monitor environmentally sustainable work practices
ACMVET401A	Coordinate patient admission and discharge
ACMVET402A	Apply imaging routines
ACMVET403A	Perform clinic pathology procedures
ACMVET404A	Perform clinic office procedures
ACMVET405A	Carry out surgical nursing routines

ACMOHS401A	Maintain occupational health and safety processes
ACMVET406A	Nurse animals
ACMVET407A	Carry out medical nursing routines
ACMVET408A	Coordinate and perform theatre routines
ACMVET409A	Provide specific animal care advice
ACMVET410A	Carry out veterinary dental nursing procedures
ACMVET501A	Manage nursing requirements for specialised surgical procedures
ACMVET502A	Carry out post-operative nursing routines

# ACM50310 Diploma of Veterinary Nursing (Dental)

## Modification History

Not applicable.

## Description

This qualification is the industry standard for veterinary nurses who provide specialised and advanced veterinary dental nursing support within a clinic or hospital that performs advanced veterinary dentistry, or a specialist or referral veterinary dental clinic or hospital.

Candidates undertaking study for this qualification should expect that access through paid employment within a clinic or hospital that performs advanced veterinary dentistry, or a specialist or referral veterinary dental clinic or hospital, will be essential for meeting assessment requirements of some units.

The Diploma of Veterinary Nursing (Dental) is extremely complex and requires access and exposure to all seven veterinary dentistry disciplines (periodontics, endodontics, restorative dentistry, oral surgery, prosthodontics, orthodontics and exotic animal dentistry). It also requires access to a veterinary clinic or hospital that performs advanced veterinary dentistry; a specialist veterinary dental clinic or hospital or a referral veterinary dental clinic or hospital; veterinarians who perform specialist dental procedures; patients and clients requiring veterinary dental oral cavity radiographs and specialised dental procedures; and the equipment, instruments and resources required to perform all seven veterinary dentistry disciplines.

## Job role

The job role that this qualification describes includes:

- Veterinary dental nurse.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM40409 Certificate IV in Veterinary Nursing
- vocational training and/or work experience related to veterinary nursing.

### Pathways from the qualification

After achieving the ACM50310 Diploma of Veterinary Nursing (Dental), candidates may undertake professional development activities in areas of benefit to their workplace and their personal aspirations.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is a direct link between this qualification and approval to perform veterinary nursing duties under the Western Australian (WA) Veterinary Surgeons Act 1960 as amended. The WA Veterinary Surgeons Board must approve qualified persons to carry out the duties of veterinary nurses and must authorise persons enrolled in approved courses to perform the duties of trainee veterinary nurses. Candidates should confirm the regulatory requirements that apply in their relevant state or territory. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

<b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b>	
<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
Communication	<ul style="list-style-type: none"> <li>• analyse and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• communicate with all people at all levels of the organisation in a professional manner</li> <li>• complete a range of workplace documentation and records</li> <li>• select communication technologies to support work operations</li> <li>• demonstrate effective and appropriate communication and interpersonal skills when dealing with people</li> <li>• develop work instructions, specifications and procedures</li> <li>• select and apply documentation, communication and interpersonal strategies when dealing with internal and external clients</li> <li>• select communication methods according to priority, cost and audience needs.</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

Teamwork	<ul style="list-style-type: none"> <li>• determine performance required to meet internal and external customer needs</li> <li>• facilitate team achievements</li> <li>• lead cooperative work relations with people of different ages, gender, race or religion</li> <li>• manage organisational processes and provide problem solving support to others</li> <li>• provide leadership.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• identify and address potential and actual problems associated with work operations or in achieving work outcomes</li> <li>• investigate problem causes and implement corrective strategies</li> <li>• identify environmental features, regulations, legislative requirements and other factors which may affect the process or service to be provided</li> <li>• use material and process knowledge to solve problems</li> <li>• identify hazards and suggest control measures</li> <li>• analyse animal welfare and safety practices.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• determine and act on situations requiring further information or problem solving</li> <li>• determine information gathering requirements to monitor work processes and procedures</li> <li>• determine quality and other indicators of work outcomes</li> <li>• identify efficient production processes</li> <li>• implement continuous improvement processes</li> <li>• provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• demonstrate time-management skills</li> <li>• determine resource requirements</li> <li>• determine work timelines and quality service targets</li> <li>• identify hazards and implement appropriate hazard control measures</li> <li>• optimise work processes.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• analyse implications of relevant Acts and regulations on work practices</li> <li>• conduct work reviews to determine improvement requirements</li> <li>• determine workplace procedures and instructions</li> <li>• monitor work operations and identify and act on any quality and performance issues</li> <li>• manage own time to meet deadlines.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• assess work data and information to identify areas for improved performance</li> <li>• be supportive, assertive and use interpersonal skills to</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<p>encourage workplace learning</p> <ul style="list-style-type: none"> <li>• develop learning opportunities</li> <li>• gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice</li> <li>• identify own training needs and seek skill development if required</li> <li>• maintain currency of industry skill and knowledge.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• ensure readiness and operational efficiency of workplace technology</li> <li>• help others use technology efficiently and safely</li> <li>• select computer software applications to perform work operations</li> <li>• work with technology safely and according to workplace standards.</li> </ul>

**Packaging Rules****Packaging Rules**

A total of **fourteen (14) units** of competency must be achieved as specified below.

- Complete **fourteen (14) CORE** units.

**CORE: Complete the following fourteen (14) units**

ACMOHS401A	Maintain occupational health and safety processes
ACMSUS301A	Implement and monitor environmentally sustainable work practices
ACMVET401A	Coordinate patient admission and discharge
ACMVET402A	Apply imaging routines
ACMVET403A	Perform clinic pathology procedures
ACMVET404A	Perform clinic office procedures
ACMVET405A	Carry out surgical nursing routines

ACMOHS401A	Maintain occupational health and safety processes
ACMVET406A	Nurse animals
ACMVET407A	Carry out medical nursing routines
ACMVET408A	Coordinate and perform theatre routines
ACMVET409A	Provide specific animal care advice
ACMVET410A	Carry out veterinary dental nursing procedures
ACMVET503A	Produce veterinary dental oral cavity radiographs
ACMVET504A	Provide veterinary dental nursing support for advanced veterinary dental surgery



# ACM50410 Diploma of Veterinary Nursing (Emergency and Critical Care)

## Modification History

Not applicable.

## Description

This qualification is the industry standard for veterinary nurses who provide support for an extensive range of emergency and critical care procedures within a veterinary hospital or emergency/specialist veterinary clinic.

Candidates undertaking study for this qualification should expect that access through paid employment to a veterinary hospital or emergency/specialist veterinary clinic where emergency and critical care procedures are performed will be essential for meeting assessment requirements of some units.

The Diploma of Veterinary Nursing (Emergency and Critical Care) is extremely complex and requires access and exposure to an extensive range of specialised emergency and critical care procedures, including medical emergencies; trauma, including road traffic accident, chest, abdominal, head and respiratory; surgical (thoracic and abdominal); haematological (disseminated intravascular coagulopathy), resulting in blood transfusions; septic (systemic inflammatory response syndrome), relating to organ dysfunction; toxin recognition and management of topical and ingested toxins; and advanced critical care and intensive care monitoring (post-surgical). It also requires access to a veterinary hospital or emergency/specialist veterinary clinic where emergency and specialised critical care procedures are performed; veterinarians who perform emergency and specialised critical care procedures; patients and clients requiring emergency and specialised critical care surgery, nursing and discharge; and the equipment, instruments and resources required to perform emergency and specialised critical care procedures.

## Job role

The job role that this qualification describes includes:

- Veterinary emergency and critical care nurse.
- 

## Pathways Information

### Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry
- after achieving ACM40409 Certificate IV in Veterinary Nursing
- vocational training and/or work experience related to veterinary nursing.

### Pathways from the qualification

After achieving the ACM50410 Diploma of Veterinary Nursing (Emergency and Critical Care), candidates may undertake professional development activities in areas of benefit to their workplace and their personal aspirations.

## Licensing/Regulatory Information

### Licensing, Legislative, Regulatory or Certification Considerations

There is a direct link between this qualification and approval to perform veterinary nursing duties under the Western Australian (WA) Veterinary Surgeons Act 1960 as amended. The WA Veterinary Surgeons Board must approve qualified persons to carry out the duties of veterinary nurses and must authorise persons enrolled in approved courses to perform the duties of trainee veterinary nurses. Candidates should confirm the regulatory requirements that apply in their relevant state or territory. In addition, individual units of competency may specify relevant licensing, legislative and/or regulatory requirements.

## Entry Requirements

Not applicable.

## Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>• analyse and apply technical information</li> <li>• analyse data and information to determine implications for work operations</li> <li>• communicate with all people at all levels of the organisation in a professional manner</li> <li>• complete a range of workplace documentation and records</li> <li>• select communication technologies to support work operations</li> <li>• demonstrate effective and appropriate communication and interpersonal skills when dealing with people</li> <li>• develop work instructions, specifications and procedures</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>select and apply documentation, communication and interpersonal strategies when dealing with internal and external clients</li> <li>select communication methods according to priority, cost and audience needs.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>determine performance required to meet internal and external customer needs</li> <li>facilitate team achievements</li> <li>lead cooperative work relations with people of different ages, gender, race or religion</li> <li>manage organisational processes and provide problem solving support to others</li> <li>provide leadership.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>identify and address potential and actual problems associated with work operations or in achieving work outcomes</li> <li>investigate problem causes and implement corrective strategies</li> <li>identify environmental features, regulations, legislative requirements and other factors which may affect the process or service to be provided</li> <li>use material and process knowledge to solve problems</li> <li>identify hazards and suggest control measures</li> <li>analyse animal welfare and safety practices.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>determine and act on situations requiring further information or problem solving</li> <li>determine information gathering requirements to monitor work processes and procedures</li> <li>determine quality and other indicators of work outcomes</li> <li>identify efficient production processes</li> <li>implement continuous improvement processes</li> <li>provide leadership in the workplace.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>demonstrate time-management skills</li> <li>determine resource requirements</li> <li>determine work timelines and quality service targets</li> <li>identify hazards and implement appropriate hazard control measures</li> <li>optimise work processes.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>analyse implications of relevant Acts and regulations on work practices</li> <li>conduct work reviews to determine improvement requirements</li> <li>determine workplace procedures and instructions</li> <li>monitor work operations and identify and act on any quality and</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>performance issues</li> <li>manage own time to meet deadlines.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>assess work data and information to identify areas for improved performance</li> <li>be supportive, assertive and use interpersonal skills to encourage workplace learning</li> <li>develop learning opportunities</li> <li>gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice</li> <li>identify own training needs and seek skill development if required</li> <li>maintain currency of industry skill and knowledge.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>ensure readiness and operational efficiency of workplace technology</li> <li>help others use technology efficiently and safely</li> <li>select computer software applications to perform work operations</li> <li>work with technology safely and according to workplace standards.</li> </ul>

**Packaging Rules****Packaging Rules**

A total of **fifteen (15) units** of competency must be achieved as specified below.

- Complete **fifteen (15) CORE** units.

**CORE: Complete the following fifteen (15) units**

ACMOHS401A	Maintain occupational health and safety processes
ACMSUS301A	Implement and monitor environmentally sustainable work practices
ACMVET401A	Coordinate patient admission and discharge
ACMVET402A	Apply imaging routines

ACMOHS401A	Maintain occupational health and safety processes
ACMVET403A	Perform clinic pathology procedures
ACMVET404A	Perform clinic office procedures
ACMVET405A	Carry out surgical nursing routines
ACMVET406A	Nurse animals
ACMVET407A	Carry out medical nursing routines
ACMVET408A	Coordinate and perform theatre routines
ACMVET409A	Provide specific animal care advice
ACMVET410A	Carry out veterinary dental nursing procedures
ACMVET505A	Prepare for emergency response
ACMVET506A	Perform emergency procedures to sustain life
ACMVET507A	Provide nursing support for critical care surgery

## ACMSS00001 Microchip Implantation for Dogs and Cats Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	<p>These units may provide credit towards:</p> <ul style="list-style-type: none"> <li>• ACM30110 Certificate III in Animal Studies</li> <li>• ACM30310 Certificate III in Captive Animals</li> <li>• ACM30410 Certificate III in Companion Animal Services</li> <li>• ACM40410 Certificate IV in Veterinary Nursing</li> </ul>
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### Licensing/Regulatory Information

Not applicable.

### Skill Set Requirements

<b>Units</b>	ACMGAS301A	Maintain and monitor animal health and wellbeing
	ACMOHS301A	Contribute to occupational health and safety processes
	ACMMIC401A	Implant microchip in cats and dogs

### Target Group

<b>Target group</b>	Those wishing to gain the relevant skills and knowledge required to be registered as a state or territory 'approved microchip implanter for cats and dogs'. It will be necessary to check with your relevant state or territory department for current licensing, legislative or regulatory requirements
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	before undertaking this Skill Set.
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	These units of competency from the ACM10 Animal Care and Management Training Package meet state and/or territory regulatory requirements for recognition as an 'approved microchip implanter for cats and dogs'.
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## ACMSS00002 Native Amphibian Rehabilitation Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.
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### Licensing/Regulatory Information

Those working as native wildlife carers in the animal care and management industry. Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.

### Skill Set Requirements

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals



<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMSPE301A	Provide basic care for amphibians

## Target Group

<b>Target group</b>	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	<p>These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.</p>
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## ACMSS00003 Native Bird Rehabilitation Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.
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### Licensing/Regulatory Information

Those working as native wildlife carers in the animal care and management industry. Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.

### Skill Set Requirements

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMSPE302A	Provide basic care for birds

## Target Group

<b>Target group</b>	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	<p>These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.</p>
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## ACMSS00004 Native Mammal Rehabilitation Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.
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### Licensing/Regulatory Information

Those working as native wildlife carers in the animal care and management industry. Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.

### Skill Set Requirements

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMSPE303A	Provide basic care for common native mammals

## Target Group

<b>Target group</b>	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	<p>These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.</p>
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## ACMSS00005 Native Reptile Rehabilitation Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	These units of competency may provide credit towards ACM30310 Certificate III in Captive Animals.
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### Licensing/Regulatory Information

Those working as native wildlife carers in the animal care and management industry.  
Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.

### Skill Set Requirements

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMGAS305A	Rescue animals and apply basic first aid
	ACMCAN305A	Assist with capturing, restraining and moving animals
	ACMCAN307A	Rehabilitate native wildlife
	ACMCAN308A	Release native animals to natural environment
	ACMCAN311A	Care for young animals

<b>Units</b>	ACMOHS201A	Participate in occupational health and safety processes
	ACMSPE311A	Provide basic care for non-venomous reptiles

## Target Group

<b>Target group</b>	<p>Those working as native wildlife carers in the animal care and management industry.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this Skill Set. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Skill Set.</p>
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	<p>These units of competency from the ACM10 Animal Care and Management Training Package meet the industry requirements to gain a Rehabilitation Permit for wildlife carers subject to state and/or territory legislation and regulatory requirements.</p>
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## ACMSS00006 Preventative Biosecurity Skill Set

### Modification History

Not applicable.

### Description

Not applicable.

### Pathways Information

<b>Pathway</b>	<p>These units of competency may provide credit towards:</p> <ul style="list-style-type: none"> <li>• ACM30110 Certificate III in Animal Studies</li> <li>• ACM30310 Certificate III in Captive Animals</li> <li>• ACM30410 Certificate III in Companion Animal Services</li> <li>• ACM40410 Certificate IV in Veterinary Nursing.</li> </ul>
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### Licensing/Regulatory Information

Not applicable.

### Skill Set Requirements

<b>Units</b>	ACMINF301A	Comply with infection control policies and procedures in animal work
	ACMSUS201A	Participate in environmentally sustainable work practices
	RTE3407A	Identify and report unusual disease or plant pest signs

### Target Group

<b>Target group</b>	Those working across a broad spectrum of enterprises or sectors, where animal care is provided, and compliance with preventative biosecurity procedures is essential.
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## Suggested words for Statement of Attainment

<b>Suggested words for statement of attainment</b>	These units of competency from the ACM10 Animal Care and Management Training Package meet the essential industry requirements related to compliance with infection control procedures.
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## ACMACR401A Comply with animal control and regulation requirements

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of working by oneself and with others within the animal control and regulation sector to identify and comply with legislative requirements and apply them to day-to-day work activities.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in animal control and regulation industry sectors where it is necessary to identify relevant legislative requirements and comply with associated standards and codes of practice, organisational policies and procedures, including occupational health and safety (OHS) and workplace communication channels.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Obtain and utilise information about the <i>animal control and regulation industry</i>	1.1. Information about the organisation is accessed and applied within day-to-day activities. 1.2. Key <i>internal and external stakeholders</i> , their needs, expectations and roles are documented. 1.3. <i>Sources of assistance</i> are identified. 1.4. Work is carried out within organisational <i>policies and procedures</i> .
2. Access and comply with relevant animal control legislative requirements	2.1. <i>Legislation</i> common to workplace activities and/or the organisation are identified and accessed. 2.2. Relevant legislation is read and applied within day-to-day work activities. 2.3. <i>Key principles</i> contained in legislation and regulations are identified and documented.

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. Statutory powers provided under legislation and the boundaries of those powers are confirmed.</p> <p>2.5. Legislation is enforced as required within day-to-day work activities.</p> <p>2.6. Work is consistent with the boundaries and powers contained in animal control legislation.</p>
3. Maintain <i>records</i>	<p>3.1. Management systems are accessed and used.</p> <p>3.2. Items are accurately entered into organisational management systems.</p> <p>3.3. Accurate records are maintained.</p> <p>3.4. Records are filed and stored correctly.</p> <p>3.5. All work is completed in accordance with organisational policies and procedures and legislative requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- read, interpret and apply relevant legislation and regulations
- source, research and analyse information
- take notes
- understand and apply written materials, such as codes of practice, legislation and regulations
- use basic information technology
- use scanning techniques to locate main ideas and key principles of legislation
- literacy skills to read and follow organisational policies and procedures, including OHS, animal welfare, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor or others
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities

**REQUIRED SKILLS AND KNOWLEDGE**

- problem-solving skills to use available resources and prioritise daily tasks.

**Required knowledge**

- legislation, regulations, standards and codes of practice relevant to work undertaken in an animal control and regulation environment
- methods for recordkeeping, including an operational knowledge of organisational recordkeeping systems and programs
- organisational structure
- principles of animal welfare and ethics
- principles of organisational protocols, policies and procedures and codes of conduct
- standards, guidelines and approaches to environmental sustainability relevant to the animal care industry.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- obtain and use information about the industry
- source, read and interpret state or territory legislation relevant to work undertaken within animal control and regulation
- apply state or territory legislation within day-to-day work activities
- identify key principles and statutory powers contained in relevant legislation
- access and use management systems to keep and maintain accurate records
- use appropriate communication channels for internal and external stakeholders.

<b>EVIDENCE GUIDE</b>	
	<p>The skills and knowledge required to comply with animal control and regulation requirements must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,</p>

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

The ***animal control and regulation industry*** covers:

- a community service provided by local government which deals with:
  - consultation
  - education
  - provision of facilities
  - regulation
  - the sourcing of information for the responsible ownership of animals.

***Internal and external stakeholders*** may include:

- key internal stakeholders within the organisation and elected members:
  - advisers
  - colleagues
  - junior officers
  - senior managers and executives
- key external stakeholders:
  - animal owners, non-animal owners and the general public
  - court administration (e.g. prosecutors, legal and court staff)
  - emergency services, such as fire and ambulance
  - investigators
  - local government law enforcement officers
  - other public sector organisations
  - private enterprise

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>state, federal and military police.</li> </ul>
<i>Sources of assistance</i> may include:	<ul style="list-style-type: none"> <li>human resources representatives</li> <li>OHS representative</li> <li>outside agencies</li> <li>union representatives.</li> </ul>
<i>Policies and procedures</i> may include:	<ul style="list-style-type: none"> <li>environmentally sustainable work practices: <ul style="list-style-type: none"> <li>environmentally friendly waste management</li> <li>processes to support environment and resource efficiencies</li> </ul> </li> <li>organisational policies and procedures</li> <li>quality system policies and procedures</li> <li>standard operating procedures</li> <li>OHS policies and procedures: <ul style="list-style-type: none"> <li>accident reports</li> <li>responsibilities and duties</li> <li>standard work practices.</li> </ul> </li> </ul>
<i>Legislation</i> may refer to:	<ul style="list-style-type: none"> <li>federal and state or territory legislation and regulations, standards and codes of practice</li> <li>local laws for animal control and regulation services</li> <li>other associated legislative constraints.</li> </ul>
<i>Key principles</i> contained in legislation and regulations may include:	<ul style="list-style-type: none"> <li>avoiding conflicts of interest</li> <li>compliance with the law</li> <li>confidentiality and non-disclosure of official information</li> <li>due care and diligence</li> <li>honesty and integrity</li> <li>obeying lawful and reasonable direction.</li> </ul>
<i>Records</i> may include:	<ul style="list-style-type: none"> <li>those required by legislation and organisational policies and procedures including: <ul style="list-style-type: none"> <li>animal identification documentation</li> <li>animal registrations</li> <li>enforcement notices</li> <li>licensing</li> <li>penalty infringement notices</li> <li>pound documentation</li> <li>service requests.</li> </ul> </li> </ul>



### Unit Sector(s)

Unit sector	Animal control and regulation
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMACR402A Assess and impound animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of seizing, handling and transporting animals in routine situations according to relevant legislation and organisational policies and procedures in an animal control and regulation environment.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in animal control and regulation industry sectors where it is necessary to impound animals.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p> <p><i>Note: This unit does not involve the use of firearms, chemical or drugs in the process of seizing an animal.</i></p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Assess the situation	1.1. <i>Situation is assessed</i> to determine risk to self, bystanders, the public and target animal. 1.2. Safety of self, bystanders, the public and target animal is always maintained. 1.3. Organisational policies and procedures and legislative requirements are followed at all times.
2. <i>Seize</i> animal	2.1. Appropriate <i>equipment</i> for seizure is selected. 2.2. Action is taken to reduce risk/hazard in seizing the animal. 2.3. Animal is seized using correct and humane animal handling techniques. 2.4. <i>Safe work practices</i> and <i>occupational health and</i>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>safety (OHS)</i> requirements are followed in seizing animal.</p> <p>2.5. Animal is assessed for injuries and health issues and basic first aid is applied to animal and/or self as required.</p> <p>2.6. Organisational policies and procedures and legislative requirements are followed.</p>
3. Transport animal	<p>3.1. Mode of transport is selected and prepared, and <i>destination</i> is determined appropriate to animal's requirements.</p> <p>3.2. <i>Restraints</i> are prepared and maintained.</p> <p>3.3. Animal is loaded and restrained humanely in accordance with organisational policies and procedures and legislative requirements.</p> <p>3.4. Animal is transported to destination.</p> <p>3.5. Animal is removed from transport restraints and unloaded safely and correctly at destination.</p> <p>3.6. Animal is housed and fed at destination as required by legislative requirements.</p> <p>3.7. Safe work practices and OHS requirements are followed in restraining and transporting animal.</p> <p>3.8. Organisational policies and procedures and legislative requirements are followed.</p> <p>3.9. Appropriate records are kept and entered into relevant management systems as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply basic first aid
- apply safe work practices on a daily basis
- assess a situation and determine an appropriate plan for the seizure and transport of animals
- employ safe, humane and environmentally responsible organisational systems and procedures when working with and handling animals, including loading and unloading animals for transportation

## REQUIRED SKILLS AND KNOWLEDGE

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- read and interpret relevant legislation
- use animal seizure and restraint techniques
- literacy skills to read and follow organisational policies and procedures, including OHS, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification from third party and reporting to supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- risk management skills, including identifying risks, consulting with stakeholders, modifying and reviewing processes and documenting changes
- interpersonal skills to communicate, relate, negotiate and mediate with a wide range of internal and external stakeholders from a range of social and cultural backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- animal behaviour, temperament and body language
- animal's interpretation of human body language when it is being approached
- awareness of diseases and zoonoses
- basic first aid methods and techniques
- equipment, methods and strategies for seizing, restraining and transporting animals safely and humanely
- OHS hazards
- organisational policies and procedures
- principles of animal welfare and ethics
- recognition of animal stress and comfort
- relevant legislation and codes of practice relating to the seizure, restraint and transportation of animals.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• assess a situation to determine an appropriate plan for seizure and transport of animals</li> <li>• minimise risks to animals, self, bystanders and the public</li> <li>• handle and restrain animals in a safe and humane manner</li> <li>• seize animals using equipment appropriate to the animal and the task</li> <li>• assess animals for injury and/or health issues</li> <li>• apply basic first aid as required</li> <li>• load, transport and unload animals using safe work practices</li> <li>• access and use management systems to keep and maintain accurate records.</li> </ul> <p>The skills and knowledge required to assess and impound animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment</p>

<b>EVIDENCE GUIDE</b>	
	<p>activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Assessing the situation</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• the consideration of: <ul style="list-style-type: none"> <li>• members of the public and their safety</li> <li>• safety of self and team members</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• safety and welfare of the animal to be seized</li> <li>• environment: <ul style="list-style-type: none"> <li>• open space</li> <li>• public facility</li> <li>• residential property</li> <li>• roads</li> </ul> </li> <li>• circumstances: <ul style="list-style-type: none"> <li>• an aggressive animal</li> <li>• crowded place</li> <li>• time of day</li> </ul> </li> <li>• provision for backup if required</li> <li>• type, size and number of animals to be seized</li> <li>• health and wellbeing of animals to be seized</li> <li>• making a decision, in consultation with supervisor, veterinarian or others, as to whether the animal should be destroyed during the seizure process.</li> </ul>
The purpose of <i>seizing an animal</i> may include:	<ul style="list-style-type: none"> <li>• an animal may be seized: <ul style="list-style-type: none"> <li>• to ensure safety to the community or to the animal itself (e.g. due to an animal's aggressive behaviour)</li> <li>• for legislative reasons: <ul style="list-style-type: none"> <li>• animal wandering at large</li> <li>• attacks</li> <li>• breach of seizure orders.</li> </ul> </li> </ul> </li> </ul>
<i>Equipment</i> may include:	<ul style="list-style-type: none"> <li>• bribes (e.g. food)</li> <li>• bridles and headstalls</li> <li>• catch poles</li> <li>• cages</li> <li>• collars and leads</li> <li>• halters and harnesses</li> <li>• nets</li> <li>• ropes</li> <li>• shackles</li> <li>• snake bags</li> <li>• protective clothing including gloves</li> <li>• traps.</li> </ul>



<b>RANGE STATEMENT</b>	
	Firearms, chemicals or drugs should not be used as part of this unit of competency.
<i>Safe work practices</i> may include:	<ul style="list-style-type: none"> <li>• use of personal protective clothing and equipment appropriate to the type of animal</li> <li>• protocols: <ul style="list-style-type: none"> <li>• animal hazard management and identification</li> <li>• animal handling (e.g. lifting and securing)</li> <li>• seizure and transportation.</li> </ul> </li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
Possible <i>destinations</i> may include:	<ul style="list-style-type: none"> <li>• pounds</li> <li>• return to owner</li> <li>• shelters</li> <li>• RSPCA</li> <li>• veterinary clinic for veterinary care and assistance</li> <li>• wildlife carer.</li> </ul>
Types of <i>restraints</i> do not include:	<ul style="list-style-type: none"> <li>• firearms, chemicals or drugs as part of this unit of competency.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMACR403A Identify and respond to animal behaviour

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying animals and interpreting their body language and behaviour in the context of an animal control and regulation environment during day-to-day activities.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in the animal control and regulation sectors where it may be necessary to identify and respond appropriately to animal behaviour. It requires an appreciation of the owner-animal-environment triangle of effect that influences behavioural expressions. Working within animal control and regulation also requires knowledge of relevant legislation and organisational policies and procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Recognise and identify animal	<p>1.1. Animal is identified by breed, type and group, according to <i>identifiable characteristics</i>.</p> <p>1.2. <i>Information and equipment</i> for use in identification activity are determined and located.</p> <p>1.3. Animal is recognised by <i>common name</i>.</p> <p>1.4. Brief description, including unique features of the animal is documented.</p> <p>1.5. Assistance from supervisors and/or peers is sought when necessary.</p>

ELEMENT	PERFORMANCE CRITERIA
	1.6. Organisational policies and procedures and legislative requirements are followed.
2. Identify animal behaviour	2.1. Animal and its body language are observed and interpreted. 2.2. Temperament, traits, health and wellbeing of animal are identified and documented. 2.3. Physical and social environment of animal are assessed. 2.4. <b>Behaviour</b> of animal is determined. 2.5. Assistance from supervisors and/or peers is sought when necessary. 2.6. Organisational policies and procedures and legislative requirements are followed.
3. Assess and respond to animal behaviour	3.1. <b>Risks or hazards</b> to the public, self, bystanders and the target animal are assessed. 3.2. <b>Constructive solutions</b> to animal behaviour are offered to owner when appropriate. 3.3. <b>Referral to specialists</b> is offered to owner when appropriate. 3.4. <b>Statutory response</b> to animal behaviour is actioned when appropriate. 3.5. Assistance from supervisors and/or peers is sought when necessary. 3.6. Organisational policies and procedures and legislative requirements are followed.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- document information about the animal, its behaviour, environment and the action taken. and read and interpret relevant legislation
- employ safe, humane and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection

## REQUIRED SKILLS AND KNOWLEDGE

- recognise and identify a range of animal species and breeds
- respond to animal behaviours and traits
- use identification equipment
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS), infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- animal behaviour and temperament
- animal species, breeds and groups
- antisocial behaviour
- evolution of animals and animal behaviour
- organisational policies and procedures
- owner-animal relationship
- possible statutory responses under relevant legislation
- principles of animal health, diseases and zoonoses
- principles of animal welfare and ethics
- recognition of animal stress and comfort
- recognition of environment, including where an animal lives, how it is managed by its owner and impacts on animal behaviour
- relevant legislation and codes of practice relating to OHS and animal control and regulation requirements
- restricted animals and restricted breeds
- top (most common) twenty breeds of dogs, top three breeds of cats and at least one species from each of livestock, wildlife and/or native animals and declared pest animals.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the

<b>EVIDENCE GUIDE</b>	
performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify animals by breed, type and group</li> <li>• recognise animals by common name</li> <li>• interpret animal body language</li> <li>• determine behaviour and temperament of animals</li> <li>• assess specific types of animal behaviour and respond accordingly</li> <li>• refer unusual or dangerous behaviour to specialists or action a statutory response</li> <li>• access and use management systems to keep and maintain accurate records.</li> </ul> <p>The skills and knowledge required to assess and impound animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence. Assessment must include identifying top (most common) twenty breeds of dogs, top three breeds of cats and at least one species from each of livestock, wildlife and/or native animals and declared pest animals.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment</p>

<b>EVIDENCE GUIDE</b>	
	<p>activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Identifiable characteristics</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
<i>Information and equipment</i> may include:	<ul style="list-style-type: none"> <li>• information: <ul style="list-style-type: none"> <li>• enclosure</li> <li>• habitat</li> <li>• photographs</li> <li>• species books</li> </ul> </li> <li>• equipment: <ul style="list-style-type: none"> <li>• animal trapping and catching paraphernalia</li> <li>• binoculars</li> <li>• cameras</li> <li>• protective gloves and clothing</li> <li>• video recorders</li> <li>• microchip detectors, devices and scanners.</li> </ul> </li> </ul>
<i>Common names</i> requires:	<ul style="list-style-type: none"> <li>• names sufficient to convey meaning</li> <li>• in Indigenous communities, language names can be used in lieu of common names.</li> </ul>
Animal <i>behaviour</i> may consider:	<ul style="list-style-type: none"> <li>• normal versus abnormal behaviour</li> <li>• aggressive versus benign behaviour</li> <li>• confident versus timid or fearful behaviour.</li> </ul>
<i>Risks or hazards</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Risks or hazards</i> to be assessed include:	<ul style="list-style-type: none"> <li>• assessment of breed/type potential to cause harm or difficulty</li> <li>• circumstances prevailing</li> <li>• degree of animal restraint and confinement</li> <li>• level of own experience, confidence and capability</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• level of owner/handler cooperation, competence and control</li> <li>• obvious signs of the animal's abnormal health and condition.</li> </ul>
<i>Constructive solutions</i> may include:	<ul style="list-style-type: none"> <li>• looking at the owner-animal-environment triangle of effect in the expression of problem animal behaviour and offering remedial advice</li> <li>• considering different methods of handling and dealing with animals displaying specific behavioural traits (e.g. nervous or timid)</li> <li>• endeavouring to remedy the causes as well as the problem animal behaviour</li> <li>• for wandering animals the constructive solution may include: <ul style="list-style-type: none"> <li>• restoring animal to correct owner property</li> <li>• capture and impoundment</li> <li>• offering advice regarding more adequate fencing</li> <li>• providing advice regarding: <ul style="list-style-type: none"> <li>• a more enriched environment</li> <li>• improving obedience and responsiveness</li> <li>• using positive and negative reinforcement training.</li> </ul> </li> </ul> </li> </ul>
<i>Referral to specialists</i> may include:	<ul style="list-style-type: none"> <li>• veterinarian, animal behaviourist or animal trainer.</li> </ul>
<i>Statutory response</i> may include:	<ul style="list-style-type: none"> <li>• detail procedural requirements and explain timelines for outcomes</li> <li>• issue caution or infringement notice</li> <li>• recommend action plan</li> <li>• seize animal.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMACR404A Manage conflict situations in an animal control and regulation environment

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of handling and resolving disputes and/or conflict situations that may arise in activities undertaken by personnel operating in an animal control and regulation environment.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the animal control and regulation sectors where it may be necessary to manage conflict situations. It requires the ability to communicate well with others through negotiation and mediation and to have an appreciation of highly emotional circumstances.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify the conflict situation	<p>1.1. The <b><i>conflict</i></b> is identified, defined and recorded in accordance with organisational policies and procedures.</p> <p>1.2. Causes of dispute/conflict and harmful behaviour are anticipated and appropriate responses to prevent escalation are implemented.</p> <p>1.3. <b><i>Parties</i></b> involved in the conflict are identified.</p> <p>1.4. Issues of the conflict are identified and analysed.</p> <p>1.5. Proceedings to settle the dispute/conflict are instigated with minimal delay in accordance with <b><i>legislative requirements</i></b> and organisational procedures.</p> <p>1.6. Situations requiring assistance are identified and support is promptly requested.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Negotiate <i>resolution</i>	<p>2.1. Conflict is addressed and resolved constructively using strategies that comply with organisational procedures.</p> <p>2.2. <i>Negotiation techniques</i> are used to maintain positive interaction and to divert and minimise aggressive behaviour.</p> <p>2.3. <i>Effective communication techniques</i> are used to ensure third parties understand the information received.</p> <p>2.4. <i>Social and cultural differences</i> are taken into account in the negotiation approach taken.</p> <p>2.5. Assistance is requested, as required, for situations that cannot be resolved through negotiation or mutual resolution.</p> <p>2.6. An accurate, complete and accessible record of the resolution is kept.</p>
3. Evaluate response	<p>3.1. Effectiveness of response is evaluated and reviewed in accordance with legal requirements and organisational procedures.</p> <p>3.2. Systems, records and reporting procedures are followed in accordance with organisational procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- analyse dispute or conflict situations
- complete relevant workplace documentation, using appropriate equipment, to record and report information regarding conflict situations
- use negotiation techniques to resolve dispute or conflict situations
- use effective communication techniques to resolve dispute or conflict situations and to ensure third parties understand the information received
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS); follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks

## REQUIRED SKILLS AND KNOWLEDGE

- oral communication skills/language to fulfil the job role as specified by the organisation, including negotiation, questioning techniques, active listening, asking for clarification, acknowledging and responding to a range of views, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- human behaviour and body language
- organisational policies and procedures, including systems, records and reporting requirements
- principles of animal welfare and ethics
- principles of cooperative teamwork
- principles of cultural awareness
- principles of negotiation and conflict resolution
- relevant legislation and codes of practice relating to OHS and animal control and regulation requirements.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify a dispute/conflict situation, its cause and the parties involved
- analyse the dispute/conflict and act to resolve it through negotiation and mediation
- communicate effectively with parties involved, using

<b>EVIDENCE GUIDE</b>	
	<p>both verbal and non-verbal techniques</p> <ul style="list-style-type: none"> <li>• comply with legislative requirements</li> <li>• follow systems, records and reporting requirements in accordance with organisational policies and procedures.</li> </ul> <p>The skills and knowledge required to manage conflict in an animal care and regulation environment must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to conflict situations regarding animals involving two or more human parties as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul>



<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Examples of dispute or <i>conflict</i> situations may include:</p>	<ul style="list-style-type: none"> <li>• animals that are:                             <ul style="list-style-type: none"> <li>• barking excessively</li> <li>• displaying aggressive behaviour</li> <li>• off leash in an on-leash area</li> <li>• wandering at large</li> </ul> </li> <li>• animal attack</li> <li>• animal welfare situations.</li> </ul>
<p><i>Parties</i> involved may include:</p>	<ul style="list-style-type: none"> <li>• animal owner</li> <li>• non-animal owner</li> <li>• observer/witness</li> <li>• victim of aggressive animal behaviour (e.g. an attack).</li> </ul>
<p><i>Legislative requirements</i> that must be followed include:</p>	<ul style="list-style-type: none"> <li>• federal and state or territory legislation and regulations, standards and codes of practice</li> <li>• local laws for animal control and regulation services</li> <li>• other associated legislative constraints.</li> </ul>
<p>Negotiation <i>resolutions</i> may</p>	<ul style="list-style-type: none"> <li>• keeping animals on leash</li> <li>• keeping animals off leash in an off-leash area</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• higher fences</li> <li>• muzzle to stop barking</li> </ul>
<i>Negotiation techniques</i> may include:	<ul style="list-style-type: none"> <li>• strategic questioning and listening to gather information and direct the focus of people involved</li> <li>• positive, confident and cooperative language</li> <li>• control of tone of voice and body language</li> <li>• language and concepts appropriate to the people involved</li> <li>• clear presentations of options and consequences</li> <li>• demonstrating flexibility and willingness to compromise</li> <li>• summarising positions of agreements to move towards understanding.</li> </ul>
<i>Effective communication techniques</i> may include:	<ul style="list-style-type: none"> <li>• active listening</li> <li>• constructive feedback</li> <li>• two-way interaction</li> <li>• reflection and summarising</li> <li>• verbal and non-verbal communication.</li> </ul>
<i>Social and cultural differences</i> may include:	<ul style="list-style-type: none"> <li>• beliefs and values</li> <li>• codes of conduct</li> <li>• relationships or family structure</li> <li>• religious or spiritual observances</li> <li>• social conventions</li> <li>• verbal and non-verbal communication.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMACR405A Euthanase sick, injured or unwanted pound animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of euthanasing sick, injured or unwanted pound animals in a humane way that complies with safe operating practices and with ethical, welfare and legislative requirements.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in the animal control and regulation sectors where it may be necessary to euthanase sick, injured or unwanted pound animals. Euthanasing animals requires knowledge of occupational health and safety (OHS) regulations, associated animal welfare legislation, safe practices in euthanasing animals, organisational standard operating procedures, detailed pharmacology of specific drugs, routine procedural techniques and handling of animals.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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	<p><b>Notes:</b></p> <p><i>Appropriate licences are required for those involved in training and assessment against this unit. Relevant records must be kept in accordance with legislation and standard operating procedures.</i></p> <p><i>This unit does not cover the euthanasia of livestock.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to euthanase an animal under supervision	<p>1.1. Animal intended for euthanasia is identified in accordance with organisational policies and procedures.</p> <p>1.2. <b>Method</b> selected for euthanasia is consistent with organisational policies and procedures and legislative requirements.</p> <p>1.3. <b>Equipment and materials</b> required for euthanasia are kept and prepared in accordance with organisational procedures and legislative requirements.</p> <p>1.4. Appropriate human assistance for the procedure is determined and gathered.</p> <p>1.5. Hazards associated with the euthanasia are identified in accordance with <b>OHS</b> procedures.</p> <p>1.6. Licences and permits required to conduct euthanasia are reviewed with the supervisor and obtained as required.</p>
2. Carry out euthanasia of an animal	<p>2.1. Personal protective and safety equipment is used in accordance with OHS standards and <b>statutory requirements</b>.</p> <p>2.2. Equipment is handled and transported safely at all times in accordance with statutory requirements and industry practices.</p> <p>2.3. Animal is physically restrained in a way that minimises its pain and distress.</p> <p>2.4. Euthanasia method is applied in accordance with the requirements of the task.</p> <p>2.5. Euthanasia procedure is monitored to ensure that the animal's death is rapid and without complications or undue suffering.</p> <p>2.6. Organisational policies and procedures and relevant legislative requirements are followed.</p>
3. Carry out euthanasia of an animal	<p>3.1. Death of animal is confirmed.</p> <p>3.2. Carcass, if required for research or post-mortem examination, is handled in accordance with organisational policies and procedures and legislative requirements.</p> <p>3.3. Animal carcass and biological waste not required are disposed of in accordance with organisational policies and procedures and legislative requirements.</p> <p>3.4. Animal carcass is handled and moved in accordance</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>with OHS requirements.</p> <p>3.5. Equipment and materials are disposed of or are decontaminated, cleaned and stored in accordance with standard operating procedures.</p> <p>3.6. <i>Records</i> relating to the euthanased animal are updated in accordance with organisational requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply injection methods and techniques
- calculate solutions, dilutions, body weights and dose rates
- clean and decontaminate equipment, materials and facilities
- complete relevant workplace documentation, using appropriate equipment, to record and report information regarding euthanasia of animals
- employ safe, humane and environmentally responsible organisational systems and procedures when working with and handling animals
- follow safe work practices
- maintain the highest standards of hygiene and infection control to reduce the risk of infection or cross-infection
- monitor animal health and behaviour
- recognise stress in animals
- use different euthanasia equipment and materials including captive bolt, firearms and lethal injections
- literacy skills to read and follow organisational policies and procedures, including OHS, animal welfare, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks

**REQUIRED SKILLS AND KNOWLEDGE**

- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- anatomy and physiology of animals commonly euthanased, especially the routes of administration, life signs and aiming points for firearms and captive bolts
- boundaries of professional behaviour in dealing with own distress and grief in the workplace
- equipment and drugs commonly used for euthanasia
- methods of euthanasia and their suitability for a range of species
- principles of animal welfare and ethics
- relevant legislation and codes of practice relating to OHS and animal control and regulation requirements
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- standard operating procedures relating to restraining, handling, euthanasing and disposing of animals
- standard operating procedures relating to using, storing and transporting equipment and drugs used when conducting euthanasia of animals.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- select suitable method of euthanasia according to size and number of animals and legislative constraints in consultation with supervisor
- select and prepare appropriate equipment and material
- follow safe work practices to minimise risks to



<b>EVIDENCE GUIDE</b>	
	<p>animals, self and others</p> <ul style="list-style-type: none"> <li>• euthanase animals in a humane, rapid and appropriate manner and confirm death</li> <li>• dispose of animal carcass and biological waste not required for research or post-mortem purposes, in accordance with legislative requirements</li> <li>• decontaminate, clean and store equipment and materials or dispose of accordingly</li> <li>• access and use management systems to keep and maintain accurate records.</li> </ul> <p>The skills and knowledge required to euthanase sick, injured or unwanted pound animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to animals to be euthanased and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Methods</i></b> of euthanasia covered by this unit of competency include:</p>	<ul style="list-style-type: none"> <li>• captive bolt</li> <li>• firearm</li> <li>• lethal injection</li> <li>• premedication drugs (e.g. sedation), as well as drugs for euthanasia, are used when appropriate and may include:               <ul style="list-style-type: none"> <li>• barbiturate overdose techniques by intravenous, intraperitoneal or intracardiac injection.</li> </ul> </li> </ul>
<p><b><i>Equipment and materials</i></b> to conduct euthanasia may include:</p>	<ul style="list-style-type: none"> <li>• captive bolts</li> <li>• clippers</li> <li>• disposal units for used or expendable equipment and materials</li> <li>• drugs</li> <li>• firearms</li> <li>• needles</li> <li>• restraining devices</li> <li>• scales</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• syringes</li> <li>• syringe pole for distance injections</li> <li>• stainless steel work surfaces</li> <li>• rubber matting or similar non-slip surface.</li> </ul> <p><i>The use of projectile injection devices is not included in this unit of competency.</i></p>
<b>OHS</b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b>Statutory requirements</b> that may impact on the euthanasia of animals may include:	<ul style="list-style-type: none"> <li>• legislation: <ul style="list-style-type: none"> <li>• Prevention of Cruelty to Animals Acts</li> <li>• Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• Fisheries Acts</li> <li>• Quarantine Acts</li> <li>• Wildlife Acts</li> </ul> </li> <li>• local government regulations covering the transport and disposal of hazardous wastes</li> <li>• organisational standard operating procedures.</li> </ul>
<b>Records</b> requirements may include:	<ul style="list-style-type: none"> <li>• date, time and operator</li> <li>• animal description (e.g. age, breed/type, sex, colour, coat, size, weight and unique features)</li> <li>• microchip search result</li> <li>• animal history, including the interval held</li> <li>• source location.</li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Animal control and regulation
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMACR406A Carry out pound procedures

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing appropriate management of impounded and surrendered animals including receiving animals, maintaining pound hygiene, providing the appropriate level of care for animals and discharging animals accordingly.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in the animal control and regulation sectors where it may be required to gather information on the animals received, process appropriate documentation and ensure the pound and its facilities are clean and hygiene is maintained. Knowledge of relevant legislation and organisational policies and procedures is also required.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Receive animals	1.1. <i>Animals</i> are received at pound. 1.2. <i>Information</i> on animals is gathered and documented in accordance with organisational policies and procedures and legislative requirements. 1.3. Information on animals is transferred to organisational management/recordkeeping system. 1.4. Animals' temperament, health and condition are assessed. 1.5. Where possible, owners are contacted and effort is made to reunite animals with owners.
2. Maintain pound hygiene	2.1. Pound facility is cleaned and disinfected in accordance with organisational policies and

ELEMENT	PERFORMANCE CRITERIA
	<p>procedures, including <i>occupational health and safety (OHS)</i> procedures.</p> <p>2.2. Animals are temporarily removed from housing whilst it is cleaned.</p> <p>2.3. Animals are cleaned and returned to housing.</p> <p>2.4. All walkways, floors, fixtures and structures are cleaned, disinfected and maintained in accordance with organisational policies and procedures and legislative requirements.</p> <p>2.5. Isolation procedures are carried out in accordance with organisational policies and legislative requirements.</p> <p>2.6. Waste is disposed of in accordance with legislative requirements.</p> <p>2.7. Adequate levels of <i>supplies</i> are maintained.</p>
3. Provide appropriate care for animals	<p>3.1. Condition of animals is regularly checked and abnormalities are reported to supervisor immediately.</p> <p>3.2. Appropriate housing, food, water and veterinary care are provided.</p> <p>3.3. Food, water and treatment regimes are provided in accordance with legislative requirements and/or veterinarian's instructions.</p> <p>3.4. Animals are handled in a safe, humane and ethical manner at all times.</p> <p>3.5. Appropriate records are maintained in accordance with organisational policies and procedures.</p>
4. Discharge animals	<p>4.1. Animals' temperaments are assessed pending discharge.</p> <p>4.2. Animals are <i>prepared</i> and discharged in accordance with organisational policies and procedures and legislative requirements.</p> <p>4.3. Documentation for discharges is prepared and legal requirements are met.</p> <p>4.4. Information about care of the animals is provided to the new owners and animals are discharged.</p> <p>4.5. Animals not discharged within a given period are prepared to be euthanased.</p> <p>4.6. <i>Clerical duties</i> are carried out in accordance with organisational policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete procedures required before the discharge of an animal as appropriate and in accordance with state or territory legislation
- deal with conflict situations with owners and members of the public
- develop a working rapport with animals
- employ safe, humane and environmentally responsible organisational systems and procedures when working with and handling animals
- identify abnormal animal behaviour
- maintain the highest standards of pound management, hygiene, infection control and animal care
- read and follow OHS and infection-control procedures and other policies and procedures, and record details and information in an accurate manner
- undertake clerical and administrative duties
- undertake temperament assessment of animals
- use and record the use of chemicals and medicines, in accordance with relevant state or territory legislation
- literacy skills to read and follow organisational policies and procedures, including OHS, animal welfare, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- animal behaviour for temperament assessment
- animal health and hygiene
- animal identification techniques
- animal requirements relating to feed, water and housing
- hazards associated with the use/misuse of medicines
- indicators of animal wellbeing



## REQUIRED SKILLS AND KNOWLEDGE

- indicators of diseases and zoonoses, signs and effects
- organisational policies and procedures
- pound environment
- relevant legislative requirements, including codes of practice and Australian standards
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- carry out the admission of animals, including gathering information about animals, assessing temperament, health and condition, and processing documentation
- clean and maintain hygiene of the pound, including animal enclosures, fixtures, fittings and walkways
- maintain pound supplies
- handle animals in an ethical and humane manner
- provide animals with appropriate housing, nutritional food, water and treatment regimes
- communicate effectively with clients, animal owners, staff and veterinarians
- carry out discharge procedures in accordance with relevant legislation
- access and use management systems to keep and maintain accurate records.

The skills and knowledge required to carry out pound

<b>EVIDENCE GUIDE</b>	
	procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to animals normally found within a pound and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animals</i></b> received at the pound may include:</p>	<ul style="list-style-type: none"> <li>• birds</li> <li>• cats</li> <li>• dogs</li> <li>• livestock.</li> </ul>
<p><b><i>Information</i></b> about an animal may include:</p>	<ul style="list-style-type: none"> <li>• breed, size, weight, colour and sex</li> <li>• identification device details, if applicable</li> <li>• registration details, if applicable</li> <li>• where found</li> <li>• how and why brought to pound</li> <li>• behaviour</li> <li>• owner details, if known.</li> </ul>
<p><b><i>OHS</i></b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<p>Examples of <b><i>supplies</i></b> that may need to be maintained include:</p>	<ul style="list-style-type: none"> <li>• animal restraint and exercise equipment</li> <li>• bedding</li> <li>• chemicals</li> <li>• cleaning agents</li> <li>• food and food supplements</li> <li>• medications</li> <li>• preventative treatment materials</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• water.</li> </ul>
<i>Preparing</i> for discharge may involve:	<ul style="list-style-type: none"> <li>• basic behavioural training</li> <li>• desexing</li> <li>• microchipping</li> <li>• providing veterinary checks</li> <li>• temperament testing</li> <li>• vaccinations.</li> </ul>
<i>Clerical duties</i> may include:	<ul style="list-style-type: none"> <li>• creating invoices and receipts</li> <li>• data entry into organisational information management recordkeeping systems</li> <li>• handling case</li> <li>• participating in marketing and advertising activities.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMACR407A Conduct community awareness programs

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of contributing to the development and improvement of community awareness programs as well as preparing, delivering and evaluating programs to increase community awareness on matters relating to animal control and regulation.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in the animal control and regulation sectors where it may be required to conduct community awareness programs. It requires an ability to research information, prepare materials, deliver programs and evaluate outcomes.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Contribute to the development/improvement of <b><i>community awareness programs</i></b>	1.1. <b><i>Community consultation</i></b> is conducted. 1.2. Specific information needs and expectations of the community are identified. 1.3. Suggestions for changes/improvements to community awareness programs are provided. 1.4. Contributions are made to the production of new and/or improved program materials and methods. 1.5. Reports on progress of community awareness programs are publicised and community input/feedback is encouraged.
2. Plan community awareness programs	2.1. Details of community requirements and expectations are clarified and confirmed to ensure programs meet their needs. 2.2. Objectives of programs are determined in

ELEMENT	PERFORMANCE CRITERIA
	<p>consultation with relevant personnel.</p> <p>2.3. Research to gather materials for presentation is conducted.</p> <p>2.4. Draft programs are structured and checked with supervisor where required.</p> <p>2.5. Programs are finalised and accepted in accordance with organisational policies and procedures.</p> <p>2.6. Relevant <i>equipment, aids and materials</i> to be used are identified, sourced and organised.</p>
3. Deliver community awareness programs	<p>3.1. Information is presented in a clear and logical sequence.</p> <p>3.2. Programs are conducted using effective <i>public speaking techniques</i>, age-appropriate information and recognised principles of group learning appropriate to the <i>community</i>.</p> <p>3.3. Relevant equipment is operated correctly and marketing aids and materials are used effectively to assist the community in understanding the programs.</p> <p>3.4. Opportunities are provided for the community to seek clarification on points.</p> <p>3.5. Questions are answered and supplemented with relevant information where possible.</p> <p>3.6. Queries outside the area of responsibility or expertise are referred to relevant personnel/area.</p>
4. Evaluate the delivery of community awareness programs	<p>4.1. Community understanding and responses to the programs are assessed.</p> <p>4.2. Feedback from the community and observers is analysed.</p> <p>4.3. Recommendations for changes/improvement to the community awareness programs are made.</p>

## Required Skills and Knowledge

### Required knowledge

- data collection methods to support the development of materials
- legislation relevant to the subject matter of the presentation
- organisational policies and procedures relating to presenting information to the public
- principles of animal welfare and ethics

**Required knowledge**

- principles of learning for children and adults
- range of presentation aids and materials available to support the presentation
- range of communication strategies
- relevant and current community awareness programs
- technical information relevant to the presentation or subject matter.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- conduct community consultations to determine needs and expectations
- contribute to the development/improvement of community awareness programs and associated materials
- conduct research and gather materials to develop programs for presentation
- use relevant presentation equipment, materials and aids
- present programs to the community using effective public speaking and communication techniques
- gather community feedback and evaluate the delivery of programs.

The skills and knowledge required to conduct community awareness programs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for**

Assessment of this unit is to be practical in nature and



<b>EVIDENCE GUIDE</b>	
<b>assessment</b>	<p>will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to community and/or target audiences when delivering presentations as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Community awareness programs*** may include:

- community awareness programs in animal control and regulation intended to improve communication between local council and the community and involve three key issues:
  - community pet owner facilities
  - council enforcement and regulation services
  - responsible pet ownership, community pet owner facilities, and council enforcement and regulation services
- community pet owner facilities:
  - agility and tracking parks
  - dog training facilities
  - faecal litter waste management
  - off-leash areas
  - public communication conduits, including websites, newspapers and electronic media
  - waterway and beach access provisions
- council enforcement and regulation services:
  - local laws in general
  - the council's position on compliance expectation and schedules of infringement penalties
  - direct and simple explanations of:
    - dangerous dog controls
    - excessive barking prevention
    - fence laws
    - leash laws
- responsible pet ownership:
  - adequate dog training
  - concepts of owners' obligations and responsibilities
  - environmental enrichment

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• puppy socialisation</li> <li>• remedial measures for routine animal behaviour problems</li> <li>• self-help groups</li> <li>• sensible pet pre-selection</li> <li>• the council's overall strategy for community pet management</li> <li>• other community awareness programs: <ul style="list-style-type: none"> <li>• information on pet owner obligations and community expectations</li> <li>• conveying key messages about animal welfare and competent pet ownership</li> <li>• promotion of the benefits of providing appropriate environmental enrichment for pets</li> <li>• providing structured classes for dog obedience instruction</li> <li>• recommending remedial measures to counter nuisance behaviour in pet animals.</li> </ul> </li> </ul>
Reasons for <i>community consultation</i> may include:	<ul style="list-style-type: none"> <li>• to determine what the community expects of pet owners, what pet owners expect of the community and what both expect from the organisation or council</li> <li>• to involve the community in the development or redevelopment of programs</li> <li>• to raise community awareness of a particular issue (e.g. new legislation or new organisation priorities).</li> </ul>
Examples of <i>equipment, aids and materials</i> include:	<ul style="list-style-type: none"> <li>• equipment: <ul style="list-style-type: none"> <li>• data projector</li> <li>• overhead projector</li> <li>• video and audio-recordings</li> <li>• whiteboard</li> </ul> </li> <li>• aids and materials: <ul style="list-style-type: none"> <li>• CD-ROMs</li> <li>• charts and posters</li> <li>• data projector slides/shows</li> <li>• diagrams</li> <li>• handouts</li> <li>• information kits</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• media articles</li> <li>• models</li> <li>• newsletters</li> <li>• overhead transparencies</li> <li>• pamphlets</li> <li>• show bags</li> <li>• videos</li> <li>• website material.</li> </ul>
Examples of <i>public speaking techniques</i> include:	<ul style="list-style-type: none"> <li>• accent</li> <li>• audience interaction</li> <li>• body language</li> <li>• eye contact</li> <li>• inflection</li> <li>• pace of speech</li> <li>• tone of voice.</li> </ul>
<i>Community</i> target audience groups may include:	<ul style="list-style-type: none"> <li>• conferences</li> <li>• schools (pre, primary and high)</li> <li>• community forums</li> <li>• groups: <ul style="list-style-type: none"> <li>• Australia Post and emergency services (e.g. fire and ambulance)</li> <li>• police</li> </ul> </li> <li>• persons included in these groups may be: <ul style="list-style-type: none"> <li>• adults, including senior citizens</li> <li>• children, including preschool children</li> <li>• community groups</li> <li>• people from culturally and linguistically diverse backgrounds</li> <li>• people with disabilities.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMACR408A Coordinate seizure of animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of coordinating a seizure plan and the seizing of animals that may be aggressive, dangerous, injured or large.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the animal control and regulation sectors where non-routine situations involving aggressive dogs and livestock may arise. It requires the ability to use equipment, such as portable yards, traps, firearms, capture guns and restraining drugs.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p> <p><i>Notes:</i></p> <p><b><i>Appropriate licences are required for those involved in training and assessment against this unit. Relevant records must be kept in accordance with legislation and standard operating procedures.</i></b></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. <i>Assess the situation</i>	1.1.Circumstances pertaining to the seizure situation are noted and recorded. 1.2.Organisational policies and procedures and legislative requirements are followed at all times. 1.3.Safety of self, assistants, the public and target animals is maintained. 1.4. <i>Seizure plan</i> is determined in consultation with

ELEMENT	PERFORMANCE CRITERIA
	colleagues and other <i>relevant personnel</i> .
2. Coordinate the seizure plan	<p>2.1.Backup from appropriate personnel is requested.</p> <p>2.2.Appropriate area is quarantined, if required, to minimise risk to self, assistants, the public and target <i>animals</i>.</p> <p>2.3.Professional assistance and/or advice are sought if required.</p> <p>2.4.Emergency services personnel are notified and, if necessary, involved.</p> <p>2.5.<i>Occupational health and safety (OHS)</i> and <i>emergency procedures</i> relating to the seizure are put into place.</p>
3. Capture animals	<p>3.1.Personnel assisting in the seizure are given appropriate instructions.</p> <p>3.2.Appropriate <i>equipment</i> is selected, unpacked and prepared in accordance with manufacturers' requirements.</p> <p>3.3.Drug doses for sedation and/or immobilisation are calculated and prepared.</p> <p>3.4.Equipment is used legally, correctly and safely to capture animals in an ethical and humane manner.</p> <p>3.5.Animals are secured, restrained, loaded and <i>transported</i> humanely.</p> <p>3.6.Animals are unloaded and secured at holding destination.</p> <p>3.7.Deceased animals are disposed of in accordance with organisational and legislative requirements.</p> <p>3.8.Drugged animals are handled appropriately, examined for health and welfare problems and, if necessary, recovery treatment is given.</p> <p>3.9.Relevant licences and permits for the use of drugs and equipment are held by the user.</p>
4. Complete post-seizure procedures	<p>4.1.Equipment is cleaned, maintained and stored in accordance with organisational policies and procedures.</p> <p>4.2.Drugs used for sedation and/or immobilisation are stored in accordance with organisational policies and procedures and legislative requirements.</p> <p>4.3.If relevant, owners of animals are notified, followed up and <i>further action</i> is taken if required.</p> <p>4.4.Appropriate documentation about the incident is</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>completed and entered into relevant management systems.</p> <p>4.5. Supervisor is briefed on incident if appropriate and necessary.</p> <p>4.6. Seizure plan and capture are reviewed, if required, to ensure improved performance in the future.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- administer specific drugs where permitted by legislation
- apply effective decision making skills to develop a seizure plan quickly in consultation with others
- calculate doses of specific drugs and administer medications
- capture/seize animals using safe and humane animal handling and restraint techniques
- complete relevant workplace documentation, using appropriate equipment, to record and report information regarding the seizure of animals
- coordinate others and work as part of a team
- implement organisational policies and procedures
- demonstrate a mature approach to the daily application of safe work practices
- estimate target animals' body weights sufficient to calculate drug doses
- maintain the highest standard of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain tools and equipment in accordance with manufacturers' specifications
- procure, store and record use of specific drugs and dispose of discarded materials
- use firearms safely and with accuracy where required licences and permits are held
- literacy skills to read and follow organisational policies and procedures, including OHS, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of

**REQUIRED SKILLS AND KNOWLEDGE**

cultural, social and religious backgrounds and with a range of physical and mental abilities

- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- animal stress and threat signs (e.g. aggression)
- animals' interpretation of human body language when being approached
- appropriate capture and restraint methods for different animals
- equipment, methods and strategies for seizing, restraining and transporting animals
- health, hygiene, diseases and zoonoses
- importance of maintaining equipment
- relevant legislation and codes of practice relating to the capture/seizure and transportation of animals
- organisational policies and procedures, including OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- relevant legislation and codes of practice relating to OHS and animal control and regulation requirements
- specific restraint drugs including:
  - their pharmacology
  - antidotes
  - dose rates
  - methods of administration
  - effects (to both animals and humans in case of error)
- use of equipment, including firearms, capture guns and anaesthetic agents.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• plan and coordinate the seizure of animals including requesting backup/assistance as required and minimising risk to self, assistants, the public and target animal</li> <li>• capture a range of dangerous, aggressive, large or injured animals</li> <li>• use capture/seizure, restraint, sedation and transportation equipment/devices in a safe and humane manner</li> <li>• communicate effectively with bystanders and the personnel involved in the seizure</li> <li>• administer drugs remotely to seize animals as required and permitted by legislation</li> <li>• prepare brief for supervisor after the event as required by organisational policies and procedures</li> <li>• access and use management systems to keep and maintain accurate records of seizure.</li> </ul> <p>The skills and knowledge required to coordinate seizure of animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or a situation that reproduces normal work conditions.</p> <p>There must be access to a range of dangerous, aggressive, large and/or injured animals as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p>

<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><i>Assessment of situations</i> may include:</p>	<ul style="list-style-type: none"> <li>• circumstances, such as aggressive/large/injured animal</li> <li>• consideration of the safety of members of the public, self, team members and animals</li> <li>• crowded place</li> <li>• environmental issues concerning residential</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>properties, public facilities, open spaces and roads</p> <ul style="list-style-type: none"> <li>• road safety</li> <li>• time of day</li> <li>• the health and wellbeing of animals to be seized</li> <li>• type, size and number of animals to be seized.</li> </ul>
Development of <i>seizure plan</i> may include:	<ul style="list-style-type: none"> <li>• consideration of risk issues involved</li> <li>• making the area safe (e.g. roadway where traffic needs to be stopped)</li> <li>• urgency (e.g. how quickly resolution is required)</li> <li>• whether the situation can be quarantined</li> <li>• if better arrangements can be made for a later time</li> <li>• appropriate capture strategy and methods for the circumstances</li> <li>• number of personnel available to assist and their relevant skills</li> <li>• involvement of other emergency services personnel (e.g. police, paramedics and fire and rescue)</li> <li>• availability of equipment and qualified equipment operator</li> <li>• number, type, size, weight and height of animals</li> <li>• animals' behaviour, such as fear, panic or aggression</li> <li>• injuries animals might have sustained</li> <li>• legislative requirements</li> <li>• immediate area (e.g. paddock or main road)</li> <li>• role of participants in the seizure</li> <li>• restraint procedures</li> <li>• transport requirements</li> <li>• where animal will be taken or disposed of in the event of its death</li> <li>• relevant documentation to be completed.</li> </ul>
<i>Relevant personnel</i> may include:	<ul style="list-style-type: none"> <li>• animal control officers</li> <li>• emergency services, such as: <ul style="list-style-type: none"> <li>• fire and ambulance</li> </ul> </li> <li>• relevant state/territory department officers</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• other council staff</li> <li>• police</li> <li>• veterinarians</li> <li>• wildlife officers.</li> </ul>
<i>Animals</i> may include:	<ul style="list-style-type: none"> <li>• large animals: <ul style="list-style-type: none"> <li>• livestock (e.g. cattle, horses and sheep)</li> <li>• kangaroos</li> <li>• camels and emus</li> <li>• may also include escaped circus animals</li> </ul> </li> <li>• aggressive animals in most cases would refer to dogs but may include: <ul style="list-style-type: none"> <li>• livestock or escaped circus animals</li> </ul> </li> <li>• dangerous animals: <ul style="list-style-type: none"> <li>• snakes</li> <li>• aggressive animals or escaped circus animals</li> </ul> </li> <li>• animals not normally dealt with should also be treated as dangerous animals on approach by an officer to ensure the safety to the officer and bystanders</li> <li>• injured animals: <ul style="list-style-type: none"> <li>• all of the above as well as wildlife and/or native animals.</li> </ul> </li> </ul>
<i>OHS</i> risks when capturing and seizing animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals, medicines and firearms</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Emergency procedures</i> may include:	<ul style="list-style-type: none"> <li>• potential escape of an animal or injury to an animal, other animals, staff and potentially the public.</li> </ul>
<i>Equipment</i> may include:	<ul style="list-style-type: none"> <li>• equipment used in securing or restraining livestock and/or large animals:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• bells and horns</li> <li>• bribes (e.g. food)</li> <li>• cages</li> <li>• catch poles</li> <li>• demountable yards</li> <li>• halters and head stalls</li> <li>• hessian bags/woolpacks</li> <li>• leads</li> <li>• nets</li> <li>• protective clothing</li> <li>• stock transporter vehicles</li> <li>• temporary fencing</li> <li>• trail bikes</li> <li>• traps</li> <li>• winch loaders</li> <li>• equipment used in routine dog capture techniques to restrain dogs that are not manageable: <ul style="list-style-type: none"> <li>• trapping devices</li> </ul> </li> <li>• in some situations, and when permitted by legislation, restraining drugs (e.g. tranquillisers or anaesthetics) may need to be remotely administered to livestock or unmanageable dogs via projectile firing devices (e.g. firearm or capture gun) and using a limited number of the most appropriate drugs</li> <li>• on occasions where no other reasonable option exists, animals that cannot be effectively restrained may need to be shot dead where they are.</li> </ul> <p><b><i>Appropriate licences and permits must be held by the user and relevant records must be kept in accordance with legislation and standard operating procedures.</i></b></p>
<p><b><i>Transporting</i></b> animals may include:</p>	<ul style="list-style-type: none"> <li>• loading animals into vehicles</li> <li>• applying appropriate restraints</li> <li>• in some cases an officer may have to feed, water and/or provide temporary housing for the animal (this will depend on the opening hours</li> </ul>

<b>RANGE STATEMENT</b>	
	of the end destination that may include a veterinary clinic or pound).
<i>Further action</i> requirements may include:	<ul style="list-style-type: none"> <li>discussion with owners in respect to their responsibilities and the animal's future, retrieval process of an animal and legal proceedings.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		



## ACMACR409A Prepare and present animal control and regulation case

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of conducting interviews, preparing evidence and presenting evidence for animal control and regulation cases.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in the animal control and regulation sectors and requires the ability to prepare for case proceedings, present evidence and follow up on the outcomes of the proceedings. Knowledge of relevant legislation and organisational policies and procedures is essential.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Conduct interview	<p>1.1. <b><i>Purpose of interview</i></b> is determined.</p> <p>1.2. Venue, <b><i>equipment</i></b> and <b><i>personnel</i></b> for conducting interview are selected and prepared in accordance with organisational and legislative requirements.</p> <p>1.3. <b><i>Interviewee</i></b> is informed of the interview and their rights in accordance with legislative requirements.</p> <p>1.4. Comprehensive questions relevant to the situation and interviewee are asked using appropriate questioning techniques.</p> <p>1.5. Interview is recorded and statement is taken in accordance with organisational and legislative requirements.</p> <p>1.6. Information obtained from the interview is reviewed and clarified to ensure relevance and sufficiency.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.7. Record of interview is produced in accordance with organisational and legislative requirements once interview is concluded.</p> <p>1.8. Assistance from supervisor and/or experts is sought where required.</p>
2. Prepare evidence	<p>2.1. All related information is collected, collated and recorded.</p> <p>2.2. Information is analysed to confirm its authenticity and reliability as evidence and to identify further evidence to be collected.</p> <p>2.3. Non-admissible evidence is separated and retained.</p> <p>2.4. <i>Admissible evidence</i> is prepared and reviewed to confirm if sufficient to proceed to prosecution.</p> <p>2.5. All evidence is secured and recorded in accordance with organisational and legislative requirements.</p> <p>2.6. <i>Witnesses</i> are coordinated.</p> <p>2.7. Brief of evidence is developed that contains the required <i>information</i> and addresses all elements of the offence.</p> <p>2.8. Assistance from supervisor and/or experts is sought where required.</p>
3. Present evidence	<p>3.1. Arrangements, role and involvement in proceedings are confirmed.</p> <p>3.2. Documentation and exhibits are prepared in accordance with organisational and legislative requirements.</p> <p>3.3. Protocols and rules of evidence relevant to the organisation and/or case are adhered to.</p> <p>3.4. Evidence is presented in a clear, concise and articulate manner.</p> <p>3.5. Outcomes of the proceedings are noted and filed and reports are completed where required in accordance with organisational and legislative requirements.</p> <p>3.6. Any required actions are implemented in accordance with organisational and legislative requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

### Required skills

- analyse, research and take notes
- apply communication techniques including engaging in complex exchanges of oral information, varying style and language structure to suit a range of interviewees
- apply conflict resolution skills as required
- interviewing and questioning techniques
- make comparisons and exercise judgement about facts in written materials
- operate complex technical and electronic equipment to record interviews where necessary
- prepare and write complex documents (e.g. witness statements and briefs of evidence) that reflect key points made in oral statements
- present evidence clearly and concisely
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS) and animal welfare; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- write reports using formal structures and language.

### Required knowledge

- admissible evidence
- burden of proof
- common law versus judicial precedent versus legislation
- court/tribunal/commission procedures, protocols and processes
- legislation relevant to the organisation and the case
- legislative and organisational requirements for the conduct of interviews, including electronic recording equipment
- legislative and organisational requirements for the documentation of interviews, information and evidence
- legislative requirements for presenting evidence
- organisational policies and procedures relating to the preparation of documents and evidence, and providing expert opinion
- rules of evidence

**REQUIRED SKILLS AND KNOWLEDGE**

- requirements of a brief of evidence.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- conduct and record interviews and statements from interviewees, including witnesses, suspects, informants or complainants
- communicate effectively with interviewees using active listening and questioning techniques
- gather information on the case and identify admissible evidence
- prepare an evidence brief
- present evidence at proceedings
- follow the rules of evidence and protocols relevant to the case
- maintain accurate records in accordance with organisational policies and procedures.

The skills and knowledge required to prepare and present animal control and regulation cases must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal control and regulation workplace or in a situation that reproduces normal work conditions.

<b>EVIDENCE GUIDE</b>	
	<p>There must be access to a relevant animal control and regulation case that requires preparation (e.g. taking statements and gathering evidence) and presentation (e.g. to a court or tribunal) and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case studies</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Purpose of interview</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• to ascertain facts surrounding an incident and gather evidence</li> <li>• to determine the appropriate action required to ensure public safety</li> <li>• to ensure compliance with legislative requirements.</li> </ul>
<p><b><i>Equipment and personnel</i></b> that may be used to conduct an interview may include:</p>	<ul style="list-style-type: none"> <li>• equipment:             <ul style="list-style-type: none"> <li>• computers</li> <li>• computer notebooks</li> <li>• recording medium (e.g. audiotapes and videotapes)</li> </ul> </li> <li>• personnel:             <ul style="list-style-type: none"> <li>• interpreters</li> <li>• police officers to gain entry and serve warrants</li> <li>• corroborating officers</li> <li>• guardians and parents if minors are involved.</li> </ul> </li> </ul>
<p><b><i>Interviewees</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• complainants</li> <li>• informants</li> <li>• suspects</li> <li>• witnesses.</li> </ul>
<p><b><i>Admissible evidence</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• direct evidence:             <ul style="list-style-type: none"> <li>• evidence and statements from those present at the time who may have heard, seen, smelt, tasted or felt something in relation to the incident and may include things that were in place at the time (e.g. gates and fences)</li> </ul> </li> <li>• circumstantial evidence:             <ul style="list-style-type: none"> <li>• what was thought to have existed at the time but may no longer be there and cannot be backed up by direct evidence.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
Coordinating <i>witnesses</i> may include:	<ul style="list-style-type: none"> <li>• issuing witness summonses and maintaining contact with witnesses to ensure their cooperation, communication and attendance at court/tribunal.</li> </ul>
<i>Information</i> for brief of evidence may include:	<ul style="list-style-type: none"> <li>• admissible evidence and other evidence</li> <li>• precedents</li> <li>• records of interview</li> <li>• relevant sections of legislation</li> <li>• witness statements.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal control and regulation
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		



## ACMATE301A Work within an animal technology facility

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of working effectively within an animal technology facility.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to junior or assistant level animal technicians working under strict supervision. Animal technicians operate under and must comply with legislative requirements as well as protocols, policies and procedures set down by the institution's Animal Ethics Committee (AEC).</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Work effectively within an animal technology facility	<p>1.1. Role of the <i>animal technology facility</i> is identified within the context of relevant <i>legislative requirements</i>.</p> <p>1.2. Roles and relationships between departments and/or individuals are determined.</p> <p>1.3. Relationships with other bodies and agencies are identified.</p> <p>1.4. Industry terminology related to work procedures, equipment and animal management is interpreted and used in work activities.</p> <p>1.5. <i>Daily routines</i> are completed in accordance with <i>occupational health and safety (OHS)</i> requirements and <i>environmentally sensitive work practices</i>.</p>
2. <i>Work ethically</i> with	2.1. Personal work practices are performed to comply

ELEMENT	PERFORMANCE CRITERIA
animals	<p>with organisational <i>policies, procedures</i> and guidelines.</p> <p>2.2. Relevant codes of practice, regulations and legislation related to the ethical treatment of animals in animal technology workplaces are interpreted and complied with.</p> <p>2.3. <i>Biosecurity protocols</i> are complied with to ensure the safety of animals and staff.</p>
3. Identify animals	<p>3.1. Common and scientific names are used to <i>identify animals</i> in accordance with facility requirements.</p> <p>3.2. Distinguishing characteristics are used to identify specific animals within a group or section.</p> <p>3.3. Assistance is provided, in accordance with OHS requirements, in applying <i>identification methods</i> to specific animals within a group.</p> <p>3.4. Details of animal identification are recorded in accordance with facility policies and procedures.</p>
4. Anticipate, recognise and respond to signs of distress or grief in self	<p>4.1. <i>Situations or incidents</i> that may result in distress or grief are identified and documented.</p> <p>4.2. Personal stressors and grief responses are identified and documented.</p> <p>4.3. <i>Strategies for coping with distress or grief</i> responses are identified and used.</p>
5. Comply with industry specific OHS requirements	<p>5.1. Job-specific work practices are performed to comply with OHS guidelines, environmental processes and industry best practice.</p> <p>5.2. Workplace <i>security procedures</i> are complied with.</p> <p>5.3. The need for assistance to improve performance is communicated clearly to the appropriate person.</p> <p>5.4. Breaches in biological control barriers are identified and reported.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- comply with project protocols or report problems or concerns to workplace

## REQUIRED SKILLS AND KNOWLEDGE

- supervisor or project manager in accordance with workplace protocols and procedures
- complete relevant workplace documents
  - employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
  - identify animals using industry terminology, species-specific features and workplace applied tagging systems
  - identify emergency situations and respond according to workplace protocols in order to minimise the risk of injury to self, others and animals
  - maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
  - participate in arrangements for maintaining the health and safety of all people in the workplace
  - use equipment, materials and machinery correctly and in accordance with manufacturers' specifications
  - literacy skills to read and follow facility policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
  - oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
  - numeracy skills to estimate, calculate and record routine workplace measures
  - interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
  - problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- biohazards in the workplace of significance to animals and humans
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- indicators of stress and wellbeing in people
- industry expectations of conduct, presentation and work performance, including quality and productivity
- identification features of animals
- organisational policies and safe work procedures, including OHS and emergency procedures
- principles of animal welfare and ethics
- protocols, legal and ethical considerations in documenting observations, measurements, treatments and decisions on animal care
- relevant animal technology regulations and codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific

## REQUIRED SKILLS AND KNOWLEDGE

### Purposes

- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS, animal welfare and research
- standards, guidelines and approaches to environmental sustainability relevant to the animal care industry
- structure of the major animal technology sectors and associated external bodies and agencies
- workplace departments and sections, staffing structures and protocols.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- comply with relevant legislation and regulations
- complete work tasks with due consideration to workplace and individual obligations to the welfare of self, others and animals
- apply ethical work practices to all activities and tasks
- identify animals, relevant to the workplace, using common and scientific names and distinguishing characteristics
- identify, recognise and respond to personal grief or distress
- maintain accurate records using relevant organisational electronic and/or manual systems.

The skills and knowledge required to work in an animal technology facility must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

<b>EVIDENCE GUIDE</b>	
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of research animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animal technology facilities</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal research and breeding facilities</li> <li>• biomedical research and production environments including laboratory and field based.</li> </ul>
<p><b><i>Legislative requirements</i></b> include:</p>	<ul style="list-style-type: none"> <li>• federal, state and territory environmental legislation</li> <li>• the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• relevant state or territory legislation and regulations in respect to animal welfare and OHS, including:               <ul style="list-style-type: none"> <li>• the Federal Gene Technology Act</li> <li>• the Quarantine Act.</li> </ul> </li> </ul>
<p><b><i>Daily routines</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• approaching, catching and handling animals</li> <li>• cleaning animal housing and facilities</li> <li>• feeding and watering animals</li> <li>• collecting, collating and recording data</li> <li>• general animal husbandry tasks</li> <li>• maintaining and storing records</li> <li>• maintaining equipment.</li> </ul>
<p><b><i>OHS</i></b> risks associated with animal technician procedures include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<p><b><i>Environmentally sensitive work</i></b></p>	<ul style="list-style-type: none"> <li>• implementing strategies and resources to:               <ul style="list-style-type: none"> <li>• minimise disturbance to animals and their</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<i>practices</i> may include:	<ul style="list-style-type: none"> <li>living environment</li> <li>• practise environmentally friendly waste management</li> <li>• practise processes relevant to the individual's work area that support environment and resource efficiencies</li> <li>• reduce noise and odour.</li> </ul>
<i>Working ethically</i> with animals requires:	<ul style="list-style-type: none"> <li>• adherence to all requirements of the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes and any requirements of the organisation's Animal Ethics Committee (AEC)</li> <li>• applying the 3Rs principles: <ul style="list-style-type: none"> <li>• replace animals in research with non-animal alternatives</li> <li>• reduce the number of animals used in experiments</li> <li>• refine scientific procedures and animal husbandry to minimise suffering</li> </ul> </li> <li>• ensuring that the welfare of animals is always considered</li> <li>• ensuring pain or distress in animals is avoided</li> <li>• ensuring the use of animals in research is justified.</li> </ul>
Relevant <i>policies and procedures</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare, including ethical use of animals for scientific or teaching purposes</li> <li>• environmental sustainability practices</li> <li>• infection control plans</li> <li>• OHS policies and procedures: <ul style="list-style-type: none"> <li>• accident and incident reports</li> <li>• standard work practices</li> </ul> </li> <li>• quality assurance systems</li> <li>• standard operating procedures.</li> </ul>
<i>Biosecurity protocols</i> include:	<ul style="list-style-type: none"> <li>• standards precautions: <ul style="list-style-type: none"> <li>• aseptic technique</li> <li>• personal hygiene practices especially washing and drying hands (e.g. before and after animal contact)</li> <li>• use of personal protective equipment</li> <li>• techniques to limit contamination</li> <li>• appropriate reprocessing of reusable</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<p>equipment</p> <ul style="list-style-type: none"> <li>• surface cleaning and management of blood and body fluid spills</li> <li>• safe handling and disposal of sharps and other clinical, related and general waste</li> <li>• environmental controls (e.g. design and maintenance of premises and cleaning)</li> <li>• additional precautions: <ul style="list-style-type: none"> <li>• special ventilation requirements</li> <li>• additional use of personal protective equipment</li> <li>• dedicated equipment (e.g. to each animal or as appropriate to work function)</li> <li>• use of a special facility</li> <li>• isolation/cohorting</li> <li>• restricted movement of animal, staff and visitors.</li> </ul> </li> </ul>
<p>Animals one would be expected to <i>identify</i>, subject to facility requirements, may include:</p>	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats</li> </ul> </li> <li>• on some occasions animal species may include: <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul> </li> </ul>
<p><i>Identification methods</i> may include:</p>	<ul style="list-style-type: none"> <li>• brands</li> <li>• ear tags or notches</li> <li>• enclosures</li> <li>• leg bands</li> <li>• microchips</li> <li>• photographs</li> <li>• tattoos.</li> </ul>

<b>RANGE STATEMENT</b>	
Types of <i>situations or incidents</i> that may result in distress or grief include:	<ul style="list-style-type: none"> <li>• planned experimental endpoints:               <ul style="list-style-type: none"> <li>• single or colony euthanasia</li> <li>• unplanned animal deaths caused by disease</li> <li>• environmental failure</li> <li>• fire or other traumas or accidents</li> </ul> </li> <li>• other causes of distress:               <ul style="list-style-type: none"> <li>• working with animals that are in distressing, but ethically approved, research experiments regarding severe and negative environmental impact</li> <li>• detrimental phenotypic abnormalities</li> <li>• adverse animal reactions to an experiment.</li> </ul> </li> </ul>
<i>Grief and stress coping</i> strategies may include:	<ul style="list-style-type: none"> <li>• advising workplace supervisor of the situation</li> <li>• seeking and accepting support from colleagues</li> <li>• seeking and accepting assistance from professional counsellors</li> <li>• practising stress management techniques</li> <li>• requesting and participating in formal or informal debriefing sessions.</li> </ul>
<i>Security procedure</i> requirements may include:	<ul style="list-style-type: none"> <li>• checking for pests within animal housing or enclosures</li> <li>• checking that locks and slides are in good working order</li> <li>• ensuring animals are safe and secure in their housing</li> <li>• ensuring medications and treatments are stored in accordance with legislative requirements</li> <li>• identifying any animal housing faults that may result in escape</li> <li>• maintaining structures in good order</li> <li>• restricting access to authorised personnel.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal technology
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMATE302A Carry out institution containment and exclusion procedures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of carrying out institution containment and exclusion procedures that are designed to exclude pathogenic organisms from entering an aseptic site and to contain organisms in a particular site.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to junior or assistant level animal technicians working under the supervision of a senior or more experienced staff member and according to established policies and procedures. Containment and exclusion may apply to physical, specific pathogen free, gnotobiotic, genetically modified organisms and infectious microbiological organisms. Containment and exclusion procedures are followed as a routine part of one's own work and are applied to visitors to the site.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to carry out containment and/or exclusion procedures	<p>1.1.Items requiring <b><i>decontamination</i></b> are treated in accordance with institutional policies and procedures.</p> <p>1.2.Where required, personal and work vehicles are decontaminated before entering a <b><i>containment or exclusion site</i></b>.</p> <p>1.3.<b><i>Personal decontamination tests and procedures</i></b> are carried out before entering a containment or exclusion site.</p> <p>1.4.Contact with <b><i>potential contaminants</i></b> is reported in accordance with <b><i>institutional requirements</i></b>.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.5.Hands are washed and gloves are changed before handling animals, feed, plant stock or other products.</p> <p>1.6.Appropriate clothing, footwear and <b>personal protective equipment</b> are put on before commencing work and 'street clothing' is securely stored away from animals, feed or other products.</p>
<p>2. Carry out site containment and exclusion procedures</p>	<p>2.1.Chemicals and/or medications are handled and stored appropriately.</p> <p>2.2.Different feed mixes, soils, growing media and/or other products are kept separate and appropriately marked in accordance with institutional procedures.</p> <p>2.3.Any cases of <b>pest infestation</b> are identified and reported to the supervisor.</p> <p>2.4.Any breaches of containment and/or exclusion procedures are identified and reported to the supervisor.</p> <p>2.5.Any <b>occupational health and safety (OHS)</b> hazards are identified and appropriate action is taken in accordance with institutional policies and OHS legislation and codes.</p> <p>2.6.All <b>waste products</b> are disposed of in accordance with institutional procedures.</p> <p>2.7.Information relating to work in containment and exclusion sites is recorded as required by institutional procedures.</p>
<p>3. Carry out animal care in a containment and/or exclusion area</p>	<p>3.1.Animal health and wellbeing requirements are provided for in accordance with the institution's standard operating procedures and codes of practice.</p> <p>3.2.Animal isolation housing areas are maintained in accordance with animal wellbeing and containment and/or exclusion requirements.</p> <p>3.3.Physical health and behaviour of animals is monitored and recorded in accordance with institutional requirements.</p> <p>3.4.Regular hygiene, feeding, exercise and enrichment procedures are carried out in accordance with the institution's standard operating procedures.</p> <p>3.5.Disease or illness treatments are provided when appropriate and as directed by the <b>supervisor</b>.</p>
<p>4. Assist in maintaining site containment and exclusion procedures</p>	<p>4.1.Procedures and protocols for restricted access are followed by and explained to visitors.</p> <p>4.2.Incoming and outgoing goods are decontaminated in</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>accordance with institutional procedures.</p> <p>4.3. Any observed breaches of containment and exclusion procedures by visitors are noted and reported to the supervisor.</p> <p>4.4. Gates and doors are kept locked, where required, in accordance with institutional procedures and supervisor's instructions.</p> <p>4.5. Where installed, security fencing is maintained in accordance with supervisor's instructions.</p> <p>4.6. Where appropriate, deliveries to site are checked to ensure that established procedures are followed for vehicle decontamination, unloading, receipt and holding or storage of stock and/or supplies.</p>
<p>5. Respond to site containment and/or exclusion breach or problem</p>	<p>5.1. The specific problem and its location are identified and reported to the supervisor.</p> <p>5.2. Problems are secured in accordance with institutional procedures.</p> <p>5.3. Containment and/or exclusion site and location of breach are cleaned and disinfected as required in accordance with the specific nature of the problem and institutional procedures.</p> <p>5.4. Livestock and plant stock suspected of being exposed to contaminants are isolated and monitored for evidence of contamination in accordance with institutional procedures.</p> <p>5.5. All contaminated stock and materials are treated and/or disposed of in accordance with institutional procedures.</p> <p>5.6. Contaminated persons are treated in accordance with institutional procedures.</p> <p>5.7. Information about the breach or problem is recorded in accordance with institutional procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

## REQUIRED SKILLS AND KNOWLEDGE

- communicate with visitors about containment and exclusion procedures
- complete relevant workplace documents
- comply with project protocols or report problems or concerns to workplace supervisor or project manager in accordance with workplace protocols and procedures
- employ safe, humane and environmentally responsible organisation systems and procedures when handling and working with animals and feed
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- report unresolved concerns related to project or workplace procedures using appropriate animal welfare and ethics protocols
- select and apply appropriate cleaning and disinfection agents
- use equipment, materials and machinery correctly and in accordance with manufacturers' specifications
- literacy skills to read, interpret and follow institutional policies and procedures, including OHS, infection control and waste management; follow sequenced written instructions; record accurately and legible information collected; and select and apply procedures for a range of tasks
- oral communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, clarifying information and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to address containment breaches or other issues within scope of responsibilities
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- an awareness of containment and exclusion requirements under the Federal Gene Technology Act
- applicable industry quality assurance requirements and required documentation
- AS/NZS 2243.3:2002: Safety in laboratories - Microbiological aspects and containment facilities
- biohazards in the workplace of significance to animals and humans
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- institutional containment and exclusion policies and procedures
- organisational policies and safe work procedures, including OHS and emergency procedures



**REQUIRED SKILLS AND KNOWLEDGE**

- personal protective clothing and equipment and when and how it should be used
- principles of animal welfare and ethics
- Federal Quarantine Act 1908 and Regulations 2000
- relevant animal technology codes of practice and regulations, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, biosecurity, animal welfare and research
- reporting procedures for alleged breaches of containment and exclusion procedures
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- apply specific institutional procedures for containment and exclusion, including security requirements and report breaches
- isolate and monitor animals as required
- care for, monitor and maintain animals housed in containment and exclusion areas
- carry out cleaning and disinfection duties, including decontaminating items as required before entering a site
- assist in responding to containment and exclusion breaches and contamination
- maintain accurate records related to breaches and problems encountered.

<b>EVIDENCE GUIDE</b>	
	The skills and knowledge required to carry out institution containment and exclusion procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English,

**EVIDENCE GUIDE**

youth and people from low socioeconomic backgrounds).

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Decontamination*** requirements may include:

- items brought onto or being removed from the site:
  - animal feed
  - bedding
  - bottles
  - cages
  - pens and other stationery
  - toys
  - trolleys
  - vehicles
- conducting decontamination by:
  - autoclave
  - chemicals
  - downtime (isolation)
  - dunk tanks
  - gases or heat
  - ultraviolet light
  - vehicle dips.

***Containment or exclusion sites*** may include:

- containment site is the physical location where the organism is being controlled and confined
- exclusion site is the physical location from which organisms are to be excluded:
  - institution premises or parts of the premises
  - isolation areas or sick bays
  - laboratories

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• research animal holding or breeding facilities</li> <li>• whole farms or parts of a farm.</li> </ul>
<i>Personal decontamination tests and procedures</i> may include:	<ul style="list-style-type: none"> <li>• tests and procedures may need to be carried out before and after entering the site: <ul style="list-style-type: none"> <li>• nasal swabs to test for viruses and micro-organisms</li> <li>• wet or air showers</li> <li>• washing hands</li> <li>• wearing shoe protection, gowns, caps and gloves</li> </ul> </li> <li>• time restrictions on when personnel and/or goods can be removed from the containment or exclusion area.</li> </ul>
<i>Potential contaminants</i> include:	<ul style="list-style-type: none"> <li>• pathogens entering the site on: <ul style="list-style-type: none"> <li>• clothing, footwear, equipment, vehicles, new livestock, dust, dander, fur, food, food products, toys, cages, lids, pens, water and soil</li> <li>• foodstuffs, including food for animal or human consumption</li> <li>• fungi</li> <li>• pests and parasites</li> <li>• vaccines and viruses or bacterial infections from humans and animals.</li> </ul> </li> </ul>
<i>Institution requirements</i> may include:	<ul style="list-style-type: none"> <li>• AS/NZ 2243.3:2002: Safety in laboratories - Microbiological aspects and containment facilities</li> <li>• institution's quality assurance manual and procedures including: <ul style="list-style-type: none"> <li>• biosecurity</li> <li>• OHS</li> <li>• recycling and re-use guidelines</li> <li>• standard operating procedures</li> <li>• waste disposal</li> </ul> </li> <li>• product labels and manufacturers specifications, including material safety data sheets (MSDS)</li> <li>• project objectives and production schedules</li> <li>• relevant state and territory legislation and regulations relating to the practice of</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>veterinary science and animal welfare and research</p> <ul style="list-style-type: none"> <li>• requirements of the Office of the Gene Technology Regulator in line with the Federal Gene Technology Act</li> <li>• work and routine maintenance plans.</li> </ul>
<p><i>Personal protective equipment</i> may include:</p>	<ul style="list-style-type: none"> <li>• clothing and equipment: <ul style="list-style-type: none"> <li>• caps</li> <li>• eyewear</li> <li>• face masks and respirators</li> <li>• gloves</li> <li>• gowns</li> <li>• shoe covers.</li> </ul> </li> </ul>
<p><i>Pest infestations</i> that might occur include:</p>	<ul style="list-style-type: none"> <li>• dogs, cats and feral animals</li> <li>• flies and mosquitoes</li> <li>• vertebrate and invertebrate pests</li> <li>• wild birds in sheds or housing</li> <li>• wildlife</li> <li>• vermin in food and bedding.</li> </ul>
<p><i>OHS</i> risks associated with animal technician procedures include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<p><i>Waste products</i> that might need to be disposed of include:</p>	<ul style="list-style-type: none"> <li>• biological matter: <ul style="list-style-type: none"> <li>• dead animals</li> <li>• embryos</li> <li>• faeces</li> <li>• semen</li> <li>• plant cuttings</li> <li>• tissue samples</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• feed spills</li> <li>• used bedding and nesting materials</li> <li>• unused or expired vaccines</li> <li>• used personal protective equipment.</li> </ul>
<i>Supervision required in providing treatment</i> will require:	<ul style="list-style-type: none"> <li>• any prescription remedies to be administered under the guidance of a veterinarian.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal technology
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMATE303A Prepare for and monitor anaesthesia in animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing for and monitoring anaesthesia in animals for non-surgical and tissue collection procedures under supervision and would aim to minimise the pain of an animal during the procedure and/or to minimise the risk to the operator during the procedure.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to junior or assistant level animal technicians working under the supervision of a senior or more experienced staff member. Animal technicians administering anaesthesia operate under and must comply with legislative requirements and the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes as well as protocols, policies and procedures set down by the institution's Animal Ethics Committee (AEC).</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for anaesthesia	1.1. Facility and personnel are prepared for animal <i>anaesthesia</i> . 1.2. <i>Equipment</i> is prepared and calibrated as required. 1.3. <i>Anaesthetic and monitoring equipment</i> are prepared as directed by the supervisor.
2. Prepare animals for anaesthesia	2.1. Animals' health and condition are assessed. 2.2. Animals are handled and restrained safely and



ELEMENT	PERFORMANCE CRITERIA
procedures	<p>humanely in accordance with institutional policies and procedures.</p> <p>2.3. <i>Pre-anaesthetic evaluations</i> are performed on animals.</p> <p>2.4. Animals are <i>prepared</i> for anaesthesia.</p> <p>2.5. Safe work practices, including <i>occupational health and safety (OHS)</i>, are followed in accordance with institutional policies and procedures.</p>
3. Assist in administering anaesthesia and monitoring animals	<p>3.1. Animals are <i>induced</i> in anaesthesia as directed by the supervisor.</p> <p>3.2. Animals are monitored during anaesthetic and/or non-surgical or tissue collection procedures.</p> <p>3.3. Variations in the physiological parameters and signs of anaesthesia in animals are recorded.</p> <p>3.4. <i>Institution protocols</i> for anaesthetic procedures on animals are complied with.</p> <p>3.5. <i>Anaesthetic emergency</i> assistance is provided in accordance with institutional policies and procedure.</p>
4. Provide post-anaesthetic care for animals	<p>4.1. Analgesics and other supportive therapies are used to manage animals post-anaesthesia as directed.</p> <p>4.2. Fluid therapy and oxygen are applied to animals as required.</p> <p>4.3. Post-anaesthetic emergencies are recognised and responded to immediately.</p> <p>4.4. Animals are <i>monitored post-anaesthetically</i>.</p> <p>4.5. Post-anaesthetic monitoring records are maintained in accordance with research and AEC requirements.</p>
5. Maintain anaesthetic facilities and equipment	<p>5.1. Facilities and equipment are cleaned and stored in accordance with institutional policies and procedures.</p> <p>5.2. Routine maintenance is carried out on anaesthetic equipment as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

## REQUIRED SKILLS AND KNOWLEDGE

### Required skills

- apply first aid techniques and provide basic animal care
- complete relevant work-related documents
- calculate dose rates of anaesthetic and other medications and verify with supervisor
- comply with project protocols or report problems or concerns to workplace supervisor or project manager in accordance with workplace protocols and procedures
- confirm the identity of animals and procedures to be undertaken
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- evaluate behaviour, vital signs, symptoms and other objective measures that may indicate animal health is at risk
- identify and locate animal structures, tissues and organs relevant to administration and monitoring of induction of anaesthesia
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read, interpret and follow institutional policies and procedures, including OHS, infection control and waste management; follow sequenced written instructions; record accurately and legible information collected; and select and apply procedures for a range of tasks
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to address emergency situations or other issues within scope of responsibilities
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- verify dose rates and identify precautions in application or administration of anaesthetic and other medications.

### Required knowledge

- anatomical terminology
- anatomical structures, tissues and organs relevant to the induction and monitoring of animals under anaesthetic
- animal anaesthetic emergencies and appropriate responses
- animal first aid techniques
- biohazards in the workplace of significance to animals and humans

## REQUIRED SKILLS AND KNOWLEDGE

- characteristics of healthy, sick or distressed animals
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- indicators of normal and undesirable responses to anaesthetic and related medications
- information that should be documented for the administration of anaesthetic and related substances
- methods and equipment used to monitor animals during anaesthesia
- methods used to anaesthetise animals in animal technology workplaces
- methods used to measure, interpret and record objective measure of animal health
- organisational policies and safe work procedures, including OHS and emergency procedures
- physiological features of animals related to the application of anaesthesia and related medications
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS, animal welfare, research and waste disposal
- safe animal handling techniques and procedures
- terminology used to describe anaesthetic processes, equipment, materials and physiological responses
- types of non-surgical or tissue collection procedures used in animal technology facilities that require the use of anaesthetics and related medications
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• prepare facilities, personnel and equipment including anaesthetic equipment and anaesthetic agents in accordance with institutional policies and procedures and OHS requirements</li> <li>• prepare animals and carry out pre-anaesthetic evaluations</li> <li>• monitor and maintain animals in anaesthesia and provide post-anaesthetic care</li> <li>• recognise and respond to anaesthetic and post-anaesthetic emergencies</li> <li>• maintain facilities and record treatments.</li> </ul> <p>The skills and knowledge required to prepare for and monitor anaesthesia in animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>All activities and procedures must be performed in accordance with animal welfare legislation, ethical and approved project protocols under supervision of a senior or more experienced staff member.</p> <p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility.</p> <p>There must be access to a range of research animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>evidence of candidate's application of practical tasks</p> <ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Anaesthesia</i></b> refers to:	<ul style="list-style-type: none"> <li>• the use of a drug administered for medical or surgical purposes that induces total loss of sensation.</li> </ul>
<b><i>Equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• anaesthetic machines</li> <li>• masks and gloves</li> <li>• needles</li> <li>• oxygen cylinders</li> <li>• syringes.</li> </ul>
<b><i>Anaesthetic and monitoring equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• anaesthetic equipment and supplies: <ul style="list-style-type: none"> <li>• anaesthetic trolleys</li> <li>• filters</li> <li>• gas cylinders</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• incubators</li> <li>• masks</li> <li>• re-breathing bags</li> <li>• scavenging systems</li> <li>• soda lime and canisters</li> <li>• tubes</li> <li>• vaporisers</li> <li>• anaesthetic monitoring equipment:               <ul style="list-style-type: none"> <li>• intubation and carbon dioxide.</li> </ul> </li> </ul>
<i>Pre-anaesthetic evaluation</i> may involve:	<ul style="list-style-type: none"> <li>• health checks:               <ul style="list-style-type: none"> <li>• general health and condition</li> <li>• heart rate</li> <li>• respiration</li> <li>• temperature</li> <li>• weight.</li> </ul> </li> </ul>
<i>Preparing</i> animals for anaesthesia will involve:	<ul style="list-style-type: none"> <li>• applying restraining devices:               <ul style="list-style-type: none"> <li>• halters</li> <li>• head collars</li> <li>• hobbles</li> <li>• muzzles</li> <li>• rearing bits</li> </ul> </li> <li>• aseptic preparation of injection sites</li> <li>• clipping</li> <li>• pre-operative scrubbing routines</li> <li>• shaving</li> <li>• further preparation under veterinary supervision may extend to:               <ul style="list-style-type: none"> <li>• administration of necessary premedication</li> <li>• intubation and the insertion of intravenous or urinary catheters</li> <li>• preparation of equipment and materials for intravenous infusions.</li> </ul> </li> </ul>
<i>OHS</i> risks associated with administering anaesthesia and monitoring animals may include:	<ul style="list-style-type: none"> <li>• allergic reaction of animal to substances</li> <li>• animal bites, kicks, scratches, crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• contamination of samples</li> <li>• cross-contamination between project classified clean and dirty animals</li> <li>• escape of animals and subsequent threat to</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>safety of humans and other animals</p> <ul style="list-style-type: none"> <li>• haemorrhage, oedema and other tissue damage</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• maintaining body temperature and other vitals for life</li> <li>• needle pricks and cuts from other sharps</li> <li>• not being able to reach target tissue</li> <li>• potential injuries to humans during capture, handling and transport processes</li> <li>• release of infective agents (animal and human)</li> <li>• reaction to collection leading to shock</li> <li>• slippery or uneven work surfaces</li> <li>• transmission of zoonotic diseases.</li> </ul>
Methods used to <i>induce</i> an animal in anaesthesia may include:	<ul style="list-style-type: none"> <li>• gaseous and injectable preparations: <ul style="list-style-type: none"> <li>• intermittent positive pressure ventilation.</li> </ul> </li> </ul>
<i>Institute protocols</i> may include:	<ul style="list-style-type: none"> <li>• AEC and safety committee procedures</li> <li>• industry recognised standards</li> <li>• institutional policies and standard operating procedures</li> <li>• OHS procedures.</li> </ul>
Possible <i>anaesthetic emergencies</i> may include:	<ul style="list-style-type: none"> <li>• an animal going into: <ul style="list-style-type: none"> <li>• hypothermia or hyperthermia</li> <li>• respiratory distress</li> <li>• shock.</li> </ul> </li> </ul>
<i>Post-anaesthetic monitoring</i> of animals may include:	<ul style="list-style-type: none"> <li>• measurement of temperature, pulse and respiration manually or via monitors attached to animals</li> <li>• observations of behaviour: <ul style="list-style-type: none"> <li>• allergic reaction</li> <li>• bleeding</li> <li>• loss of nervous system control</li> <li>• loss/regaining consciousness depending on procedures used</li> <li>• symptoms of shock.</li> </ul> </li> </ul>

### Unit Sector(s)

Unit sector	Animal technology
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		



## ACMATE304A Conduct non-surgical procedures on animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of conducting non-surgical procedures required to administer substances and take tissue and fluid samples for clinical trial project research purposes.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to junior or assistant level animal technicians working under supervision of a senior or more experienced staff member. Animal technicians operate under and must comply with legislative requirements as well as protocols, policies and procedures set down by the institution's Animal Ethics Committee (AEC).</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for non-surgical procedures	1.1.Procedures and <i>sample requirements</i> are verified in accordance with legislative and ethical requirements. 1.2.Sample methods are confirmed with supervisor. 1.3.Dose rates are calculated. 1.4.Equipment required is prepared and positioned.
2. Prepare animals for procedure	2.1.Animals are selected to meet project requirements. 2.2.Animals are moved to testing area and prepared for procedure using <i>techniques to minimise stress and discomfort</i> .

ELEMENT	PERFORMANCE CRITERIA
	2.3. Work practices are managed to ensure animals are kept in preparation and procedure areas for minimal time.
3. Administer substances to animals	3.1. Approved substances and dose rates are verified with supervisor. 3.2. Method of administration of substances is verified. 3.3. <b>Risks associated with preparation and administration of substances</b> are evaluated, emergency procedures practised and implemented as required. 3.4. Substances are administered to animals using approved methods and appropriate restraint techniques. 3.5. Animals are <b>monitored</b> during the administration of substances for adverse reactions.
4. Collect samples from animals	4.1. Sampling techniques are verified with supervisor. 4.2. Hazards in collection process are identified and <b>emergency response requirements</b> are practised and implemented when required. 4.3. Body fluid samples are collected, processed, packaged and stored. 4.4. Tissue samples are collected. 4.5. Samples are checked for suitability and prepared according to laboratory and project protocols.
5. Complete post-procedure duties	5.1. Animals are returned to housing, monitored and responded to as required. 5.2. <b>Animal and project records</b> are updated. 5.3. Procedures area is cleaned and waste disposed of according to laboratory protocols.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply first aid techniques and provide basic animal care
- complete relevant work-related documents

## REQUIRED SKILLS AND KNOWLEDGE

- comply with project protocols or report problems or concerns to workplace supervisor or project manager in accordance with workplace protocols and procedures
- employ safe, humane and environmental responsible organisation systems and procedures when handling and work with animals
- identify signs of animal distress and discomfort and respond in compliance with animal welfare and workplace or project protocols
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare and use materials, tools and equipment correctly and in accordance with manufacturers' specifications
- take and record animals temperature, pulse, respiration and hydration indicators where appropriate
- literacy skills to read and follow facility policies and procedures, including occupational health and safety (OHS), infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- verify precautions in application or administration of substances.

### Required knowledge

- anatomical terminology
- anatomical structures and physiological features of animals relevant to the administration of substances and collection of samples
- basic animal first aid techniques
- biohazards in the workplace of significance to animals and humans
- ethical practices, protocols and procedures in relation to the administration of substances and collection of samples of animals in animal technology workplaces
- indicators of stress and wellbeing in animals and methods used to measure, interpret and record objective measures of animal health
- information that should be documented related to the administration of substances, and collection of samples
- methods used to prepare, store and transport samples

## REQUIRED SKILLS AND KNOWLEDGE

- organisational policies and safe work procedures, including OHS and accident requirements
- personal protective clothing and equipment and when and how it should be used
- principles of animal welfare and ethics
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare and research
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe animal handling techniques, including approved handling methods during the administration of substances and collection of samples
- situations where the administration of substances or collection of samples should be stopped and reported
- tissue and fluid sample types and methods
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare animals for substance administration and sample collection in accordance with legislative, ethical and approved workplace project protocols
- calculate dose rates, prepare and administer substances as directed by supervisor and in accordance with legislative, ethical and approved workplace project protocols
- collect samples of body tissue and fluids from animals in accordance with legislative, ethical and

<b>EVIDENCE GUIDE</b>	
	<p>approved workplace project protocols</p> <ul style="list-style-type: none"> <li>• prepare samples in accordance with workplace protocols and project requirements</li> <li>• document procedures used in the administration of substances and collection of samples and any events that occur.</li> </ul> <p>The skills and knowledge required to conduct non-surgical procedures on animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>All activities and procedures must be performed in accordance with animal welfare legislation, ethical and approved project protocols under supervision of a senior or more experienced staff member.</p> <p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of research animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Sample requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>a range of samples:             <ul style="list-style-type: none"> <li>blood</li> <li>faeces</li> <li>muscle biopsy</li> <li>nasal discharge</li> <li>saliva</li> <li>semen specimens</li> <li>skin scrapings</li> <li>urine and semen specimens</li> </ul> </li> <li>monitoring heart rate, blood pressure, respiration rate and temperature</li> <li>injecting substances subcutaneously, intramuscularly or intravenously</li> <li>administering substances via ingestion, topical application or inhalation</li> <li>preparing samples for chemical, visual</li> </ul>

<b>RANGE STATEMENT</b>	
	assessment.
<b><i>Techniques to minimise stress and discomfort</i></b> may include:	<ul style="list-style-type: none"> <li>• moving animal to collection area in own housing</li> <li>• sedating animals</li> <li>• restraining animals</li> <li>• numbing collection area</li> <li>• collecting specimens away from distractions from other animals, sounds, smells or other stimuli.</li> </ul>
<b><i>Risks associated with preparation and administration of substances</i></b> may include:	<ul style="list-style-type: none"> <li>• allergic reaction of animal to substances</li> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• contamination of samples</li> <li>• cross contamination between project classified clean and dirty animals</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• haemorrhage, oedema and other tissue damage</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• maintaining body temperature and other vitals for life</li> <li>• needle pricks and cuts from other sharps</li> <li>• not being able to reach target tissue</li> <li>• potential injuries to humans during capture, handling and transport processes</li> <li>• release of infective agents (animal and human)</li> <li>• reaction to collection leading to shock</li> <li>• slippery or uneven work surfaces</li> <li>• transmission of zoonotic diseases.</li> </ul>
<b><i>Monitoring</i></b> of animals during administration of substances or during recovery may include:	<ul style="list-style-type: none"> <li>• measurement of temperature, pulse and respiration manually or via monitors attached to animals</li> <li>• observations of behaviour: <ul style="list-style-type: none"> <li>• allergic reaction</li> <li>• bleeding</li> <li>• loss of nervous system control</li> <li>• loss/regaining consciousness depending on</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<p>procedures used</p> <ul style="list-style-type: none"> <li>• symptoms of shock</li> <li>• observation of behaviour during recovery, and return to normal routines for rest, exercise, eating and social interaction.</li> </ul>
<i>Emergency response requirements</i> may include:	<ul style="list-style-type: none"> <li>• animal or human first aid procedures for: <ul style="list-style-type: none"> <li>• allergic reaction</li> <li>• bits, kicks and scratches</li> <li>• haemorrhage</li> <li>• needle or sharps accidents</li> <li>• shock</li> </ul> </li> <li>• capture and isolation of escaped animals</li> <li>• decontamination of technician or animal.</li> </ul>
<i>Animal and project records</i> may include:	<ul style="list-style-type: none"> <li>• animal: <ul style="list-style-type: none"> <li>• identification</li> <li>• substances administered, including amounts and method of administration</li> <li>• response to administration of substance</li> <li>• tissue and body fluid samples taken</li> <li>• any problems with animal health that arise during administration of substances, collection of samples and during recovery</li> </ul> </li> <li>• project: <ul style="list-style-type: none"> <li>• project ethics approval details</li> <li>• project substance administration and sampling instructions</li> <li>• number of animals used and their identification details</li> <li>• officer who administered substances and collected samples</li> <li>• substances and amounts administered</li> <li>• methods used to administer substances</li> <li>• samples taken and methods used to collect samples</li> <li>• incidents or issues that arose during project procedures.</li> </ul> </li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Animal technology
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMATE305A Conduct euthanasia of research animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of euthanasing research animals under supervision. It has been developed specifically for animal technicians working with and caring for animals used within an animal technology biomedical research or production environment for scientific purposes and teaching purposes.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to junior or assistant level animal technicians working under the supervision of a senior or more experienced staff member where it may be necessary to euthanase individual or groups of animals because of a range of reasons approved by the institution's Animal Ethics Committee (AEC). Animal technicians conducting euthanasia operate under and must comply with legislative requirements and the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes as well as protocols, policies and procedures set down by the institution's AEC.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to</p>
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	<p>exhibit appropriate care for animals so that stress and discomfort is minimised.</p> <p><i>Note: Scientific purposes refers to 'all those activities that require approval from an Animal Ethics Committee (AEC) and are performed to acquire, develop or demonstrate knowledge of techniques in any scientific discipline, including activities for the purposes of teaching, field trips, environmental studies, research, diagnosis, product testing and the production of biological products'.</i></p> <p><i>Note: Where euthanasia involves firearms, appropriate licences are required for those involved in training and assessment against this unit of competency.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Prerequisite units	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range
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	statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to conduct euthanasia of research animal	<p>1.1. <i>Need for euthanasia</i> is identified, justified and reported to the workplace supervisor in accordance with institutional protocols.</p> <p>1.2. <i>Method</i> selected for the euthanasia is consistent with the research program approval or protocol and is in accordance with the workplace supervisor's instructions.</p> <p>1.3. <i>Equipment and materials</i> required to complete the euthanasia are prepared in accordance with the institution's standard operating procedures and relevant statutory requirements.</p> <p>1.4. <i>Location</i> for the euthanasia is selected.</p> <p>1.5. Hazards associated with the euthanasia are identified in accordance with <i>occupational health and safety (OHS)</i> procedures and guidelines.</p> <p>1.6. Licences and permits required to conduct the euthanasia are reviewed and completed with the supervisor.</p>
2. Carry out the euthanasia of animals	<p>2.1. Personal protective and safety equipment are used in accordance with OHS policies and statutory requirements.</p> <p>2.2. Equipment is handled and transported safely at all times in accordance with statutory requirements and industry practices.</p> <p>2.3. Animals are physically restrained in a way that minimises pain, distress and risk of injury to the animals or personnel and complies with ethical, welfare and legal requirements.</p> <p>2.4. Euthanasia method is applied in accordance with the requirements of the task and in a way that complies with ethical, welfare and legal requirements, including the requirements for any licences, permits or supervisor's instructions.</p> <p>2.5. Euthanasia procedure is monitored to ensure that the animal's death is rapid and without complications or undue suffering.</p>

ELEMENT	PERFORMANCE CRITERIA
3. Complete the euthanasia of animals	<p>3.1. Animal deaths are confirmed.</p> <p>3.2. Carcasses that are required for research or post-mortem examination are handled in accordance with the institution's standard operating procedures, experimental requirements and OHS policies.</p> <p>3.3. Animal carcasses are handled and moved in accordance with OHS guidelines and codes of practice.</p> <p>3.4. Biological waste and animal carcasses that are not required for research or other approved purposes are disposed of promptly in accordance with <i>statutory requirements</i>, the institution's standard operating procedures and OHS policies.</p> <p>3.5. Equipment and materials are decontaminated or cleaned and stored or disposed of in accordance with the institution's standard operating procedures.</p> <p>3.6. Records relating to euthanased animals are updated in accordance with the institution's standard operating procedures.</p> <p>3.7. Coping mechanisms are developed to deal with <i>personal distress or grief</i> related to workplace duties.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- acquire firearms licences (as appropriate/required) and comply with relevant regulations if shooting is an approved method of euthanasing animals
- complete relevant work-related documents
- consult with other staff and identify when direction and advice is needed from senior and more experienced staff
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor animal health and behaviour
- set up and use carbon dioxide cylinders and regulators

## REQUIRED SKILLS AND KNOWLEDGE

- use and store drugs correctly
- literacy skills to read and follow facility policies and procedures, including OHS, infection control and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to calculate solutions, dilutions, percentages, concentrations, proportions, ratios, molarity and weights and measures conversions
- interpersonal skills to work cooperatively with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate strategies
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- verify precautions in application or administration of substances.

### Required knowledge

- anatomical terminology
- anatomical structures and physiological features of animals in research facilities
- anatomy and physiology of animals commonly held in the institution, especially the neck and head, and respiration and heart rates
- biohazards in the workplace of significance to animals and humans
- equipment and drugs commonly used for euthanasia
- firearm legislation, regulations and techniques related to the humane destruction of animals if required
- institution's standard operating procedures relating to the restraint, handling, euthanasing and disposal of animals
- methods and administration routes of euthanasia and their suitability for a range of species
- methods used to cope with distress and grief due to workplace duties
- organisational policies and safe work procedures, including OHS and accident requirements
- physical conditions, vital signs of animals as well as signs of pain and distress in commonly held species
- principles of animal welfare and ethics
- protocols, legal and ethical considerations in the euthanasing of animals
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of

**REQUIRED SKILLS AND KNOWLEDGE**

- veterinary science, OHS, animal welfare and research
- safe animal handling techniques and procedures
  - workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare and maintain required materials and equipment
- select and apply appropriate methods of euthanasia to kill a range of research animals in a humane, rapid and appropriate manner for the approved endpoint in accordance with supervisor's instructions, relevant codes of practice, legislation and codes of practice
- dispose of animal carcasses and biological waste not required for research or post-mortem purposes in accordance with statutory requirements
- decontaminate, clean and store equipment and materials or dispose of them accordingly
- use appropriate coping mechanisms to deal with personal distress or grief
- maintain accurate records.

The skills and knowledge required to conduct euthanasia of research animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for**

All activities and procedures must be performed in



<b>EVIDENCE GUIDE</b>	
<b>assessment</b>	<p>accordance with animal welfare legislation, ethical and approved project protocols under supervision of a senior or more experienced staff member.</p> <p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility.</p> <p>There must be access to a range of research animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><i>Need for euthanasia</i> may include:</p>	<ul style="list-style-type: none"> <li>• accidents</li> <li>• cull of production</li> <li>• environmental failure; fire or other trauma</li> <li>• excessive aggression</li> <li>• meeting the requirements of product quality assurance</li> <li>• outbreak of disease</li> <li>• reaching the end point of research</li> <li>• the need to alleviate uncontrollable pain and distress.</li> </ul>
<p><i>Methods</i> of euthanasia may include:</p>	<ul style="list-style-type: none"> <li>• chemical or physical methods of euthanasia:             <ul style="list-style-type: none"> <li>• barbiturate overdose through an acceptable injection route</li> <li>• captive bolt</li> <li>• cervical dislocation</li> <li>• decapitation by guillotine</li> <li>• gas</li> <li>• gunshot</li> <li>• microwave.</li> </ul> </li> </ul>
<p><i>Equipment and materials</i> that may be required to conduct euthanasia include:</p>	<ul style="list-style-type: none"> <li>• carbon dioxide gas cylinders and regulators</li> <li>• captive bolts</li> <li>• chemicals</li> <li>• drugs</li> <li>• needles</li> <li>• sealed and approved containment cages</li> <li>• scales</li> <li>• syringes</li> <li>• restraining devices and drugs.</li> </ul>
<p><i>Location</i> should be selected to</p>	<ul style="list-style-type: none"> <li>• animals are euthanised in a quiet, clean environment and normally away from other</li> </ul>

<b>RANGE STATEMENT</b>	
ensure:	animals.
<i>OHS</i> risks associated with euthanasing animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• cross-contamination between project classified clean and dirty animals</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• gas leakage</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• potential injuries to humans during capture, handling and transport processes</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• transmission of zoonotic diseases.</li> </ul>
<i>Statutory requirements</i> that impact on the euthanasia of animals include:	<ul style="list-style-type: none"> <li>• approval from the institution's AEC</li> <li>• relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• local government regulations covering the transport and disposal of hazardous wastes</li> <li>• relevant state or territory legislation and regulations such as those relating to: <ul style="list-style-type: none"> <li>• firearms usage</li> <li>• fisheries</li> <li>• prevention of cruelty to animals</li> <li>• quarantine</li> <li>• the practice of veterinary surgery</li> <li>• the administration and storage of therapeutic and controlled substances</li> <li>• wildlife.</li> </ul> </li> </ul>
<i>Grief and stress coping</i> mechanisms may include:	<ul style="list-style-type: none"> <li>• advising workplace supervisor of the situation</li> <li>• seeking and accepting support from colleagues</li> <li>• seeking and accepting assistance from professional counsellors</li> <li>• practising stress management techniques</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>requesting and participating in formal or informal debriefing sessions.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Animal technology
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMATE501A Manage compliance in animal technology

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of practising and promoting animal welfare and ethical standards to others in animal technology workplaces and ensuring work practices, documentation and attitudes meet legislative, regulatory and workplace standards.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to a senior or managerial level. All work practices must be undertaken in accordance with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes and the institution's standard operating procedures. It requires the ability to liaise with and report to the institution's Animal Ethics Committee (AEC) according to institutional requirements. It may also involve supporting and directing other, usually less experienced, staff in carrying out their responsibilities in these areas.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Manage animals in accordance with relevant codes of practice and legislative and institutional requirements	<p>1.1. The use of <i>animals</i> in the institution's research programs is justified and written approval is sought from the Animal Ethics Committee (AEC).</p> <p>1.2. <i>Principles of the 3Rs</i> (replacement, refinement and reduction) are applied.</p> <p>1.3. The scope of interests and responsibilities of the institution, the individual working in animal technology and the community are identified.</p> <p>1.4. Requirements outlined in the Australian Code of Practice for the Care and Use of Animals for</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>Scientific Purposes are applied to daily animal care.</p> <p>1.5. Reporting requirements to the AEC are clearly defined and followed.</p> <p>1.6. The care and containment of experimental animals are followed to comply with AEC requirements.</p>
<p>2. Manage the euthanasia of research animals</p>	<p>2.1. <b>Reasons</b> for the decision to euthanase an animal are identified to comply with institutional policies and procedures, program approvals or protocols and <b>legislative requirements</b>.</p> <p>2.2. Licences and permits required to conduct the euthanasia are obtained</p> <p>2.3. Euthanasia procedures conducted by less experienced staff are monitored and assistance or support is provided where required.</p> <p>2.4. The institution's standard operating procedures relating to euthanasia are regularly reviewed and suggestions for improvement are discussed with veterinarians and implemented.</p> <p>2.5. The institution's standard operating procedures relating to euthanasia are communicated to staff, researchers and others.</p>
<p>3. Manage the negotiation of approval for non-standard laboratory practices and specific projects</p>	<p>3.1. Project and laboratory practices that require approval are identified.</p> <p>3.2. Project and non-standard laboratory practices are justified in line with <b>animal ethics and welfare</b> guidelines.</p> <p>3.3. Application for approval of non-standard project or laboratory practices is prepared and presented.</p>
<p>4. Manage the operation of and compliance with containment and exclusion procedures</p>	<p>4.1. Monitoring programs for <b>containment and exclusion</b> of organisms are developed and implemented.</p> <p>4.2. Breaches of containment or exclusion reported by staff or others are acted on in accordance with the monitoring program and the <b>institution's standard operating procedures</b>.</p> <p>4.3. The institution's standard operating procedures relating to containment and exclusion are regularly reviewed and suggestions for improvement are discussed with veterinarians.</p> <p>4.4. The institution's standard operating procedures relating to containment and exclusion are communicated to staff, researchers and others.</p>

ELEMENT	PERFORMANCE CRITERIA
5. Maintain records	<p>5.1. <i>Records</i> relating to the management of breeding stock and research and teaching animals are maintained in accordance with requirements.</p> <p>5.2. Records relating to containment and exclusion are maintained as required by the institution and relevant government authorities.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply AEC classification system to determine procedures that require approval
- develop/review and communicate the institution's standard operating procedures
- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor compliance with animal welfare and ethics regulations and workplace safe operating procedures
- prepare and maintain appropriate records, including animal care and ethics register using relevant institutional electronic and/or manual systems
- prepare applications to animal care and ethics committee for workplace and project specific procedures
- provide information and instruction to staff on institutional policies and procedures
- literacy skills to read, interpret and apply facility policies and procedures, including OHS, infection control, containment and exclusion and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from senior or more experienced staff
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to address non-compliance or other issues within scope of responsibilities.



## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- AS/NZS 2243.3:2002: Safety in laboratories - Microbiological aspects and containment facilities
- applicable industry quality assurance requirements and required documentation
- biohazards in the workplace of significance to animals and humans
- classification system used to categorise animal care and treatment by AECs
- containment and exclusion policies, procedures and requirements under the Federal Gene Technology Act
- institution's standard operating procedures relating to restraining, handling, euthanasing and disposing of animals
- institution's standard operating procedures relating to use, storage and transport of equipment and drugs used when conducting euthanasia of animals
- organisational policies and safe work procedures, including OHS and emergency procedures
- principles of animal welfare and ethics
- protocols, legal and ethical considerations in establishing animal care procedures and policies and gaining AEC approval
- relevant codes of practice including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare, quarantine and research, including the Office of the Gene Technology Regulator
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- reporting procedures for alleged breaches of containment and exclusion procedures and the consequences of any breaches.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of

<b>EVIDENCE GUIDE</b>	
	<p>this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• provide advice to and monitor staff on a range of procedural work functions relating to animal technology workplace compliance requirements</li> <li>• ensure that the organisation and all staff complies with relevant legislative requirements</li> <li>• manage the use, care and containment of animals to be used in research programs</li> <li>• manage the euthanasia of research animals and monitor staff performing euthanasia procedures</li> <li>• review, improve and implement the institution's policies and procedures to ensure compliance</li> <li>• manage relationships and communicate effectively with a range of stakeholders</li> <li>• maintain accurate records using relevant institutional electronic and/or manual systems.</li> </ul> <p>The skills and knowledge required to manage compliance in animal technology must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility or an environment that reproduces normal work conditions and has a scientific establishment licence and access to an approved AEC.</p> <p>There must be access to relevant information, materials and documentation to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>knowledge</p> <ul style="list-style-type: none"> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Subject to facility requirements <i>animals</i> may include:</p>	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats</li> </ul> </li> <li>• on some occasions animal species may include: <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul>
<i>Principles of 3Rs</i> are:	<ul style="list-style-type: none"> <li>• replace the animals in research with non-animal alternatives</li> <li>• reduce the number of animals used in experiments</li> <li>• refine scientific procedures and animal husbandry to minimise suffering.</li> </ul>
<i>Reasons</i> to conduct euthanasia may include:	<ul style="list-style-type: none"> <li>• accidents</li> <li>• cull of production</li> <li>• environmental failure; fire or other trauma</li> <li>• excessive aggression</li> <li>• meeting the requirements of product quality assurance</li> <li>• outbreak of disease</li> <li>• reaching the end point of research</li> <li>• the need to alleviate uncontrollable pain and distress.</li> </ul>
<i>Legislation requirements</i> that impact on the euthanasia of animals include:	<ul style="list-style-type: none"> <li>• approval from the institution's AEC</li> <li>• local government regulations covering the transport and disposal of hazardous wastes</li> <li>• relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• relevant state or territory legislation and regulations such as those relating to: <ul style="list-style-type: none"> <li>• firearms usage</li> <li>• fisheries</li> <li>• prevention of cruelty to animals</li> <li>• quarantine</li> <li>• the practice of veterinary surgery</li> <li>• the administration and storage of therapeutic and controlled substances</li> <li>• wildlife.</li> </ul> </li> </ul>
<i>Animal ethics and welfare</i> requirements include:	<ul style="list-style-type: none"> <li>• adhering to the responsible care and use of animals by providing for its needs in a</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>reasonable way:</p> <ul style="list-style-type: none"> <li>• adequate food and water</li> <li>• appropriate accommodation or living conditions</li> <li>• handling animals humanely</li> <li>• the display of normal behavioural patterns</li> <li>• treatment of disease and injury</li> <li>• providing standards for animal care and use that: <ul style="list-style-type: none"> <li>• achieve a reasonable balance between the welfare of animals and the interests of people whose livelihood is dependent on animals</li> <li>• allow for the effect of advancements in scientific knowledge about animal biology and changes in community expectations about practices involving animals</li> <li>• protect animals from unjustifiable, unnecessary, or unreasonable pain (e.g. cruelty)</li> </ul> </li> </ul>
<i>Containment and exclusion</i> sites include:	<ul style="list-style-type: none"> <li>• containment site is the physical location where the organism is being controlled and confined</li> <li>• exclusion site is the physical location from which organisms are to be excluded: <ul style="list-style-type: none"> <li>• institution premises or parts of the premises</li> <li>• isolation areas or sick bays</li> <li>• laboratories</li> <li>• research animal holding or breeding facilities</li> <li>• whole farms or parts of a farm.</li> </ul> </li> </ul>
<i>Containment and exclusion</i> may apply to:	<ul style="list-style-type: none"> <li>• genetically modified organisms</li> <li>• gnotobiotic</li> <li>• infectious microbiological organisms</li> <li>• physical</li> <li>• specific pathogen free.</li> </ul>
<i>Institute standard operating procedures</i> may include:	<ul style="list-style-type: none"> <li>• AS/NZ 2243.3:2002: Safety in laboratories - Microbiological aspects and containment facilities</li> <li>• institution's quality assurance manual and procedures: <ul style="list-style-type: none"> <li>• biosecurity</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• OHS</li> <li>• recycling and re-use guidelines</li> <li>• waste disposal</li> <li>• product labels and manufacturers specifications, including material safety data sheets (MSDS)</li> <li>• project objectives and production schedules</li> <li>• relevant state and territory legislation and regulations relating to the practice of veterinary science, quarantine, animal welfare and research</li> <li>• requirements of the Office of the Gene Technology Regulator in line with the Federal Gene Technology Act</li> <li>• work and routine maintenance plans.</li> </ul>
<i>Records</i> to be kept may include:	<ul style="list-style-type: none"> <li>• breeding program records</li> <li>• genetic constitution</li> <li>• infection control records</li> <li>• health status</li> <li>• environmental variables</li> <li>• fate of animals</li> <li>• staff training and rosters</li> <li>• monitoring animal health and wellbeing and other species-specific records.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal technology
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMATE502A Manage and maintain the health of research animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes of managing the health of animals in a research environment according to the institution's standard operating procedures and relevant codes of practice.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to a senior or managerial level. It requires the ability to work independently and as part of a team including other staff, researchers and veterinarians. All work practices must be undertaken in accordance with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes and the institution's standard operating procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Monitor the health status of laboratory animals	<p>1.1. <b><i>Standard operating procedures</i></b> to monitor the health of laboratory <b><i>animals</i></b> for signs of disease are developed in conjunction with others.</p> <p>1.2. The institution's standard operating procedures, including <b><i>occupational health and safety (OHS)</i></b>, requirements are followed when monitoring the health of laboratory animals.</p>
2. Investigate and recognise disease processes in research	2.1. Develop standard operating procedures to investigate and recognise <b><i>diseases</i></b> in laboratory animals.

ELEMENT	PERFORMANCE CRITERIA
animals	<p>2.2. Follow institution's standard operating procedures to investigate and recognise diseases in laboratory animals.</p> <p>2.3. <i>Signs</i> of ill health, sickness behaviours and pain are recognised and reported to appropriate staff.</p> <p>2.4. Lesions are recognised clinically and during post-mortem examinations, and are recorded against health status of animals.</p> <p>2.5. Post-mortem changes due to deterioration in tissues and organs are recognised.</p> <p>2.6. Organisms detected during testing procedures on biological samples taken from animals and their environments are <i>classified</i> as pathogenic or potentially pathogenic.</p>
3. Treat, prevent and control disease in laboratory animals	<p>3.1. Standard operating procedures to <i>treat</i>, prevent and control disease in laboratory animals are developed in conjunction with others.</p> <p>3.2. The institution's standard operating procedures are followed when treating, preventing and controlling a range of diseases in laboratory animals.</p> <p>3.3. <i>Strategies</i> are developed and implemented to investigate, treat, prevent, control and monitor disease.</p>
4. Identify the way in which disease processes may influence the design and outcome of experiments in laboratory animals	<p>4.1. Effects of disease processes in laboratory animals are identified and documented.</p> <p>4.2. Effects on laboratory animals of <i>experimental techniques</i> are identified and documented.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply Animal Ethics Committee (AEC) classification system to determine procedures that require approval
- collect and perform basic tests on urine, blood and faeces

## REQUIRED SKILLS AND KNOWLEDGE

- collect ante-mortem and post-mortem samples
- comply with animal welfare and ethical standards in the humane handling of animals, administration of substances, collection of samples and documenting of activities
- ensure correct usage of equipment, materials and machinery in accordance with manufacturers' specifications
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor compliance with animal welfare and ethics regulations and workplace safe operating procedures
- observe, document and report findings on animal health status and behaviour traits using workplace protocols and procedures
- organise and participate in regular team meetings with other staff, researchers and veterinarians
- prepare and maintain appropriate records, including animal care and ethics register using relevant institutional electronic and/or manual systems
- research, develop and communicate the institution's standard operating procedures to monitor the health of laboratory animals, recognise diseases, and implement treatment, prevention or control strategies
- use bibliographic databases to locate relevant scientific and technical material
- literacy skills to read, interpret and apply institutional policies and procedures, including OHS, infection control, containment and exclusion and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from research group team members, senior or more experienced staff or other relevant persons
- numeracy skills to estimate, calculate and record routine and more complex workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available information and resources and prioritise daily tasks
- verify precautions in application or administration of treatments or services.

### Required knowledge

- anatomical and physiological structures and functions related to the health and wellbeing of commonly held animals
- ante-mortem and post-mortem changes in animals
- biohazards in the workplace of significance to animals and humans
- industry terminology used to describe administration of substances and sampling

## REQUIRED SKILLS AND KNOWLEDGE

- techniques and other animal technology workplace practices
- industry terminology used to identify animals, describe their behaviour and diseases
- methodology and format of the institution's standard operating procedures
- microbiology
- nutritional and behavioural disorders
- organisational policies and safe work procedures, including OHS and emergency procedures
- parameters of normal and abnormal behaviour in animals, including signs of a healthy animal, signs of an animal in pain or distress in commonly held species
- protocols, legal and ethical considerations in establishing animal care procedures and policies and gaining ethics committee approval
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare and research
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe animal handling techniques, including approved handling methods during the administration of substances and collection of samples
- sources of relevant scientific and technical literature
- tissue and fluid sample types and methods
- types of disease vectors
- types of infectious and non-infectious diseases
- types of infectious agents (e.g. bacteria, virus, protozoa and parasites) and non-infectious agents (e.g. cancer, environmental, accident or diet)
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• develop and implement standard operating procedures to manage and maintain the health of research animals</li> <li>• work independently and as part of a team to observe animals, monitor their health, sickness behaviours and pain and to report abnormalities</li> <li>• assist in the investigation of disease processes and act to treat, prevent, control and monitor disease</li> <li>• identify and document the impact of disease processes on a research program.</li> </ul> <p>The skills and knowledge required to manage and maintain the health of research animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal technology research facility or an environment that reproduces normal work conditions and has a scientific establishment licence and access to an approved AEC.</p> <p>There must be access to a range of research animals and the relevant information, materials and documentation to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>evidence of candidate's application of practical tasks</p> <ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Standard operating procedures</i></b> for monitoring research animal health may be developed:</p>	<ul style="list-style-type: none"> <li>• in conjunction with other staff, in particular veterinarians and staff involved in research programs</li> <li>• in some institutions the responsibility to develop safe operating procedures lies with the veterinarian with other staff assisting</li> <li>• as a team task with all involved being consulted.</li> </ul>
<p>Subject to facility requirements <b><i>animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• rabbits</li> <li>• rats</li> <li>• on some occasions animal species may include:               <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul> </li> </ul>
<i>OHS</i> risks associated with animal technician procedures include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<i>Diseases</i> that may occur in research animals include:	<ul style="list-style-type: none"> <li>• common infectious diseases:               <ul style="list-style-type: none"> <li>• bacterial</li> <li>• fungal</li> <li>• parasitic</li> <li>• prions</li> <li>• protozoa</li> <li>• viral</li> </ul> </li> <li>• common non-infectious diseases:               <ul style="list-style-type: none"> <li>• congenital</li> <li>• degenerative</li> <li>• dietary</li> <li>• genetic</li> <li>• neoplastic</li> <li>• toxic</li> <li>• traumatic.</li> </ul> </li> </ul>
<i>Signs</i> that may indicate that an	<ul style="list-style-type: none"> <li>• clinical signs:</li> </ul>

<b>RANGE STATEMENT</b>	
animal is unwell may include:	<ul style="list-style-type: none"> <li>• aggression</li> <li>• change in normal appearance</li> <li>• changes in temperature</li> <li>• changes to skin, fur or hair</li> <li>• decreased fertility</li> <li>• depression</li> <li>• increased or decreased mobility</li> <li>• isolation from others</li> <li>• lack of grooming</li> <li>• loss of appetite</li> <li>• signs of injury: <ul style="list-style-type: none"> <li>• blood</li> <li>• diarrhoea</li> <li>• pus</li> <li>• vomitus.</li> </ul> </li> </ul>
<i>Classifying</i> organisms found in biological samples may require:	<ul style="list-style-type: none"> <li>• investigation using: <ul style="list-style-type: none"> <li>• clinical advice</li> <li>• the internet</li> <li>• reference texts.</li> </ul> </li> </ul>
Requirements for <i>treating</i> animals may include:	<ul style="list-style-type: none"> <li>• relevant medication: <ul style="list-style-type: none"> <li>• parasite treatment</li> <li>• prescription drugs</li> <li>• vaccinations</li> </ul> </li> <li>• seeking veterinary assistance when developing a health-monitoring program.</li> </ul>
<i>Strategies</i> might be developed:	<ul style="list-style-type: none"> <li>• in consultation with other staff, including veterinarians and researchers</li> <li>• to include minimising the adverse effects that interactions of host and pathogenic agents and the environment may have on animal health</li> <li>• using scientific literature.</li> </ul>
<i>Experimental techniques</i> may include:	<ul style="list-style-type: none"> <li>• carcinogenic agents</li> <li>• radiation</li> <li>• radioisotopes</li> <li>• surgical procedures.</li> </ul>



### Unit Sector(s)

Unit sector	Animal technology
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMATE503A Carry out post-mortem examination of a research animal

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of conducting a post-mortem examination of a research animal for scientific purposes.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit has been specifically developed for animal technicians working with and caring for animals (all live non-human vertebrates) used within scientific establishments for scientific purposes and teaching. Work is likely to be performed independently according to the institution's standard operating procedures but may also be undertaken as part of a team that includes other staff, researchers, veterinarians and specialist analysts. All work practices must be undertaken in accordance with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes and the institution's standard operating procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and</p>
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	<p>discomfort is minimised.</p> <p><i>Note: Scientific purposes refers to 'all those activities that require approval from an Animal Ethics Committee (AEC) and are performed to acquire, develop or demonstrate knowledge of techniques in any scientific discipline, including activities for the purposes of teaching, field trips, environmental studies, research, diagnosis, product testing and the production of biological products'.</i></p> <p><i>Note: This unit does not cover the analysis and/or diagnosis of preliminary information or samples taken during the post-mortem.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent</p>
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	with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to conduct the post-mortem examination	<p>1.1. The <i>site for the post-mortem</i> is selected and prepared.</p> <p>1.2. Containment issues are identified and appropriate action is taken.</p> <p>1.3. <i>Correct clothing, equipment and resources</i> are obtained and prepared for use.</p> <p>1.4. The <i>animal</i> to be examined is moved to the post-mortem area using appropriate manual lifting techniques and/or equipment.</p> <p>1.5. Death of the animal is confirmed by checking its <i>vital signs</i>.</p> <p>1.6. All relevant <i>preliminary information</i> about the animal to be examined is obtained and collated.</p> <p>1.7. <i>Abnormal characteristics</i> that may indicate the presence of notifiable and potentially hazardous conditions or diseases are identified and appropriate action is taken.</p> <p>1.8. <i>Occupational health and safety (OHS)</i> hazards associated with the procedure are identified and appropriate action is taken to protect self and others.</p> <p>1.9. <i>Expert assistance</i> is sought as appropriate.</p>
2. Carry out the post-mortem examination	<p>2.1. External assessment of the animal is carried out and outward signs of abnormalities or injury are noted.</p> <p>2.2. Animal is dissected using appropriate techniques and equipment to avoid cutting into organs or stomach cavity.</p> <p>2.3. Nominated organs, tissues and structures are examined.</p> <p>2.4. Samples of organs, other tissues and fluid samples are taken, where appropriate, and prepared in accordance with institutional and laboratory requirements.</p>
3. Complete the post-mortem examination	<p>3.1. Carcass is disposed of using appropriate equipment in accordance with institutional quarantine requirements and other procedures.</p> <p>3.2. Correctly labelled and packaged samples are sent for</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>analysis.</p> <p>3.3.All information about the animal examined and the records of observations made during the post-mortem are collated and forwarded to the relevant persons for analysis and diagnosis</p> <p>3.4.Post mortem area and equipment used are cleaned and disinfected.</p> <p>3.5.<i>Personal biosecurity clean-up</i> is completed in accordance with the institution's policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate solutions, dilutions, percentages, concentrations, proportions, ratios, molarity and weights and measures conversions
- collect, prepare and label samples according to post-mortem techniques and workplace protocols
- evaluate sample suitability and viability in line with project protocols or workplace standards
- identify common indicators of the presence of disease and infection processes visually
- identify potential hazards to self and others (including animals) in conducting post-mortem examinations and prepare risk management plans
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare and use equipment and materials correctly in accordance with manufacturers' specifications
- prepare and maintain appropriate records, including animal care and ethics register using relevant institutional electronic and/or manual systems
- use chemicals and cleaning agents in accordance with state or territory legislation and organisational policies and procedures
- literacy skills to read, interpret and apply facility policies and procedures, including OHS, infection control, containment and exclusion and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the

## REQUIRED SKILLS AND KNOWLEDGE

organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from research group team members, senior or more experienced staff or other relevant persons

- numeracy skills to estimate, calculate and record routine and more complex workplace measures
- problem-solving skills to use available information and resources and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- animal biology, anatomy and physiology of the range of species in the institution's research program, including the position, features and appearance of major organs in healthy animals of the species being examined
- anatomical and physiological terminology, and glossary of terms and nomenclature related to the species being examined
- animal care and ethics protocols related to the conduct of post-mortems
- biosecurity issues (for animals and humans) relating to the collection of samples from animals
- classification system used to categorise animal care and treatment by AECs
- industry terminology used to describe and document findings in post-mortem
- methods and equipment used to collect and prepare tissue and fluid samples for transport to testing area
- organisational policies and safe work procedures, including OHS and emergency procedures
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS, animal welfare, waste disposal and animal research practices
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- requirements for the correct preparation, labeling and packaging of biological and potentially hazardous samples
- sequence of actions in conducting a post-mortem
- specific post-mortem clean-up techniques, equipment and materials
- terminology used to describe findings in post mortem
- type of information that can be provided in pathology tests
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• collect and obtain information about animals to be examined</li> <li>• carry out external and internal assessments of animals and take samples and tissues as required in accordance with OHS and organisation policies and procedures</li> <li>• clean and disinfect equipment, materials and area upon completion of post-mortem examination</li> <li>• handle, move and dispose of animal carcasses</li> <li>• prepare a brief for the veterinarian and/or supervisor to enable an accurate analysis and/or diagnosis of the cause of death and/or to provide data required for the research program.</li> </ul> <p>The skills and knowledge required to carry out post-mortem examination of research animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately be assessed in an animal research facility or an environment that reproduces normal work conditions that has a scientific establishment licence and access to an approved AEC.</p> <p>There must also be access to a range of dead research animals and the relevant information, materials and</p>

<b>EVIDENCE GUIDE</b>	
	documentation to enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. post-mortem brief)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and



<b>RANGE STATEMENT</b>	
regional contexts) may also be included.	
Considerations for a <i>site suitable for post-mortem</i> may include:	<ul style="list-style-type: none"> <li>• a suitable laboratory</li> <li>• a post-mortem site that: <ul style="list-style-type: none"> <li>• can be cleaned both before and after the examination</li> <li>• is located away from other animals to avoid stress to live animals</li> </ul> </li> <li>• blood and fluids not being able to contaminate surrounding areas or facilities.</li> </ul>
<i>Correct clothing, equipment and resources</i> may include:	<ul style="list-style-type: none"> <li>• an autopsy kit containing: <ul style="list-style-type: none"> <li>• a knife</li> <li>• a steel or sharpening stone</li> <li>• bucket, scrubbing brush and disinfectant</li> <li>• plastic bags or containers to collect specimens</li> <li>• plastic or rubber disposable gloves</li> <li>• scissors and forceps or tweezers</li> <li>• swabs</li> </ul> </li> <li>• clothing: <ul style="list-style-type: none"> <li>• surgical gowns, caps, masks, boots and gloves</li> </ul> </li> <li>• other equipment: <ul style="list-style-type: none"> <li>• optical aids</li> <li>• pen and notebook</li> <li>• wheelbarrow or trolley for disposal of the carcass.</li> </ul> </li> </ul>
<i>Animals</i> that may be included are:	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats</li> </ul> </li> <li>• on some occasions animal species may include: <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul>
<b>Vitals signs</b> to be checked will include:	<ul style="list-style-type: none"> <li>• pulse, respiration and papillary light reflex.</li> </ul>
<b>Preliminary information</b> that should be collected before conducting the post-mortem examination should include:	<ul style="list-style-type: none"> <li>• date of death or the date animal was found dead</li> <li>• identification number and age of animal</li> <li>• location of animal (e.g. pen, shed or paddock number)</li> <li>• weight</li> <li>• body condition</li> <li>• previous health problems</li> <li>• period of ill health if any (e.g. when first noted as being sick or off feed)</li> <li>• health of other animals in the same institution</li> <li>• specific information relating to the experimental program</li> <li>• other details required by the AEC and institutional policies and procedures.</li> </ul>
<b>Abnormal characteristics</b> to be considered may include:	<ul style="list-style-type: none"> <li>• abnormal characteristics might be anything that cannot be diagnosed or explained from previous experience</li> <li>• where abnormal characteristics appear to be present, they should be referred immediately to a veterinary laboratory.</li> </ul>
<b>OHS hazards</b> associated with animal technician procedures include:	<ul style="list-style-type: none"> <li>• animal bites, kicks or scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of anaesthetic agents, chemicals and scavenging systems</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<b>Expert assistance</b> that may be needed includes:	<ul style="list-style-type: none"> <li>• a veterinarian where unusual symptoms are detected:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• the presence of notifiable and potentially hazardous conditions or diseases, such as anthrax or other zoonoses</li> <li>• large or small organs</li> <li>• excessive fluid and swellings.</li> </ul>
<i>Personal biosecurity clean-up</i> may include:	<ul style="list-style-type: none"> <li>• clothing changed and placed in appropriate bin for laundering</li> <li>• disposable gloves are disinfected before being disposed</li> <li>• footwear disinfected if appropriate</li> <li>• hands thoroughly washed and dried.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal technology
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMATE504A Administer anaesthesia and perform surgery on animals for scientific purposes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of preparing personnel, equipment, animals and the facility for anaesthesia and surgical procedures for scientific purposes.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit has been specifically developed for animal technicians working with and caring for animals (all live non-human vertebrates) used within scientific establishments for scientific purposes and teaching. Animal technicians administering anaesthesia and performing basic surgery on animals operate under and must comply with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, relevant state/territory legislative requirements as well as protocols, policies and procedures set down by the institution's Animal Ethics Committee (AEC).</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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	<p><i>Note: Scientific purposes refers to 'all those activities that require approval from an Animal Ethics Committee (AEC) and are performed to acquire, develop or demonstrate knowledge of techniques in any scientific discipline, including activities for the purposes of teaching, field trips, environmental studies, research, diagnosis, product testing and the production of biological products'.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Prepare facilities, equipment and personnel</p>	<p>1.1. Anaesthetic and surgical facilities are prepared for sterile surgery.</p> <p>1.2. <b>Anaesthetic agents, equipment and supplies</b> are selected and prepared.</p> <p>1.3. <b>Surgical instruments and equipment</b> are selected and prepared in accordance with surgical procedures.</p> <p>1.4. <b>Aseptic environment</b> is maintained at all times to ensure sterile surgery.</p> <p>1.5. Safe work practices, including <b>occupational health and safety (OHS)</b>, are followed in accordance with institutional policies and procedures.</p> <p>1.6. Institutional protocols, policies and procedures as set down by the AEC and <b>relevant legislative requirements</b> are complied with at all times.</p>
<p>2. Prepare animals for anaesthesia and surgery for scientific purposes</p>	<p>2.1. <b>Animals</b> are handled and restrained safely and humanely in preparation for anaesthesia and surgical procedures in accordance with institutional policies and procedures.</p> <p>2.2. <b>Animals are prepared</b> for anaesthesia and surgery.</p> <p>2.3. <b>Pre-anaesthetic and pre-operative medication</b> is administered to animals as required.</p>
<p>3. Induce, maintain and monitor anaesthesia in animals</p>	<p>3.1. <b>Pre-anaesthetic and pre-operative evaluations</b> of animals are performed, including indications for the use of tranquillisers, sedatives, analgesics and antibiotics in accordance with institutional policies and procedures.</p> <p>3.2. <b>Animals are induced</b> in anaesthesia.</p> <p>3.3. Animals are monitored and maintained during anaesthetic and/or surgical procedures.</p> <p>3.4. Variations in the physiological parameters and signs of anaesthesia in animals are recorded and interpreted.</p> <p>3.5. Institutional protocols for anaesthetic procedures on animals and relevant legislative requirements are complied with.</p> <p>3.6. <b>Anaesthetic emergency</b> procedures are followed in accordance with institutional policies and procedures.</p>
<p>4. Identify and handle a range of body structures, tissues</p>	<p>4.1. Integument and facial structures are located, identified and handled for surgical procedures.</p> <p>4.2. Musculoskeletal structures are located, identified and</p>

ELEMENT	PERFORMANCE CRITERIA
and organs	<p>handled for surgical procedures.</p> <p>4.3.Digestive system structures and organs are located, identified and handled for surgical procedures.</p> <p>4.4.Reproductive and organs and structures are located, identified and handled for surgical procedures.</p> <p>4.5.Other structures and organs relevant to basic animal technology surgical procedures are located, identified and handled for surgical procedures.</p>
5. Perform basic surgery on animals	<p>5.1.Surgical instruments are used correctly and safely.</p> <p>5.2.Surgical equipment is operated correctly.</p> <p>5.3.Surgical materials and medications are applied to animals as required and in accordance with AEC approval.</p> <p>5.4.<b>Basic surgical procedures</b> are performed in accordance with research, institution and AEC protocols and relevant legislative requirements.</p> <p>5.5.Surgical wounds are sutured as required by surgical procedures.</p> <p>5.6.Post-operative anaesthesia procedures are completed in accordance with institutional policies.</p>
6. Provide post-anaesthetic and post-operative care for animals	<p>6.1.Analgesics and other supportive therapies are used to manage animals <b>post-anaesthetically and post-operatively</b>.</p> <p>6.2.Fluid therapy, medication, dressings, bandages and oxygen are applied to animals as required.</p> <p>6.3.Surgical wounds are monitored for signs of healing, inflammation or infection.</p> <p>6.4.Animals are monitored post-anaesthetically and post-operatively and <b>abnormalities</b> are responded to appropriately.</p> <p>6.5.Post-anaesthetic and post-operative emergencies are recognised and responded to immediately.</p> <p>6.6.Monitoring records are maintained in accordance with research and AEC requirements.</p>
7. Maintain facilities and equipment	<p>7.1.Facilities and equipment are cleaned and stored in accordance with institutional policies and procedures.</p> <p>7.2.Routine maintenance is carried out on anaesthetic and surgical equipment as required in accordance with manufacturers' requirements</p> <p>7.3.Anaesthetic and surgical facilities are maintained in accordance with institutional policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate dosage and administer drugs, including anaesthetic and monitor response in accordance with project protocols and workplace standards
- check animals' physical conditions and vital signs and monitor for signs of progress or deterioration in condition or health of animals pre-, during and post-surgery
- comply with animal welfare and ethical standards in the humane handling of animals, administration of treatments, collection of samples and documenting of activities
- identify and locate animal structures, tissues and organs relevant to performance and monitoring of basic surgical procedures and induction of anaesthesia
- maintain the highest standards of hygiene and infection at all times to reduce the risk of infection and cross-infection
- measure, interpret and record animal weight and other relevant data required in the procedures associated with the administration of anaesthesia and related medications
- interpret and apply relevant legislation, regulations, codes of conduct, AEC procedures and standard operating procedures
- prepare and maintain appropriate records, including animal care and ethics register using relevant institutional electronic and/or manual systems
- use chemicals and cleaning agents in accordance with state or territory legislation and organisational policies and procedures
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read, interpret and apply facility policies and procedures, including OHS, infection control, containment and exclusion and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from research group team members, senior or more experienced staff or other relevant persons
- numeracy skills to estimate, calculate and record routine and more complex workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available information and resources and prioritise



## REQUIRED SKILLS AND KNOWLEDGE

### daily tasks

- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- verify dose rates and identify precautions in application or administration of anaesthetic and other medications.

### Required knowledge

- anatomical and physiological terminology, and glossary of terms and nomenclature related to the species being examined
- anatomical structures, tissues and organs relevant to basic surgical procedures and the induction and monitoring of animals under anaesthetic
- aseptic techniques
- biosecurity issues (for animals and humans) relating to conducting surgical procedures
- characteristics of healthy, sick or distressed animals including indicators of normal and undesirable responses to anaesthetic and related medications
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- methods and equipment used to monitor animals during anaesthesia and surgical procedures
- information that should be documented regarding the administration of anaesthetic and related substances and application of surgical procedures
- methods used to measure, interpret and record objective measure of animal health
- physiological features of animals related to the application of anaesthesia and related medications and the response to surgical procedures
- principles of animal welfare and ethics
- principles of managing an anaesthetic overdose
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS, waste disposal, animal welfare and research
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- surgical procedures and techniques used in animal technology facilities
- safe animal handling techniques, including approved handling methods during the administration of substances and surgical procedures
- terminology used to describe anaesthetic processes, equipment, materials and physiological responses
- types of information that has to be reported and recorded in relation to anaesthesia and surgical procedures
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
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and cleaning equipment and materials.
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## Evidence Guide

<b>EVIDENCE GUIDE</b>
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The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>Overview of assessment</b>	
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<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare facilities, personnel and equipment, including anaesthetic equipment, anaesthetic agents and surgical instruments and equipment</li> <li>• prepare animal and carry out pre-anaesthetic and pre-operative evaluation</li> <li>• comply with institutional protocols, policies and procedures, AEC and relevant legislative requirements</li> <li>• induce, monitor and maintain an animal in anaesthesia</li> <li>• perform aseptic and basic surgical procedures</li> <li>• recognise and respond to emergencies during and after anaesthesia and surgery</li> <li>• provide post-anaesthetic and post-operative care</li> <li>• maintain appropriate and accurate records.</li> </ul> <p>The skills and knowledge required to administer anaesthesia and perform surgery on animals for scientific purposes must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
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<b>Context of and specific resources for assessment</b>	Assessment of this unit is to be practical in nature and will be most appropriately be assessed in an animal research facility or an environment that reproduces
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<b>EVIDENCE GUIDE</b>	
	<p>normal work conditions that has a scientific establishment licence and access to an approved AEC.</p> <p>There must also be access to the relevant information, materials and documentation to enable one to demonstrate competence. This would include access to research animals, anaesthetic equipment, anaesthetic agents, surgical instruments and equipment as required for the anaesthetic and surgical procedures.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>Anaesthesia</i></b> refers to:	<ul style="list-style-type: none"> <li>• the use of a drug administered for medical or surgical purposes that induces total loss of sensation.</li> </ul>
<b><i>Anaesthetic agents, equipment and supplies</i></b> may include:	<ul style="list-style-type: none"> <li>• anaesthesia agents:             <ul style="list-style-type: none"> <li>• isoflurane</li> <li>• ketamine</li> <li>• ketamine combination anaesthesia</li> <li>• methoxyflurane</li> </ul> </li> <li>• anaesthetic equipment and supplies:             <ul style="list-style-type: none"> <li>• anaesthetic machines and trolleys</li> <li>• filters</li> <li>• gas cylinders</li> <li>• incubators</li> <li>• masks</li> <li>• re-breathing bags</li> <li>• soda lime and canisters</li> <li>• scavenging systems</li> <li>• tubes</li> <li>• vaporisers</li> </ul> </li> <li>• relevant state or territory drugs and poisons legislation must be complied with.</li> </ul>
<b><i>Surgical instruments and equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• forceps</li> <li>• needles</li> <li>• needle holders</li> <li>• resection clamps</li> <li>• scalpels</li> <li>• scissors</li> <li>• sutures.</li> </ul>
Maintaining an <b><i>aseptic environment</i></b> includes:	<ul style="list-style-type: none"> <li>• positive pressure airflow</li> <li>• sterile drapes, gloves, gowns and equipment</li> <li>• swabs of betadine or alcohol.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>OHS</i></b> risks associated with animal technician procedures include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches or crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• scalds and burns from sterilising and cleaning equipment</li> <li>• zoonoses.</li> </ul>
<b><i>Relative legislative requirements</i></b> include:	<ul style="list-style-type: none"> <li>• Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• related state or territory legislation for: <ul style="list-style-type: none"> <li>• animal welfare</li> <li>• protection of cruelty to animals</li> <li>• animal protection</li> <li>• animal research</li> </ul> </li> <li>• relevant state or territory drugs and poisons legislation.</li> </ul>
Subject to research requirements <b><i>animals</i></b> may include:	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats</li> </ul> </li> <li>• on some occasions animal species may include: <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul> </li> </ul>
<b><i>Preparing an animal</i></b> may include:	<ul style="list-style-type: none"> <li>• applying restraining devices: <ul style="list-style-type: none"> <li>• halters or hobbles</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• head collars</li> <li>• muzzles</li> <li>• rearing bits</li> <li>• aseptic preparation of injection sites</li> <li>• clipping</li> <li>• preoperative skin preparation routines</li> <li>• further preparation may extend to:               <ul style="list-style-type: none"> <li>• administration of necessary premedication</li> <li>• intubation and the insertion of intravenous or urinary catheters</li> <li>• preparation of equipment and materials for intravenous infusions.</li> </ul> </li> </ul>
<i>Pre-anaesthetic and pre-operative medication</i> may include:	<ul style="list-style-type: none"> <li>• the use of:               <ul style="list-style-type: none"> <li>• analgesics</li> <li>• antibiotics</li> <li>• sedatives</li> <li>• tranquilisers.</li> </ul> </li> </ul>
<i>Pre-anaesthetic and pre-operative evaluations</i> may include:	<ul style="list-style-type: none"> <li>• animal health checks:               <ul style="list-style-type: none"> <li>• general health and condition</li> <li>• heart rate</li> <li>• respiration</li> <li>• temperature</li> <li>• weight.</li> </ul> </li> </ul>
Methods used to <i>induce</i> an animal in anaesthesia may include:	<ul style="list-style-type: none"> <li>• gaseous and injectable preparations:               <ul style="list-style-type: none"> <li>• intermittent positive pressure ventilation.</li> </ul> </li> </ul>
Possible <i>anaesthetic emergencies</i> may include:	<ul style="list-style-type: none"> <li>• an animal going into:               <ul style="list-style-type: none"> <li>• hypothermia or hyperthermia</li> <li>• respiratory distress</li> <li>• shock.</li> </ul> </li> </ul>
<i>Basic surgical procedures</i> that may be performed on common laboratory animals include:	<ul style="list-style-type: none"> <li>• embryo insertion</li> <li>• implantation of mini-pumps or catheters</li> <li>• ovarian transfer</li> <li>• vasectomy.</li> </ul>
<i>Post-operative anaesthesia procedures</i> may include:	<ul style="list-style-type: none"> <li>• extubation</li> <li>• continued monitoring of vital signs</li> <li>• positioning of patient recumbency in consideration of recovery phase and surgical site</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• adjustment of intravenous fluid therapy rates.</li> </ul>
<p><i>Post-operative abnormalities</i> that may be encountered include:</p>	<ul style="list-style-type: none"> <li>• abnormalities in wounds and surgical sites:                             <ul style="list-style-type: none"> <li>• haemorrhage or other exudation</li> <li>• swelling</li> <li>• self-trauma</li> </ul> </li> <li>• other abnormalities:                             <ul style="list-style-type: none"> <li>• abnormal distension</li> <li>• cold extremities</li> <li>• delayed recovery</li> <li>• increased heart rate</li> <li>• increased respiratory rate</li> <li>• low body temperature</li> <li>• pale mucous membranes.</li> </ul> </li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal technology
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMATE505A Carry out advanced breeding procedures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of establishing breeding programs for multiple generation production lines, selecting and preparing animals for breeding and implementing breeding and post-mating procedures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit has been specifically developed for animal technicians working in research and teaching facilities that are required to breed animals for scientific purposes. Work is performed in accordance with the institution's breeding program and standard operating procedures and requires a sound effective working knowledge of genetics. Animal technicians must comply with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, relevant state/territory legislative requirements as well as protocols, policies and procedures set down by the Animal Ethics Committee (AEC) within their institution.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and</p>
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	<p>discomfort is minimised.</p> <p><i>Note: Scientific purposes refers to 'all those activities that require approval from an Animal Ethics Committee (AEC) and are performed to acquire, develop or demonstrate knowledge of techniques in any scientific discipline, including activities for the purposes of teaching, field trips, environmental studies, research, diagnosis, product testing and the production of biological products'.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish breeding programs for production lines	<p>1.1. Institutional <i>policies, procedures</i> and protocols as set down by the AEC and <i>relevant legislative requirements</i> including, <i>occupational health and safety (OHS)</i>, are complied with at all times.</p> <p>1.2. <i>Genetic</i> diversity principles are identified and related to <i>breeding program</i> requirements.</p> <p>1.3. Differences between knock in, knock out, transgenic and genetic drift lines are defined.</p> <p>1.4. Breeding programs for multiple generation production lines are designed and established.</p> <p>1.5. Data collection record systems are confirmed and/or designed and developed if required.</p> <p>1.6. Institutional standard operating procedures for breeding programs are reviewed and modified if required.</p>
2. Select animals and prepare for breeding	<p>2.1. Breeding program for specific production line requirements and production schedules are identified and confirmed.</p> <p>2.2. <i>Animals</i> for mating are selected and monitored to determine the current stage of their reproductive cycle.</p> <p>2.3. Females are monitored and identification for <i>stages of oestrus cycle</i> and those that are ready for mating are identified.</p> <p>2.4. Animals selected for mating are placed in an <i>appropriate environment</i>.</p>
3. Implement breeding procedures	<p>3.1. Appropriate <i>mating systems and methods</i> are selected and applied in accordance with the breeding program.</p> <p>3.2. Animals are monitored during and after the mating period to determine whether mating has been successful.</p>
4. Perform post-mating procedures	<p>4.1. Animals are monitored for signs of hatching or parturition.</p> <p>4.2. Fostering arrangements or caesarean rederivations are planned as necessary.</p> <p>4.3. Quality of offspring is assessed in accordance with required quality parameters of the breeding program.</p> <p>4.4. Offspring are indentified, sexed and weaned in accordance with the breeding program.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>4.5. <i>Post-weaning management</i> is carried out in accordance with the breeding program.</p> <p>4.6. <i>Breeding records</i> are maintained according to the breeding program requirements and institutional policies and procedures.</p> <p>4.7. Breeding program outcomes are reviewed and modified for future production runs as required.</p>
5. Name and record animals	<p>5.1. Types of animals are <i>identified</i>.</p> <p>5.2. The correct genetic names of animals are established by gathering information and seeking guidance from the relevant nomenclature committee and scientists.</p> <p>5.3. Strain names are registered if appropriate.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply AEC classification system to determine procedures that require approval
- check animals' physical conditions and vital signs and monitor for signs of progress or deterioration in condition or health of animals
- employ safe and environmentally responsible organisational systems and procedures when handling animals, materials and equipment
- identify health, congenital reproductive and parturition problems in breeding animals and respond in compliance with animal welfare and workplace project protocols
- identify the sex, age and reproductive status of male and female animals
- interpret and establish a breeding program consisting of multiple generations
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare and maintain appropriate records relevant to breeding and technical procedures using relevant institutional electronic and/or manual systems
- prepare and use equipment and materials correctly and in accordance with manufacturers' specifications
- prepare facilities and appropriate environments for breeding animals, embryo development, hatching or parturition and nursing animals
- literacy skills to read, interpret and apply institution policies and procedures, including OHS, infection control, containment and exclusion and waste

## REQUIRED SKILLS AND KNOWLEDGE

management; critically analyse material and record information collected accurately and legibly

- oral communication skills/language to fulfil the job role as specified by the institution, including questioning, active listening, asking for clarification and consulting with or seeking advice from research group team members, senior or more experienced staff or other relevant persons
- numeracy skills to estimate, calculate and record routine and more complex workplace measures relative to the establishing and designing of breeding procedures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available information and resources and carry out breeding procedures
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological structures and functions related to animal reproductive health and wellbeing of commonly held animals
- anatomical and physiological terminology, and glossary of terms and nomenclature related to animal reproduction
- artificial insemination procedures, including cryopreservation techniques
- common diseases, ailments, injuries and other impacts on animal health and wellbeing and characteristics of healthy, sick or distressed animals
- common pedigrees
- effective knowledge of genetics including principles, common terminology and nomenclature
- functions and requirements of a breeding colony
- knockout and transgenic technology
- organisational policies and safe operating procedures, including OHS and emergency procedures
- oestrus cycles of a range of species, including representative polyoestrus, mono-oestrus and induced ovulation species
- principles of animal welfare and ethics
- principles of post-weaning management
- range of mating systems, behaviour and methods appropriate to the species
- recordkeeping requirements including types of information that needs to be kept on birthing and fostering processes
- relevant codes of practice, such as the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of

**REQUIRED SKILLS AND KNOWLEDGE**

veterinary science, OHS and animal welfare and research, including the Office of the Gene Technology Regulator and the National Health and Medical Research Council (NHMRC)

- reproductive cycles
- safe animal handling techniques, including approved handling methods during mating and breeding programs
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- establish breeding programs for multiple generation production lines in accordance with institutional policies and procedures, including AEC and legislative requirements
- select animals for breeding and apply appropriate breeding systems and mating methods and perform appropriate post-mating procedures in accordance with the breeding program and institutional standard operating procedures
- identify and record animal type and genetic and strain names where appropriate
- review, revise, maintain and update records in accordance with regulatory and project documentation requirements.

The skills and knowledge required to carry out advanced breeding procedures must be transferable to a range of work environments and contexts and include the ability

<b>EVIDENCE GUIDE</b>	
	to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal research facility or an environment that reproduces normal work conditions that has a scientific establishment licence and access to an approved AEC.</p> <p>There must be access to a range of research animals and the relevant information, materials and documentation to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• practical simulation exercises that reproduce normal breeding work-related conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p>Institutional <i>policies and procedures</i> may include:</p>	<ul style="list-style-type: none"> <li>• institution's quality assurance manual and procedures:             <ul style="list-style-type: none"> <li>• biosecurity</li> <li>• breeding processes</li> <li>• OHS</li> <li>• recycling and re-use guidelines</li> <li>• restraint, handling, euthanasing and disposal of animals</li> <li>• safe handling, storage and thawing of frozen genetic material</li> <li>• standard operating procedures</li> <li>• use, storage and transport of equipment and drugs used during procedures</li> <li>• waste disposal</li> </ul> </li> <li>• project objectives and production schedules.</li> </ul>
<p><i>Relative legislative requirements</i> may include:</p>	<ul style="list-style-type: none"> <li>• Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• Federal Gene Technology Act 2000</li> <li>• NHMRC guidelines</li> <li>• relevant state or territory legislation and regulations such as those relating to:             <ul style="list-style-type: none"> <li>• animal research</li> <li>• animal welfare</li> <li>• prevention of cruelty to animals</li> <li>• quarantine</li> <li>• the practice of veterinary surgery</li> <li>• the administration and storage of therapeutic and controlled substances.</li> </ul> </li> </ul>
<p><i>OHS</i> risks associated with animal</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks or scratches</li> <li>• biological hazardous waste and sharps disposal</li> </ul>

<b>RANGE STATEMENT</b>	
technician procedures include:	<ul style="list-style-type: none"> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<i>Genetics</i> may include:	<ul style="list-style-type: none"> <li>• genetic concepts: <ul style="list-style-type: none"> <li>• advanced punnet squares</li> <li>• allele</li> <li>• autosomes</li> <li>• cell differentiation and genetic integrity</li> <li>• creation of transgenic, knock in and knockout lines</li> <li>• chromosomes and inheritance</li> <li>• coefficient of inbreeding</li> <li>• defining the differences between knock in, knock out, transgenic and genetic drift</li> <li>• genotype</li> <li>• heterozygosity</li> <li>• homozygosity</li> <li>• locus</li> <li>• nomenclature</li> <li>• phenotype</li> <li>• polygenic</li> <li>• recessive and recombinant genes</li> <li>• segregation</li> <li>• sex-linked genes.</li> </ul> </li> </ul>
<i>Breeding program</i> may include:	<ul style="list-style-type: none"> <li>• information about: <ul style="list-style-type: none"> <li>• number of breeders required</li> <li>• selection criteria for breeders and retiring breeders</li> <li>• breeding system to be used: <ul style="list-style-type: none"> <li>• backcross</li> <li>• inbred</li> <li>• outbred</li> </ul> </li> <li>• mating system to be used</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• fostering requirements</li> <li>• identification system to be used</li> <li>• record systems to be used: <ul style="list-style-type: none"> <li>• books</li> <li>• cards</li> <li>• computer</li> </ul> </li> <li>• data to be collected about: <ul style="list-style-type: none"> <li>• parent information</li> <li>• generation development (e.g. litter numbers, numbers born and sex ratios)</li> <li>• sex and weaning rates.</li> </ul> </li> </ul>
Subject to research requirements <i>animals</i> may include:	<ul style="list-style-type: none"> <li>• on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats</li> </ul> </li> <li>• on some occasions animal species may include: <ul style="list-style-type: none"> <li>• amphibians, fish and reptiles</li> <li>• dogs and cats</li> <li>• fish</li> <li>• invertebrates</li> <li>• livestock (e.g. sheep, cattle and pigs)</li> <li>• native wildlife (e.g. marsupials and birds)</li> <li>• primates</li> <li>• poultry.</li> </ul> </li> <li>• animals may be housed in an experimental or teaching facility and typically, but not always, in a laboratory setting.</li> </ul>
<i>Stages of oestrus cycle</i> may include:	<ul style="list-style-type: none"> <li>• induced ovulation species</li> <li>• mono-oestrus</li> <li>• representative polyoestrus.</li> </ul>
<i>Appropriate environment</i> may consider:	<ul style="list-style-type: none"> <li>• the species involved</li> <li>• the specific requirements of the breeding program: <ul style="list-style-type: none"> <li>• day or night cycle</li> <li>• humidity</li> <li>• seasonal effects</li> <li>• special dietary requirements</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• temperature.</li> </ul>
<p><i>Mating systems and methods</i> may include:</p>	<ul style="list-style-type: none"> <li>• mating systems: <ul style="list-style-type: none"> <li>• breeding of mutant and transgenic strains</li> <li>• controlled outbreeding</li> <li>• cross breeding</li> <li>• hybrid breeding</li> <li>• inbreeding</li> </ul> </li> <li>• mating methods: <ul style="list-style-type: none"> <li>• artificial insemination</li> <li>• dominant mutant</li> <li>• hand mating</li> <li>• paired mating</li> <li>• stud mating</li> <li>• the harem system.</li> </ul> </li> </ul>
<p><i>Post-weaning management</i> may include:</p>	<ul style="list-style-type: none"> <li>• phenotype care and the selection of future breeding animals or research stock based on: <ul style="list-style-type: none"> <li>• genotyping</li> <li>• health or history</li> </ul> </li> <li>• supplement feeding.</li> </ul>
<p><i>Breeding records</i> should include:</p>	<ul style="list-style-type: none"> <li>• breeding history</li> <li>• parents information</li> <li>• date of birth</li> <li>• numbers born</li> <li>• stillborn</li> <li>• missing or found dead</li> <li>• sexes born</li> <li>• number weaned</li> <li>• strain, genotype and phenotype information.</li> </ul>
<p>Types of animals that may be <i>identified</i> include:</p>	<ul style="list-style-type: none"> <li>• chromosomal aberration</li> <li>• congenic</li> <li>• genetically modified</li> <li>• hybrid</li> <li>• inbred</li> <li>• recombinant.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal technology
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMATE507A Manage the parturition of transgenic mice or rats

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of stages of natural and caesarean births and management of transgenic mice or rat pups.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit has been specifically developed for animal technicians working in research and teaching facilities that require transgenic laboratory animals for scientific purposes where it may be necessary to monitor natural birth or perform caesarean sections and rear offspring for transgenic programs. Animal technicians performing surgery on animals operate under and must comply with the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, relevant state/territory legislative requirements as well as protocols, policies and procedures set down by the Animal Ethics Committee (AEC) within their institution.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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	<p><i>Note: Scientific purposes refers to 'all those activities that require approval from an Animal Ethics Committee (AEC) and are performed to acquire, develop or demonstrate knowledge of techniques in any scientific discipline, including activities for the purposes of teaching, field trips, environmental studies, research, diagnosis, product testing and the production of biological products'.</i></p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for procedures and maintain documentation	<p>1.1. Institutional <i>policies, procedures</i> and protocols as set down by the <i>AEC</i> and <i>relevant legislative requirements</i>, including <i>occupational health and safety (OHS)</i>, are complied with at all times</p> <p>1.2. Regulatory and project documentation requirements are identified.</p> <p>1.3. Project reproductive and <i>breeding program</i> objectives are verified.</p> <p>1.4. Records are revised, reviewed, maintained and updated in accordance with institutional policies and procedures.</p>
2. Monitor natural birth of transgenic offspring	<p>2.1. <i>Signs of parturition</i> are identified.</p> <p>2.2. Birth is monitored and decision is made to foster pups or leave with birth mother depending on project requirements and mother and offspring reactions.</p> <p>2.3. Mother and offspring are housed and monitored to minimise stress to animals.</p>
3. Perform caesarean procedures	<p>3.1. Need for caesarean section is justified and AEC approval verified.</p> <p>3.2. <i>Equipment</i>, including <i>personal protective equipment</i> and <i>medications</i>, are prepared.</p> <p>3.3. Female is euthanased by cervical dislocation or sedated and euthanased.</p> <p>3.4. Caesarean procedure is conducted.</p> <p>3.5. Pups are collected, identified, checked and monitored.</p> <p>3.6. Birth mother is euthanased (if not previously) and carcass disposed of in accordance with legislative requirements.</p>
4. Foster pups onto clean mother	<p>4.1. <i>Clean or dirty status</i> of the mother is verified and handling and treatment areas of each group are separated according to biosecurity requirements</p> <p>4.2. Foster mother is selected and <i>prepared</i> prior to caesarean surgery of birth mother.</p> <p>4.3. <i>Area for fostering</i> is selected and prepared to ensure minimal stress to foster mother and pups.</p> <p>4.4. Pups are allocated to foster mother and bonding monitored.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply animal care and ethics committee classification system to determine procedures that require approval
- calculate dosage, administer drugs, including anaesthetic, and monitor response in accordance with project protocols and workplace standards
- check animals' physical condition vital signs and monitor for signs of progress or deterioration in condition or health of animals
- employ safe and environmentally responsible organisational systems and procedures when handling animals, materials and equipment
- identify sex, age, reproductive and parturition status of male and female animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare and maintain appropriate records relevant to breeding and technical procedures using relevant institutional electronic and/or manual systems
- prepare and use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read, interpret and apply institution policies and procedures, including OHS, infection control, containment and exclusion and waste management; critically analyse material and record information collected accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the institution, including questioning, active listening, asking for clarification and consulting with or seeking advice from research group team members, senior or more experienced staff or other relevant persons
- numeracy skills to estimate, calculate and record routine and more complex workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available information and resources including recording information and prioritise daily tasks.
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features of mice and rats related to the reproductive system and parturition

## REQUIRED SKILLS AND KNOWLEDGE

- aseptic techniques
- biosecurity requirements for clean and dirty status handling and treatment areas
- common diseases, ailments, injuries and other impacts on animal health and wellbeing and characteristics of healthy, sick or distressed animals
- communication procedures and systems, and technology relevant to the institution and the individual's work responsibilities
- comprehensive understanding of genetics, including principles, common terminology and nomenclature
- equipment and drugs commonly used for euthanasia
- institutional policies and safe work procedures, including OHS and emergency procedures
- methods used to perform caesarean procedures in mice and rats
- mouse and rat breeding procedures and their species specific requirements
- principles of animal welfare and ethics
- relevant codes of practice, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare and research, including the Office of the Gene Technology Regulator
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- reproductive cycles
- techniques used to start the breathing process in pups
- techniques used to foster pups onto foster mothers
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of



<b>EVIDENCE GUIDE</b>	
	<p>this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare for procedures in accordance with institutional policies and procedures, including AEC and legislative requirements</li> <li>• monitor parturition stages of natural births and monitor pups</li> <li>• plan and conduct caesarean section on full-term pregnant mice or rats</li> <li>• foster pups onto clean mothers and monitor acceptance</li> <li>• review, revise, maintain and update records in accordance with regulatory and project documentation requirements.</li> </ul> <p>The skills and knowledge required to manage the parturition of transgenic mice or rats must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal research facility or an environment that reproduces normal work conditions that has a scientific establishment licence and access to an approved AEC.</p> <p>There must be access to a range of research animals and the relevant information, materials and documentation to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• practical simulation exercises that reproduce normal breeding work-related conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Institutional <i>policies and procedures</i> may include:</p>	<ul style="list-style-type: none"> <li>• institution's quality assurance manual and procedures: <ul style="list-style-type: none"> <li>• biosecurity</li> <li>• breeding processes</li> <li>• OHS</li> <li>• recycling and re-use guidelines</li> <li>• restraint, handling, euthanasing and disposal of animals</li> <li>• safe handling, storage and thawing of frozen genetic material</li> <li>• standard operating procedures</li> <li>• use, storage and transport of equipment and</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>drugs used during procedures</p> <ul style="list-style-type: none"> <li>• waste disposal</li> <li>• project objectives and production schedules.</li> </ul>
Procedures that require <i>AEC</i> approval may include:	<ul style="list-style-type: none"> <li>• cloning</li> <li>• creation of transgenic, knock in and knockout lines</li> <li>• random mutagenesis</li> <li>• surgical procedures</li> <li>• any other procedure that may impact on the animal's health and wellbeing.</li> </ul>
<i>Relevant legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>• Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• Federal Gene Technology Act 2000</li> <li>• National Health and Medical Research Council (NHMRC) guidelines</li> <li>• relevant state or territory legislation and regulations, such as those relating to: <ul style="list-style-type: none"> <li>• animal research</li> <li>• animal welfare</li> <li>• prevention of cruelty to animals</li> <li>• quarantine</li> <li>• the practice of veterinary surgery</li> <li>• the administration and storage of therapeutic and controlled substances.</li> </ul> </li> </ul>
<i>OHS</i> risks associated with animal technician procedures include:	<ul style="list-style-type: none"> <li>• animal bites, kicks or scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• scalds and burns from sterilising and cleaning equipment</li> <li>• zoonoses.</li> </ul>
<i>Breeding program</i> may include:	<ul style="list-style-type: none"> <li>• information about: <ul style="list-style-type: none"> <li>• the number of breeders required</li> <li>• selection criteria for breeders and retiring</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>breeders</p> <ul style="list-style-type: none"> <li>• breeding system to be used: <ul style="list-style-type: none"> <li>• inbred</li> <li>• outbred</li> <li>• backcross</li> </ul> </li> <li>• fostering requirements and identification system to be used</li> <li>• record systems to be used (e.g. computer, cards and books)</li> <li>• data to be collected about: <ul style="list-style-type: none"> <li>• production rates</li> <li>• parent information</li> <li>• generation development (e.g. litter numbers, numbers born and sex ratios)</li> </ul> </li> <li>• sex and weaning rate.</li> </ul>
<i>Signs of parturition</i> may include:	<ul style="list-style-type: none"> <li>• bleeding and discharge</li> <li>• box presentation</li> <li>• grooming</li> <li>• isolation</li> <li>• nest building</li> <li>• restlessness.</li> </ul>
<i>Equipment</i> required for caesarean procedures may include:	<ul style="list-style-type: none"> <li>• anaesthetic equipment and supplies: <ul style="list-style-type: none"> <li>• anaesthetic machines</li> <li>• anaesthetic trolleys</li> <li>• filters</li> <li>• gas cylinders</li> <li>• incubators</li> <li>• masks</li> <li>• re-breathing bags</li> <li>• soda lime and canisters</li> <li>• scavenging systems</li> <li>• tubes</li> <li>• vaporisers</li> </ul> </li> <li>• surgical instruments and equipment: <ul style="list-style-type: none"> <li>• cautery</li> <li>• forceps</li> <li>• needles</li> <li>• needle holders</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• resection clamps</li> <li>• scalpels</li> <li>• scissors</li> <li>• sutures.</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• appropriate footwear</li> <li>• optical aids</li> <li>• surgical gowns, caps, masks, boots and gloves</li> <li>• theatre clothing.</li> </ul>
<i>Medications</i> may include:	<ul style="list-style-type: none"> <li>• anaesthesia agents: <ul style="list-style-type: none"> <li>• isoflurane</li> <li>• ketamine</li> <li>• ketamine combination anaesthesia</li> <li>• methoxyflurane.</li> </ul> </li> </ul>
<i>Clean or dirty status</i> assessment may consider:	<ul style="list-style-type: none"> <li>• establishing an aseptic animal and room environment</li> <li>• preparation techniques</li> <li>• workplace hygiene standards: <ul style="list-style-type: none"> <li>• cleaning agents and techniques</li> <li>• cleaning equipment and materials</li> <li>• disinfectants.</li> </ul> </li> </ul>
<i>Preparation</i> of foster mother may include:	<ul style="list-style-type: none"> <li>• consideration of: <ul style="list-style-type: none"> <li>• environment</li> <li>• housing and bedding</li> <li>• strain qualities and benefits</li> <li>• temperament.</li> </ul> </li> </ul>
<i>Area for fostering</i> assessment may consider:	<ul style="list-style-type: none"> <li>• bedding conditions and qualities</li> <li>• chemicals</li> <li>• environmental conditions and impact of particular changes to environment</li> <li>• housing.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Animal technology
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN301A Work within a captive animal facility

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of working effectively within a captive animal facility, complying with legislative requirements and facility policy and procedures and identifying animals in the workplace.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Work effectively within a <i>captive animal facility</i>	<p>1.1. The <i>function and structure of the facility</i>, including its commitment to conservation, is determined.</p> <p>1.2. The role of the facility is identified within the context of relevant <i>legislative requirements</i> and regional and <i>international agreements</i>.</p> <p>1.3. Roles and relationships between departments and/or individuals are determined.</p> <p>1.4. Relationships with <i>other bodies and agencies</i> are identified.</p> <p>1.5. <i>Daily routines</i> are completed in accordance with <i>occupational health and safety (OHS)</i> requirements and <i>environmentally sensitive work practices</i>.</p>
2. Comply with captive animal interaction policies and	<p>2.1. Risks associated with interacting with captive animals are identified and evaluated.</p> <p>2.2. <i>Animal interaction policies and procedures</i> are</p>



ELEMENT	PERFORMANCE CRITERIA
procedures	<p>interpreted and importance of compliance with personal roles and responsibilities are detailed.</p> <p>2.3.Procedures used to enter and leave animal enclosures are described and demonstrated.</p> <p>2.4.Escaped animal procedures are described and practised.</p> <p>2.5.Negative animal interaction incident procedures are practised in accordance with OHS hazard identification and risk control procedures.</p>
3. Identify and handle animals humanely	<p>3.1.Common and scientific names are used in accordance with facility requirements to identify animals.</p> <p>3.2.<i>Distinguishing characteristics</i> are used to identify specific animals within a group or section.</p> <p>3.3.Animals are handled humanely and in accordance with <i>animal welfare</i> considerations, relevant codes of practice and other legislative requirements.</p> <p>3.4.Assistance is provided with the application of <i>identification techniques</i> in accordance with OHS requirements.</p>
4. Communicate effectively	<p>4.1.<i>Communication</i> is conducted and documented in accordance with organisation requirements.</p> <p>4.2.Records are kept in accordance with organisation policies and procedures and approved <i>animal keeping information systems and software</i>.</p> <p>4.3.Records are maintained and stored in accordance with organisation policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe and environmentally responsible organisational systems and procedures when handling animals
- follow facility policies and procedures
- follow verbal instructions and assist safely with tasks
- identify specified species following organisational policy and procedures

## REQUIRED SKILLS AND KNOWLEDGE

- identify animals within the workplace to family level, using distinguishing characteristics
- maintain records in accordance with organisational policies and procedures
- literacy skills to read and follow facility policies and procedures, including OHS and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- animal taxonomy to family level
- basic animal behaviour and the potential effects of captivity
- basic working knowledge of relevant international agreements and conventions
- captive animal facility's policies and procedures, including captive animal interaction, OHS and emergency procedures
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- principles of animal welfare and ethics
- relevant international, federal and state or territory legislation and codes of practice
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe work practices.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the facility's structure and role within the context of legislative requirements and zoological agreements</li> <li>• comply with captive animal interaction policies and procedures</li> <li>• identify and handle animals in accordance with facility and animal welfare requirements.</li> </ul> <p>The skills and knowledge required to work within a captive animal facility must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace with access to a range of captive animals and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector,</p>

<b>EVIDENCE GUIDE</b>	
	workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Captive animal facilities</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• aquaria</li> <li>• fauna parks</li> <li>• mobile zoos</li> <li>• theme parks</li> <li>• wildlife care and rehabilitation facilities</li> <li>• wildlife parks</li> <li>• zoological parks.</li> </ul>
<p><b><i>Function and structure of the facility</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• function: <ul style="list-style-type: none"> <li>• conservation</li> <li>• education</li> <li>• recreation</li> <li>• research</li> </ul> </li> <li>• function should be seen in the context of: <ul style="list-style-type: none"> <li>• the World Zoo Conservation Strategy</li> <li>• the role of the International Union for Conservation of Nature and Natural Resources</li> <li>• the Captive Breeding Specialist Group</li> <li>• the Australasian Regional Association of Zoological Parks</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• structures:               <ul style="list-style-type: none"> <li>• facility status:                   <ul style="list-style-type: none"> <li>• corporate</li> <li>• family-owned</li> <li>• government</li> <li>• not for profit</li> </ul> </li> <li>• internal structure:                   <ul style="list-style-type: none"> <li>• organisational sections</li> <li>• roles and responsibilities</li> <li>• lines of reporting.</li> </ul> </li> </ul> </li> </ul>
<i>Legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>• relevant state or territory and local government legislation and regulations in respect to captive animals and OHS.</li> </ul>
<i>International agreements</i> may include:	<ul style="list-style-type: none"> <li>• the Agreement between Australia and Japan for the protection of Migratory Birds in Danger of Extinction and their Environment</li> <li>• the China-Australia Migratory Bird Agreement</li> <li>• the Convention for the Conservation of Antarctic Seals</li> <li>• the Convention for the Regulation of Whaling</li> <li>• the Convention on International Trade in Endangered Species for Flora and Fauna</li> <li>• the Convention on Wetlands of International Importance.</li> </ul>
<i>Other bodies and agencies</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare and rescue groups</li> <li>• government departments and statutory bodies</li> <li>• industry associations</li> <li>• other captive animal institutions/facilities</li> <li>• research organisations</li> <li>• volunteer groups.</li> </ul>
<i>Daily routines</i> may include:	<ul style="list-style-type: none"> <li>• answering enquiries from the public</li> <li>• capturing animals</li> <li>• cleaning</li> <li>• completing records</li> <li>• ensuring the security of animals</li> <li>• feeding and watering</li> <li>• general animal husbandry tasks</li> <li>• maintaining equipment and completing minor repairs.</li> </ul>
<i>OHS risks</i> when working in a	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches</li> </ul>

<b>RANGE STATEMENT</b>	
captive animal facility may include:	<ul style="list-style-type: none"> <li>and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Environmentally sensitive work practices</i> may include:	<ul style="list-style-type: none"> <li>• implementing strategies and resources to: <ul style="list-style-type: none"> <li>• minimise disturbance to animals and their living environment</li> <li>• practise environmentally friendly waste management</li> <li>• reduce noise and odour.</li> </ul> </li> </ul>
<i>Animal interaction policies and procedures</i> will include:	<ul style="list-style-type: none"> <li>• in-house standard operating procedures for interaction with animals (staff and/or public): <ul style="list-style-type: none"> <li>• handling</li> <li>• transportation</li> </ul> </li> <li>• Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA) <i>Accreditation Program - General Standards and Guidelines</i> May 2005 updated September 2007.</li> </ul>
<i>Distinguishing characteristics</i> that may be used to identify captive animals include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
<i>Animal welfare</i> requirements include:	<ul style="list-style-type: none"> <li>• adequate housing and stock levels</li> <li>• enrichment opportunities</li> <li>• compliance to appropriate state or territory legislation and regulations and international conventions</li> <li>• the compatibility of species and breeds</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>the absence of pests and vermin.</li> </ul>
<i>Identification techniques</i> may include:	<ul style="list-style-type: none"> <li>tattoos, ear tags, leg bands and passive integrated transponder tags.</li> </ul>
<i>Communication</i> may be conducted by:	<ul style="list-style-type: none"> <li>two-way radio, email, the intranet and the internet</li> <li>it may include:               <ul style="list-style-type: none"> <li>answering queries from the public</li> <li>contributing to daily bulletins or media releases.</li> </ul> </li> </ul>
<i>Animal keeping information systems and software</i> examples include:	<ul style="list-style-type: none"> <li>International Species Information System (ISIS)</li> <li>Regional Animal Species Collection Plan (REGASP) computerised collection planning tool</li> <li>Animal Record-Keeping System (ARKS)</li> <li>Single Population Analysis and Records Keeping System (SPARKS).</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Captive animals
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	





## ACMCAN302A Prepare and present information to the public

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing and presenting information to internal staff members and members of the public, and participating in other interpretative and learning functions within an animal care facility.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare a presentation	1.1. Audience is identified and objectives of the <i>presentation</i> are determined. 1.2. Plan of the presentation is developed and materials are selected to match the audience. 1.3. Presentation is trialled to ensure its objectives and learning outcomes are achieved.
2. Conduct presentation	2.1. <i>Public speaking skills</i> are used effectively to engage the audience. 2.2. <i>Visual aids</i> and other <i>presentation equipment</i> are used correctly to enhance the presentation. 2.3. Animals involved in the presentation are handled and/or utilised in accordance with <i>occupational health and safety (OHS)</i> , <i>animal welfare</i> and facility requirements.

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. Audience is encouraged to participate, where appropriate, and provide feedback.</p> <p>2.5. Presentation is completed within required timeframe and <i>reviewed</i> with other staff.</p>
3. Participate in other interpretive and learning activities	<p>3.1. Interpretive and learning activities within the facility are analysed for accuracy and currency.</p> <p>3.2. Information is adapted for a <i>broad range of clients</i>.</p> <p>3.3. Information is prepared for exhibit signage and other text-based resources.</p>
4. Assist in <i>media presentations</i>	<p>4.1. Workplace policies on staff interaction with the media are clarified.</p> <p>4.2. Interview techniques and media presentation protocols are defined in accordance with workplace policies.</p> <p>4.3. Contributions are made to the preparation of information for media releases and interviews under supervision.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe and environmentally responsible organisational systems and procedures when handling and/or utilising animals
- implement facility policies and procedures
- review and improve presentations
- use interview techniques and media presentation protocols
- use presentation equipment effectively
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental

**REQUIRED SKILLS AND KNOWLEDGE**

abilities

- problem-solving skills to use available resources and develop interesting presentations.

**Required knowledge**

- basic instructional design principles
- captive animal facility's policies and procedures, including OHS and emergency procedures
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- education policy and support materials of the Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA)
- features of presentation equipment
- interpretive theory
- interview techniques and media presentation principles
- learning principles for the captive animal environment and for different age groups
- public speaking techniques
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe work practices
- subject matter for the presentation.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- plan presentations to meet desired objectives
- prepare and present information to a range of audiences
- use a range of materials and equipment as part of

<b>EVIDENCE GUIDE</b>	
	<p>presentations</p> <ul style="list-style-type: none"> <li>• review presentations and adjust accordingly</li> <li>• assist in media presentations.</li> </ul> <p>The skills and knowledge required to prepare and present information to the public must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to suitable presentation venues, content material, animals to be used during presentations (if required) as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. presentation materials)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector,</p>

<b>EVIDENCE GUIDE</b>	
	workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<i>Types of presentations</i> may include:	<ul style="list-style-type: none"> <li>• interactive sessions</li> <li>• public presentations</li> <li>• lectures</li> <li>• seminars</li> <li>• workshops.</li> </ul>
<i>Public speaking skills</i> may include:	<ul style="list-style-type: none"> <li>• ability to relate to the particular audience</li> <li>• body language</li> <li>• eye contact</li> <li>• voice control.</li> </ul>
<i>Visual aids</i> may include:	<ul style="list-style-type: none"> <li>• animals</li> <li>• charts</li> <li>• electronic presentations</li> <li>• handouts</li> <li>• overhead transparencies</li> <li>• slides.</li> </ul>
<i>Presentation equipment</i> may include:	<ul style="list-style-type: none"> <li>• computers</li> <li>• mobile microphones</li> <li>• props</li> <li>• overhead and data projectors.</li> </ul>
<i>OHS risks when handling animals</i>	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches</li> </ul>

<b>RANGE STATEMENT</b>	
may include:	<ul style="list-style-type: none"> <li>and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal welfare</i> considerations will include:	<ul style="list-style-type: none"> <li>• dispensing treats</li> <li>• limiting time involvement in presentations</li> <li>• minimising stress</li> <li>• using correct handling procedures.</li> </ul>
<i>Reviewing</i> a presentation may include:	<ul style="list-style-type: none"> <li>• analysing participant feedback and peer comments</li> <li>• revising the presentation and support materials.</li> </ul>
<i>Broad range of clients</i> may include:	<ul style="list-style-type: none"> <li>• internal clients: <ul style="list-style-type: none"> <li>• other staff</li> <li>• management</li> </ul> </li> <li>• external clients: <ul style="list-style-type: none"> <li>• educational groups (primary, secondary and tertiary)</li> <li>• members of the public</li> <li>• personnel from government bodies or other captive animal institutions</li> <li>• visiting dignitaries.</li> </ul> </li> </ul>
<i>Media presentations</i> may include:	<ul style="list-style-type: none"> <li>• assistance with the preparation of information for the institution's media department, media releases and interviews.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		



## ACMCAN303A Support collection management

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of supporting collection management for captive animals.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify animal keeping information systems and software	1.1.Purpose, variations and application of relevant <b><i>animal keeping information systems and software</i></b> are identified and documented.
2. Identify, collect, record and interpret data	2.1.Relevant data is identified and collected in accordance with institutional policies and procedures and recorded using approved animal keeping information systems and/or software. 2.2.Data in institutional and regional collection plans is interpreted.
3. Assist with <b><i>collection management</i></b>	3.1.Relationships between institutional and regional plans are identified. 3.2. <b><i>Personnel</i></b> associated with institutional and regional plans are identified and located as required. 3.3.Institutional and regional collection plans are accessed and interpreted. 3.4.Collection management plans are followed as directed by supervisors.

ELEMENT	PERFORMANCE CRITERIA
4. Interpret population management practices and principles	4.1. Commonly used terms in population management are defined. 4.2. Categories of relevant species management programs are identified.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- access technical advice
- analyse information
- assist in developing in-house studbooks
- assist in maintaining section records
- follow institutional policies and procedures
- operate appropriate species management databases
- record data using approved animal keeping information systems and/or software
- read and understand population management documents, such as Australasian Species Management Program (ASMP) Annual Reports
- use appropriate species management databases to run basic analysis, such as reports in Animal Record-Keeping System (ARKS)
- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; interpret studbook data; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem solving skills to use available resources and prioritise daily tasks.

#### Required knowledge

- ASMP and ASMP Regional Census and Plan
- ASMP guidelines and criteria for studbook keeping
- basic genetic principles for the management of captive animal populations, including small population biology and concepts of inbreeding and out breeding
- captive animal policies

## REQUIRED SKILLS AND KNOWLEDGE

- collection planning requirements
- database programs for record keeping and data analysis
- institutional collection planning policies and procedures and other relevant policies and procedures, including OHS
- international agreements and conventions such as the International Union for Conservation of Nature and Natural Resources conservation status categories
- principles and constraints of wildlife conservation
- principles of animal welfare and ethics
- principles of taxonomy and relevance to population management
- relevant federal, state or territory legislation
- report formats for captive animal management plans.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify approved animal keeping information systems and software
- identify, collect, record and interpret data
- assist with collection management
- follow institutional policies and procedures and legislative requirements
- interpret population management practices and principles.

The skills and knowledge required to support collection management must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

<b>EVIDENCE GUIDE</b>	
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to animal keeping information systems and software, relevant collection and species-management plans as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animal keeping information systems and software</i></b> include:</p>	<ul style="list-style-type: none"> <li>• International Species Information System (ISIS)</li> <li>• Regional Animal Species Collection Plan (REGASP)</li> <li>• Animal Record-Keeping System (ARKS)</li> <li>• Single Population Analysis and Records Keeping System (SPARKS)</li> <li>• Population Management (PM 2000)</li> <li>• GENES and DEMOG.</li> </ul>
<p><b><i>Collection management</i></b> involves:</p>	<ul style="list-style-type: none"> <li>• collection management occurs at a regional and institutional level and needs to consider:               <ul style="list-style-type: none"> <li>• regional and institutional collection plans</li> <li>• species-management plans</li> <li>• regional captive management plans</li> <li>• available facilities</li> <li>• conservation and education issues</li> <li>• visitors' experiences of particular captive animal facilities.</li> </ul> </li> </ul>
<p><b><i>Personnel</i></b> that may be indentified in a plan include:</p>	<ul style="list-style-type: none"> <li>• Taxon Advisory Group (TAG) representatives</li> <li>• husbandry program coordinator</li> <li>• species coordinators (in-house and regional)</li> <li>• species contact</li> <li>• studbook keepers.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN304A Prepare and maintain animal housing

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of determining housing that meets the behavioural and physical requirements of a particular animal species and includes the preparation, cleaning and routine maintenance required to maintain the hygiene and appearance of an enclosure or exhibit.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.



## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare housing appropriate to a particular species	<p>1.1. <b><i>Behavioural and physical requirements</i></b> of the species being housed are identified.</p> <p>1.2. <b><i>Animal enclosures</i></b> appropriate for specific species are identified.</p> <p>1.3. <b><i>Enclosure furniture</i></b> requirements for the species are identified and <b><i>assessed</i></b>.</p> <p>1.4. Animal housing is prepared for occupation in accordance with <b><i>species-specific requirements</i></b> and facility policies and procedures.</p>
2. Implement animal housing maintenance routines	<p>2.1. Activities to maintain enclosure in compliance with workplace and legislative requirements are identified and ranked as daily, weekly or longer term tasks.</p> <p>2.2. Procedures to ensure the wellbeing of animals during maintenance activities are identified and</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>followed.</p> <p>2.3. Enclosure and exhibit <i>security</i> and safety procedures are followed in accordance with <i>occupational health and safety (OHS)</i> requirements and facility policies and procedures.</p> <p>2.4. Aesthetic qualities and furniture of enclosures and exhibits are maintained in accordance with responsibility level and maintenance task schedule.</p> <p>2.5. Areas requiring horticultural or <i>maintenance attention</i> are identified and reported to supervisor.</p> <p>2.6. Responsibility levels for horticultural or maintenance tasks and work schedule timelines are established in consultation with supervisor.</p>
3. Maintain enclosure hygiene and appearance	<p>3.1. <i>Cleaning regime</i> for a section is prepared and implemented and regularly reviewed.</p> <p>3.2. Enclosures, including equipment and furniture, are cleaned with minimum disturbance to animals and in accordance with OHS requirements and facility hygiene standards.</p> <p>3.3. <i>Pests</i> are detected and reported to supervisor.</p> <p>3.4. Assistance is provided to implement and manage environmentally safe and effective pest control procedures.</p> <p>3.5. <i>Tools and equipment</i> are maintained in accordance with facility policies and procedures and manufacturers' requirements.</p> <p>3.6. Enclosure and exhibit maintenance status is reported and records updated.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete minor repairs
- employ safe, humane and environmentally responsible organisational systems and procedures when working with animals
- identify horticultural and maintenance tasks, establish responsibility levels and

## REQUIRED SKILLS AND KNOWLEDGE

- work schedule timelines in consultation with supervisor
- implement facility policies and procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records related to enclosure and exhibit maintenance status
- literacy skills to read and follow facility policies and procedures, including OHS and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- educational and interpretive functions of enclosures
- pest identification and associated risks and controls
- principles and protocols for enclosure or exhibit design, including aesthetics, function and effects of introduced fixtures and features
- principles of enclosure landscaping and horticulture, including knowledge of exhibit plants and weeds
- principles of animal welfare and ethics
- relevant facility policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice, including OHS and animal welfare
- safe animal handling techniques and procedures with respect to 'shifting' animals if and when required for enclosure maintenance
- safe work practices
- security control principles
- specialist enclosures for different animals
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials and associated OHS.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify animal housing requirements in consultation with others and prepare enclosure for occupation</li> <li>• maintain animal housing, including security, hygiene, pest control and appearance</li> <li>• update enclosure and exhibit maintenance records.</li> </ul> <p>The skills and knowledge required to prepare and maintain animal housing must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace with access to a range of animal housing and temporary housing as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Behavioural and physical requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• behavioural requirements: <ul style="list-style-type: none"> <li>• environments that replicate normal feeding behaviour</li> <li>• environments that provide appropriate stimulation for the animals</li> <li>• normal activity patterns: <ul style="list-style-type: none"> <li>• crepuscular</li> <li>• diurnal</li> <li>• nocturnal</li> </ul> </li> </ul> </li> <li>• physical requirements: <ul style="list-style-type: none"> <li>• appropriate space/features based on whether animal is arboreal, terrestrial or aquatic</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• appropriate substrate</li> <li>• temperature and humidity regimes.</li> </ul>
<i>Animal enclosures</i> may include:	<ul style="list-style-type: none"> <li>• aquaria</li> <li>• aviaries</li> <li>• cages</li> <li>• habitat boxes</li> <li>• paddocks</li> <li>• walk through or closed off enclosures.</li> </ul>
<i>Enclosure furniture</i> requirements may include:	<ul style="list-style-type: none"> <li>• shading, shelters, walkways/paths and behavioural enrichment features: <ul style="list-style-type: none"> <li>• branches, logs, rocks and vines</li> <li>• landscaping</li> <li>• vegetation</li> <li>• water features.</li> </ul> </li> </ul>
Considerations when <i>assessing</i> the impact of furniture should include:	<ul style="list-style-type: none"> <li>• furniture hardiness, attractiveness and compatibility</li> <li>• keeper/carer access</li> <li>• the obstruction of animal movement or view</li> <li>• the safety of new materials (e.g. toxicity or splintering)</li> <li>• wear and tear.</li> </ul>
<i>Species-specific requirements</i> may consider:	<ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• caged</li> <li>• fully enclosed</li> <li>• indoor</li> <li>• moated</li> <li>• naturalistic</li> <li>• outdoor</li> </ul> </li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
Enclosure <i>security</i> may involve:	<ul style="list-style-type: none"> <li>• checking for pests within animal housing or enclosures</li> <li>• checking there are no unauthorised people in animal enclosures</li> <li>• checking that locks and slides are in good</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>working order</li> <li>• considering compatibility of species and breeds within housing</li> <li>• ensuring animals are safe and secure in their housing</li> <li>• identifying any animal housing faults that may result in escape</li> <li>• maintaining structures in good order.</li> </ul>
<i>OHS</i> risks when handling animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries if working in with the animal or animal has potential to reach keeper through barriers</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical when using water in close vicinity of electrical outlets</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• noise, including machinery and some animals</li> <li>• release of infective agents (animal and human)</li> <li>• repetitive strain injury (e.g. raking and scrubbing)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Maintenance attention</i> may be classified by:	<ul style="list-style-type: none"> <li>• major urgent repairs: <ul style="list-style-type: none"> <li>• broken windows</li> <li>• faulty locks/slides</li> <li>• landscaping concerns</li> <li>• repairs to holes in wire, roof or doors</li> </ul> </li> <li>• minor repairs: <ul style="list-style-type: none"> <li>• repairing signs or taps</li> <li>• replacing plants.</li> </ul> </li> </ul>
<i>Cleaning regime</i> may include:	<ul style="list-style-type: none"> <li>• behavioural needs of animals and their impact on the cleaning routine</li> <li>• chemicals that cannot be used with certain animals</li> <li>• equipment and cleaning agents to be used</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• importance of odour for some species</li> <li>• safety of self and animals</li> <li>• sequence of cleaning events</li> <li>• time to perform the cleaning tasks.</li> </ul>
<i>Pests</i> may include:	<ul style="list-style-type: none"> <li>• cockroaches, spiders, ants and flying insects</li> <li>• predators and parasites</li> <li>• rats and mice.</li> </ul>
<i>Tools and equipment</i> may include:	<ul style="list-style-type: none"> <li>• blowers</li> <li>• cleaning agents</li> <li>• mowers</li> <li>• pressure cleaners</li> <li>• rakes and spades</li> <li>• secateurs</li> <li>• wheelbarrows</li> <li>• whipper snippers.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Captive animals
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		



## ACMCAN305A Assist with capturing, restraining and moving animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of assisting with capture and restraint of animals that may need rescue and/or moving from one location to another.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan the capture and restraint of animals	<p>1.1. <i>Species</i> of animal to be captured is confirmed.</p> <p>1.2. Capture and restraint of animal are <i>planned</i> in accordance with institutional policies and procedures.</p> <p>1.3. Role of individuals involved in the process is allocated and confirmed.</p> <p>1.4. <i>Equipment</i> required is identified and checked.</p> <p>1.5. <i>Occupational health and safety (OHS)</i> and <i>emergency procedures</i> relating to procedure are reviewed and put into place.</p>
2. Capture and restrain animals	<p>2.1. Capture and restraint equipment is used in a <i>safe and humane manner</i>, using safe lifting techniques, where appropriate.</p> <p>2.2. <i>Assistance</i> is provided in administering medication to animals under veterinary supervision where appropriate.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.3. Animals are monitored carefully for distress and/or injury.</p> <p>2.4. Dead animals are disposed of in accordance with legislative requirements and institutional policies and procedures, if relevant.</p> <p>2.5. Capture and restraint equipment is cleaned, maintained and stored in accordance with institutional policies and procedures.</p> <p>2.6. Debriefing sessions are conducted with relevant personnel after an animal capture.</p>
3. Assist with animal transportation requirements	<p>3.1. Animals are <i>prepared</i> for transportation as directed.</p> <p>3.2. <i>Transport containers</i> appropriate to the species are designed or selected and prepared in accordance with International Air Transport Association (IATA) Live Animal Regulations.</p> <p>3.3. <i>Protocols and procedures</i> for shipment or transfer, including animal welfare requirements are followed under supervision.</p> <p>3.4. Relevant documentation and reports are completed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete animal husbandry tasks as required, including conditioning animal for transportation and providing special dietary requirements
- complete relevant documentation and reports
- employ safe, humane and environmentally responsible organisational systems and procedures when handling, restraining and moving animals
- follow quarantine and disease control procedures
- implement institutional policies and procedures
- maintain capture and restraint tools and equipment and transport containers in accordance with manufacturers' specifications
- monitor animal health and behaviour for indicators of injury, compromised health or distress
- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; follow treatment instructions; record

**REQUIRED SKILLS AND KNOWLEDGE**

accurately and legibly information collected; and select and apply procedures to a range of defined tasks

- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures and transport container requirements as required
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- anatomical structures and physiological features of animals related to capture, restraint and transportation
- animal husbandry requirements related to capture, restraint and transportation
- emergency procedures
- IATA shipment requirements and protocols
- maintenance of capture and restraint equipment
- principles of animal welfare and ethics
- principles of capture and restraint and associated behavioural and physiological aspects
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant legislation, including state or territory acts and codes of practice
- relevant quarantine requirements for the external shipment of animals.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria,

<b>EVIDENCE GUIDE</b>	
	<p>required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• assist with planning and implementing the safe capture and restraint of animals</li> <li>• assist with moving animals in accordance with established protocols and legislative requirements</li> <li>• complete relevant documentation and reports.</li> </ul> <p>The skills and knowledge required to assist with capturing, restraining and moving animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace.</p> <p>There must be access in this situation to animals to capture and restrain, from at least two of the six major animal groups (amphibians, birds, fish, invertebrates, mammals and reptiles), as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Species</i></b> may include animals from the six major animal groups:</p>	<ul style="list-style-type: none"> <li>• amphibians</li> <li>• birds</li> <li>• fish</li> <li>• invertebrates</li> <li>• mammals</li> <li>• reptiles.</li> </ul>
<p><b><i>Planning</i></b> requirements may include:</p>	<ul style="list-style-type: none"> <li>• assessment of the impact of the capture or restraint on animals and/or group</li> <li>• choice of capture technique depending on species' characteristics: <ul style="list-style-type: none"> <li>• aggressive nature</li> <li>• defence mechanisms</li> <li>• flight or fight</li> <li>• physiological attributes</li> <li>• sex</li> <li>• size</li> <li>• stress response</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• choice of staff, including veterinary</li> <li>• climatic conditions</li> <li>• contingency plans in the event of escape</li> <li>• equipment required</li> <li>• safety issues, including those relating to the public and the team involved in the capture or restraint</li> <li>• time factors.</li> </ul>
<i>Equipment</i> may include:	<ul style="list-style-type: none"> <li>• anaesthetic agents</li> <li>• bags</li> <li>• catch poles</li> <li>• nets</li> <li>• ropes</li> <li>• transportation containers</li> <li>• visual barriers.</li> </ul>
<i>OHS</i> risks when handling animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Emergency procedures</i> would relate to:	<ul style="list-style-type: none"> <li>• injury to animal, other animals, staff and potentially the public</li> <li>• potential escape of animal.</li> </ul>
<i>Safe and humane manner</i> requirements include:	<ul style="list-style-type: none"> <li>• allocating sufficient time to the process</li> <li>• appropriately restraining the animal</li> <li>• conducting the capture or restraint out of the public's view</li> <li>• observing stress in the animal</li> <li>• using personal protective equipment.</li> </ul>
<i>Assistance</i> to the veterinarian may be provided by:	<ul style="list-style-type: none"> <li>• safely and securely restraining the animal</li> <li>• administering tranquillisers and/or sedatives</li> <li>• using chemical agents.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Preparation</i> prior to transportation may include:	<ul style="list-style-type: none"> <li>• building transport containers</li> <li>• conditioning the animal for transport</li> <li>• providing special dietary requirements.</li> </ul>
<i>Transport containers</i> may include:	<ul style="list-style-type: none"> <li>• bags</li> <li>• padded containers</li> <li>• pouches</li> <li>• shipping boxes</li> <li>• transfer or crush cages.</li> </ul>
Transportation <i>protocols and procedures</i> may include:	<ul style="list-style-type: none"> <li>• IATA shipment requirements and protocols</li> <li>• container requirements</li> <li>• transportation methods</li> <li>• transportation standards for specific species</li> <li>• food and water requirements.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Captive animals
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	



## ACMCAN306A Monitor animal reproduction

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of facilitating and monitoring reproduction needs in accordance with the institution's breeding plan. Animals in the reproduction program may be either naturally or artificially reared.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Facilitate reproduction	<p>1.1.Reproduction is facilitated in accordance with the institution's <b><i>breeding plan</i></b>.</p> <p>1.2.<b><i>Sexual behaviour, communication</i></b> and <b><i>signs</i></b> in the male and female reproductive cycle are recognised and reported for the <b><i>major animal groups</i></b>.</p> <p>1.3.Risks associated with potential aggressive animal behaviour are identified and monitored in accordance with <b><i>occupational health and safety (OHS)</i></b> and animal welfare requirements.</p> <p>1.4.<b><i>Conditions</i></b> and <b><i>environmental cues</i></b> conducive to breeding are provided in accordance with species-specific requirements.</p>
2. Monitor breeding animals during the period of	<p>2.1.A <b><i>suitable environment</i></b> for breeding animals is provided in accordance with species-specific requirements and OHS requirements.</p>

ELEMENT	PERFORMANCE CRITERIA
reproduction	<p>2.2. <b>Requirements</b> of breeding animals are provided and monitored in accordance with institutional policies and procedures.</p> <p>2.3. Relevant <b>data</b> is recorded so that successes can be replicated.</p> <p>2.4. Changes to husbandry regimes are communicated to the team in accordance with institutional policies and procedures.</p>
3. Prepare and assist with birth or hatching	<p>3.1. <b>Suitable media</b> are provided to assist with the birth or hatching.</p> <p>3.2. Appropriate <b>monitoring</b> is provided to ensure the safe birth or hatching of young animals.</p> <p>3.3. Post-birth or post-hatching <b>behavioural considerations</b> are assessed and managed.</p> <p>3.4. Breeding outcomes are assessed and updates are recommended for inclusion in the institution's breeding plan.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete animal husbandry tasks, including nutritional, health and behavioural requirements
- complete relevant documentation and reports
- employ safe, humane and environmentally responsible systems and procedures when handling and working with animals
- follow quarantine and disease control procedures
- implement institutional policies and procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor animal health and behaviour for indicators of injury, compromised health or distress
- prepare and maintain breeding, birthing and hatching environments and other requirements
- recognise courtship, copulation, combat and signs of behavioural and physical changes associated with reproduction

## REQUIRED SKILLS AND KNOWLEDGE

- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; follow breeding plan recommendations; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical structures and physiological features for the animal groups associated with reproduction
- animal husbandry requirements related to breeding animals
- behavioural changes in animals when pregnant, with young or when displaying territorial behaviour
- emergency procedures
- environmental processes that may influence breeding, birth and hatching
- factors that may interfere with breeding
- housing requirements for mother and young, where relevant
- institution collection and breeding plans
- natural breeding behaviours and biology
- normal and abnormal animal behaviour
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant legislation, including state or territory Acts and codes of practice
- reproductive terminology
- seasonality and non-seasonality of reproduction.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• provide environments conducive to reproduction in accordance with institution's breeding plan</li> <li>• monitor reproductive processes in captive animals from the time prior to fertilisation through to birth or hatching of the young</li> <li>• monitor and manage birth or hatching processes</li> <li>• record and maintain accurate records.</li> </ul> <p>The skills and knowledge required to monitor animal reproduction must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace.</p> <p>There must be access in this situation to breeding pairs and/or groups of animals for a range of species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>conditions</p> <ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Breeding plan</i></b> may include:	<ul style="list-style-type: none"> <li>• information about: <ul style="list-style-type: none"> <li>• species management: <ul style="list-style-type: none"> <li>• number of breeders required</li> <li>• selection criteria for breeders and retiring breeders</li> <li>• stock replacement</li> </ul> </li> <li>• mating system to be used</li> <li>• enhanced reproductive methods</li> <li>• reproductive control methods</li> <li>• identification and records systems to be used</li> <li>• data to be collected about production rates (e.g. numbers born and sex ratios)</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• weaning methods.</li> </ul>
Types of <i>sexual behaviour</i> that may be observed includes:	<ul style="list-style-type: none"> <li>• aggression between males</li> <li>• courtship rituals</li> <li>• copulation</li> <li>• nesting</li> <li>• preening.</li> </ul>
<i>Communication</i> and <i>signs</i> in the male and female reproductive cycle may include:	<ul style="list-style-type: none"> <li>• communication: <ul style="list-style-type: none"> <li>• olfactory signals</li> <li>• specific breeding calls</li> </ul> </li> <li>• signs: <ul style="list-style-type: none"> <li>• changes in dietary habits</li> <li>• fattening up</li> <li>• metamorphosis in amphibians</li> <li>• oestrus</li> <li>• parturition</li> <li>• puberty.</li> </ul> </li> </ul>
<i>Major animal groups</i> are:	<ul style="list-style-type: none"> <li>• amphibians</li> <li>• birds</li> <li>• fish</li> <li>• invertebrates</li> <li>• mammals</li> <li>• reptiles.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Conditions</i> suitable for breeding may include:	<ul style="list-style-type: none"> <li>• dietary requirements</li> <li>• photoperiod</li> <li>• privacy</li> <li>• reduced noise or light</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• screening</li> <li>• simulated natural habitat</li> <li>• temperature and humidity.</li> </ul>
<i>Environmental cues</i> that may be required include:	<ul style="list-style-type: none"> <li>• changes in photoperiod</li> <li>• humidity</li> <li>• temperature and/or precipitation.</li> </ul>
<i>Suitable environment</i> may include:	<ul style="list-style-type: none"> <li>• consideration of appropriate housing for the mother</li> <li>• providing suitable media for fertilisation</li> <li>• screening or privacy from the public</li> <li>• separation of the animal from other animals</li> <li>• simulated natural habitats.</li> </ul>
<i>Requirements</i> may include:	<ul style="list-style-type: none"> <li>• behaviour requirements (e.g. physical, social and food-related enrichment)</li> <li>• health requirements (e.g. specific medication and regular health checks)</li> <li>• nutritional requirements (e.g. food supplements during egg development, pregnancy and lactation).</li> </ul>
<i>Data</i> may include:	<ul style="list-style-type: none"> <li>• environmental conditions</li> <li>• the introduction or separation of individuals.</li> </ul>
<i>Suitable media</i>	<ul style="list-style-type: none"> <li>• materials or substrates for nest building, egg laying and/or incubation.</li> </ul>
<i>Monitoring</i> may include:	<ul style="list-style-type: none"> <li>• implementation of a 24-hour watch and checking egg viability.</li> </ul>
<i>Behaviour considerations</i> may include:	<ul style="list-style-type: none"> <li>• post-birth and egg laying behavioural considerations: <ul style="list-style-type: none"> <li>• the need to remove one or both parents</li> <li>• maintenance of a private and/or quiet environment</li> <li>• maintenance of the animal within a social group.</li> </ul> </li> </ul>

suitable media

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN307A Rehabilitate native wildlife

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing immediate care for rescued native wildlife and rehabilitating animals.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to wildlife animal keepers or carers working in wildlife animal shelters or parks, either on a paid or voluntary basis.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Provide immediate care for <i>rescued animals</i>	<p>1.1. Native animals are handled following <i>occupational health and safety (OHS)</i> procedures and using <i>personal protective equipment</i>.</p> <p>1.2. Quarantine and <i>disease control procedures</i> are followed in accordance with facility policies and procedures.</p> <p>1.3. Animal species are identified and <i>initial animal emergency care</i> is initiated in accordance with policies and procedures.</p> <p>1.4. Animals are examined and <i>seriously injured</i> animals are referred to supervisors and/or taken to veterinary clinic for immediate treatment.</p> <p>1.5. <i>Information</i> on each animal is collected and recorded in accordance with legislative and facility</p>

ELEMENT	PERFORMANCE CRITERIA
	policies and procedures.
2. Rehabilitate rescued animals	<p>2.1. Suitable species-relevant <i>rearing procedures</i> are applied in accordance with industry guidelines.</p> <p>2.2. <i>Captive diets</i> similar to the natural diet of the relevant species are provided.</p> <p>2.3. <i>Common problems</i> experienced by rescued animals are identified and treated as directed by veterinarian.</p> <p>2.4. Species-specific <i>recovery procedures</i> are followed in accordance with relevant legislative and <i>facility</i> policies and procedures.</p> <p>2.5. Deceased animals required for research purposes are <i>processed</i> in accordance with legislative and facility policies and procedures.</p> <p>2.6. <i>Documentation</i> required in relation to rescued wildlife is maintained.</p>
3. Prepare animals for post rehabilitation life	<p>3.1. <i>Options</i> for returning mature animals to native habitat are evaluated.</p> <p>3.2. Options for orphaned animals are evaluated.</p> <p>3.3. Hunting or foraging skills development opportunities are provided as required.</p> <p>3.4. Socialising opportunities are provided where appropriate.</p> <p>3.5. Tactics to reduce human interaction are implemented as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete animal husbandry tasks as required
- develop and follow animal rehabilitation procedures in consultation with relevant people and organisations
- employ safe, humane and environmentally responsible organisation systems and procedures when handling and/or working with animals
- follow quarantine and disease control procedures
- implement facility policies and procedures

## REQUIRED SKILLS AND KNOWLEDGE

- provide basic animal first aid
- undertake basic preparation for necropsy requirements
- literacy skills to read and implement facility policies and procedures, including OHS and waste management; follow treatment instructions; record accurately and legibly information collected; and select and apply procedures to a range of tasks
- communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, asking for clarification from coordinators and/or veterinarians and consulting with coordinators and/or veterinarians
- numeracy skills to estimate, calculate and record basic workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical structures and physiological features of common native animals
- basic animal husbandry requirements and rehabilitation procedures for common native species
- natural dietary requirements for specific species
- normal behaviour of native wildlife
- pathogens and their potential impact on the environment
- principles and objectives of animal rehabilitation programs, animal welfare and ethics
- relevant facility policies and procedures, including OHS, hygiene standards and other industry guidelines
- relevant legislation including state or territory wildlife Acts and codes of practice
- wildlife ecology, including population dynamics, habitat selection, competition, and predator-prey interactions.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

<b>EVIDENCE GUIDE</b>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify and handle native wildlife correctly and humanely</li> <li>• provide care for rescued native animals</li> <li>• develop and implement rehabilitation programs for native animals in consultation with relevant people and organisations</li> <li>• prepare animals for post-rehabilitation life</li> <li>• maintain accurate records.</li> </ul> <p>The skills and knowledge required to rehabilitate native wildlife must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or an environment that reproduces normal work conditions.</p> <p>There must be access in either situation to rescued native wildlife requiring rehabilitation as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>conditions</p> <ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Rescued animals</i></b> refers to:	<ul style="list-style-type: none"> <li>• native wildlife rescued from the wild: <ul style="list-style-type: none"> <li>• amphibians</li> <li>• birds</li> <li>• mammals</li> <li>• reptiles.</li> </ul> </li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• boots</li> <li>• gloves</li> <li>• hessian bags to wrap around arm</li> <li>• long-sleeved and legged clothing</li> <li>• safety goggles.</li> </ul>
<i>Disease control procedures</i> may include:	<ul style="list-style-type: none"> <li>• appropriate reprocessing of reusable equipment</li> <li>• aseptic technique</li> <li>• environmental controls (e.g. design and maintenance of premises and cleaning)</li> <li>• isolation/cohorting</li> <li>• personal hygiene practices especially washing and drying hands (e.g. before and after animal contact)</li> <li>• safe handling and disposal of sharps and other clinical, related and general waste</li> <li>• surface cleaning and management of blood and body fluid spills</li> <li>• techniques to limit contamination</li> <li>• use of personal protective equipment.</li> </ul>
<i>Initial animal emergency care</i> may include:	<ul style="list-style-type: none"> <li>• clearing animal's mouth and nose to assist breathing</li> <li>• applying pressure bandages to stem external bleeding</li> <li>• supporting bandages to immobilise fractures</li> <li>• observing injuries</li> <li>• treating dehydration</li> <li>• providing warmth and comfort for shock.</li> </ul>
<i>Seriously injured</i> may include:	<ul style="list-style-type: none"> <li>• bleeding</li> <li>• evidence of poisoning or pain</li> <li>• missing fur or skin</li> <li>• obvious head injury</li> <li>• paralysis</li> <li>• puncture wounds</li> <li>• seizures</li> <li>• visible limb or wing fractures</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• visible trauma and/or bruising.</li> </ul>
<i>Information</i> may include:	<ul style="list-style-type: none"> <li>• exact location where animals were found</li> <li>• date and time of collection</li> <li>• presence of other animals</li> <li>• known circumstances</li> <li>• conditions including weather</li> <li>• human activities in the area.</li> </ul>
Problems associated with animal care and orphan <i>rearing procedures</i> may include:	<ul style="list-style-type: none"> <li>• behavioural changes</li> <li>• changes in urine or bowel movements</li> <li>• feeding problems</li> <li>• humanisation</li> <li>• loss of weight</li> <li>• malnutrition</li> <li>• parasitism</li> <li>• poor animal husbandry practices</li> <li>• poor nutrition standards</li> <li>• stress-induced conditions</li> <li>• trauma.</li> </ul>
<i>Captive diet</i> considerations will include:	<ul style="list-style-type: none"> <li>• ensure captive diet is similar to the natural diet for the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> </ul> </li> <li>• provide suitable quantity and appropriate quality of food and water for the particular species in care to ensure: <ul style="list-style-type: none"> <li>• maximum potential for healing and recovery from wounds and injuries</li> <li>• growth of young animals</li> <li>• maximum development of natural survival techniques</li> </ul> </li> <li>• seek advice from knowledgeable person when caring for a species unfamiliar to the carer.</li> </ul>
<i>Common problems</i> experienced by rescued animals may include:	<ul style="list-style-type: none"> <li>• age-related health conditions</li> <li>• bloat</li> <li>• changes in behaviour</li> <li>• changes in urine and bowel movements</li> <li>• cloacal prolapse</li> <li>• dehydration</li> <li>• discharges</li> <li>• feeding problems, including milk aspiration</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and decreased appetite</p> <ul style="list-style-type: none"> <li>• fight injuries</li> <li>• fur loss</li> <li>• general ill health</li> <li>• heat stress</li> <li>• humanisation</li> <li>• lethargy</li> <li>• loss of weight</li> <li>• malnutrition</li> <li>• parasitic burdens</li> <li>• stooped position</li> <li>• stress</li> <li>• trauma</li> <li>• zoonotic and other diseases.</li> </ul>
<i>Recovery procedures</i> may include:	<ul style="list-style-type: none"> <li>• 24-hour care for young animals</li> <li>• accessing veterinary care and administering medication as directed</li> <li>• applying relevant husbandry standards to ensure pathogens are not contracted</li> <li>• cleaning eyes</li> <li>• dressing wounds</li> <li>• feeding and hydrating</li> <li>• integrating with other same-species animals</li> <li>• minimising stress</li> <li>• providing warmth</li> <li>• releasing animals to the natural environment if permitted by relevant legislation</li> <li>• removing domestic animals from wild animals' presence.</li> </ul>
<i>Facilities</i> and organisations involved in animal rehabilitation may include:	<ul style="list-style-type: none"> <li>• animal shelters</li> <li>• captive animal government bodies</li> <li>• fauna parks</li> <li>• independent bodies</li> <li>• volunteer groups/individuals.</li> </ul>
<i>Processes</i> may include:	<ul style="list-style-type: none"> <li>• recording data: <ul style="list-style-type: none"> <li>• animals' weight</li> <li>• estimated age and sex</li> <li>• location where found</li> <li>• history of animal care, if applicable</li> </ul> </li> <li>• in the case of deceased animals processes may</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>include:</p> <ul style="list-style-type: none"> <li>• following recommended industry guidelines for necropsy requirements</li> <li>• labelling and recording the circumstances of death.</li> </ul>
<p><b>Documentation</b> in relation to rescued wildlife that must be maintained includes:</p>	<ul style="list-style-type: none"> <li>• individual animal identification where possible</li> <li>• health history if applicable</li> <li>• reports to relevant government departments of species of threatened wildlife or unusual animals held</li> <li>• approval of shelter operators for any release of rehabilitated wildlife</li> <li>• yearly returns to relevant state or territory bodies detailing the survival of all wildlife held.</li> </ul>
<p><b>Options</b> for release considerations may include:</p>	<ul style="list-style-type: none"> <li>• animals readiness for release: <ul style="list-style-type: none"> <li>• age, sex and health status of animal</li> <li>• ability to establish a home range</li> <li>• need for social interaction</li> </ul> </li> <li>• availability of suitable release site</li> <li>• other habitat considerations (e.g. current stock density, availability of natural food and water)</li> <li>• practicality of releasing animals into the area where they were originally found.</li> </ul>

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## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAN308A Release native animals to natural environment

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing and successfully releasing native wildlife into their natural environment.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to wildlife animal keepers or carers working in wildlife animal shelters or parks either on a paid or voluntary basis.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Investigate <i>options</i> for release of native animals	<p>1.1.Habitat of <i>native animals</i> for release is researched and suitable release locations identified and evaluated.</p> <p>1.2.Risks to released native animals are identified and options to minimise risks evaluated.</p> <p>1.3.Release strategy is developed and site selected and prepared as required.</p> <p>1.4.<i>Release site is monitored</i> in consultation with experienced personnel.</p>
2. Prepare for animal release	<p>2.1.Prior to release animals are identified and assessed for <i>readiness</i> to be released.</p> <p>2.2.Monitoring devices or tactics are evaluated and implemented where appropriate.</p> <p>2.3.<i>Documentation</i> is completed as required in</p>

ELEMENT	PERFORMANCE CRITERIA
	accordance with legislative requirements and facility policies and procedures.
3. Release and monitor native animals	<p>3.1. Release day is determined according to animal needs.</p> <p>3.2. Animals are handled safely and humanely and transported to the release site in accordance with <i>occupational health and safety (OHS)</i>, animal welfare and facility procedures.</p> <p>3.3. <i>Release strategies</i> are implemented to address the requirements of particular animals.</p> <p>3.4. Released animals are monitored, where possible, to ensure successful return to their natural environment.</p> <p>3.5. Records are updated.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete animal husbandry tasks as required
- develop and follow animal release strategy in consultation with experienced personnel and organisations
- employ safe, humane and environmentally responsible organisational systems and procedures when handling, transporting and releasing native animals
- follow quarantine and disease control procedures
- implement facility policies and procedures
- literacy skills to read and implement facility policies and procedures, including OHS and waste management; follow treatment instructions; record accurately and legibly information collected; and select and apply procedures to a range of tasks
- communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, asking for clarification from coordinators and/or other experienced personnel and consulting with coordinators and/or other experienced personnel
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment

**REQUIRED SKILLS AND KNOWLEDGE**

- use safe waste handling and disposal procedures.

**Required knowledge**

- anatomical structures and physiological features of native animals
- animal monitoring devices and tactics
- basic animal husbandry requirements and rehabilitation procedures for common native species
- database to establish status of species in the wild
- natural dietary requirements for specific species
- normal behaviour of native wildlife
- principles and objectives of animal rehabilitation and release programs, animal welfare and ethics
- relevant facility policies and procedures, including OHS, animal welfare, hygiene standards and other industry guidelines
- relevant legislation, including state or territory wildlife Acts and codes of practice
- wildlife ecology, including population dynamics, habitat selection, competition, and predator-prey interactions.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare native animals for release
- transport and release animals
- monitor success of release program, where possible
- maintain accurate records.

The skills and knowledge required to release native animals to natural environment must be transferable to a range of work environments and contexts and include the



<b>EVIDENCE GUIDE</b>	
	ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or an environment that reproduces normal work conditions.</p> <p>There must be access in either situation to a range of rehabilitated native wildlife potentially ready for release as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Options*** for release considerations may include:

- animals readiness for release:
  - age, sex and health status of animal
  - ability to establish a home range
  - need for social interaction
- availability of suitable release site
- other habitat considerations (e.g. current stock density, availability of natural food and water)
- practicality of releasing animals into the area where they were originally found.

***Native animals*** may include:

- rescued and rehabilitated native wildlife:
  - amphibians
  - birds
  - marsupials
  - monotremes
  - reptiles.

***Release site*** selection and ***monitoring*** considerations may include:

- selected site should be close to where the animal was found or captured, as relocation to new areas is not advised due to the potential of:
  - creating competition with local wildlife
  - disease spread
  - displacing other animals from their home range
  - genetic integrity compromise.
- site may be monitored for:
  - adequate shelter
  - availability of natural food and water supply
  - habitat destruction
  - human interaction or intervention
  - pests
  - predators

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• suitable numbers of same species of animals.</li> </ul>
<p><b>Readiness</b> for release considerations may include:</p>	<ul style="list-style-type: none"> <li>• indications of animals' readiness for release: <ul style="list-style-type: none"> <li>• being dehumanised</li> <li>• displaying appropriate species behaviour</li> <li>• displaying normal physical features (e.g. returning to waterproof state)</li> <li>• feeding independently and eating at least 85 per cent natural diet that will be available in the proposed release site</li> <li>• moving freely</li> <li>• recognising own species</li> <li>• socially adapted to survive in their natural state</li> <li>• recognising natural food sources</li> <li>• used to exposure to natural elements</li> </ul> </li> <li>• readiness will also depend on: <ul style="list-style-type: none"> <li>• availability of a suitable release site</li> <li>• other habitat considerations</li> <li>• practicality of releasing animals into the area where they were originally found</li> <li>• timing of release (e.g. species migratory patterns)</li> <li>• weather conditions.</li> </ul> </li> </ul>
<p><b>Documentation</b> in relation to rescued wildlife that must be maintained may include:</p>	<ul style="list-style-type: none"> <li>• individual animal identification, where possible</li> <li>• health history, if applicable</li> <li>• reports to relevant government departments of species of threatened wildlife or unusual animals held</li> <li>• approval of shelter operators for any release of rehabilitated wildlife, if applicable</li> <li>• yearly returns to relevant state or territory bodies detailing the survival of all wildlife held.</li> </ul>
<p><b>OHS</b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Release strategies</i> may include:	<ul style="list-style-type: none"> <li>• ensuring animal readiness for release: <ul style="list-style-type: none"> <li>• physical wellbeing of the animal</li> <li>• necessary survival skills are present</li> </ul> </li> <li>• steps for release: <ul style="list-style-type: none"> <li>• veterinary examination to ensure animals are clinically free of diseases and parasite</li> <li>• notify relevant government department of proposed release, as required</li> <li>• organise tagging, banding or other marking, as required, for monitoring purposes</li> <li>• soft or hard release</li> <li>• release as near as possible to original habitat</li> <li>• release in the appropriate social group, where applicable to species</li> <li>• select appropriate weather, season and time of day.</li> </ul> </li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Captive animals
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAN309A Develop institutional husbandry guidelines

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of researching, consulting with others and writing institutional husbandry guidelines for a particular species.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Write institutional husbandry guidelines	<p>1.1. Need for <i>husbandry guidelines</i> and additional notes are agreed upon in consultation with supervisors.</p> <p>1.2. <i>Information</i> relevant to the species to be included or referenced in the guidelines is researched.</p> <p>1.3. Draft of guidelines is prepared in accordance with institutional policies and procedures and <i>occupational health and safety (OHS)</i> requirements.</p> <p>1.4. Draft of guidelines is circulated within the institution for comment and revised accordingly.</p> <p>1.5. Final document is produced and distributed in accordance with institutional policies and procedures.</p>
2. Review and maintain husbandry guidelines	<p>2.1. Information in the guidelines is monitored for accuracy, relevance and currency.</p> <p>2.2. Guidelines are updated and improved in consultation with relevant personnel.</p> <p>2.3. New information to be included in guidelines is disseminated to staff.</p>

ELEMENT	PERFORMANCE CRITERIA
	2.4. Guidelines are stored in accordance with institutional policies and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- research and analyse information
- follow institutional policies and procedures
- operate appropriate species management databases
- use word-processing software
- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; interpret data; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors and other staff
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- write husbandry guidelines following institutional standard format and citation procedures.

#### Required knowledge

- animal husbandry guidelines requirements
- biology and husbandry of animals in a captive animal environment
- database programs for recordkeeping and data analysis
- genetic principles for the management of captive animal populations
- institutional policies and procedures, including OHS
- principles of animal welfare and ethics
- regional and institutional collection plans and policies
- relevant federal, state or territory legislation and codes of practice
- report formats for husbandry guidelines
- research methods and facilities
- species stocking policies.



## Evidence Guide

<b>EVIDENCE GUIDE</b>	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• research, collate and analyse information relating to a particular species</li> <li>• discuss and collaborate with team members on the development and maintenance of the guidelines.</li> </ul> <p>The skills and knowledge required to develop institutional husbandry guidelines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. research and guidelines documentation)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Husbandry guidelines:</i></b>	<ul style="list-style-type: none"> <li>• may be documents, usually at an institutional level, that provide information on species management including: <ul style="list-style-type: none"> <li>• maintaining, displaying and breeding a species in captivity</li> </ul> </li> <li>• should encourage readers to access additional information by referencing published data</li> <li>• husbandry guidelines differ from Husbandry Manuals in that they refer to the specific</li> </ul>

<b>RANGE STATEMENT</b>	
	management of the species within the said institution rather than all institutions in a region/program.
<i>Information</i> that may be researched includes:	<ul style="list-style-type: none"> <li>• artificial incubation and/or rearing of the animal group</li> <li>• behaviour</li> <li>• feeding requirements</li> <li>• general husbandry</li> <li>• health requirements</li> <li>• housing, handling and transport requirements</li> <li>• taxonomy and natural history</li> <li>• relevant references.</li> </ul>
<i>OHS</i> risks to consider when developing guidelines may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAN310A Assist with exhibit design and renovation planning

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of assessing current exhibit status and contributing to exhibit design and renovation planning.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess exhibit status	<p>1.1.<i>Exhibit security</i> for animals, staff and the public is reviewed.</p> <p>1.2.<i>Animal welfare</i> in relation to exhibit structure and furnishings is evaluated.</p> <p>1.3.<i>Exhibit aesthetics</i> and access are reviewed from the perspective of public perception, workplace image and animal needs.</p> <p>1.4.<i>Exhibit furnishings</i> condition, functionality and safety are evaluated.</p> <p>1.5.Recommendations for exhibit design or renovation upgrades are documented and reported to supervisor.</p>
2. Contribute to exhibit design and renovation planning	<p>2.1.Enclosure and exhibit development and renovation proposals are reviewed.</p> <p>2.2.Contributions are made as required to facility <i>concept briefs</i> for the design or renovation of</p>

ELEMENT	PERFORMANCE CRITERIA
	enclosures and exhibits.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- assist with preparation of basic technical drawings
- identify animal housing behavioural and physical requirements
- implement facility policies and procedures
- maintain records and write workplace documents
- literacy skills to read and follow institutional policies and procedures, including occupational health and safety (OHS), hygiene control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, training others and consulting with supervisors
- numeracy skills to complete mathematical calculations relating to enclosure and exhibit designs
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to access and use available resources.

#### Required knowledge

- animal biology and husbandry requirements relevant to enclosures and exhibits
- educational and interpretive functions of enclosures
- environmental enrichment
- principles of enclosure landscaping and horticulture, including basic working knowledge of exhibit plants and weeds
- principles and protocols for enclosure or exhibit design, including aesthetics, function and effects of introduced fixtures and features
- principles of animal welfare and ethics
- principles of naturalistic landscaping for enclosures and exhibits
- relevant facility policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice

**REQUIRED SKILLS AND KNOWLEDGE**

- security control principles
- specialist enclosures for different animals.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess exhibit status and submit upgrade recommendations
- contribute to new or renovation concept briefs.

The skills and knowledge required to assist with exhibit design and renovation planning must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace or in a situation that reproduces normal work conditions.

There must be access in this situation to the appropriate equipment and/or resources to enable one to demonstrate competence.

**Method of assessment**

To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.



<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. design and renovation planning)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Exhibit security</i></b> considerations may include:</p>	<ul style="list-style-type: none"> <li>• ensuring animals are safe and secure in their housing</li> <li>• locks and slides in good working order</li> <li>• maintaining structures in good order</li> <li>• presence of pests within animal housing or</li> </ul>

<b>RANGE STATEMENT</b>	
	enclosures <ul style="list-style-type: none"> <li>• prevention of escape by animals</li> <li>• restriction of access to authorised personnel</li> <li>• safe access and egress.</li> </ul>
<i>Animal welfare</i> requirements include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations and international conventions</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>Exhibit aesthetics</i> may include:	<ul style="list-style-type: none"> <li>• appropriate placement of exhibit furniture</li> <li>• appropriate use of materials (e.g. naturalistic or non-naturalistic) in line with institute's policies and procedures</li> <li>• lines of sight</li> <li>• maintaining the overall appearance of the exhibit and its features.</li> </ul>
<i>Exhibit furnishings</i> may include:	<ul style="list-style-type: none"> <li>• branches and trees</li> <li>• logs</li> <li>• perches</li> <li>• rails</li> <li>• rocks or mock rocks</li> <li>• shelves.</li> </ul>
<i>Concept briefs</i> may include:	<ul style="list-style-type: none"> <li>• basic technical drawings</li> <li>• costs for new or renovated enclosures or exhibits evaluation of exhibit performance</li> <li>• detailed work plans</li> <li>• research</li> <li>• theme of exhibit, in line with institute's mission and visions/values.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN311A Care for young animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of monitoring the general health and wellbeing of young animals that may be either rescued native wildlife or captive animals being naturally or artificially reared.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify and assist with animal care needs	<p>1.1. <i>Suitable environment</i> for rearing young animals is prepared and maintained in accordance with <i>occupational health and safety (OHS)</i> requirements.</p> <p>1.2. Appropriate <i>care program</i> is developed to ensure the health and wellbeing of animals.</p> <p>1.3. Assistance is provided in operating and maintaining <i>controlled environments</i> in accordance with facility policies and procedures.</p> <p>1.4. <i>Risks to animals</i> associated with artificial rearing are identified and minimised.</p>
2. Monitor health and nutrition requirements for young animals	<p>2.1. Dietary and feeding requirements of young animals are prepared and stored in accordance with facility policies and procedures.</p> <p>2.2. <i>Growth and general condition</i> of animals are monitored.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.3. <i>Weaning</i> procedures are followed for nominated species where appropriate.</p> <p>2.4. Pre-release activities are conducted under supervision, where appropriate.</p> <p>2.5. <i>Records</i> are maintained in accordance with facility policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with young animals
- identify signs and symptoms of disease and ill thrift in young animals
- implement facility policies and procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records
- monitor animal health and condition and recognise abnormalities
- literacy skills to read and follow facility policies and procedures, including OHS and waste management; follow treatment instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomy structure and physiology features of the relevant animal groups related to caring for young animals

## REQUIRED SKILLS AND KNOWLEDGE

- concepts of imprinting and socialisation
- feeding and husbandry requirements for artificially raised animals
- formula types for common species
- housing requirements for mother and young where relevant
- normal and abnormal animal behaviour
- pre-release activities
- range of risks to animals being artificially fed
- release strategies
- relevant facility policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice
- safe animal handling techniques and procedures
- safe work practices
- weaning management
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- provide appropriate environments and care programs to meet the needs of a range of young animals
- assist in artificially rearing animals
- monitor the health and nutrition of young animals to ensure their overall growth and wellbeing
- prepare animals for release into a captive or natural habitat environment.

<b>EVIDENCE GUIDE</b>	
	The skills and knowledge required to care for young animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace.</p> <p>There must be access in this situation to a range of young animals as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).



## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Suitable environments</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• appropriate level of barrier nursing</li> <li>• consideration of appropriate housing for the mother</li> <li>• reduced noise or light</li> <li>• screening or privacy from the public</li> <li>• separation of the young from other animals or mate</li> <li>• simulated natural habitats.</li> </ul>
<p><b><i>OHS</i></b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<p><b><i>Care program</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• appropriate environment</li> <li>• nutritional requirements</li> <li>• teaching animals to catch their own food</li> <li>• providing animals with materials to create their own living environment</li> <li>• providing socialisation opportunities with other animals.</li> </ul>
<p><b><i>Controlled environment</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• brooders</li> <li>• food dictated by breeding and growth patterns</li> <li>• heat pads</li> <li>• hospital cages</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• humidicribs</li> <li>• incubators</li> <li>• invertebrate breeding cages.</li> </ul>
<i>Risks to animals</i> during artificial feeding may include:	<ul style="list-style-type: none"> <li>• acquisition of aberrant behaviours</li> <li>• aspiration</li> <li>• imprinting</li> <li>• infection</li> <li>• lack of socialisation</li> <li>• pneumonia.</li> </ul>
<i>Growth and general condition</i> monitoring may include:	<ul style="list-style-type: none"> <li>• appearance of the body or coat</li> <li>• body measurements</li> <li>• monitoring weight</li> <li>• temperature.</li> </ul>
<i>Weaning</i> may involve:	<ul style="list-style-type: none"> <li>• changing the diet</li> <li>• introducing alternative feeding strategies</li> <li>• weaning from human contact.</li> </ul>
<i>Records</i> may include:	<ul style="list-style-type: none"> <li>• those required by legislation and facility policies and procedures: <ul style="list-style-type: none"> <li>• animal identification and health records</li> <li>• facility breeding program records, if applicable</li> <li>• yearly returns to relevant state or territory bodies detailing the survival of all wildlife held, if required.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAN401A Implement collection management

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of contributing to and implementing regional collection plans within a captive animal facility, by ensuring breeding environments and programs are monitored carefully and the transportation of animals between captive animal facilities is managed effectively.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to senior or more experienced keepers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Action <i>collection plans</i>	<p>1.1. Regional and institutional plan objectives are reviewed and implemented within own area of responsibility.</p> <p>1.2. In-house <i>husbandry manuals and studbooks</i> are prepared and/or updated as requested or required.</p> <p>1.3. Communication with relevant <i>internal and external personnel</i> is maintained to ensure appropriate breeding environments.</p> <p>1.4. Breeding programs are monitored and reviewed in accordance with the collection plan objectives.</p> <p>1.5. Accurate section records are maintained in accordance with institutional policies and procedures.</p>
2. Identify and transport animals between	2.1. <i>Identification techniques</i> are selected and applied correctly to identify animals.

ELEMENT	PERFORMANCE CRITERIA
facilities	<p>2.2. Animal transactions and security are managed in accordance with the Australasian Species Management Program (ASMP), International Air Transport Association (IATA), regulations and <i>occupational health and safety (OHS)</i> requirements.</p> <p>2.3. Accurate records of transactions are kept in accordance with institutional policies and procedures.</p>
3. Contribute to collection planning policies	<p>3.1. Species management and collection planning policies are analysed.</p> <p>3.2. <i>Contribution</i> to collection planning policies and procedures is provided as required.</p> <p>3.3. Endorsed policies are discussed and disseminated to staff in accordance with institutional policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- access technical advice
- analyse information and write proposals
- develop, interpret and review studbooks and husbandry manuals
- follow institutional policies and procedures
- interpret studbook data and run basic analysis
- maintain section records
- manage demographics within populations
- operate appropriate species management databases
- record data using approved animal keeping information systems and/or software
- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; interpret studbook data; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures and interpret studbooks

**REQUIRED SKILLS AND KNOWLEDGE**

- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to interpret breeding coefficients.

**Required knowledge**

- animal husbandry manual requirements
- animal identification to the sup-species level
- ASMP and ASMP Regional Census and Plan
- ASMP guidelines and criteria for studbook keeping
- breeding control methods
- collection planning requirements
- concepts of inbreeding and out breeding
- database programs for recordkeeping and data analysis
- genetic principles for the management of captive animal populations
- importance of breeding coefficients
- institutional collection planning policies and procedures and other relevant policies and procedures, including OHS and emergency procedures
- principles and constraints of wildlife conservation
- principles of animal welfare and ethics
- principles of taxonomy and relevance to population management
- relevant international, federal and state or territory legislation and codes of practice
- report formats for captive animal management plans
- role of the Australasian Regional Association of Zoological Parks (ARAZP)
- small population biology
- species stocking policies
- working knowledge of international agreements and conventions, including the World Zoo Conservation Strategy and the International Union for Conservation of Nature and Natural Resources conservation status categories.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• analyse collection plans and contribute to their review and implementation</li> <li>• communicate effectively with staff on breeding programs</li> <li>• develop and review husbandry manuals and studbooks</li> <li>• manage the transportation of animals between captive animal facilities</li> <li>• maintain accurate records.</li> </ul> <p>The skills and knowledge required to implement collection management must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Collection plans</i></b> are:	<ul style="list-style-type: none"> <li>• developed at regional or institutional level and need to consider: <ul style="list-style-type: none"> <li>• species management plans</li> <li>• regional captive management plans</li> <li>• interpretive plans</li> <li>• available facilities</li> <li>• conservation issues</li> <li>• education programs</li> <li>• visitors' experiences of particular captive animal facilities.</li> </ul> </li> </ul>
<b><i>Husbandry manuals and studbooks</i></b> may include:	<ul style="list-style-type: none"> <li>• husbandry manuals: <ul style="list-style-type: none"> <li>• how to house individual species</li> <li>• details of their biology, behaviour and requirements in captivity</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• reproductive biology</li> <li>• distribute</li> <li>• appropriate capture and restraint methods</li> <li>• studbooks may include identifiers, such as:               <ul style="list-style-type: none"> <li>• sex</li> <li>• identities of both parents</li> <li>• birth and death dates</li> <li>• and may also include:                   <ul style="list-style-type: none"> <li>• full transaction history</li> <li>• any information unique to the species, such as any data on the reproductive potential of living animals.</li> </ul> </li> </ul> </li> </ul>
<i>Internal and external personnel</i> may include:	<ul style="list-style-type: none"> <li>• husbandry coordinators</li> <li>• keepers within the section, in other sections and keepers in charge</li> <li>• management</li> <li>• record keepers</li> <li>• species contacts (in-house and regional)</li> <li>• studbook keepers</li> <li>• Taxon Advisory Group (TAG) contacts and coordinators</li> <li>• veterinarians.</li> </ul>
<i>Identification techniques</i> may include:	<ul style="list-style-type: none"> <li>• banding</li> <li>• branding</li> <li>• ear tagging</li> <li>• microchipping</li> <li>• banding</li> <li>• tattooing.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>

**RANGE STATEMENT***Contributions* may include:

- feedback from staff on draft policies and procedures
- individual research into and evaluation of current policies and procedures
- providing feedback on draft institutional and regional collection plans
- undertaking professional development roles with the ASMP.

**Unit Sector(s)**

<b>Unit sector</b>	Captive animals
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAN402A Manage enclosures and exhibits

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of supervising animal care and housing operations, supervising staff and implementing plans for the commissioning of new or renovated enclosures or exhibits.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to senior or more experienced keepers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Supervise enclosure and exhibit staff	<p>1.1. Personnel, material and equipment required to manage and maintain <i>enclosures and exhibits</i> are identified.</p> <p>1.2. Recruitment and induction of personnel is arranged in accordance with facility policies and procedures as appropriate.</p> <p>1.3. Rosters are developed and coordinated to balance job requirements, responsibility levels and skill development opportunities.</p> <p>1.4. <i>Safe work practices</i> are communicated and enforced for all staff members.</p> <p>1.5. Effective communication procedures are established and maintained with staff to review work operations and improve operational efficiency.</p> <p>1.6. Staff skills and knowledge gaps are identified and</p>

ELEMENT	PERFORMANCE CRITERIA
	appropriate training is arranged.
2. Supervise animal care and housing operations	<p>2.1. <i>Enclosure and exhibit security</i> and safety are regularly monitored in accordance with <i>occupational health and safety (OHS)</i> and <i>animal welfare requirements</i>, and recommendations for improvements are prepared.</p> <p>2.2. <i>Animal care strategies</i> are regularly assessed and evaluated in consultation with animal handlers and other relevant personnel.</p> <p>2.3. Enclosure and exhibit maintenance works are regularly monitored to ensure compliance with OHS, animal welfare and hygiene standards requirements and facility policies and procedures.</p> <p>2.4. Environmentally safe and effective <i>pest</i> control procedures are implemented as required.</p> <p>2.5. Identified urgent maintenance works are initiated in a timely manner.</p> <p>2.6. Animal housing maintenance records are updated as required.</p>
3. Implement plans for new or renovated enclosures and exhibits	<p>3.1. Current exhibit status is reviewed in consultation with facility staff.</p> <p>3.2. Enclosure and exhibit <i>development and renovation proposals</i> are submitted to management for consideration as required.</p> <p>3.3. Factors that may impact on the commissioning of new or renovated enclosures and exhibits are identified and assessed.</p> <p>3.4. Operating procedures for new or renovated exhibits are developed/reviewed and evaluated in consultation with relevant departments and colleagues.</p> <p>3.5. Animal handling and other operations staff are briefed on revised operating procedures.</p> <p>3.6. Facility master plan is updated.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

## REQUIRED SKILLS AND KNOWLEDGE

### Required skills

- develop/review operating procedures
- evaluate enclosure or exhibit status, including security
- identify animal housing behavioural and physical requirements
- implement facility policies and procedures and advise on animal care strategies
- implement environmentally safe and effective pest control procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and complete workplace documents
- manage staff effectively
- monitor enclosure and exhibit security and safety
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, training others and consulting with staff, other departments, relevant experts and management
- numeracy skills to complete mathematical calculations relating to enclosure and exhibit designs and maintenance
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and schedule workplace activities.

### Required knowledge

- animal biology and husbandry requirements relevant to enclosures and exhibits
- animal husbandry manuals and other recordkeeping requirements
- educational and interpretive functions of enclosures
- environmental enrichment related to exhibit species
- exhibit maintenance and security requirements
- institution master plan and collection management policy
- pest identification and management techniques
- principles of animal welfare and ethics
- principles of enclosure landscaping and horticulture, including basic working knowledge of exhibit plants and weeds
- principles and protocols for enclosure or exhibit design, including aesthetics, function and effects of introduced fixtures and features
- principles of naturalistic landscaping for enclosures and exhibits
- relevant facility policies and procedures, including OHS and emergency procedures, animal welfare, ethics, hygiene standards and other industry guidelines

**REQUIRED SKILLS AND KNOWLEDGE**

- relevant federal and state or territory legislation and codes of practice
- safe work practices
- security control principles
- specialist enclosures for different animals
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- manage the operations of enclosures and exhibits
- supervise enclosure and exhibit staff
- submit development or renovations proposals to management
- implement plans for the commissioning of new or renovated enclosures or exhibits
- maintain accurate records.

The skills and knowledge required to manage enclosures and exhibits must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.



<b>EVIDENCE GUIDE</b>	
	There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work

<b>RANGE STATEMENT</b>	
situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Enclosures and exhibits</i> may include:	<ul style="list-style-type: none"> <li>• defined spaces where animals are kept and includes both:               <ul style="list-style-type: none"> <li>• exhibit public viewing areas</li> <li>• off-exhibit holding spaces</li> </ul> </li> <li>• enclosures and exhibits may be for:               <ul style="list-style-type: none"> <li>• existing species</li> <li>• new single species</li> <li>• multi-species.</li> </ul> </li> </ul>
<i>Safe work practices</i> include:	<ul style="list-style-type: none"> <li>• applying appropriate manual handling techniques when packaging and handling loads, including animals and equipment</li> <li>• hazard identification and risk minimisation:               <ul style="list-style-type: none"> <li>• handling, use, storage, transport and disposal of chemicals</li> <li>• handling and disposal of biological wastes</li> </ul> </li> <li>• following personal and workplace hygiene procedures</li> <li>• using infection control procedures to minimise risks associated with:               <ul style="list-style-type: none"> <li>• zoonoses</li> <li>• release of infective agents (both animal and human)</li> <li>• chemical spillage</li> <li>• gas leakages</li> </ul> </li> <li>• using machinery and equipment in accordance with manufacturers' instructions</li> <li>• using personal protective equipment and clothing:               <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• appropriate footwear</li> <li>• ear muffs/plugs</li> <li>• protective masks</li> <li>• safety gloves</li> <li>• safety goggles and glasses</li> <li>• sun hat and sunscreen lotion.</li> </ul> </li> </ul>
<i>Enclosure and exhibit security</i> may include:	<ul style="list-style-type: none"> <li>• checking for pests within animal housing or enclosures</li> <li>• checking there are no unauthorised people in</li> </ul>

<b>RANGE STATEMENT</b>	
	animal enclosures <ul style="list-style-type: none"> <li>• checking that locks and slides are in good working order</li> <li>• ensuring animals are safe and secure in their housing</li> <li>• identifying any animal housing faults that may result in escape</li> <li>• maintaining structures in good order.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal welfare requirements</i> include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations and international conventions</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>Animal care strategies</i> may include:	<ul style="list-style-type: none"> <li>• artificial rearing</li> <li>• breeding</li> <li>• enrichment</li> <li>• handling, restraining and transporting.</li> </ul>
<i>Pests</i> may include:	<ul style="list-style-type: none"> <li>• cockroaches, spiders, ants and flying insects</li> <li>• predators and parasites</li> <li>• rats and mice.</li> </ul>
<i>Development and renovation proposals</i> may include:	<ul style="list-style-type: none"> <li>• availability of animals</li> <li>• cover requirements</li> <li>• enjoyment and education</li> <li>• environmental and social enrichment</li> <li>• immersion techniques</li> <li>• institution conservation policy and collection</li> </ul>

**RANGE STATEMENT**

	plan <ul style="list-style-type: none"> <li>• keeper access and safety</li> <li>• safety and security</li> <li>• solitary and social animals</li> <li>• space allocation between public and non-public areas</li> <li>• sound and touch</li> <li>• visitor intrusion.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Captive animals
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAN403A Develop animal diets

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of developing and presenting animal diets, including the ordering of food, and communicating with others in respect to the nutritional requirements of animals, recognising signs of poor nutrition in animals and developing interim corrective diets.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to senior or more experienced keepers or animal carers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Develop a <i>feed regime</i>	<p>1.1. Diets are evaluated in accordance with facility policy and procedures.</p> <p>1.2. <i>Natural and artificial diets</i> and feeding regimes are researched to assist in correct diet development.</p> <p>1.3. Diets and feeding regimes are formulated and modified as required.</p> <p>1.4. Substitution of natural feed with artificial or alternative feeds is approved by supervisor.</p> <p>1.5. <i>Preparation and presentation of diets</i> is coordinated in accordance with <i>occupational health and safety (OHS)</i> and animal requirements.</p>
2. Order food	<p>2.1. Supplies are ordered from internal and external suppliers.</p> <p>2.2. <i>Food quality</i> is monitored in accordance with</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>facility policies and procedures.</p> <p>2.3. Food and feeding records are maintained and stored in accordance with facility policies and procedures.</p>
<p>3. Communicate effectively with others about animal nutritional requirements</p>	<p>3.1. Contribution is provided to facility's <i>nutritional policy</i>.</p> <p>3.2. Assistance is provided with nutrition training of keepers.</p> <p>3.3. Coordination of nutritional projects and communication with <i>internal and external personnel</i> is maintained.</p> <p>3.4. <i>Nutritional reports</i> are prepared and presented to management in accordance with facility policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate and evaluate dietary needs for a range of animals
- develop interim corrective diets for animals
- employ safe and environmentally responsible organisation systems and procedures when working with animals and feed
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- recognise and investigate signs of poor nutrition in animals
- identify food items and evaluate methods of preparation, storage and presentation for various animal groups
- implement and advise on animal care strategies related to nutrition
- maintain records and write workplace documents, including nutritional reports to management
- undertake research
- use a variety of feeding techniques in response to behavioural needs of animals
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility,

## REQUIRED SKILLS AND KNOWLEDGE

including questioning techniques, active listening, training others and consulting with supervisors, internal and external personnel and management

- numeracy skills to complete mathematical calculations relating to formulating feed regimes
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and develop well-balanced diets
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- write food orders and prepare feed records.

### Required knowledge

- animal care and management strategies
- anatomy and physiology for a range of animal groups relating to nutrition and digestive processes
- animal classifications that influence dietary needs and styles of eating
- behavioural features related to feeding styles and unsuitable responses to diets
- animal husbandry manuals and other recordkeeping requirements
- animal management software, such as Animal Record-Keeping System (ARKS) and Single Population Analysis and Records Keeping System (SPARKS)
- dietary requirements for a broad range of animal groups
- feedstuffs available and approved in Australia for animals, their availability, cost, shelf life, method of storage, preparation and presentation to animals
- institution master plan
- importance of vitamin and mineral substitution in artificial diets
- methods used to calculate rations, estimate weight of animals, calculate dry feed weight of food stuffs and other relevant measurements and calculations used for diet planning and food preparation
- natural animal diets
- principles of animal welfare and ethics
- principles of nutrition and the impact of poor nutrition on the health and condition of animals
- relevant facility policies and procedures, including OHS, animal welfare, feeding regimes, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice, including OHS and animal welfare
- safe work practices
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.



## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• manage the preparation of diets and feed regimes to meet specific animal requirements</li> <li>• monitor the quality of food and communicate effectively with staff and management on all aspects of animal nutrition</li> <li>• maintain section nutrition records and write reports.</li> </ul> <p>The skills and knowledge required to develop animal diets must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities, mobile or theme park environments, wildlife parks, zoos or rescue facilities.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills</p>

<b>EVIDENCE GUIDE</b>	
	<p>assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Feed regime</i></b> may include:	<ul style="list-style-type: none"> <li>• foodstuffs: <ul style="list-style-type: none"> <li>• fresh</li> <li>• live</li> <li>• preserved</li> <li>• reconstituted</li> <li>• supplements</li> <li>• preparation</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• presentation</li> <li>• quantities</li> <li>• quality</li> <li>• timing and method of food distribution</li> <li>• animal needs: <ul style="list-style-type: none"> <li>• species requirements</li> <li>• age</li> <li>• sex</li> <li>• breeding status</li> <li>• activity load</li> <li>• climate.</li> </ul> </li> </ul>
<i>Natural and artificial diets</i> may include:	<ul style="list-style-type: none"> <li>• natural: <ul style="list-style-type: none"> <li>• sources of food normally available in wild or similar environment</li> <li>• fresh or preserved food</li> </ul> </li> <li>• artificial: <ul style="list-style-type: none"> <li>• chemical replacement foodstuffs</li> <li>• chemical supplements</li> <li>• items that can provide required nutrients but aren't usually consumed by species.</li> </ul> </li> </ul>
<i>Preparation and presentation of diets</i> may include:	<ul style="list-style-type: none"> <li>• avoiding inhalation of organic and other dusts</li> <li>• checking the shelf life of foodstuffs and using appropriate storage methods</li> <li>• controlling animal movement and handling during feeding</li> <li>• preventing contamination from other animal diet materials that are potentially toxic to some species</li> <li>• preventing contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• preventing plants and other materials being thrown into animal enclosures by the public</li> <li>• using appropriate personal protective equipment: <ul style="list-style-type: none"> <li>• aprons and gloves</li> <li>• ear protection when working with noisy animals</li> </ul> </li> <li>• using infection control procedures to avoid the possibility of zoonotic infection</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• using manual handling and general food preparation, storage and distribution equipment according to manufacturers' instructions and safe work method statements (SWMS).</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• noise including machinery and some animals</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> <li>•</li> </ul>
<i>Food quality</i> may include:	<ul style="list-style-type: none"> <li>• cost versus availability</li> <li>• cost versus nutrient content</li> <li>• digestibility</li> <li>• nutrient value of food items</li> <li>• percentage of spoilage per order</li> <li>• roughage content</li> <li>• shelf life.</li> </ul>
<i>Nutritional policy</i> may include:	<ul style="list-style-type: none"> <li>• budget for food purchase</li> <li>• minimum quantities for on hand supplies</li> <li>• procedures for: <ul style="list-style-type: none"> <li>• approving nominated suppliers</li> <li>• calculating rations</li> <li>• checking animal's response to diet</li> <li>• disposing of uneaten food</li> <li>• disposing of unused or perished items</li> <li>• ordering supplies</li> <li>• preparing rations</li> <li>• recording dietary information</li> <li>• recording food use</li> <li>• returning of poor quality product</li> <li>• storing food stuffs</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• staff authorised to:               <ul style="list-style-type: none"> <li>• approve purchase</li> <li>• calculate and modify diets</li> <li>• check supply quality</li> <li>• order supplies</li> <li>• prepare rations.</li> </ul> </li> </ul>
<i>Internal and external personnel</i> may include:	<ul style="list-style-type: none"> <li>• internal:               <ul style="list-style-type: none"> <li>• curators</li> <li>• management</li> <li>• operations managers</li> <li>• records managers</li> <li>• staff within the section</li> <li>• staff in other sections</li> <li>• team leaders</li> <li>• veterinarians</li> </ul> </li> <li>• external:               <ul style="list-style-type: none"> <li>• contractors</li> <li>• government bodies</li> <li>• members of the public</li> <li>• other captive animal facilities</li> <li>• professional associations</li> <li>• suppliers.</li> </ul> </li> </ul>
<i>Nutritional reports</i> may include:	<ul style="list-style-type: none"> <li>• written and verbal information on:               <ul style="list-style-type: none"> <li>• animal profile and response to diet</li> <li>• diet calculations</li> <li>• feed budget</li> <li>• feed orders</li> <li>• feed stocktake</li> <li>• options for feed substitutes.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN404A Develop, monitor and review behavioural management strategies

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of developing, monitoring and reviewing behavioural management strategies for animals which incorporate short and long-term objectives and require the involvement and cooperation of a range of staff within the facility or institution.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to senior or more experienced keepers or animal carers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Analyse <i>animal data profiles</i>	1.1. Animal behaviour data is collated and analysed. 1.2. Individual animal profiles are created and compared against known normal behaviour patterns in captivity and in the wild.
2. Develop <i>behavioural management strategies</i>	2.1. Research and consultation are conducted to determine appropriate strategies for particular animals. 2.2. Strategies are developed incorporating <i>animal welfare and occupational health and safety (OHS) considerations</i> . 2.3. Strategies are finalised and approved by supervisors and/or senior management.
3. Monitor and review	3.1. Strategies are disseminated to relevant staff and



ELEMENT	PERFORMANCE CRITERIA
strategies	<p>action plans are implemented.</p> <p>3.2.Short and long-term objectives are reviewed on a regular basis in accordance with institutional policies and procedures.</p>
4. Communicate effectively with others on behavioural management strategies	<p>4.1.Contribution is provided to institutional animal behavioural management policy.</p> <p>4.2.Assistance is provided with training for keepers in animal behaviour strategies and enrichment programs.</p> <p>4.3.Coordination of projects and communication with <i>internal and external personnel</i> are maintained.</p> <p>4.4.<b>Reports</b> are prepared and presented to supervisors in accordance with institutional policies and procedures.</p> <p>4.5.<i>Animal husbandry manuals</i> are updated in accordance with institutional policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- analyse animal behavioural data
- apply behavioural management and enrichment techniques
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- implement institutional policies and procedures
- maintain records and write workplace documents, including reports to management
- provide advice to others on behavioural management issues
- select behaviour enrichment activities, materials and equipment suitable for animal species and stage of development
- suggest modifications to behaviour enrichment programs to improve animal comfort and learning opportunities
- undertake research and consult to determine appropriate strategies for particular animals
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record

## REQUIRED SKILLS AND KNOWLEDGE

accurately and legibly information collected; and select and apply procedures to a range of defined tasks

- oral communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, training others and consulting with supervisors, internal and external personnel and management
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data related to behavioural enrichment programs
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and develop appropriate behavioural management strategies.

### Required knowledge

- animal care and management strategies
- anatomy and physiology of animals
- animal husbandry manuals and other recordkeeping requirements
- behavioural needs such as housing, nutrition and feeding, enclosure maintenance and breeding
- animal management software, such as Animal Record-Keeping System (ARKS) and Single Population Analysis and Records Keeping System (SPARKS)
- institution master plan
- normal and abnormal animal behaviour and behaviour patterns
- principles of animal welfare and ethics
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice, including OHS and animal welfare
- safe work practices
- terminology used to describe and document health and behavioural signs and symptoms
- terminology used to describe behaviour repertoires, including desirable and undesirable features.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• create and analyse animal profiles</li> <li>• develop behavioural management strategies in accordance with OHS and animal welfare requirements</li> <li>• communicate and work effectively over a period of time with a wide range of people in respect to the strategies</li> <li>• provide support and advice to others on behavioural management issues</li> <li>• maintain records and prepare reports as required.</li> </ul> <p>The skills and knowledge required to develop, monitor and review behavioural management strategies must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities, mobile or theme park environments, wildlife parks, zoos or rescue facilities.</p> <p>There must be access to a range of animals suitable for behavioural management programs as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p>

<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animal data profiles</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• information on: <ul style="list-style-type: none"> <li>• behavioural characteristics</li> <li>• feeding and socialisation patterns</li> <li>• interaction with humans</li> <li>• sexual and reproductive activities.</li> </ul> </li> </ul>
<p><b><i>Behavioural management</i></b></p>	<ul style="list-style-type: none"> <li>• animal husbandry practices</li> </ul>

<b>RANGE STATEMENT</b>	
<i>strategies</i> may include:	<ul style="list-style-type: none"> <li>• appropriate exhibit design</li> <li>• enrichment activities</li> <li>• social grouping.</li> </ul>
<i>Animal welfare and OHS requirements</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare requirements: <ul style="list-style-type: none"> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• keeping health and behaviour records</li> <li>• providing adequate housing and stock levels</li> <li>• providing appropriate enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds</li> </ul> </li> <li>• OHS requirements: <ul style="list-style-type: none"> <li>• use of relevant personal protective equipment: <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• eye wear</li> </ul> </li> <li>• hazard identification, risk minimisation and workplace procedures for: <ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• gas leakage</li> <li>• handling, use, storage, transport and disposal of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• to control the release of infective agents (animal and human)</li> <li>• transmission of zoonotic diseases.</li> </ul> </li> </ul> </li> </ul>
<i>Internal and external personnel</i> may include:	<ul style="list-style-type: none"> <li>• internal: <ul style="list-style-type: none"> <li>• curators</li> <li>• management</li> <li>• operations managers</li> <li>• records managers</li> <li>• staff within the section</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• staff in other sections</li> <li>• team leaders</li> <li>• veterinarians</li> <li>• external: <ul style="list-style-type: none"> <li>• contractors</li> <li>• government bodies</li> <li>• members of the public</li> <li>• other captive animal facilities</li> <li>• professional associations</li> <li>• suppliers.</li> </ul> </li> </ul>
<b>Reports</b> may include:	<ul style="list-style-type: none"> <li>• verbal and written information on: <ul style="list-style-type: none"> <li>• daily animal behaviour</li> <li>• strategies used to manage behaviour and the animal's response</li> <li>• suggestions on modification of current strategies.</li> </ul> </li> </ul>
<b>Animal husbandry manuals</b> may include:	<ul style="list-style-type: none"> <li>• information related to: <ul style="list-style-type: none"> <li>• captive animal profile: <ul style="list-style-type: none"> <li>• common behavioural issues</li> <li>• common health and nutrition issues</li> <li>• current thinking on adaptability to captive animal facilities</li> <li>• diets</li> <li>• enrichment strategies</li> <li>• exercise and housing needs</li> <li>• socialising needs</li> </ul> </li> <li>• wild animal profile: <ul style="list-style-type: none"> <li>• general daily activity</li> <li>• habitat, climatic region and common food sources</li> <li>• sexual behaviours and breeding cycle</li> <li>• social structure and classification as prey or predator</li> </ul> </li> </ul> </li> <li>• instructions on: <ul style="list-style-type: none"> <li>• behaviour enrichment</li> <li>• health and nutrition</li> <li>• housing, socialising and exercise</li> <li>• individual animal needs</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• records of:             <ul style="list-style-type: none"> <li>• activity budget</li> <li>• animal health care and treatment</li> <li>• behaviour issues and management strategies</li> <li>• breeding records</li> <li>• diet</li> </ul> </li> <li>• references to further reading, research and known specialists in behaviour relevant to particular species.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Captive animals
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAN405A Design and evaluate interpretive and learning programs

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of developing and evaluating interpretive and learning programs for a captive animal institution to provide exemplary learning opportunities that connect people to nature.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to senior or more experienced keepers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.



## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify and design priority interpretive and learning programs	<p>1.1. Australian Regional Association of Zoological Parks (ARAZPA) and institutional interpretive and learning policies are accessed and reviewed, and draft program objectives are assessed in line with the institutional strategic plan.</p> <p>1.2. Priorities for <i>interpretive and learning programs</i> are established in consultation with management.</p> <p>1.3. Internal and external <i>resources</i> are identified and accessed to assist with development of specific program content.</p> <p>1.4. Programs are <i>designed</i> in consultation with relevant personnel to meet the learning objectives of the target audience.</p> <p>1.5. Draft program designs are presented to management</p>

ELEMENT	PERFORMANCE CRITERIA
	to gain approval for further development.
2. Develop and deliver interpretive and learning programs	2.1. Communication methods and materials for delivery are developed, noting relevant <i>occupational health and safety (OHS)</i> requirements. 2.2. Staff members are trained and provided with ongoing professional development to deliver and support the programs. 2.3. Programs are trialled where appropriate and feedback is incorporated into the final draft. 2.4. Programs are printed or displayed and promoted in accordance with institutional policies and procedures.
3. Review and evaluate the <i>programs or materials</i>	3.1. Programs or other interpretive material are presented to relevant client groups. 3.2. Feedback from a variety of <i>sources</i> is collected, collated and analysed on a regular basis. 3.3. Programs or displays are improved and updated in accordance with institutional policies and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply effective presentation and public speaking skills
- apply excellent written skills to develop program materials and resources
- evaluate interpretive and learning programs
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- identify relevant communication methods and materials for delivery
- implement institutional policies and procedures
- maintain records and write workplace documents, including reports to management
- relate to and communicate with a wide range of clients
- undertake research and consult to determine program requirements
- use training and facilitation skills
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a

**REQUIRED SKILLS AND KNOWLEDGE**

range of defined tasks

- oral communication skills/language to fulfil the job role as specified by the institution, including negotiating and questioning techniques, active listening, training others, asking for clarification from client groups and acknowledging and responding to a range of views
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and present information in a format appropriate for the audience.

**Required knowledge**

- ARAZPA education policy and support materials
- exhibit design theories
- features of presentation equipment
- instructional design principles
- interpretive theory
- learning principles, strategies and technologies
- principles of animal welfare and ethics
- public speaking techniques
- teaching strategies
- relevant institutional policies and procedures, including OHS, animal welfare, ethics and strategic plan
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe work practices
- subject matter for the interpretive and learning programs.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of

<b>EVIDENCE GUIDE</b>	
	<p>this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• design, develop and promote interpretive and learning programs in consultation with others</li> <li>• trial and deliver a range of interpretive and learning programs to a wide range of audiences</li> <li>• review and improve interpretive and learning programs based on feedback.</li> </ul> <p>The skills and knowledge required to design and evaluate interpretive and learning programs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. program materials)</li> <li>• portfolio.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Interpretive and learning programs</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• conservation programs</li> <li>• family learning programs</li> <li>• holiday programs and tours</li> <li>• interactive programs</li> <li>• keeper talks and other presentations</li> <li>• learning technologies</li> <li>• online learning</li> <li>• outreach programs</li> <li>• preschool and community programs</li> <li>• publications</li> <li>• schools education (on and off-site)</li> <li>• signage and brochures</li> <li>• special events</li> <li>• website information.</li> </ul>
<p><b><i>Resources</i></b> that may be accessed include:</p>	<ul style="list-style-type: none"> <li>• internal resources:               <ul style="list-style-type: none"> <li>• content experts</li> <li>• educational personnel</li> <li>• existing materials and programs</li> </ul> </li> <li>• external resources:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• ARAZPA educational policy and support materials</li> <li>• ARAZPA education specialist advisory groups</li> <li>• internet material</li> <li>• other institutions' programs and materials.</li> </ul>
Program or material <i>design</i> considerations may include:	<ul style="list-style-type: none"> <li>• budget</li> <li>• instructional design principles</li> <li>• learning principles</li> <li>• levels of interaction required</li> <li>• program objectives</li> <li>• requirements to use animals</li> <li>• target groups.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
Feedback <i>sources</i> may include:	<ul style="list-style-type: none"> <li>• education specialist advisory groups</li> <li>• keepers within the section, in other sections or keepers in charge</li> <li>• management</li> <li>• other institutions' staff</li> <li>• species experts</li> <li>• target audience evaluations.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Captive animals
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAN406A Assist in establishing and maintaining a plantation

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of assisting other personnel, such as horticulturists, in establishing and maintaining a plantation for animal feed requirements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to senior or more experienced keepers with extensive zoo keeping or related experience.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assist with establishing and maintaining a zoological plantation	<p>1.1. <b><i>Zoological plantation requirements</i></b> are identified and <b><i>sourced</i></b> in consultation with <b><i>relevant personnel</i></b>.</p> <p>1.2. Assistance is provided in establishing a plantation.</p> <p>1.3. <b><i>Plantation management strategies</i></b> are implemented in accordance with <b><i>occupational health and safety (OHS)</i></b> and institutional policies and procedures.</p> <p>1.4. <b><i>Daily plantation activities</i></b> are conducted under supervision.</p>
2. Calculate and harvest animal food requirements	<p>2.1. Animal food requirements are calculated to ensure a constant food supply.</p> <p>2.2. Plantation is harvested in accordance with <b><i>sustainable horticultural practices</i></b>.</p> <p>2.3. <b><i>Advice</i></b> is provided to relevant personnel in respect to maintaining the plantation to meet animal requirements.</p>

ELEMENT	PERFORMANCE CRITERIA
	2.4.Plantation records are maintained and stored in accordance with institutional policies and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate and evaluate dietary needs for a range of animals
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- implement institutional policies and procedures
- maintain records and write workplace documents, including reports to management
- provide advice on animal food requirements
- research plantation requirements for specific animals
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; implement dietary instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to communicate effectively with team members, supervisors, contractors and consultants and to fulfil job role as specified by the institution, including questioning techniques, active listening, training others, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to complete arithmetic calculations and weigh and measure feed
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

#### Required knowledge

- animal care and management strategies
- basic anatomy and physiology relating to nutrition and digestive processes for specific animal species
- animal groups and their natural diets
- animal husbandry manuals and other recordkeeping requirements
- animal nutrition requirements
- basic physiology of required plant species
- pest identification and management techniques

**REQUIRED SKILLS AND KNOWLEDGE**

- principles of animal welfare and ethics
- OHS and animal welfare legislative requirements and codes of practice
- objectives of a plantation program
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice
- safe work practices
- toxic plants and substances, including control factors affecting toxicity and protocols for suspected animal poisoning
- zoological horticulture principles and practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- work with others, including horticulturists, to establish and maintain a plantation in accordance with OHS and organisation requirements
- correctly calculate and harvest food requirements
- maintain plantation records.

The skills and knowledge required to assist in establishing and maintaining a plantation must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large

<b>EVIDENCE GUIDE</b>	
	<p>captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. plantation records)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
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<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Zoological plantation requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal needs</li> <li>• considerations of location and size</li> <li>• environmental considerations</li> <li>• equipment and materials</li> <li>• plant types</li> <li>• planting a mix of evergreen and deciduous for year round supply</li> <li>• use of plant simulators.</li> </ul>
<p>Plantation requirements may be <b><i>sourced</i></b> from:</p>	<ul style="list-style-type: none"> <li>• donations</li> <li>• local councils</li> <li>• other plantations within the captive animal facility</li> <li>• outside contractors for plants and equipment</li> <li>• own plant stock</li> <li>• roadside verges.</li> </ul>
<p><b><i>Relevant personnel</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• consultants</li> <li>• horticulturalists</li> <li>• keepers in charge</li> <li>• landscapers</li> <li>• project managers.</li> </ul>
<p><b><i>Plantation management strategies</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• environmentally friendly and non-poisonous pest management</li> <li>• environmentally friendly waste management</li> <li>• water conservation techniques.</li> </ul>
<p><b><i>OHS</i></b> risks associated with the plantation may include:</p>	<ul style="list-style-type: none"> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and fertilisers</li> <li>• inhalation of aerosol particles</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• noise including machinery</li> <li>• repetitive strain injury (e.g. secateurs usage)</li> <li>• slippery or uneven work surfaces.</li> </ul>
<p><b><i>Daily plantation activities</i></b> may</p>	<ul style="list-style-type: none"> <li>• canopy reduction</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• controlling pests</li> <li>• fertilising</li> <li>• mulching</li> <li>• pruning</li> <li>• removing waste</li> <li>• replanting</li> <li>• thinning</li> <li>• watering</li> <li>• weeding.</li> </ul>
<i>Sustainable horticulture practices</i> may include:	<ul style="list-style-type: none"> <li>• plantation practices that consider the needs of:               <ul style="list-style-type: none"> <li>• environment</li> <li>• equipment and materials</li> <li>• plant types</li> <li>• planting a mix of evergreen and deciduous plants for year round supply</li> <li>• specific animals</li> <li>• use of plant stimulators</li> </ul> </li> <li>• safe and effective pest control and waste management strategies.</li> </ul>
<i>Advice</i> may relate to:	<ul style="list-style-type: none"> <li>• animal preferences</li> <li>• mixed age structure</li> <li>• plants known to be toxic to animals</li> <li>• plant variety.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Captive animals
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAN501A Contribute to enclosure and exhibit design or renovation projects

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of assessing current exhibit status, identifying the need for new or renovation enclosure or exhibit works, preparing proposals and contributing to project planning and implementation.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to senior or more experienced keepers, such as the keeper in charge, who operates as a specialist in exhibit design and development whilst demonstrating competence in other specialist areas, including animal husbandry, interpretive and learning programs, nutrition, collection management and conservation and research.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. <i>Research enclosure or exhibit</i> needs	1.1.Exhibit purpose is established. 1.2.Animal needs are researched. 1.3.Climate, landscape and other environmental conditions on site are reviewed. 1.4.Public access and safety requirements are researched. 1.5. <i>Staff and animal security</i> issues are identified.
2. Review exhibit options	2.1.Current relevant <i>exhibit performance</i> is critically evaluated in relation to <i>occupational health and</i>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>safety (OHS), animal welfare requirements, regulatory and facility policies and procedures.</i></p> <p>2.2.Features of other exhibits are evaluated for relevance to current project.</p> <p>2.3.Exhibit longevity, wear and tear potential are estimated based on experience and research of specific animal behaviour and needs.</p> <p>2.4.Exhibit design features are prioritised from animal welfare and staff safety perspective.</p> <p>2.5.Impact of building and construction works on other exhibits is evaluated.</p>
3. Present findings to project team	<p>3.1.Concept findings are confirmed in consultation with <i>other staff or experts</i>.</p> <p>3.2.Contributions are made to prepare images that illustrate design features and needs for report.</p> <p>3.3.Relevant references or support are identified for exhibit needs justification.</p> <p>3.4.Issues relating to potential construction impact on workplace operation from keepers perspective are itemised and justified.</p> <p>3.5.Report is prepared and presented to project team and/or management.</p>
4. Contribute to project planning and implementation	<p>4.1.<i>Concept briefs</i> are prepared, in consultation with others, and presented to project team and/or management as required.</p> <p>4.2.Contributions are made to project management plan and implementation strategies development.</p> <p>4.3.Issues that compromise animal welfare, staff, contractor and public safety are raised with project team throughout the project planning and implementation stages as they arise.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- evaluate enclosure or exhibit status, including security and safety

## REQUIRED SKILLS AND KNOWLEDGE

- evaluate detailed costing and work plans
- identify animal housing behavioural and physical requirements
- implement facility policies and procedures
- maintain records and write concept briefs and reports
- read, interpret and prepare basic technical drawings in consultation with others
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, training others and consulting with staff, other departments, relevant experts and management
- numeracy skills to complete mathematical calculations relating to enclosure and exhibit design and renovation
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources when developing concept briefs and contributing to project management strategy development.

### Required knowledge

- animal care and management strategies
- animal biology and husbandry requirements relevant to enclosures and exhibits
- educational and interpretive functions of enclosures
- environmental enrichment
- exhibit maintenance and security requirements
- institution master plan and collection policy
- interaction between animal types and various habitats
- internal decision making process leading to approval of new exhibits or renovation of existing ones
- principles of animal welfare and ethics
- principles of enclosure landscaping and horticulture, including basic working knowledge of exhibit plants and weeds
- principles and protocols for enclosure or exhibit design, including aesthetics, function and effects of introduced fixtures and features
- principles of naturalistic landscaping for enclosures and exhibits
- principles of project management
- recognition of animal, keeper, client and public requirements
- relevant facility policies and procedures, including OHS and emergency procedures, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice
- security control principles

**REQUIRED SKILLS AND KNOWLEDGE**

- specialist enclosures for different animals.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- research and review enclosure and/or exhibit needs
- work with others to prepare proposals and concept briefs for the design and development or renovation of exhibits and enclosures
- contribute to project planning
- monitor and advise on issues that arise during the implementation stages.

The skills and knowledge required to contribute to enclosure and exhibit design or renovation projects must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.

There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. reports and concept briefs)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>

<b>RANGE STATEMENT</b>	
<b>Research</b> may include:	<ul style="list-style-type: none"> <li>• exhibit theme and relationship to institutional master plan</li> <li>• other requirements: <ul style="list-style-type: none"> <li>• animal behaviour</li> <li>• animal husbandry</li> <li>• current best practice examples</li> <li>• display and interpretative</li> <li>• habitat</li> <li>• horticultural and maintenance</li> <li>• OHS and other legislative requirements.</li> </ul> </li> </ul>
<b>Enclosures and exhibits</b> may include:	<ul style="list-style-type: none"> <li>• defined spaces where animals are kept and includes both: <ul style="list-style-type: none"> <li>• exhibit public viewing areas</li> <li>• off-exhibit holding spaces</li> </ul> </li> <li>• enclosures and exhibits may be for: <ul style="list-style-type: none"> <li>• existing species</li> <li>• new single species</li> <li>• multi-species and multi-taxa.</li> </ul> </li> </ul>
<b>Staff and animal security</b> considerations may include:	<ul style="list-style-type: none"> <li>• animal housing faults that may result in escape</li> <li>• compatibility of species and breeds within housing</li> <li>• keeper access and safety</li> <li>• locks and slides are in good working order</li> <li>• restriction of access to authorised personnel</li> <li>• structures are maintained in good order.</li> </ul>
<b>Exhibit performance</b> measures may include:	<ul style="list-style-type: none"> <li>• animal husbandry and behaviour</li> <li>• environmental constraints</li> <li>• feedback from the public and staff</li> <li>• hazard identification and risk management</li> <li>• interaction of animals with the public and their habitat</li> <li>• problems associated with a simulated environment</li> <li>• the durability and appropriateness of enclosure furniture.</li> </ul>
<b>OHS</b> hazard considerations related to exhibit performance may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical when using water in close proximity</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>to electrical outlets</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of machinery or equipment</li> <li>• needle pricks and cuts from other sharps</li> <li>• noise, including machinery and some animals</li> <li>• release of infective agents (animal and human)</li> <li>• repetitive strain injury (e.g. raking and scrubbing)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal welfare requirements</i> include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations and international conventions</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>Other staff and experts</i> may include:	<ul style="list-style-type: none"> <li>• exhibit design advisory groups</li> <li>• keepers within the section, in other sections or keepers in charge</li> <li>• management</li> <li>• other institutions' staff</li> <li>• species experts</li> <li>• technical or architectural advisers/consultants.</li> </ul>
<i>Concept briefs</i> may include:	<ul style="list-style-type: none"> <li>• graphical representation to illustrate overall concept supported by: <ul style="list-style-type: none"> <li>• short introduction of the idea</li> <li>• background research and benchmarking</li> <li>• design and interpretive features, layout and materials</li> <li>• animal species habitat, husbandry and environmental enrichment suitability</li> <li>• resources required: <ul style="list-style-type: none"> <li>• estimated funding</li> <li>• skills and technical resources.</li> </ul> </li> </ul> </li> </ul>

### Unit Sector(s)

Unit sector	Captive animals
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		



## ACMCAN502A Develop and monitor collection management

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of developing and monitoring the implementation of a collection plan, by ensuring extensive liaison with internal and external personnel and assisting in the development of institutional policies, manuals and records in the area of species management.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to senior or more experienced keepers, such as a keeper in charge, who operates as a specialist in collection management whilst demonstrating competence in other specialist areas including animal husbandry, interpretive and learning programs, nutrition and conservation and research.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Assist with the development of the collection plan	1.1. <b><i>Collection plan</i></b> is <b><i>prepared</i></b> in accordance with institutional policies and procedures. 1.2. Liaison with <b><i>internal and external personnel</i></b> is conducted in respect to collection planning. 1.3. Recommendations of Taxon Advisory Groups (TAGs) are identified and considered when acquiring and disposing of animals. 1.4. Merits of each species included in the collection plan are <b><i>evaluated</i></b> . 1.5. <b><i>Databases and other resources</i></b> are accessed and utilised as required.
2. Contribute	2.1. Assistance is provided with collection planning

ELEMENT	PERFORMANCE CRITERIA
effectively to collection planning policy and practice	<p>policy development as required.</p> <p>2.2.Information or assistance is provided to regional and international <i>studbooks</i> and management plans as required.</p> <p>2.3.Critical analysis and review of the collection plan are undertaken and recommendations are presented to management.</p> <p>2.4.Reports are prepared and presented to management in accordance with institutional policies and procedures.</p> <p>2.5.Section animal records are coordinated and maintained in accordance with institutional policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- access technical advice
- analyse information, prepare and write proposals and reports
- apply word processing, spreadsheet and database skills
- develop, interpret and review studbooks and husbandry manuals
- determine appropriate genetic pairings
- determine appropriate demographic management
- implement institutional policies and procedures
- interpret studbook data and run basic analysis
- operate appropriate species management databases
- record data using approved animal keeping information systems and/or software
- literacy skills to read and implement institutional policies and procedures, critically analyse material; and record accurately and legibly information collected
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening and consulting with management
- numeracy skills to complete mathematical calculations relating to species management
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and develop a species

**REQUIRED SKILLS AND KNOWLEDGE**

management plan.

**Required knowledge**

- animal husbandry manual requirements
- animal identification to the sup-species level
- animal management software, such as Animal Record-Keeping System (ARKS), International Species Information System (ISI), Regional Animal Species Collection Plan (REGASP) and Single Population Analysis and Record Keeping System (SPARKS)
- Australasian Species Management Program (ASMP) and ASMP Regional Census and Plan
- ASMP guidelines and criteria for studbook keeping
- biology and husbandry of animals in a captive animal environment
- breeding control methods
- collection planning requirements
- concepts of inbreeding and out breeding
- international agreements and conventions, including the World Zoo Conservation Strategy and the International Union for Conservation of Nature and Natural Resources conservation status categories
- database programs for recordkeeping and data analysis
- genetic principles for the management of captive animal populations
- importance of breeding coefficients
- institutional collection planning policies and procedures, institutional master plan and other relevant policies and procedures
- principles and constraints of wildlife conservation
- principles of animal welfare and ethics
- principles of taxonomy and relevance to population management
- relevant international, federal and state or territory legislation and codes of practice
- report formats for captive animal management plans
- role of the Australasian Regional Association of Zoological Parks (ARAZP)
- small population biology
- species stocking policies.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• initiate and undertake analyses of species management and collection planning</li> <li>• interpret and undertake analyses of studbooks</li> <li>• write and interpret a strategic plan for a regional population of a species</li> <li>• liaise extensively with internal and external personnel on behalf of the institution in respect to collection planning</li> <li>• manage animal records and provide reports to management as required.</li> </ul> <p>The skills and knowledge required to develop and monitor collection management must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>knowledge</p> <ul style="list-style-type: none"> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Collection plans</i></b> are:	<ul style="list-style-type: none"> <li>• developed at regional or institutional level and need to consider: <ul style="list-style-type: none"> <li>• species management plans</li> <li>• regional captive management plans</li> <li>• interpretive plans</li> <li>• available facilities</li> <li>• conservation issues</li> <li>• education programs</li> <li>• visitors' experiences of particular captive animal facilities.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
Considerations when <i>preparing</i> a collection plan must take into account:	<ul style="list-style-type: none"> <li>• institution's collection policy</li> <li>• collection management policy</li> <li>• master plan</li> <li>• interpretive plan</li> <li>• facilities (existing and proposed) within the institution</li> <li>• principles of species management and disposition policy.</li> </ul>
<i>Internal and external personnel liaison</i> may include:	<ul style="list-style-type: none"> <li>• internal personnel: <ul style="list-style-type: none"> <li>• conservation coordinators</li> <li>• curatorial unit staff</li> <li>• species coordinators</li> <li>• staff from across the institution</li> <li>• Taxon Advisory Group representatives (TAGs)</li> </ul> </li> <li>• external personnel: <ul style="list-style-type: none"> <li>• government departments and bodies</li> <li>• other zoological institutions</li> <li>• representatives of ARAZPA and TAGs</li> <li>• species coordinators</li> <li>• studbook keepers</li> <li>• wildlife authorities.</li> </ul> </li> </ul>
Factors to consider when <i>evaluating</i> the merits of each species may include:	<ul style="list-style-type: none"> <li>• conservation needs</li> <li>• display value</li> <li>• provenance and associated plans.</li> </ul>
<i>Databases and other resources</i> that may be used include:	<ul style="list-style-type: none"> <li>• animal management software: <ul style="list-style-type: none"> <li>• ISIS</li> <li>• ARKS</li> <li>• SPARKS</li> </ul> </li> <li>• plans: <ul style="list-style-type: none"> <li>• ASMP</li> <li>• ASMP Regional Census and Plan</li> <li>• management plans</li> <li>• studbooks</li> <li>• husbandry manuals.</li> </ul> </li> </ul>
<i>Studbooks</i> may include:	<ul style="list-style-type: none"> <li>• studbooks may include identifiers, such as: <ul style="list-style-type: none"> <li>• sex</li> <li>• identities of both parents</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• birth and death dates</li> <li>• and may also include: <ul style="list-style-type: none"> <li>• full transaction history</li> <li>• any information unique to the species, such as any data on the reproductive potential of living animals.</li> </ul> </li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Captive animals
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		



## ACMCAS301A Work effectively in the companion animal industry

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of working effectively on an individual basis and with others within the companion animal industry.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector. It may include pet shops, aquariums, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Organise and complete daily work activities	<p>1.1. Own role and responsibilities are identified and confirmed with supervisor in accordance with <b><i>organisational requirements</i></b>.</p> <p>1.2. Work tasks are identified, prioritised and completed within designated timeframes and in accordance with <b><i>task requirements</i></b>.</p> <p>1.3. <b><i>Factors</i></b> affecting the achievement of task instructions are promptly identified and reported to supervisor.</p> <p>1.4. <b><i>Organisational equipment</i></b> is used as required to complete work tasks within designated timeframes.</p> <p>1.5. Daily routines are performed in accordance with <b><i>safe work practices and occupational health and safety (OHS) requirements</i></b>.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Work ethically with companion animals	2.1. <i>Companion animals</i> in the workplace are identified using common names. 2.2. Animals are handled <i>ethically</i> in accordance with relevant <i>legislative requirements</i> . 2.3. Work with animals is performed in a humane manner that optimises animal health and welfare.
3. Communicate effectively with clients	3.1. Clients' needs are identified and responded to in accordance with organisational policies and procedures. 3.2. <i>Communication with clients</i> is conducted in a professional and courteous manner. 3.3. Questioning and active listening techniques are used to determine client requirements.
4. Maintain companion animal records	4.1. Data is gathered and documented in accordance with organisational policies and procedures and task requirements. 4.2. Data is recorded and maintained in the organisational recordkeeping system.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- follow instructions and assist safely with tasks
- follow organisation policies, procedures and requirements
- literacy skills to read and follow OHS and waste management procedures and other organisational policies and procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to complete basic arithmetic calculations and measure volumes
- interpersonal skills to work with others and relate to people from a range of

**REQUIRED SKILLS AND KNOWLEDGE**

cultural, social and religious backgrounds and with a range of physical and mental abilities

- problem-solving skills to use available resources and prioritise daily tasks.

**Required knowledge**

- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- OHS and animal welfare legislative requirements and codes of practice
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal ethics and welfare
- relevant recordkeeping systems
- safe animal handling techniques and procedures
- safe work practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- organise, prioritise and complete work tasks in a timely manner
- identify and handle animals in an ethical and humane manner
- comply with relevant legislation, regulations and codes of practice, including animal welfare and OHS
- communicate effectively with supervisor and follow task instructions to complete daily work activities
- build relationships and communicate effectively with clients
- gather, document, maintain and record companion

<b>EVIDENCE GUIDE</b>	
	<p>animal records using organisational recordkeeping systems.</p> <p>The skills and knowledge required to work effectively in the companion animal industry must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces may include pet shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>

<b>EVIDENCE GUIDE</b>	
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Organisation requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal care and management protocols and procedures</li> <li>• code of conduct and code of ethics</li> <li>• daily work roster</li> <li>• environmental sustainability practices</li> <li>• infection control plans</li> <li>• quality and continuous improvement standards</li> <li>• relevant legislation</li> <li>• workplace documentation and reporting protocols procedures, communication channels and records</li> <li>• workplace-specific OHS, emergency and environmental protocols and procedures.</li> </ul>
<p><b><i>Task requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• instructions from supervisor or manager</li> <li>• reporting and documentation</li> <li>• objectives and timeframes</li> <li>• specific client requirements</li> <li>• work tasks and procedures.</li> </ul>
<p><b><i>Factors</i></b> affecting the achievement of task instructions may include:</p>	<ul style="list-style-type: none"> <li>• budget constraints</li> <li>• competing work demands</li> <li>• environmental factors including time and weather</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• lack of resource and materials</li> <li>• own ability to complete work (competency and skill level)</li> <li>• technology or equipment breakdowns</li> <li>• unforeseen incidents</li> <li>• workplace hazards, risks and controls.</li> </ul>
<i>Organisation equipment</i> may include:	<ul style="list-style-type: none"> <li>• cash registers</li> <li>• computers</li> <li>• fax machines</li> <li>• personal schedulers</li> <li>• photocopiers</li> <li>• printers.</li> </ul>
<i>Safe work practices and OHS requirements</i> will include:	<ul style="list-style-type: none"> <li>• applying appropriate manual handling techniques when packaging and handling loads, including animals and equipment</li> <li>• hazard identification and risk minimisation: <ul style="list-style-type: none"> <li>• handling, use, storage, transport and disposal of chemicals</li> <li>• handling and disposal of biological wastes</li> </ul> </li> <li>• following personal and workplace hygiene procedures</li> <li>• using infection control procedures to minimise risks associated with: <ul style="list-style-type: none"> <li>• zoonoses</li> <li>• release of infective agents (both animal and human)</li> <li>• chemical spillage</li> <li>• gas leakages</li> </ul> </li> <li>• using machinery and equipment in accordance with manufacturers' instructions</li> <li>• using of personal protective equipment and clothing: <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• appropriate footwear</li> <li>• aprons</li> <li>• protective masks</li> <li>• safety gloves</li> <li>• safety goggles and glasses</li> <li>• sun hat and sunscreen lotion.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<i>Companion animals</i> may include:	<ul style="list-style-type: none"> <li>• aquaria, reptiles and amphibians</li> <li>• birds</li> <li>• dogs and cats</li> <li>• invertebrates (e.g. stick insects, spiders and beetles)</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs).</li> </ul>
<i>Ethical</i> work with animals may include	<ul style="list-style-type: none"> <li>• completing work practices with due regard to animal health and safety</li> <li>• complying with relevant animal welfare, biosecurity and local government legislation and regulations</li> <li>• reporting animal illness, injury or distress to supervisor</li> <li>• reporting via workplace chain of command to animal health authorities if biosecurity hazard is suspected.</li> </ul>
<i>Legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>• Pet Industry Joint Advisory Council codes of practice</li> <li>• relevant companion animal legislation</li> <li>• local council regulations</li> <li>• microchipping</li> <li>• animal welfare legislation</li> <li>• National Parks and Wildlife Service legislation.</li> </ul>
Effective <i>communication with clients</i> may include	<ul style="list-style-type: none"> <li>• clarifying and verifying information from and to clients</li> <li>• providing information to clients within the area of personal responsibility and expertise only</li> <li>• referring client to others where requests are beyond scope of personal responsibility</li> <li>• reporting client requests and interaction using workplace protocols and procedures</li> <li>• respecting client and workplace information confidentiality.</li> </ul>



### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMCAS302A Provide advice on companion animal selection and general care

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing advice to customers on the appropriate selection of companion animals, and on their housing, nutritional and other general care requirements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector. It may include pet shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments, mobile animal facilities and veterinary practices.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Provide information and advice on <i>companion animal</i> selection	<p>1.1. <i>Interpersonal skills</i> are used effectively to engage customers and identify their requirements.</p> <p>1.2. <i>Client profiles</i> are developed during communication with customers.</p> <p>1.3. Information is provided on the <i>characteristics</i> of different breeds and species of animals.</p> <p>1.4. Advice is provided on the suitability of the selected animals to meet customers' requirements.</p>
2. Advise on <i>housing and environmental requirements</i>	<p>2.1. Appropriate housing and shelter requirements are discussed for the selected animals.</p> <p>2.2. Set-up and maintenance of housing are explained and demonstrated if required.</p> <p>2.3. Advice is provided on the introduction of animals to</p>

ELEMENT	PERFORMANCE CRITERIA
	a new environment.
3. Advise on <i>health and nutritional requirements</i>	3.1. Animals' environmental health requirements are discussed with customers. 3.2. Information is provided on recommended medical treatments for the selected animals. 3.3. Dietary requirements are explained for the selected animals. 3.4. Grooming requirements are explained for the selected animals.
4. Advise on additional <i>products and services</i>	4.1. Accessories are displayed and demonstrated in accordance with customer requirements. 4.2. Additional equipment and related services are discussed and demonstrated as required. 4.3. <i>Transportation</i> of animals is arranged or instructions are provided to customers.
5. Complete transactions	5.1. Sales of animals and products are completed in accordance with organisational policies and procedures. 5.2. <i>Legislative requirements</i> are complied with for the sale or transportation of the selected animals. 5.3. Records are maintained and customers are followed up in accordance with organisational policies and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- follow organisation policies, procedures and requirements
- identify animals using common names
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- literacy skills to read and follow organisation policies and procedures, including

**REQUIRED SKILLS AND KNOWLEDGE**

occupational health and safety (OHS) and waste management procedures and other organisational policies and procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks

- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures and sales data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

**Required knowledge**

- basic animal biology
- common companion animal diseases and treatment strategies
- communication procedures and systems, including sales techniques
- feeding techniques for a range of species
- general maintenance and cleaning of animal housing
- OHS and animal welfare legislative requirements and codes of practice, including transportation of companion animals
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal ethics and welfare
- relevant products and additional services
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- species and breed nutritional requirements
- species compatibility
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• provide information and advice of the housing, nutrition, environmental and general maintenance requirements of a range of companion animals</li> <li>• comply with relevant legislation, regulations and codes of practice, including animal welfare, OHS, sale and transport of companion animals</li> <li>• build relationships and communicate effectively with clients to advise on the suitability of a particular companion animal breed or species to meet their needs</li> <li>• maintain records and follow-up with customers as required.</li> </ul> <p>The skills and knowledge required to provide advice on companion animal selection and general care must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces may include pet shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>There must be access to a range of companion animal breeds and species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order

<b>EVIDENCE GUIDE</b>	
	<p>to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Companion animals</i></b> may include:	<ul style="list-style-type: none"> <li>• aquaria, reptiles and amphibians</li> <li>• birds</li> <li>• dogs and cats</li> <li>• invertebrates (e.g. stick insects, spiders and</li> </ul>

<b>RANGE STATEMENT</b>	
	beetles) <ul style="list-style-type: none"> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs).</li> </ul>
<i>Interpersonal skills</i> may include:	<ul style="list-style-type: none"> <li>• effective questioning techniques to gather and clarify relevant information</li> <li>• following up client requests to ensure information or products are provided in a timely manner</li> <li>• following workplace protocols and procedures when dealing with client requests from various sources:               <ul style="list-style-type: none"> <li>• email</li> <li>• face to face</li> <li>• from other staff member or other business representative</li> <li>• telephone</li> <li>• web inquiry</li> </ul> </li> <li>• presenting an appropriate professional manner in line with workplace aims, protocols and procedures</li> <li>• referring client to superiors if client request is beyond level of personal responsibility</li> <li>• responding to client requests within the limits of personal level of responsibility and expertise.</li> </ul>
<i>Client profile</i> may include:	<ul style="list-style-type: none"> <li>• client contact details</li> <li>• previous animal ownership history and other animals currently kept</li> <li>• family structure and lifestyle</li> <li>• environment the animal will be living in</li> <li>• reasons for new animal acquisition and type of animal selected.</li> </ul>
<i>Characteristics</i> of different breeds and species may include	<ul style="list-style-type: none"> <li>• breeding issues</li> <li>• heritable traits</li> <li>• medical conditions typical of the breed or species</li> <li>• natural predators</li> <li>• requires intensive exercise and/or grooming</li> <li>• temperament:               <ul style="list-style-type: none"> <li>• aggressive</li> <li>• good with children</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• noisy</li> <li>• playful</li> <li>• quiet</li> <li>• requires companionship</li> <li>• shy</li> <li>• training requirements.</li> </ul>
<p><b><i>Animal housing and environmental requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• set-up of cages, enclosures, compounds, brooders, aviaries, habitat boxes, paddocks and other structures used to house animals</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals allowed</li> <li>• noise control</li> <li>• restricting access to animals</li> <li>• waste management</li> </ul> </li> <li>• pest control</li> <li>• ventilation, heating and cooling requirements.</li> </ul>
<p><b><i>Health and nutritional requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• dietary needs: <ul style="list-style-type: none"> <li>• types and quantities of commonly available feedstuffs, their preparation and presentation</li> <li>• feeding and watering frequency and rates</li> <li>• supplements that may be required according to current animal status</li> </ul> </li> <li>• exercise and socialising needs</li> <li>• grooming and cleaning requirements</li> <li>• handling procedures and equipment</li> <li>• health check-up frequency and procedures</li> <li>• parasite control</li> <li>• potential hazards to specific animal species</li> <li>• techniques used to minimise trauma during rehousing, socialising with other animals and humans</li> <li>• temperature, climate and habitat needs of specific animal species</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• vaccinations requirements and schedules.</li> </ul>
<i>Products and services</i> may include:	<ul style="list-style-type: none"> <li>• animal handling equipment, clothing and bedding</li> <li>• animal housing furniture</li> <li>• boarding and holiday care services</li> <li>• books, DVDs and other information sources</li> <li>• feeding equipment, implements and products</li> <li>• grooming and cleaning equipment and services available</li> <li>• parasite control products</li> <li>• puppy and general animal training services</li> <li>• toys and stimulation products</li> <li>• transportation equipment and services</li> <li>• veterinary and other products and services.</li> </ul>
<i>Transportation</i> requirements may include:	<ul style="list-style-type: none"> <li>• local, interstate or overseas travel</li> <li>• to and from the companion animal facility and clients' homes.</li> </ul>
<i>Legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare obligations</li> <li>• companion animal regulations</li> <li>• environmental obligations</li> <li>• local council regulations: <ul style="list-style-type: none"> <li>• identification, such as microchip and other methods</li> <li>• registration</li> <li>• waste control.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAS303A Provide advice on selection and care of aquatic animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing advice to customers on the appropriate selection of aquatic animals and on their housing, nutritional and other general care requirements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector. It relates to the selection and care of aquatic animals and may include aquariums and pet shops.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Provide information and advice on <i>aquatic animal selection</i>	<p>1.1. <i>Interpersonal skills</i> are used effectively to engage customers and identify their requirements.</p> <p>1.2. <i>Client profiles</i> are developed during communication with customers.</p> <p>1.3. Information is provided on the level of care required by different species of aquatic animals.</p> <p>1.4. Advice is provided on the suitability of the <i>selected</i> species to meet customers' requirements.</p>
2. Advise on <i>housing and environmental requirements</i>	<p>2.1. Suitable housing and shelter requirements for species are discussed and selected.</p> <p>2.2. Water features and landscaping requirements are identified and recommended to suit animals' requirements.</p> <p>2.3. Set-up and maintenance of housing are explained</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>and demonstrated as required.</p> <p>2.4. Advice is provided on the introduction of animals to a new environment.</p>
<p>3. Advise on <i>aquatic support systems</i></p>	<p>3.1. Systems are identified and demonstrated to customers.</p> <p>3.2. Systems are evaluated and recommendations are made to customers.</p> <p>3.3. Additional equipment and related services are discussed and demonstrated as required.</p> <p>3.4. Transportation of animal and/or equipment is arranged and instructions are provided to customers.</p>
<p>4. Advise on <i>health and nutritional requirements</i></p>	<p>4.1. Animals' environmental health requirements are discussed with customers.</p> <p>4.2. Information is provided on recommended treatments and medications for the selected animals.</p> <p>4.3. Dietary requirements are explained and recommended for the selected animals.</p> <p>4.4. Grooming requirements are explained for the selected animals.</p>
<p>5. Complete aquatic animal sales transactions</p>	<p>5.1. Sales of animals and/or <i>products and services</i> are completed in accordance with organisational policies and procedures.</p> <p>5.2. <i>Legislative requirements</i> are complied with for the sale or transportation of the selected animals.</p> <p>5.3. Records are maintained and customers are followed up in accordance with organisational policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling aquatic animals
- follow organisation policies, procedures and requirements

## REQUIRED SKILLS AND KNOWLEDGE

- identify aquatic animals using common names
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- literacy skills to read and follow organisation policies and procedures, including occupational health and safety (OHS) and waste management procedures and other organisational policies and procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures and sales data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- aquatic species nutritional requirements
- basic aquatic animal biology
- basic principles of animal ethics and welfare
- common aquatic animal diseases and treatment strategies
- communication procedures and systems including sales techniques
- feeding techniques for a range of species
- general maintenance and cleaning of aquaria
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal ethics and welfare
- relevant OHS and animal welfare legislative requirements and codes of practice, including environmental and transportation of aquatic animals regulations
- relevant products and additional services
- relevant recordkeeping systems
- safe aquatic animal handling techniques and procedures
- safe work practices
- species compatibility
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• provide information and advice of the housing, nutrition, environmental and general maintenance requirements of a range of aquatic animals</li> <li>• comply with relevant legislation, regulations and codes of practice, including animal welfare, OHS, sale and transport of aquatic animals</li> <li>• build relationships and communicate effectively with clients to advise on the suitability of a particular aquatic animal to meet their needs</li> <li>• maintain records and follow-up with customers as required.</li> </ul> <p>The skills and knowledge required to provide advice on selection and care of aquatic animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces can include aquariums and pet shops.</p> <p>There must be access to a range of aquatic animal breeds and species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order</p>



<b>EVIDENCE GUIDE</b>	
	<p>to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Aquatic animals</i></b> may include:	<ul style="list-style-type: none"> <li>• fish, invertebrates, reptiles and amphibians.</li> </ul>
<b><i>Interpersonal skills</i></b> may include:	<ul style="list-style-type: none"> <li>• effective questioning techniques to gather and clarify relevant information</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• following up client requests to ensure information or products are provided in a timely manner</li> <li>• following workplace protocols and procedures when dealing with client requests from various sources: <ul style="list-style-type: none"> <li>• email</li> <li>• face to face</li> <li>• from other staff member or other business representative</li> <li>• telephone</li> <li>• web inquiry</li> </ul> </li> <li>• presenting an appropriate professional manner in line with workplace aims, protocols and procedures</li> <li>• referring client to superiors if client request is beyond level of personal responsibility</li> <li>• responding to client requests within the limits of personal level of responsibility and expertise.</li> </ul>
<i>Client profile</i> may include:	<ul style="list-style-type: none"> <li>• client contact details</li> <li>• previous animal ownership history and other aquatic animals currently kept</li> <li>• family structure and lifestyle</li> <li>• environment the animal will be living in</li> <li>• reasons for new aquatic animal acquisition and type of aquatic animal selected.</li> </ul>
<i>Aquatic animal selection</i> considerations may include:	<ul style="list-style-type: none"> <li>• compatibility of aquatic animal being considered with others of the same or different species</li> <li>• budget for setting up and maintaining aquatic animals being considered</li> <li>• individual species care and feeding requirements.</li> </ul>
<i>Aquatic animal housing and environmental requirements</i> may include:	<ul style="list-style-type: none"> <li>• plants, water features and other furniture</li> <li>• cleaning routines and methods</li> <li>• filtration systems and water quality</li> <li>• temperature and lighting control</li> <li>• general animal housing security</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>allowed</p> <ul style="list-style-type: none"> <li>• noise control</li> <li>• restricting access to animals</li> <li>• waste management</li> <li>• set-up and maintenance of aquatic environment: <ul style="list-style-type: none"> <li>• water testing</li> <li>• regular cleaning and correct disposal of waste</li> <li>• techniques used for maintaining biological, chemical and mechanical filtration system</li> </ul> </li> <li>• size of system required for aquatic animal selected.</li> </ul>
<p><i>Aquatic support systems</i> considerations may include:</p>	<ul style="list-style-type: none"> <li>• availability of spare parts and servicing</li> <li>• cleaning agents and tools required</li> <li>• ease of maintenance</li> <li>• energy sources</li> <li>• feature lighting</li> <li>• generators</li> <li>• needs of animals to be housed</li> <li>• water filtration options</li> <li>• plant requirements for food source, decoration and habitat</li> <li>• pumps.</li> </ul>
<p><i>Health and nutritional requirements</i> may include:</p>	<ul style="list-style-type: none"> <li>• dietary needs: <ul style="list-style-type: none"> <li>• types and quantities of commonly available feedstuffs, their preparation and presentation</li> <li>• feeding and watering frequency and rates</li> <li>• supplements that may be required according to current animal status</li> </ul> </li> <li>• grooming and cleaning requirements</li> <li>• handling procedures and equipment</li> <li>• health check-up frequency and procedures</li> <li>• diseases of aquatic animals that will require medication: <ul style="list-style-type: none"> <li>• bacterial and viral infections</li> <li>• bloat</li> <li>• fin rot</li> <li>• fungus</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hole in the head</li> <li>• lateral line infection</li> <li>• white spot</li> <li>• parasite and pest control</li> <li>• potential hazards to specific aquatic species</li> <li>• techniques used to minimise trauma during rehousing, socialising with other animals, where relevant, and humans</li> <li>• temperature, climate and habitat needs of specific aquatic species</li> <li>• water treatments: <ul style="list-style-type: none"> <li>• pH correction</li> <li>• chlorine neutralisers</li> <li>• water stabilisers.</li> </ul> </li> </ul>
<i>Products and services</i> may include:	<ul style="list-style-type: none"> <li>• animal handling equipment</li> <li>• animal housing and furniture, including vegetation, water features, shade and heating provisions</li> <li>• boarding and holiday care services</li> <li>• books, DVDs and other information sources</li> <li>• feeding equipment, implements and products</li> <li>• filtration systems</li> <li>• parasite control products</li> <li>• transportation equipment and services</li> <li>• veterinary and other products and services.</li> </ul>
<i>Legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare obligations</li> <li>• aquatic and native animal license requirements</li> <li>• companion animal regulations</li> <li>• endangered or restricted species regulations</li> <li>• environmental obligations</li> <li>• local council regulations: <ul style="list-style-type: none"> <li>• licensing</li> <li>• registration</li> <li>• waste control.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAS304A Capture, handle and transport companion animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of capturing, handling and transporting companion animals.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in the companion animal industry sector where it may be necessary to transport companion animals. Transportation may be required to and from pet shops, boarding kennels and catteries or companion animal training, groomer and breeding establishments, mobile animal facilities, client residences or veterinary practices.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan the capture and restraint of <i>companion animals</i>	1.1. Animals are identified and <i>risks</i> are assessed in accordance with organisational policies and procedures. 1.2. Appropriate <i>capture techniques and equipment</i> are selected and prepared for use. 1.3. <i>Transport housing</i> is prepared as appropriate.
2. Capture animals	2.1. Animals are captured in a <i>safe and humane manner</i> and in accordance with <i>occupational health and safety (OHS)</i> and <i>emergency procedures</i> . 2.2. Animals are handled correctly and monitored carefully for <i>stress</i> or injury. 2.3. Animals are placed in transport housing and housing is secured correctly.

ELEMENT	PERFORMANCE CRITERIA
3. Prepare animals for movement	3.1. Advice is provided to client on appropriate transport and <i>relocation procedures</i> . 3.2. Documentation is completed, as required, in accordance with legislative and organisational requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe, humane and environmentally responsible organisational systems and procedures when capturing, restraining and handling animals
- implement organisation policies, procedures and requirements
- identify transport containers appropriate to animals' requirements
- maintain tools, equipment and transport containers in accordance with manufacturers' specifications
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- literacy skills to read and follow organisation policies and procedures, including OHS procedures and other organisational policies and procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment.

#### Required knowledge

- appropriate relocation procedures for a range of animals
- behaviour and physiology of typical companion animals
- dietary requirements before, during and after transport



## REQUIRED SKILLS AND KNOWLEDGE

- general maintenance and cleaning of animal transport housing, capture and restraint equipment
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal welfare and ethics
- relevant recordkeeping systems
- relevant OHS and animal welfare legislative requirements and codes of practice, including transportation of companion animals
- safe and humane animal capture, handling and restraint techniques and procedures for a range of animals
- safe work practices
- species compatibility
- transport housing requirements
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- handle animals in a safe, humane and ethical manner at all times
- select and use appropriate techniques and equipment to capture and restrain a range of companion animals
- prepare correct type of transport container
- comply with relevant legislation, regulations and codes of practice, including animal welfare, OHS and transport of companion animals
- build relationships and communicate effectively with clients in respect to animals' transportation and initial

<b>EVIDENCE GUIDE</b>	
	<p>settling in requirements</p> <ul style="list-style-type: none"> <li>• maintain records and documentation.</li> </ul> <p>The skills and knowledge required to capture, handle and transport companion animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>There must be access to a range of companion animal breeds and species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector,</p>

<b>EVIDENCE GUIDE</b>	
	workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Companion animals</i></b> may include:	<ul style="list-style-type: none"> <li>• aquaria, reptiles and amphibians</li> <li>• birds</li> <li>• dogs and cats</li> <li>• invertebrates (e.g. stick insects, spiders and beetles)</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs).</li> </ul>
<b><i>Risks</i></b> in capture, handling and transport of animals may include	<ul style="list-style-type: none"> <li>• aggressive animal behaviour</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• potential injuries to humans during capture, handling and transport processes</li> <li>• potential stress and injury to animals during capture and transport.</li> </ul>
<b><i>Capture techniques and equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• equipment: <ul style="list-style-type: none"> <li>• chemical controls (e.g. sedatives)</li> <li>• hoods or other sight restriction devices</li> <li>• leads, collars and halters</li> <li>• lassoes, ropes, chains, catching poles, nets and harnesses</li> </ul> </li> <li>• traps</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• visual barriers</li> <li>• techniques and devices used to: <ul style="list-style-type: none"> <li>• entice or attract animals</li> <li>• herd stock</li> <li>• separate animals.</li> </ul> </li> </ul>
<i>Transport housing</i> may include:	<ul style="list-style-type: none"> <li>• bags, cages, pouches, padded containers</li> <li>• containers suitable for holding water</li> <li>• climate controlled containers</li> <li>• trailers or other stock vehicle</li> <li>• transfer or crush equipment.</li> </ul>
<i>Transport housing preparation</i> factors may include:	<ul style="list-style-type: none"> <li>• animals' metabolic and other health features</li> <li>• challenges involved in loading captured animal into transport</li> <li>• location of capture and distance to destination</li> <li>• risk of injury to animal within transport container</li> <li>• size, age, health status and number of animals to be transported.</li> </ul>
<i>Safe and humane manner</i> considerations may include:	<ul style="list-style-type: none"> <li>• allocating sufficient time to the process</li> <li>• appropriate use of restraints for animals</li> <li>• considering animals' welfare at all times</li> <li>• correct use of personal protective equipment</li> <li>• observing if the animal is becoming distressed.</li> </ul>
<i>OHS</i> risks when handling animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Emergency procedures</i> may relate to:	<ul style="list-style-type: none"> <li>• potential escape of an animal</li> <li>• injury to target animals, other animals, staff and potentially the public.</li> </ul>

<b>RANGE STATEMENT</b>	
Indicators of <i>stress</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• inappetence</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Relocation procedure</i> considerations may include:	<ul style="list-style-type: none"> <li>• future dietary requirements</li> <li>• housing at destination</li> <li>• immediate food and water requirements on arrival</li> <li>• indicators of travel stress and other health emergencies</li> <li>• introduction process to people and other animals.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMCAS305A Maintain aquascapes and aquatic animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of monitoring illness and/or abnormal behaviour in aquatic animals, collecting and analysing water samples and administering treatments.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of reptiles and amphibians. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector. It relates to the maintenance of aquascapes and aquatic animals, including fish, amphibians and some reptiles.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Follow effective personal health management practices	<p>1.1. Personal hygiene and cleanliness standards are maintained in accordance with <b><i>occupational health and safety (OHS)</i></b> and organisational policies and procedures.</p> <p>1.2. <b><i>Disease agents</i></b> and their impact on aquatic animals are identified.</p> <p>1.3. Work practices are implemented to protect oneself from, and minimise spread of, <b><i>zoonotic diseases</i></b>.</p>
2. Identify unhealthy aquatic animals	<p>2.1. <b><i>Unhealthy</i></b> aquatic animals are identified and information is recorded in accordance with organisational policies and procedures.</p> <p>2.2. <b><i>Injured</i></b> aquatic animals are recognised and reported</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>to supervisors.</p> <p>2.3. Aquatic animal <i>abnormal behaviour</i> and condition are recognised and reported to supervisors.</p> <p>2.4. Records for unhealthy aquatic animals are maintained in accordance with organisational policies and procedures.</p>
3. Sample, analyse and adjust aquascape water quality	<p>3.1. Water samples are collected using correct equipment, in accordance with organisational policies and procedures.</p> <p>3.2. Samples are <i>tested</i> using appropriate equipment in accordance with manufacturers' directions.</p> <p>3.3. Sampling results are recorded in accordance with organisational policies and procedures.</p> <p>3.4. <i>Water quality is adjusted</i> to better suit the requirements of the aquascape and species.</p> <p>3.5. Optimum water quality records for the aquascape and species are maintained in accordance with industry requirements.</p>
4. Administer aquatic animal treatments	<p>4.1. Broad categories of <i>parasitic infestations</i> and/or <i>viral, fungal and bacterial diseases</i> are identified.</p> <p>4.2. Appropriate and authorised <i>aquatic animal treatments</i> are administered in accordance with organisational policies and procedures.</p> <p>4.3. <i>Preventative medicine programs</i> for internal and external parasites are implemented in accordance with organisational policies and procedures.</p> <p>4.4. Treatments and medicines are correctly stored in accordance with organisational policies and procedures and legislative requirements.</p> <p>4.5. Records for treatments and medicine programs are maintained in accordance with organisational policies and procedures and legislative requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills



## REQUIRED SKILLS AND KNOWLEDGE

- adjust water quality and conditions to suit aquascape and species requirements
- administer appropriate and authorised aquatic animal treatments
- apply organisation policies, procedures and requirements
- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling aquatic animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- recognise behaviours and conditions that could be indicative of possible aquatic animal health problems
- literacy skills to read and follow organisation policies and procedures, including OHS and waste management procedures and other organisational policies and procedures; follow sequenced written instructions including treatment instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures and treatment doses
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- appropriate and authorised aquatic animal treatments
- basic aquatic animal biology
- broad categories of parasitic infestations and/or viral, fungal and bacterial diseases
- general maintenance and cleaning of aquaria
- normal and abnormal behaviour of aquatic species
- organisation policies, procedures and requirements, including OHS and emergency procedures
- preventative medicine programs for internal and external parasites
- principles of animal welfare and ethics
- relevant OHS and animal welfare legislative requirements and codes of practice, including environmental regulations
- relevant recordkeeping systems
- safe aquatic animal handling techniques and procedures
- safe work practices

**REQUIRED SKILLS AND KNOWLEDGE**

- signs of common aquatic animal diseases and parasitic infestations and their transmission between aquatic animals
- water quality adjustment procedures, including water chemistry
- water sampling, testing and analysis procedures and techniques
- working knowledge of ideal water conditions and quality for a range of aquatic animals, including Ph, nitrate, nitrite, ammonia, salinity, calcium and hardness
- working knowledge of chemicals used to correct water conditions and the water quality of aquascapes
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials
- zoonotic diseases.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- monitor and maintain effective aquatic animal health-management practices in accordance with organisational policies and procedures
- comply with relevant legislation, regulations and codes of practice, including animal welfare and OHS
- identify aquatic animals showing signs of poor health, injuries or abnormal behaviour
- administer authorised aquatic animal treatments and implement preventative medicine programs
- collect and test water samples and adjust water quality to suit the aquascape and species requirements as required
- maintain records and required documentation.

<b>EVIDENCE GUIDE</b>	
	The skills and knowledge required to maintain aquascapes and aquatic animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed in an aquaria services workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of aquatic animal breeds and species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>OHS</i></b> risks when handling animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<p><b><i>Disease agents</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• infectious disease agents:             <ul style="list-style-type: none"> <li>• bacteria</li> <li>• fungi</li> <li>• internal and external parasites</li> <li>• virus</li> </ul> </li> <li>• non-infectious disease agents:             <ul style="list-style-type: none"> <li>• allergies</li> <li>• chemical toxicities</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• nutritional</li> <li>• physical trauma.</li> </ul> </li> </ul>
<p><b><i>Zoonotic diseases</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• bacterial and endo-parasites (e.g. protozoa)</li> <li>• different types of salmonella infections.</li> </ul>
<p>Signs of <b><i>unhealthy</i></b> or <b><i>injured</i></b> animals may include:</p>	<ul style="list-style-type: none"> <li>• abnormal faeces colour, texture quantity</li> <li>• blisters or other skin lesions, dead or peeling</li> </ul>

<b>RANGE STATEMENT</b>	
	skin <ul style="list-style-type: none"> <li>• clamping of fins and tail with presence of blood streaks</li> <li>• difficulty breathing</li> <li>• difficulty in sloughing old skins</li> <li>• irregular colouration on shell</li> <li>• loss of righting behaviour</li> <li>• one or both eyes protruding</li> <li>• presence of parasites on skin surface or trailing from body cavities</li> <li>• swelling</li> <li>• wounds.</li> </ul>
Signs of <i>abnormal behaviour</i> may include:	<ul style="list-style-type: none"> <li>• aggression or docility (depending on animal)</li> <li>• inappetence</li> <li>• lethargy.</li> </ul>
Water sampling <i>tests</i> and analysis may include:	<ul style="list-style-type: none"> <li>• ammonia</li> <li>• calcium</li> <li>• hardness</li> <li>• pH</li> <li>• salinity</li> <li>• temperature.</li> </ul>
<i>Water quality adjustment</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering of pH or hardness.</li> </ul>
<i>Parasitic infestations</i> may include:	<ul style="list-style-type: none"> <li>• anchor worm</li> <li>• fish lice</li> <li>• flukes</li> <li>• parasitic protozoa.</li> </ul>
<i>Viral, fungal and bacterial diseases</i> may include:	<ul style="list-style-type: none"> <li>• body fungus</li> <li>• dropsy</li> <li>• fin and tail rot</li> <li>• mouth fungus.</li> </ul>
<i>Aquatic animal treatments</i> may be administered via:	<ul style="list-style-type: none"> <li>• dips and bathes</li> <li>• food and water preparations</li> <li>• liquids</li> <li>• pastes</li> <li>• soluble powers</li> <li>• tablet</li> <li>• topical applications.</li> </ul>

**RANGE STATEMENT**

*Preventative medicine programs*  
may include:

- anti-parasitic water treatments
- food preparations.

**Unit Sector(s)**

<b>Unit sector</b>	Companion animal services
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAS306A Provide grooming services for companion animal comfort

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing animal grooming services for companion animals to maintain/restore animal comfort within an established grooming environment.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector where grooming services are provided under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Establish client requirements	1.1. <b><i>Breed type grooming characteristics</i></b> are identified. 1.2. <b><i>Animal profile</i></b> is established. 1.3. Animal condition is evaluated. 1.4. Owner's desired outcome is established.
2. Plan grooming routine	2.1. <b><i>Risks</i></b> associated with grooming nominated animals are determined and minimised in accordance with <b><i>occupational health and safety (OHS)</i></b> and animal welfare requirements. 2.2. Time limitations, budget and available facilities are considered in preparing grooming plan. 2.3. Grooming plan is confirmed with supervisor based on animal and client needs. 2.4. <b><i>Grooming equipment</i></b> and supplies are prepared.



ELEMENT	PERFORMANCE CRITERIA
	2.5. Order of grooming activities is determined.
3. Groom animals	3.1. Animals are restrained for grooming and monitored for <i>signs of distress</i> . 3.2. <i>Grooming techniques</i> used to address matted or knotted coat are implemented. 3.3. Grooming techniques to treat external parasites are implemented. 3.4. Coat is groomed. 3.5. Techniques used to clip or file nails are implemented.
4. Trim coat for animal comfort	4.1. Tools used for <i>coat trimming</i> are selected and prepared. 4.2. Risks associated with using coat trimming equipment are identified and minimised in accordance with OHS and animal welfare requirements. 4.3. Techniques used to trim coat to restore animal comfort are implemented. 4.4. Techniques used to remove hair from ears are justified and implemented.
5. Complete grooming and trimming procedures	5.1. Animal is housed safely and monitored until owner's arrival. 5.2. Grooming equipment and area is cleaned and returned to storage, supplies audited and documented. 5.3. Waste material is collected and disposed of in accordance with environmental and legislative requirements. 5.4. Grooming services are documented for invoicing. 5.5. Animals are returned to owner, <i>grooming plan is reviewed</i> with supervisor and any follow-up requirements are discussed.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

## REQUIRED SKILLS AND KNOWLEDGE

### Required skills

- apply a range of industry recognised grooming procedures to maintain animal comfort in consultation with supervisor
- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- follow organisation policies, procedures and requirements
- identify animals using common names
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- operate and maintain a range of grooming equipment
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to complete basic arithmetic calculations and measure volumes
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- basic animal anatomy and physiology related to grooming procedures
- communication procedures and systems
- industry recognised maintenance and restoration animal grooming techniques, procedures and equipment
- normal and abnormal animal behaviour and traits for relevant species
- organisation policies, procedures and requirements, including OHS and emergency procedures, hygiene standards and waste disposal regulations
- principles of animal ethics and welfare
- relevant grooming products and services
- relevant recordkeeping systems
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling and restraint techniques and procedures
- safe work practices
- signs of abnormalities and health concerns in animals, including parasitic

**REQUIRED SKILLS AND KNOWLEDGE**

infections

- transmission of diseases between animals
- usage and maintenance of a range of grooming equipment
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess health and condition of animal's coat and determine grooming requirements with client/owner
- follow workplace instructions to apply industry recognised grooming methods and procedures for different breeds of companion animals to maintain/restore animal comfort
- handle animals in a safe and humane manner
- use and maintain grooming equipment and supplies in accordance with organisational standards and manufacturers' specifications under supervision
- build relationships and communicate effectively with clients regarding appropriate grooming requirements
- maintain records and follow-up with customers as required.

The skills and knowledge required to provide grooming services for companion animal comfort must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

<b>EVIDENCE GUIDE</b>	
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal organisations that offer grooming services or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of companion animal breeds as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and firsthand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Breed type grooming characteristics</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• breed-specific clipping regulations and standards for competition animals</li> <li>• metabolic and other animal health issues that may be impacted by coat condition, grooming methods and equipment</li> <li>• techniques used to groom animals to ensure their comfort in various climatic and lifestyle conditions.</li> </ul>
<p><b><i>Animal profile</i></b> information may include:</p>	<ul style="list-style-type: none"> <li>• breed or type</li> <li>• age, sex and reproductive status</li> <li>• contact details for owner</li> <li>• current body, skin and coat condition</li> <li>• known allergies or other health problems</li> <li>• history of previous grooming experience</li> <li>• injuries or other issues either reported or observed</li> <li>• vaccination status.</li> </ul>
<p><b><i>Risks</i></b> in capture, handling and grooming of animals may include:</p>	<ul style="list-style-type: none"> <li>• aggressive animal behaviour</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• potential anxiety of animal when being handled by strangers</li> <li>• potential injuries to humans during capture, handling and grooming processes</li> <li>• potential stress and injury to animals during handling and grooming</li> <li>• reaction to washing and grooming chemicals</li> <li>• transmission of disease and infection to humans and other animals</li> <li>• unfamiliarity of animal to grooming and washing equipment and processes to animals.</li> </ul>
<p><b><i>OHS</i></b> risks when handling animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Grooming equipment</i> may include:	<ul style="list-style-type: none"> <li>• brushes, combs, files, polishing pads and towels</li> <li>• coat cleaning and conditioning products</li> <li>• detangling and debris removing products</li> <li>• grooming stands</li> <li>• restraining equipment (e.g. collars, leads, muzzles and harnesses)</li> <li>• scissors, clippers, tweezers and stripping knives.</li> </ul>
<i>Signs of distress</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• inappetence</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Grooming techniques</i> may include:	<ul style="list-style-type: none"> <li>• clean ears, eyes and teeth</li> <li>• detangle coat or hair</li> <li>• file or clip nails and horns</li> <li>• inspect animals for parasites and other health issues</li> <li>• remove and control external parasites</li> <li>• remove dander or scurf from skin</li> <li>• remove dirt, debris and contaminants from the coat and skin</li> <li>• remove old coat</li> <li>• restrain animal during grooming</li> <li>• stimulate skin and coat health by brushing and basic massage.</li> <li>•</li> </ul>
<i>Coat trimming</i> techniques and	<ul style="list-style-type: none"> <li>• clipping techniques:</li> </ul>

<b>RANGE STATEMENT</b>	
equipment may include:	<ul style="list-style-type: none"> <li>• for ease of animal care</li> <li>• to remove excess hair in ears</li> <li>• to remove knots and contaminants in coat.</li> <li>• equipment: <ul style="list-style-type: none"> <li>• coat clippers, including electric, rechargeable, hand operated and assorted clipping blades</li> <li>• scissor and shears or various sizes</li> <li>• stripping knives and tweezers.</li> </ul> </li> </ul>
<i>Grooming plan review</i> may include:	<ul style="list-style-type: none"> <li>• further parasite control requirements</li> <li>• identifying follow-up grooming schedule to maintain coat and skin in optimal condition</li> <li>• reporting on animal behaviour during grooming to supervisor</li> <li>• reporting any injury or illness issues that have occurred during grooming to supervisor</li> <li>• reporting any health issues noticed during grooming or inspection of animal to supervisor</li> <li>• suggesting grooming or care products for home use.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

<b>Co-requisite units</b>		



## ACMCAS307A Provide companion animal hydro-bathing services

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing hydro-bathing services for companion animals following industry recognised bathing procedures.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in companion animal facilities where hydro-bathing services are provided; whether in a fixed location or in a mobile operation. This unit covers the assessment, planning and execution of the bathing procedures.</p> <p>Operating procedures for a mobile hydro-bathing facility is covered by ACMCAS408A Manage the operation of a mobile hydro-bathing facility for companion animals.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess bathing requirements	1.1. Breed type <b><i>bathing needs</i></b> are established with client. 1.2. Animal's coat length and condition, including condition of ears, eyes and toenails, are assessed in relation to its age and breed. 1.3. Animal condition is evaluated and reported to client. 1.4. Advice is provided to client, as required, regarding maintenance regimes for the animal's coat or condition.
2. Prepare and bathe	2.1. <b><i>Risks</i></b> associated with bathing nominated animals are

ELEMENT	PERFORMANCE CRITERIA
animal	<p>determined and minimised in accordance with <b><i>occupational health and safety (OHS)</i></b> and animal welfare requirements.</p> <p>2.2. Bathing facilities and <b><i>equipment</i></b> are prepared.</p> <p>2.3. Animal is restrained for bathing, as required, and monitored for <b><i>signs of distress</i></b>.</p> <p>2.4. Animal is brushed prior to bathing in order to remove dead skin, knots and loose hair.</p> <p>2.5. Appropriate water temperature, shampoos and supplementary treatments, including external parasite treatment, if required, are selected in accordance with client requirements and the animal's breed.</p> <p>2.6. Animal is bathed and rinsed using industry-recognised <b><i>bathing techniques</i></b>.</p>
3. Complete bathing procedures	<p>3.1. Animals is housed and monitored safely until owner's arrival.</p> <p>3.2. <b><i>Hydro-bath and associated equipment are cleaned</i></b> and disinfected in accordance with organisational policies and procedures.</p> <p>3.3. Waste is disposed of in accordance with relevant legislative requirements.</p> <p>3.4. Consumables and other equipment are checked and returned to storage, supplies audited and documented.</p> <p>3.5. Bathing services provided are documented for invoicing.</p> <p>3.6. Animals are returned to owner, <b><i>bathing services reviewed</i></b> and any follow-up requirements are discussed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals

## REQUIRED SKILLS AND KNOWLEDGE

- follow organisation policies, procedures and requirements
- followup customers regarding future bathing service requirements in accordance with organisational policies and procedures
- identify animals using common names
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- operate and maintain a range of bathing and rinsing equipment
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening, asking for clarification and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- basic industry recognised animal bathing techniques, procedures and equipment
- basic animal anatomy and physiology related to hydro-bathing services
- communication procedures and systems
- how shampoo and bathing products may irritate an animal and the effects of incorrect rinsing techniques
- normal and abnormal animal behaviour and traits for relevant species
- organisation policies, procedures and requirements, including OHS and emergency procedures, hygiene standards and waste disposal regulations
- principles of animal ethics and welfare
- relevant bathing products and services
- relevant OHS and animal welfare legislative requirements and codes of practice
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- signs and symptoms of disease and parasitic infections
- signs of abnormalities and health concerns in animals
- transmission of diseases between animals
- usage and maintenance of a range of bathing equipment
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques

**REQUIRED SKILLS AND KNOWLEDGE**

and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess health and condition of animal's coat and determine bathing requirements with client/owner
- apply industry recognised hydro-bathing methods and procedures for different breeds of companion animals
- handle animals in a safe and humane manner
- set up, use and maintain hydro-bathing equipment and supplies in accordance with organisational standards and manufacturers' specifications
- build relationships and communicate effectively with clients regarding appropriate bathing requirements
- maintain records and follow-up with clients as required.

The skills and knowledge required to provide companion animal hydro-bathing services must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal organisations that offer animal hydro-bathing services or in a situation that reproduces normal work conditions.

<b>EVIDENCE GUIDE</b>	
	There must be access to a range of companion animal breeds and species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating

<b>RANGE STATEMENT</b>	
conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<b>Bathing needs</b> may include:	<ul style="list-style-type: none"> <li>• animal and owner lifestyle factors</li> <li>• breed or type</li> <li>• age, sex, reproductive status</li> <li>• current body, skin and coat condition</li> <li>• known allergies or other health problems</li> <li>• history of previous bathing experience</li> <li>• injuries or other issues either reported or observed.</li> <li>•</li> </ul>
<b>Risks</b> in capture, handling and bathing of animals may include:	<ul style="list-style-type: none"> <li>• aggressive animal behaviour</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• potential anxiety of animal when being handled by strangers</li> <li>• potential injuries to humans during capture, handling and bathing processes</li> <li>• potential stress and injury to animals during handling, bathing and drying</li> <li>• reaction to washing and grooming chemicals</li> <li>• unfamiliarity of animal to washing equipment and processes.</li> </ul>
<b>OHS</b> risks when handling animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b>Equipment</b> may include:	<ul style="list-style-type: none"> <li>• brushes, combs, sprayers, polishing pads, towels</li> <li>• detangling lotion</li> <li>• coat dryers</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• grooming stands</li> <li>• restraining equipment including collars, leads, muzzles and harness</li> <li>• wash tubs and hydro-baths</li> <li>• shampoo and other coat cleaning products.</li> </ul>
<i>Signs of distress</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• inappetence</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
Bathing <i>techniques</i> may include:	<ul style="list-style-type: none"> <li>• detangle coat or hair</li> <li>• dry animal after washing</li> <li>• inspect animals for parasites and other health issues</li> <li>• remove and control external parasites</li> <li>• remove dander or scurf from skin</li> <li>• remove dirt, debris, contaminants from the coat and skin</li> <li>• restrain animal during bathing</li> <li>• wash animals using shampoo, parasite control and other chemicals</li> <li>• post-wash rinse to remove chemicals from skin and coat</li> </ul>
<i>Hydro-bath and equipment cleaning</i> may include:	<ul style="list-style-type: none"> <li>• checking equipment for damage and wear and tear</li> <li>• disinfecting equipment using approved chemicals and processes</li> <li>• drying, lubricating and protecting parts as required</li> <li>• pumping out grey water into approved waste water system</li> <li>• removing hair and debris from waste traps and filters.</li> </ul>
<i>Post-bathing review</i> may include:	<ul style="list-style-type: none"> <li>• further parasite control requirements</li> <li>• reporting on animal behaviour during bathing</li> <li>• advising of any injury or illness issues that have occurred during bathing</li> <li>• advising of any health issues noticed during bathing or inspection of animal</li> <li>• suggesting grooming or care products for home use</li> </ul>



**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>identifying follow-up schedule to maintain coat and skin in optimal condition.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Companion animal services
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAS401A Manage compliance in the companion animal industry

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of managing compliance within the companion animal industry, including the provision of high-level advice to clients on companion animal management and housing needs, maintaining external relationships and keeping records.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector. It may include pet and aquarium shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Provide high-level advice on <i>companion animals</i>	1.1. Client and/or animal needs are assessed. 1.2. Advice on behaviour management for different species and breeds is provided as required. 1.3. Advice on special <i>dietary requirements</i> , including food and water, is provided to client as required.
2. Manage animals in accordance with relevant <i>codes of practice and legislative requirements</i>	2.1. Appropriate <i>housing</i> and equipment are provided in accordance with the physical, behavioural and social requirements and applied to animals kept on the premises. 2.2. Policies and procedures for animal management, <i>security</i> and <i>environmentally sustainable work practices</i> are developed, documented and promoted. 2.3. Appropriate nutritional strategies are developed, as required, for the range of animals kept on the

ELEMENT	PERFORMANCE CRITERIA
	<p>premises.</p> <p>2.4. Monitoring and care of young, sick or injured animals is arranged as required.</p> <p>2.5. Effective <i>waste management strategies</i> are implemented in accordance with legislative requirements.</p>
3. Provide advice on legislative requirements	<p>3.1. Advice on local council and companion animal legislative requirements is provided as required.</p> <p>3.2. Advice on relocation options and disposal of dead animals is provided to clients, as required, in accordance with legislative requirements.</p> <p>3.3. Advice on companion animal agencies is provided as required.</p> <p>3.4. Advice on <i>transportation</i> and quarantine requirements is provided as required.</p>
4. Manage external relationships	<p>4.1. Consultation is conducted and relationships with veterinarians are maintained.</p> <p>4.2. Relationships with suppliers, relevant industry associations and other stakeholders are maintained.</p>
5. Maintain records	<p>5.1. Records of medication and <i>treatments</i> provided to animals are maintained.</p> <p>5.2. Trading in animals that are subject to <i>regulatory control</i> is managed.</p> <p>5.3. Reporting of illness, disease or death in animals is carried out in accordance with legislative requirements and industry standards.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communicate effectively with clients and other relevant stakeholders
- develop, implement and monitor organisational policies and procedures, including safe operating systems
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals and initiating behavioural management strategies

## REQUIRED SKILLS AND KNOWLEDGE

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and write workplace documents
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- anatomical and physiological structures and functions related to the care and wellbeing of commonly held animals
- animal transportation methods
- behavioural management for different species and breeds
- companion animal diseases and treatment strategies
- communication procedures and systems
- general maintenance and cleaning of animal housing
- organisation policies, procedures and requirements, including OHS and emergency procedures
- physical, behavioural and social requirements of a range of species and breeds kept in captivity
- principles of animal ethics and welfare
- relevant codes of practice and regulatory controls, including Pet Industry Joint Advisory Council codes of practice, companion animal legislation, local council regulations, microchipping and National Parks and Wildlife Service legislation
- relevant OHS and animal welfare legislative requirements and codes of practice
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- species and breed nutritional requirements and feeding techniques of commonly held animals
- species compatibility
- standards, guidelines and approaches to environmental sustainability relevant to the animal care industry
- waste management strategies

**REQUIRED SKILLS AND KNOWLEDGE**

- workplace hygiene standards and infection control protocols.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- provide advice to customers and clients on a range of issues relating to companion animals
- establish organisation policies and procedures to ensure the organisation complies with relevant legislation, regulations and codes of practice, including animal welfare and OHS
- manage relationships and communicate effectively with a range of stakeholders, including veterinarians, suppliers and relevant industry associations
- maintain records and workplace documentation.

The skills and knowledge required to manage compliance in the companion animal industry must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces may include pet and aquarium shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.

<b>EVIDENCE GUIDE</b>	
	There must be access to a range of companion animal breeds and species and the relevant information, materials and documentation.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and firsthand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different

<b>RANGE STATEMENT</b>	
work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Companion animals</i> may include:	<ul style="list-style-type: none"> <li>• aquaria, reptiles and amphibians</li> <li>• birds</li> <li>• dogs and cats</li> <li>• invertebrates (e.g. stick insects, spiders and beetles)</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs).</li> </ul>
<i>Dietary requirements</i> of companion animals may include:	<ul style="list-style-type: none"> <li>• the type of food (e.g. packaged, seed mixes, fresh, raw, frozen or live)</li> <li>• food requirements in accordance with the species, breed, age, sex and activity level of the animal</li> <li>• appropriate quantities and temperature of food.</li> </ul>
<i>Codes of practice and legislative requirements</i> that may apply include:	<ul style="list-style-type: none"> <li>• environmental sustainability practices</li> <li>• Pet Industry Joint Advisory Council codes of practice</li> <li>• relevant companion animal legislation</li> <li>• local council regulations</li> <li>• microchipping</li> <li>• animal welfare legislation</li> <li>• National Parks and Wildlife Service legislation.</li> </ul>
<i>Housing</i> may include:	<ul style="list-style-type: none"> <li>• cages</li> <li>• kennels</li> <li>• enclosures</li> <li>• compounds</li> <li>• brooders</li> <li>• aquaria</li> <li>• aviaries and bird rooms.</li> </ul>
Animal <i>security</i> arrangements may include:	<ul style="list-style-type: none"> <li>• safe access and egress</li> <li>• prevention of escape by animals</li> <li>• restriction of access to authorised personnel</li> <li>• compatibility of species and breeds within housing.</li> </ul>



<b>RANGE STATEMENT</b>	
<i>Environmentally sustainable work practices</i> may include:	<ul style="list-style-type: none"> <li>• environmentally friendly waste management</li> <li>• processes relevant to the workplace that support environment and resource efficiencies.</li> </ul>
<i>Transportation</i> may include:	<ul style="list-style-type: none"> <li>• airfreight boxes</li> <li>• pet carriers</li> <li>• plastic bags</li> <li>• restraints</li> <li>• transport fish boxes</li> <li>• trolleys.</li> </ul>
<i>Waste management strategies</i> may include:	<ul style="list-style-type: none"> <li>• disposal of: <ul style="list-style-type: none"> <li>• food waste</li> <li>• animal waste</li> <li>• used cleaning and disinfection products and containers</li> </ul> </li> <li>• local government requirements and environmental or other legislative requirements.</li> </ul>
<i>Treatments</i> may include:	<ul style="list-style-type: none"> <li>• topical and systemic parasite controls</li> <li>• dietary supplements</li> <li>• washing and grooming products.</li> </ul>
<i>Regulatory controls</i> applicable when trading in animals may include:	<ul style="list-style-type: none"> <li>• federal and state or territory legislation, regulations and codes of practice.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAS402A Manage and maintain aviaries and bird rooms

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of determining the housing and maintenance needs of specific species and breeds of birds, maintaining enclosures, detecting and controlling pests and reporting notifiable diseases.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of native and some international birds. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to those working in companion animal industry organisations that include aviaries and bird rooms as part of their operations.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Determine housing needs	<p>1.1. <b><i>Housing requirements</i></b> of particular species and breeds are identified and appropriate security and housing is provided.</p> <p>1.2. <b><i>Husbandry practices</i></b> of species are determined and appropriate resources are provided.</p>
2. Maintain enclosures	<p>2.1. Maintenance plans for aviaries and bird rooms are developed in accordance with <b><i>occupational health and safety (OHS)</i></b> requirements and <b><i>environmental considerations</i></b>.</p> <p>2.2. <b><i>Maintenance activities</i></b> are conducted in accordance with maintenance plans and relevant industry standards.</p> <p>2.3. Appropriate <b><i>tools, equipment and materials</i></b> are selected and used correctly, including <b><i>personal</i></b></p>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>protective equipment.</i></p> <p>2.4.Environmentally safe and effective measures are implemented, including <i>hygiene standards and infection control procedures.</i></p> <p>2.5.Maintenance plans and activities are documented.</p>
3. Detect and control pests and report notifiable diseases	<p>3.1.<i>Pests</i> are detected and appropriate control procedures are implemented.</p> <p>3.2.Pest control and disease records are maintained in accordance with industry standards and organisational policies and procedures.</p> <p>3.3.Notifiable diseases are identified, documented and reported in accordance with legislative requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- develop and implement maintenance plans for aviaries and bird rooms
- employ safe and environmentally responsible organisational systems and procedures when working with and handling a variety of bird species
- identify diseases in birds and pests
- implement environmentally safe and effective pest control procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and write workplace documents
- operate cleaning and maintenance equipment
- prepare and maintain housing
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental

**REQUIRED SKILLS AND KNOWLEDGE**

abilities

- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- avian biology related to the care and wellbeing of commonly held avian species and breeds
- avian pests and diseases and treatment strategies
- communication procedures and systems
- general maintenance and cleaning of avian housing
- housing requirements of bird species and breeds
- organisation policies, procedures and requirements, including OHS and emergency procedures
- relevant OHS and animal welfare legislative requirements and codes of practice
- physical, behavioural and social requirements of a range of avian species and breeds kept in captivity
- principles of animal ethics and welfare
- relevant recordkeeping systems
- safe avian handling techniques and procedures
- safe work practices
- species and breed nutritional requirements and feeding techniques
- species compatibility
- waste management strategies
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials
- zoonotic diseases associated with animal care and methods of prevention and control.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• manage aviaries and bird rooms</li> <li>• provide appropriate husbandry for birds</li> <li>• maintain enclosures</li> <li>• identify pests and apply pest control techniques</li> <li>• detect and report notifiable diseases</li> <li>• maintain accurate records and workplace documentation.</li> </ul> <p>The skills and knowledge required to manage and maintain aviaries and bird rooms must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal workplaces where a broad range of bird species are housed.</p> <p>There must be access to a range of bird species and breeds as well as the relevant information, materials and documentation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Housing requirements</i></b> may include:	<ul style="list-style-type: none"> <li>• brooders, heating and perches</li> <li>• fencing, netting, gates and security measures</li> <li>• food and water dispensers</li> <li>• hollow logs, branches and environmental enrichment.</li> </ul>
<b><i>Husbandry practices</i></b> may include:	<ul style="list-style-type: none"> <li>• appropriate delivery and placement of food and water</li> <li>• handling and housing methods relevant to bird species</li> <li>• disease control</li> <li>• environmental and waste management control.</li> </ul>
<b><i>OHS and environmental considerations</i></b> may include:	<ul style="list-style-type: none"> <li>• hazard identification, risk minimisation and workplace procedures for: <ul style="list-style-type: none"> <li>• animal bites, kicks and scratches</li> <li>• biological hazardous waste and sharps disposal</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• gas leakage</li> <li>• handling, use, storage, transport and disposal of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• manual handling including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• control of the release of infective agents (animal and human)</li> <li>• transmission of zoonotic diseases.</li> </ul>
<i>Maintenance activities</i> may include:	<ul style="list-style-type: none"> <li>• checking and reporting utilities</li> <li>• repairing fixtures and fittings</li> <li>• replacing consumables</li> <li>• sweeping, hosing, washing and disinfecting.</li> </ul>
<i>Tools, equipment and materials</i> may include:	<ul style="list-style-type: none"> <li>• surveying and levelling equipment: <ul style="list-style-type: none"> <li>• levels and pegs</li> <li>• notebook, pencil and calculator</li> </ul> </li> <li>• tools: <ul style="list-style-type: none"> <li>• hammers</li> <li>• hose and hose fittings</li> <li>• rakes</li> <li>• rollers</li> <li>• shovels and spades</li> <li>• wheelbarrows</li> </ul> </li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• gloves</li> <li>• overalls</li> <li>• hearing or eye protection</li> <li>• respirators or face masks</li> <li>• sun hats and sunscreen lotion</li> <li>• work boots.</li> </ul>
<i>Hygiene standards and infection control</i> practices may include:	<ul style="list-style-type: none"> <li>• appropriate reprocessing of reusable equipment</li> <li>• aseptic technique</li> <li>• dedicated equipment (e.g. to each animal or as appropriate to work function)</li> <li>• environmental controls (e.g. design and maintenance of premises and cleaning)</li> <li>• isolation/cohorting</li> <li>• personal hygiene practices especially washing</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and drying hands (e.g. before and after animal contact)</p> <ul style="list-style-type: none"> <li>• restricted movement of animal, staff and visitors/customers</li> <li>• restricting contact with birds away from workplace</li> <li>• safe handling and disposal of sharps and other related and general waste</li> <li>• special ventilation requirements</li> <li>• surface cleaning and management of blood and bodily fluid spills</li> <li>• techniques to limit contamination</li> <li>• use of personal protective equipment.</li> </ul>
<i>Pests</i> may include:	<ul style="list-style-type: none"> <li>• cockroaches, spiders, ants and flying insects</li> <li>• predators and parasites</li> <li>• rats and mice.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

## ACMCAS403A Design, construct and maintain aquascapes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of designing, constructing and maintaining aquascapes for a range of aquaria, including ponds, waterfalls and water features.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector where aquascapes are designed, constructed and maintained for clients to house aquatic animals, such as fish, amphibians and some reptiles.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify client needs	1.1.Types of <i>aquaria</i> and proposed species to be housed are established. 1.2.Proposed location and climatic conditions affecting design are identified. 1.3.Special installation and/or maintenance requirements are confirmed with client. 1.4.Advice on suitability of species and location is provided to client.
2. Prepare <i>aquascape design</i>	2.1.Appropriate <i>heating, lighting and filtration</i> requirements are identified and selected according to the design parameters. 2.2. <i>Plants, features</i> and substrate materials are selected according to the design parameters. 2.3.Aquascape design is prepared in accordance with

ELEMENT	PERFORMANCE CRITERIA
	industry best practice and client needs.
3. Establish aquascape	<p>3.1. <b>Tools, equipment</b> and materials appropriate to the job and <b>occupational health and safety (OHS)</b> requirements are selected and used, including <b>personal protective equipment</b>.</p> <p>3.2. Substrate is established, using appropriate materials in accordance with the design.</p> <p>3.3. Aquascape features and plants are installed and secured in accordance with the design and industry standards.</p> <p>3.4. Installation, testing and commissioning of lighting, heating and filtration systems are conducted in accordance with manufacturers' requirements.</p> <p>3.5. Ongoing maintenance requirements are discussed with client in preparation for handover.</p> <p>3.6. Waste from construction and installation is collected, treated and disposed of or recycled in accordance with organisational and environmental requirements.</p> <p>3.7. Worksite, tools and equipment are cleaned, returned to operating order and stored according to OHS and organisational requirements.</p>
4. Maintain aquascapes	<p>4.1. <b>Water sampling and testing</b> are conducted in accordance with species type and environmental requirements.</p> <p>4.2. Isolation of electrical equipment prior to maintenance is proven using appropriate techniques, procedures and equipment.</p> <p>4.3. <b>Service and repairs</b> are carried out according to manufacturers' specifications and organisational requirements.</p> <p>4.4. Health of aquaria and plants is monitored and reported.</p> <p>4.5. <b>Complex faults</b> are identified and referred for specialist advice and/or remedial action in accordance with organisational requirements.</p> <p>4.6. Accurate records are maintained in accordance with industry requirements and organisational policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adjust water quality and conditions to suit aquascape and species requirements
- collect and test water samples using appropriate equipment correctly
- construct advanced aquascapes
- employ safe and environmentally responsible organisational systems and procedures when working with and handling aquatic animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and write workplace documents
- recognise behaviours and conditions that could be indicative of possible aquatic animal health problems
- literacy skills to read and follow organisation policies and procedures, including OHS and waste management procedures and other organisational policies and procedures; follow sequenced written instructions including treatment instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- aquatic animal biology related to the care and wellbeing of commonly held species
- aquaria water chemistry including water quality adjustment procedures and chemicals used to correct water conditions of aquascapes
- appropriate aquaria heating, lighting and filtration systems
- environmental requirements for commonly held species
- general maintenance and cleaning of aquaria
- load-bearing capacity of architectural structures
- normal and abnormal behaviour of aquatic species
- organisation policies, procedures and requirements, including OHS and emergency

## REQUIRED SKILLS AND KNOWLEDGE

- procedures
- plants, features and substrate materials suitable for aquascapes
  - principles of animal ethics and welfare
  - relevant OHS and animal welfare legislative requirements and codes of practice, including environmental regulations
  - relevant recordkeeping systems
  - safe aquatic animal handling techniques and procedures
  - safe work practices
  - signs of common aquatic animal diseases and parasitic infestations and their transmission between aquatic animals
  - water sampling, testing and analysis procedures and techniques
  - ideal water conditions and quality for a range of aquatic animals, including Ph, nitrate, nitrite, ammonia, salinity, calcium and hardness
  - workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials
  - zoonotic diseases associated with animal care and methods of prevention and control.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify client's needs and produce a range of aquascape designs that provides a suitable environment for the selected species and desired features
- construct aquascapes in accordance with OHS and organisation policies and procedures
- identify cause and effect of environmental problems and implement corrective action

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• apply correct cleaning and maintenance techniques</li> <li>• maintain records and required documentation.</li> </ul> <p>The skills and knowledge required to design, construct and maintain aquascapes must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal workplaces that design, construct and maintain aquascapes for clients or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of aquatic species or breeds as well as the relevant information, materials and documentation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and firsthand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• workplace documentation (e.g. aquascape design plans)</li> <li>• third-party evidence</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>



**EVIDENCE GUIDE****Guidance information for assessment**

Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>Aquaria</i></b> may include:	<ul style="list-style-type: none"> <li>• fresh and marine aquaria, pools and water features.</li> </ul>
<b><i>Aquascape design</i></b> may include:	<ul style="list-style-type: none"> <li>• air pumps and water pumps</li> <li>• lighting</li> <li>• mechanical and electrical devices</li> <li>• natural and artificial features</li> <li>• substrate material.</li> </ul>
<b><i>Heating, lighting and filtration equipment</i></b> used in an aquascape may include:	<ul style="list-style-type: none"> <li>• advanced systems, including ultraviolet (UV) and ozone</li> <li>• energy requirements of pumping system and its suitability for aquaria selected</li> <li>• heating systems, including gas, electric and solar</li> <li>• infrastructure, including seepage pits and permaculture considerations</li> <li>• lighting systems, including UV, fluorescent, incandescent, metal halide and mercury vapour</li> <li>• mechanical, chemical and biological filtration systems.</li> </ul>
<b><i>Plants and features</i></b> may include:	<ul style="list-style-type: none"> <li>• natural and artificial plants.</li> </ul>
<b><i>Tools and equipment</i></b> may	<ul style="list-style-type: none"> <li>• surveying and levelling equipment: <ul style="list-style-type: none"> <li>• levels and pegs</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• notebook, pencil and calculator</li> <li>• tools: <ul style="list-style-type: none"> <li>• hammers</li> <li>• hose and hose fittings</li> <li>• rakes</li> <li>• rollers</li> <li>• shovels and spades</li> <li>• wheelbarrows</li> </ul> </li> </ul>
<b>OHS</b> hazards associated with the installation and maintenance of aquascape systems may include:	<ul style="list-style-type: none"> <li>• disturbance of utilities and services</li> <li>• hazards from the use of hired equipment</li> <li>• moving machinery, powered equipment and hand tools</li> <li>• solar radiation, dust and noise</li> <li>• uneven surfaces and holes</li> <li>• working in confined spaces and water hazards.</li> </ul>
<b>Personal protective equipment</b> may include:	<ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• gloves</li> <li>• overalls</li> <li>• hard hats</li> <li>• hearing or eye protection</li> <li>• respirators or face masks</li> <li>• sun hats and sunscreen lotion</li> <li>• work boots.</li> </ul>
<b>Water sampling and testing</b> may include:	<ul style="list-style-type: none"> <li>• tests for pH, salinity, chlorine, electro-conductivity, chloride, calcium carbonate, iron, turbidity and biological oxygen demand.</li> </ul>
<b>Service and repairs</b> may include:	<ul style="list-style-type: none"> <li>• cleaning a range of aquaria surfaces, including glass, concrete and plastic</li> <li>• maintaining a range of filtration, pumping and heating systems</li> <li>• maintaining seepage pits and permaculture environments</li> <li>• salinity control, pH correction and chlorine neutralisers</li> <li>• water stabilizers.</li> </ul>
<b>Complex faults</b> may include:	<ul style="list-style-type: none"> <li>• problems that are beyond the scope of service personnel and require the services of a licensed electrical tradesperson: <ul style="list-style-type: none"> <li>• construction issues</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• power supply issues</li> <li>• plumbing issues</li> <li>• water quality issues.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Companion animal services
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAS404A Develop enrichment strategies for companion animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of developing, implementing, monitoring and reviewing enrichment strategies for companion animals and communicating the strategies to staff members.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the animal care industry where it may be necessary to develop and provide enrichment activities for animals in various companion animal sectors, including but not restricted to, pet shops, boarding kennels and catteries, and dog and cat breeding establishments.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Develop <i>enrichment strategies</i>	<p>1.1. <b><i>Research</i></b> and consultation are conducted to determine appropriate strategies for particular <b><i>animals</i></b> and breeds.</p> <p>1.2. Enrichment strategies are developed against known animal behaviour and traits.</p> <p>1.3. <b><i>Animal welfare</i></b> and <b><i>occupational health and safety (OHS) requirements</i></b> are incorporated into strategies as appropriate.</p> <p>1.4. Organisational procedures for enrichment are developed in accordance with the profile of animals in the workplace.</p> <p>1.5. Behavioural management budget allocation is aligned to short and longer-term strategies.</p>
2. Implement	2.1. Enrichment strategies and procedures are

ELEMENT	PERFORMANCE CRITERIA
enrichment programs	<p>communicated to staff and training is provided as necessary.</p> <p>2.2. Animal husbandry regimes are adjusted to incorporate enrichment strategies.</p> <p>2.3. Assistance is provided to staff in implementing physical, social and food-related enrichment programs appropriate to the target species.</p> <p>2.4. Staff members providing enrichment to animals are supervised in accordance with organisational policies and procedures.</p> <p>2.5. Short-term management of animals exhibiting undesirable behaviour is assessed and implemented.</p>
3. Monitor and review enrichment strategies	<p>3.1. Responses to implementation of enrichment strategy are monitored to determine their effects on animals and documented.</p> <p>3.2. <i>Adverse consequences</i> to an enrichment strategy are investigated and evaluated.</p> <p>3.3. Enrichment program modification suggestions are gathered in consultation with staff and implemented where appropriate.</p> <p>3.4. Short and longer-term enrichment strategies are updated in line with review findings and documented.</p> <p>3.5. Organisation behavioural management budget allocation is aligned to reviewed and updated strategies.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- develop and implement short and longer-term enrichment strategies including behaviour enrichment activities, materials and equipment suitable for animal species and stage of development
- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals
- identify common indicators of the presence of disease, injury, compromised health

## REQUIRED SKILLS AND KNOWLEDGE

- or distress in animals
- identify the signs, behaviour and objective measures of development in young animals
- maintain records and write workplace documents
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- modify behaviour enrichment programs to improve animal comfort and learning opportunities
- observe animals, document and report behaviour and feeding patterns
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare, follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with staff
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate strategies and prioritise daily tasks
- use safe manual handling techniques and/or equipment.

### Required knowledge

- anatomical and physiological structures and functions related to the care and wellbeing of commonly held animals
- companion animal husbandry regimes
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- housing, exercise, social and activity needs of animals
- indicators of stress and wellbeing in animals
- methods of rectifying and modifying animal behaviour patterns
- natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- normal and abnormal behaviour patterns and traits of commonly held animals
- organisational policies and procedures, including OHS and emergency procedures and animal welfare requirements
- physical, social and food-related enrichment activities
- principles of animal welfare and ethics
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques
- safe work practices

**REQUIRED SKILLS AND KNOWLEDGE**

- species compatibility
- terminology used to describe and document health and behavioural signs and patterns, including desirable and undesirable features
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- develop and implement appropriate enrichment strategies for common species or breeds, including appropriate physical, social and food-related enrichment
- comply with animal welfare and OHS requirements and organisational policies and procedures
- communicate enrichment strategies to staff, provide training as necessary and supervise implementation
- monitor responses to implementation and review strategies in consultation with others
- monitor organisation budget allocation and maintain accurate records.

The skills and knowledge required to develop enrichment strategies for companion animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces



<b>EVIDENCE GUIDE</b>	
	<p>normal work conditions. Workplaces may include pet shops, boarding kennels and catteries, companion animal training, grooming and/or breeding establishments and mobile animal facilities.</p> <p>There must be access to a range of companion animal breeds and species and the relevant information, materials and documentation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Enrichment strategies*** may include:

- physical:
  - climbing poles and scratching posts
  - gnawing manipulada
  - hide boxes, tunnels and ladders
  - nest building or bedding material:
    - shredded paper
    - straw
    - substrate or wood shavings
  - toys (e.g. balls, bells, toys, puzzles and mirrors)
  - perches, roosting shelves and nest boxes
- food or food-related:
  - giving animals opportunities to forage for food by hiding it in substrates
  - giving the animal food that requires processing (e.g. peeling or shelling fruit or seeds)
- social enrichment:
  - levels of contact with other animals of the same species or breed
  - social interactions between the animal and the carer may also be appropriate.

***Research*** may involve:

- reviewing:
  - breeders associations
  - internet sites
  - technical papers and texts
- discussions with:
  - hobbyists
  - private consultants
  - registered breeders
  - specialist breeders
  - wholesalers.

<b>RANGE STATEMENT</b>	
<i>Animals</i> may include:	<ul style="list-style-type: none"> <li>• birds</li> <li>• dogs and cats</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs)</li> <li>• reptiles and amphibians.</li> </ul>
<i>Animal welfare requirements</i> may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS requirements</i> may include:	<ul style="list-style-type: none"> <li>• following safe work method statements in the conduct of work tasks</li> <li>• hazard identification and risk minimisation procedures for the handling of animals</li> <li>• hazard identification and risk minimisation procedures for the handling, use, storage, transport and disposal of chemicals</li> <li>• manual handling strategies</li> <li>• procedures for the handling and disposal of biological wastes</li> <li>• use of personal protective clothing and equipment relevant to the task: <ul style="list-style-type: none"> <li>• safety goggles and glasses</li> <li>• protective masks</li> <li>• animal handling gauntlets.</li> </ul> </li> </ul>
<i>Adverse consequences</i> may include:	<ul style="list-style-type: none"> <li>• destruction of habitat</li> <li>• fighting between animals over access to enrichment items or activities leading to potential for injuries</li> <li>• impact on security of animals, staff and public of enrichment activity</li> <li>• life of enrichment item or activity compared to cost</li> <li>• over-stimulation of animal</li> <li>• refusal of animal to utilise enrichment items</li> <li>• self-mutilation or other signs of stress.</li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Companion animal services
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMCAS405A Purchase companion animal livestock

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of purchasing companion animal livestock for companion animal organisations and/or on behalf of clients.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the animal care industry where it may be necessary to purchase a range of companion animal livestock for companion animal organisations, such as pet shops, or to fulfil specific client orders.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Locate companion animal livestock purchase opportunities	1.1. Trends in purchase patterns for companion animals are <b><i>researched</i></b> and evaluated. 1.2. Agents and sellers of companion animal livestock are researched and reviewed to determine appropriate sources. 1.3. Sales histories for companion animal livestock species or breeds are monitored and evaluated. 1.4. Relevant <b><i>legislative requirements</i></b> are assessed in relation to species and breeds. 1.5. Appropriate purchases from reliable sources are identified and pre-purchase investigations initiated.
2. Inspect livestock condition	2.1. <b><i>Health and condition status</i></b> of livestock are checked using accepted industry standard methods. 2.2. <b><i>Records and documents</i></b> related to livestock

ELEMENT	PERFORMANCE CRITERIA
	<p>histories are obtained and verified.</p> <p>2.3. Government agencies, industry bodies and veterinarians are consulted as required.</p> <p>2.4. Livestock purchase arrangements are initiated for suitable stock.</p>
3. Manage documentation and livestock procurement	<p>3.1. Licensing requirements for non-exempt native species are met if required.</p> <p>3.2. <i>Special transportation needs</i> of livestock are identified and utilised.</p> <p>3.3. Purchase details of livestock are completed in accordance with legislative, industry and organisational requirements.</p> <p>3.4. Organisation purchasing records are completed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- check on health status and condition of livestock for range of companion animal species
- comply with animal housing, transport and quarantine requirements
- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals
- identify common indicators of the presence of disease, injury, compromised health or distress in animals
- maintain records and workplace documents
- negotiate the purchase of livestock
- safely and securely prepare animals for transport
- literacy skills to read and follow organisational policies and procedures, including OHS, animal welfare and infection control procedures, follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening and asking for clarification
- numeracy skills to complete basic arithmetic calculations and measure volumes
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities

**REQUIRED SKILLS AND KNOWLEDGE**

- problem-solving skills to assess appropriate strategies and prioritise daily tasks
- use safe manual handling techniques and/or equipment.

**Required knowledge**

- anatomical and physiological structures and functions related to livestock assessment requirements
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- housing and transportation requirements for a range of companion animal species and breeds
- normal and abnormal behaviour patterns and traits of a range of species
- principles of animal welfare and ethics
- relevant legislative and regulatory compliance requirements, including the Pet Industry Joint Advisory Council codes of practice, companion animal legislation, local council regulations, microchipping, animal welfare legislation and wildlife regulations
- relevant organisational policies and procedures, including OHS and emergency procedures and animal welfare requirements
- safe animal handling techniques
- safe work practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify market trends and seasonal availability of livestock
- source and evaluate suppliers and determine best price for livestock
- perform health and condition checks on potential



<b>EVIDENCE GUIDE</b>	
	<p>purchases</p> <ul style="list-style-type: none"> <li>• identify, supply and comply with relevant housing, transport and quarantine requirements</li> <li>• comply with relevant legislative requirements</li> <li>• communicate effectively with suppliers and clients</li> <li>• maintain accurate records.</li> </ul> <p>The skills and knowledge required to purchase companion animal livestock must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace that provides purchasing services or in a situation that reproduces normal work conditions. Workplaces may include pet shops and aquariums.</p> <p>There must be access in either situation to a range of companion animal breeds and species and the relevant information, materials and documentation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Research</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal soundness or temperament issues</li> <li>• breed and training associations</li> <li>• cost and availability</li> <li>• demographics</li> <li>• registered or licensed breeders, hobbyists, specialist breeders or wholesalers</li> <li>• retail associations</li> <li>• trends and seasonal purchasing.</li> </ul>
<p><b><i>Legislative requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal health and notifiable disease regulations</li> <li>• animal welfare legislation and regulations</li> <li>• companion animal legislation</li> <li>• local council regulations</li> <li>• microchipping</li> <li>• owner or breeder licence regulations</li> <li>• Pet Industry Joint Advisory Council codes of practice</li> <li>• veterinary regulations</li> <li>• wildlife regulations.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>Health and condition status</i></b> considerations may include:	<ul style="list-style-type: none"> <li>• animal health guarantees</li> <li>• identification requirements</li> <li>• presence of parasites</li> <li>• size, age and weight</li> <li>• vaccination records</li> <li>• visual checks on condition.</li> </ul>
<b><i>Records and documents</i></b> may include:	<ul style="list-style-type: none"> <li>• breeder certificates</li> <li>• microchipping and vaccination records</li> <li>• veterinary certificates of soundness</li> <li>• wildlife licences.</li> </ul>
<b><i>Special transport needs</i></b> may include:	<ul style="list-style-type: none"> <li>• animal transport considerations: <ul style="list-style-type: none"> <li>• animals' metabolic and other health features</li> <li>• challenges involved in loading animal into transport</li> <li>• distance to destination</li> <li>• risk of injury to animal within transport container</li> <li>• size, age, health status and number of animals to be transported</li> </ul> </li> <li>• compliance with relevant legislation or regulations</li> <li>• food and water requirements</li> <li>• transport housing requirements: <ul style="list-style-type: none"> <li>• bags, cages, pouches and padded containers</li> <li>• containers suitable for holding water</li> <li>• climate controlled containers</li> <li>• trailers or other stock vehicle</li> <li>• transfer or crush equipment</li> </ul> </li> <li>• transportation standards for specific species.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMCAS406A Manage companion animal breeding

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of planning for and monitoring companion animal mating and breeding programs and evaluating outcomes.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to senior supervisors or managers working in a companion animal facility where animal breeding is conducted.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess breeding requirements	<p>1.1. <b><i>Breeding requirements</i></b> are assessed and clarified according to organisational objectives.</p> <p>1.2. <b><i>Resources</i></b> to support breeding requirements are identified and arranged.</p> <p>1.3. Breeding options are selected to optimise results and consistency.</p> <p>1.4. <b><i>Breeding programs</i></b> are formulated to meet organisation objectives.</p> <p>1.5. Organisational procedures for breeding are developed in accordance with <b><i>legislative requirements</i></b>, industry standards and safe workplace and environmentally responsible practices.</p>
2. Select animals for breeding	2.1. <b><i>Animals</i></b> for mating are selected in accordance with requirements of the breeding program, animal welfare regulations and ethical practice principles.

ELEMENT	PERFORMANCE CRITERIA
	<p>2.2. <i>Examinations and tests</i> are scheduled as required to confirm suitability of selected animals for breeding program.</p> <p>2.3. Appropriate <i>breeding systems</i> are selected and applied in accordance with the breeding program requirements.</p> <p>2.4. Appropriate <i>mating methods</i> are applied in accordance with the breeding program.</p>
3. Monitor breeding programs	<p>3.1. Breeding program strategies and procedures are communicated to staff and training provided as necessary.</p> <p>3.2. <i>Potential risks to animals</i> during breeding, birth and early life procedures are identified and options for managing the risk are evaluated and preparations are made in case of emergencies.</p> <p>3.3. Implementation of breeding programs is monitored for efficiency and effectiveness.</p> <p>3.4. Changes necessary to achieve breeding aims are prioritised and implemented according to breeding program requirements.</p>
4. Evaluate breeding programs	<p>4.1. Breeding program processes and outcomes are reviewed and evaluated against organisation's objectives and breeding plans are updated as required.</p> <p>4.2. Criteria used to select animals for breeding are assessed and updated to meet the requirements of the breeding programs.</p> <p>4.3. Breeding records are maintained in accordance with <i>industry standards</i> and breeding program requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- develop, monitor, evaluate and update breeding programs using appropriate breeding systems and mating methods according to species or breed requirements

## REQUIRED SKILLS AND KNOWLEDGE

- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals
- evaluate behaviour, signs and objective measures that may indicate animal health is at risk
- identify indicators that animals are ready for breeding and signs of hatching or parturition
- identify situations and evaluate options for intervening in emergency situations related to the breeding, hatching and parturition and rearing of animals
- identify situations relating to the breeding and rearing of animals that require veterinary or specialist assistance
- maintain breeding program and animal records
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor animal health and condition and recognise abnormalities
- literacy skills to read, select and follow organisational policies and procedures, including occupational health and safety (OHS) and infection control procedures; and record details and information accurately and legibly
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

## Required knowledge

- anatomical and physiological structures and functions related to the reproduction, care and wellbeing of commonly held animals
- breeding program systems, methods and traits related to commonly held animals
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- diseases and ailments of breeding and young animals
- industry terminology related to companion animal health and breeding processes and events
- normal and abnormal animal behaviour relating to the characteristics of the species, age, health status and social needs
- principles of animal welfare and ethics
- protocols, legal and ethical considerations in providing care and treatment of breeding animals and their offspring
- relevant legislative and regulatory compliance requirements, including the Pet Industry Joint Advisory Council codes of practice, companion animal legislation,



**REQUIRED SKILLS AND KNOWLEDGE**

local council regulations, microchipping, animal welfare legislation and wildlife regulations

- relevant organisational policies and procedures, including OHS and emergency procedures and animal welfare requirements
- tests and examinations used to determine suitability of animals for breeding and determine pregnancy
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify, develop and implement breeding program aims
- select suitable animals for breeding programs
- establish appropriate mating systems and methods
- monitor breeding activities and evaluate program outcomes
- identify potential risks to animals in breeding, birth and early life procedures and plan for emergencies
- maintain breeding program records.

The skills and knowledge required to manage companion animal breeding must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion

<b>EVIDENCE GUIDE</b>	
	<p>animal facility where animal breeding is conducted or in a situation that reproduces normal work conditions. Facilities may include aquariums, aviaries, boarding kennels, catteries or other breeding establishments.</p> <p>There must be access to a range of companion animal breeds or species and the relevant information, materials and documentation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. breeding program records)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Breeding requirements*** may include:

- an assessment of the organisation's breeding and production records to identify public demand for species or breeds
- breed or bloodline health, soundness and temperament considerations
- breed standards
- breeding and rearing procedures and equipment for nominated animals
- expected return on investment
- licensing or registration regulations for breeding
- restrictions on ownership of nominated animals
- trends in breed or species popularity.

***Resources*** may include:

- facilities and equipment:
  - recording systems
  - personal protective equipment
  - monitoring technology for breeding
  - weighing and testing equipment
- human resources.

***Breeding program*** suitability considerations may include:

- age of potential breeding animals
- expertise level of staff to manage breeding animals
- genetic suitability due to:
  - breeding for highly specialised purpose
  - closeness of relationship to potential mate
  - designer breed focus
  - dominant or recessive traits
  - hybrid vigour requirements
  - soundness and temperament
- introduction of new bloodlines
- location of potential breeding animals
- natural mating or artificial breeding options

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>potential restrictions on importing semen or using embryo transfer.</li> </ul>
<b>Breeding program</b> information may include:	<ul style="list-style-type: none"> <li>identification of parents and offspring</li> <li>health records (e.g. ailments, injuries, vaccinations, worming and feeding)</li> <li>number of breeders required</li> <li>production rates (e.g. miscarriages and deaths)</li> <li>selection criteria for breeders</li> <li>weaning methods used, rates and response of offspring</li> <li>purchaser records</li> <li>breeding records of matings for sire and dam.</li> </ul>
<b>Legislative requirements</b> may include:	<ul style="list-style-type: none"> <li>animal health and notifiable disease regulations</li> <li>animal welfare legislation and regulations</li> <li>companion animal legislation</li> <li>local council regulations</li> <li>microchipping, animal welfare legislation</li> <li>OHS and environmental management legislation and regulations</li> <li>owner or breeder licence regulations</li> <li>veterinary regulations</li> <li>wildlife regulations.</li> </ul>
<b>Animals</b> may include:	<ul style="list-style-type: none"> <li>those commonly encountered within the industry workplace: <ul style="list-style-type: none"> <li>birds</li> <li>dogs and cats</li> <li>fish, reptiles and amphibians</li> <li>small animals (e.g. rabbits, rodents, ferrets and guinea pigs).</li> </ul> </li> </ul>
<b>Examinations and tests</b> may include:	<ul style="list-style-type: none"> <li>genetic tests for heritable defects</li> <li>physical examination for structural and reproductive soundness</li> <li>tests for presence of disease that may affect breeding viability or the health of either animal.</li> </ul>
<b>Breeding systems</b> may include:	<ul style="list-style-type: none"> <li>breeding for specialised market purposes (e.g. colour and size)</li> <li>creating designer breeds</li> <li>cross breeding</li> <li>inbreeding</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• line breeding</li> <li>• outcrossing.</li> </ul>
<i>Mating methods</i> may include:	<ul style="list-style-type: none"> <li>• natural and artificial breeding</li> <li>• paired mating, the harem system and stud mating.</li> </ul>
<i>Potential risks</i> to animals may include:	<ul style="list-style-type: none"> <li>• breeding risks: <ul style="list-style-type: none"> <li>• aggression from either animal</li> <li>• either animal has been ill prior to breeding</li> <li>• either animal is infected with a disease that could affect reproduction or health of other breeding animal</li> <li>• either animal is infertile or has poor reproductive viability</li> <li>• either partner refuses to breed</li> <li>• female does not show obvious signs of readiness for breeding</li> <li>• inexperienced breeders</li> <li>• shy or timid breeders</li> </ul> </li> <li>• birth and early life risks: <ul style="list-style-type: none"> <li>• mother attacks offspring</li> <li>• mother dies or cannot mother offspring</li> <li>• mother retains placenta (where relevant)</li> <li>• mother will not or cannot suckle or feed offspring</li> <li>• offspring are born with disease or defects that limit their ability to survive or lead healthy lives in the future</li> <li>• offspring are injured during or after birth</li> <li>• offspring are too large for natural birth</li> <li>• offspring contract disease or become infested with parasites</li> <li>• offspring die or are stillborn</li> <li>• offspring will not feed</li> <li>• weaker offspring are prevented from feeding effectively due to competition from others.</li> </ul> </li> </ul>
<i>Industry standards</i> may include:	<ul style="list-style-type: none"> <li>• Pet Industry Joint Advisory Council codes of practice</li> <li>• ethical practices</li> <li>• breed association reporting requirements.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMCAS407A Provide professional companion animal grooming services

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing professional pattern and style grooming services for companion animals.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector where pattern and style grooming services are provided for companion animals at their home or at a companion animal facility.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Assess grooming needs	1.1.Grooming needs of animals are established with client. 1.2.Animal's coat length and condition, including condition of the ears, eyes and toenails, are assessed in relation to its age and breed. 1.3.Animal is checked for <i>parasitic infection</i> . 1.4. <i>General health and temperament of animal</i> is checked with the client and documented. 1.5.Observations of the animal's condition are reported to client. 1.6.Client is informed of grooming procedures and advised regarding required maintenance regimes for the animal's coat and/or condition.
2. Prepare animal and	2.1. <i>Risks</i> associated with grooming nominated animals



ELEMENT	PERFORMANCE CRITERIA
grooming environment	<p>are determined and managed in accordance with <b>occupational health and safety (OHS)</b> and animal welfare requirements.</p> <p>2.2. Appropriate <b>grooming pattern and style</b> are identified in accordance with breed standards, client preference, health of the animal and condition of its coat.</p> <p>2.3. <b>Grooming equipment</b> and supplies relevant for the condition of the coat, its pattern and style are selected and prepared.</p> <p>2.4. Animal is restrained and handled safely and humanely in accordance with its age, health and breed characteristics.</p>
3. Perform grooming services	<p>3.1. Pre-bathing procedures, including brushing and de-matting, are carried out as required.</p> <p>3.2. Animal is bathed, rinsed and dried using appropriate bathing procedures in accordance with organisational policies and procedures.</p> <p>3.3. Grooming equipment is operated safely and correctly in accordance with organisational grooming procedures and manufacturers' instructions.</p> <p>3.4. Animal's coat is styled as required using industry-recognised grooming techniques and in accordance with pattern, style and client requirements.</p> <p>3.5. Additional grooming services are completed as required.</p>
4. Complete grooming services	<p>4.1. Animal is housed safely and monitored until owner's arrival.</p> <p>4.2. Grooming equipment and area is cleaned and returned to storage, supplies audited and documented.</p> <p>4.3. <b>Waste material</b> is collected and disposed of in accordance with environmental and legislative requirements.</p> <p>4.4. Grooming services are documented and <b>business records</b> updated for compliance and invoicing requirements.</p> <p>4.5. Animals are returned to client, <b>advice on home-grooming care</b> is provided and any follow-up requirements are discussed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply a range of industry recognised pattern and style grooming techniques, procedures and associated range of treatments
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- follow-up customers in relation to future grooming services in accordance with organisational policies and procedures
- identify animals using common names
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and complete relevant workplace documentation
- operate and maintain a range of grooming equipment
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- basic animal anatomy and physiology related to grooming procedures
- industry recognised animal pattern and style grooming techniques, procedures and equipment
- normal and abnormal animal behaviour and traits for relevant species
- communication procedures and systems
- principles of animal welfare and ethics
- relevant grooming products and services
- relevant legislative and regulatory compliance requirements, including the Pet Industry Joint Advisory Council codes of practice, companion animal legislation, local council regulations, microchipping, animal welfare legislation and wildlife

## REQUIRED SKILLS AND KNOWLEDGE

- regulations
- relevant organisational policies and procedures, including OHS and emergency procedures, animal welfare requirements, hygiene standards and waste disposal regulations
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- signs of abnormalities and health concerns in animals, including parasitic infections
- transmission of diseases between animals
- usage and maintenance of a range of grooming equipment
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess health and condition of animal's coat and determine pattern and style grooming requirements with client/owner
- apply industry recognised bathing and grooming methods and procedures for different breeds of companion animals
- handle animals in a safe and humane manner
- operate and maintain grooming equipment and supplies in accordance with organisational standards and manufacturers' specifications
- build relationships and communicate effectively with clients regarding appropriate grooming requirements
- maintain records and follow-up with customers as

<b>EVIDENCE GUIDE</b>	
	<p>required.</p> <p>The skills and knowledge required to provide professional companion animal grooming services must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal organisations that offer animal pattern and style grooming services or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of companion animal breeds as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for</b>	Assessment methods should reflect workplace demands

<b>EVIDENCE GUIDE</b>	
<b>assessment</b>	(e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Animals</i></b> may include:	<ul style="list-style-type: none"> <li>• most commonly, dogs and cats</li> <li>• other small animals: <ul style="list-style-type: none"> <li>• rabbits, rodents, ferrets and guinea pigs.</li> </ul> </li> </ul>
<b><i>Parasitic infestations</i></b> may include:	<ul style="list-style-type: none"> <li>• external parasites: <ul style="list-style-type: none"> <li>• fleas, mites, lice, ticks, flies and midges.</li> </ul> </li> </ul>
<b><i>General health and temperament</i></b> may include:	<ul style="list-style-type: none"> <li>• current body, skin and coat condition</li> <li>• known allergies or other health problems</li> <li>• habits and behavioural traits</li> <li>• history of previous grooming experience</li> <li>• injuries or other issues either reported or observed</li> <li>• preferred restraint</li> <li>• vaccination status.</li> </ul>
<b><i>Risks</i></b> in capture, handling and grooming of animals may include:	<ul style="list-style-type: none"> <li>• aggressive animal behaviour</li> <li>• escape of animals and subsequent threat to safety of humans and other animals</li> <li>• potential anxiety of animal when being handled by strangers</li> <li>• potential injuries to humans during capture, handling and grooming processes</li> <li>• potential stress and injury to animals during handling and grooming</li> <li>• reaction to washing and grooming chemicals</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• transmission of disease and infection to humans and other animals</li> <li>• unfamiliarity of animal to grooming and washing equipment and processes to animals.</li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, and scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Grooming pattern and style</i></b> characteristics may include:	<ul style="list-style-type: none"> <li>• breed specific clipping regulations and standards for competition or working animals</li> <li>• coat thinning, cutting, shaving and pattern trimming</li> <li>• metabolic and other animal health issues that may be impacted by coat condition, grooming methods and equipment</li> <li>• techniques used to groom animals to ensure their comfort in various climatic and lifestyle conditions.</li> </ul>
<b><i>Grooming equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• brushes and combs</li> <li>• coat cleaning and conditioning products</li> <li>• coat clippers (e.g. electric, rechargeable, hand operated and assorted clipping blades)</li> <li>• detangling and debris removing products</li> <li>• dryers</li> <li>• files</li> <li>• grooming stands</li> <li>• polishing pads and towels</li> <li>• restraining equipment (e.g. collars, leads, muzzles and harnesses)</li> <li>• scissor and shears, tweezers and stripping knives.</li> </ul>
<b><i>Waste material</i></b> may include:	<ul style="list-style-type: none"> <li>• bath water</li> <li>• chemicals, shampoos and conditioners</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• empty containers and disposable gloves</li> <li>• faeces</li> <li>• hair and nails</li> <li>• washing and drying cloths.</li> </ul>
<i>Business record</i> compliance and invoicing requirements may include:	<ul style="list-style-type: none"> <li>• appointment book</li> <li>• client records</li> <li>• daily takings record</li> <li>• hours worked</li> <li>• invoice that is compliant with the Australian Taxation Office (ATO) requirements</li> <li>• price list for services and products</li> <li>• services and treatments completed record.</li> </ul>
<i>Advice on home grooming care</i> may include:	<ul style="list-style-type: none"> <li>• advising of any health issues noticed during grooming or inspection of animal</li> <li>• advising of any injury or illness issues that have occurred during grooming</li> <li>• booking future appointments</li> <li>• further parasite control requirements</li> <li>• identifying follow-up grooming schedule to maintain coat and skin in optimal condition</li> <li>• providing literature on services or care</li> <li>• suggesting grooming or care products for home use.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		



## ACMCAS408A Manage the operation of a mobile hydro-bathing facility

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of managing the set-up, operation, cleaning and pack-up of a mobile hydro-bathing facility.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry where a mobile hydro-bathing facility is operated. This unit relates to the management of a mobile hydro-bathing facility.</p> <p>Providing companion animal hydro-bathing services is covered by ACMCAS307A Provide animal companion hydro-bathing services.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Set up mobile hydro-bath	1.1. Location for hydro-bath service and access to power and water are confirmed with client. 1.2. On-site <i>risks</i> are identified and managed in accordance with <i>occupational health and safety (OHS)</i> , traffic control and waste disposal regulations. 1.3. Mobile unit is positioned and secured in a safe and easily accessible area in accordance with manufacturer's instructions. 1.4. Appropriate hoses are connected to water supply and drainage systems at the client's residence in

ELEMENT	PERFORMANCE CRITERIA
	<p>accordance with legislative requirements.</p> <p>1.5. <b>Materials and equipment</b> are unloaded and prepared ready for provision of hydro-bathing services.</p>
2. Clean and pack up hydro-bath	<p>2.1. <b>Hydro-bath and associated equipment are cleaned</b> and disinfected in accordance with organisational policies and procedures.</p> <p>2.2. Waste is disposed of in accordance with relevant legislative requirements.</p> <p>2.3. Consumables and other equipment are checked and packed into mobile unit.</p> <p>2.4. Mobile unit is secured and <b>safety check</b> conducted ready for removal from site.</p> <p>2.5. Relevant <b>documentation</b> is completed in accordance with organisational policies and procedures.</p>

## Required Skills and Knowledge

### Required skills

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and complete relevant workplace documents
- operate and maintain mobile hydro-baths in accordance with manufacturer's instructions
- literacy skills to read and follow organisation policies and procedures, including OHS, infection control and waste management procedures; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

## Required skills

- communication procedures and systems
- relevant bathing materials and equipment
- relevant legislative and regulatory compliance requirements, including the Pet Industry Joint Advisory Council codes of practice, companion animal legislation, local council regulations, microchipping, animal welfare legislation and wildlife regulations
- relevant organisational policies and procedures, including OHS and emergency procedures, animal welfare requirements, hygiene standards and waste disposal regulations
- relevant recordkeeping systems
- safe work practices
- safety check procedures for mobile unit
- traffic control regulations
- use and maintenance of a range of bathing and rinsing equipment
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- effectively maintain and operate a mobile hydro-bath facility
- identify risks related to OHS, traffic control and animal welfare and implement minimisation strategies
- comply with hygiene standards and infection control protocols
- maintain accurate records.

<b>EVIDENCE GUIDE</b>	
	The skills and knowledge required to manage the operation of a mobile hydro-bathing facility must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed in companion animal organisations that offer mobile hydro-bathing services or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of companion animal breeds, a mobile hydro-bathing unit as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Risks*** in capturing, handling and mobile bathing of animals at various on-site venues may include:

- aggressive animal behaviour
- escape of animals and subsequent threat to safety of humans and other animals
- disposal of waste on-site
- potential anxiety of animal when being handled by strangers
- potential injuries to humans during capturing, handling and bathing processes
- potential stress and injury to animals during handling, bathing and drying
- location hazards, such as unsafe footing inadequate shelter and exposure to other distractions
- potential interference from owner or representative that could impact on operator and animal safety
- potential need for animal handling assistance that may only be available from an owner or representative with inadequate training or experience
- reaction to washing and grooming chemicals
- road worthiness of vehicle and mobile hydro-bath
- safety of on-site power and water sources
- security of venue:
  - animal safe fencing in good repair
  - collection and storage of fee for service

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• personal safety if working alone</li> <li>• restriction of access to immediate area by general public and other animals</li> <li>• unfamiliarity of animal to washing equipment and processes</li> <li>• venue access for mobile hydro-bath.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches or crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Materials and equipment</i> may include:	<ul style="list-style-type: none"> <li>• brushes, combs, sprayers, polishing pads and towels</li> <li>• detangling lotion</li> <li>• coat dryers</li> <li>• grooming stands</li> <li>• restraining equipment (e.g. collars, leads, muzzles and harnesses)</li> <li>• wash tubs and hydro-baths</li> <li>• shampoo and other coat cleaning products.</li> </ul>
<i>Hydro-bath and equipment cleaning</i> may include:	<ul style="list-style-type: none"> <li>• checking equipment for damage and wear and tear</li> <li>• disinfecting equipment using approved chemicals and processes</li> <li>• drying, lubricating and protecting parts as required</li> <li>• pumping out grey water into approved waste water system</li> <li>• removing hair and debris from waste traps and filters.</li> </ul>
<i>Safety check</i> procedures for mobile unit may include:	<ul style="list-style-type: none"> <li>• tow vehicle: <ul style="list-style-type: none"> <li>• tow ball</li> <li>• trailer connectors and fittings</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• brakes</li> <li>• tyre condition and pressure</li> <li>• hydro-bath trailer: <ul style="list-style-type: none"> <li>• electrics and indicator lights</li> <li>• coupling</li> <li>• power leads, water hoses and other connections to be used on-site</li> <li>• trailer brake and chains</li> <li>• water and waste tanks</li> <li>• tyre condition and pressure</li> </ul> </li> <li>• stowage of materials and equipment: <ul style="list-style-type: none"> <li>• chemicals, equipment and materials stocktake completed and items secured to prevent theft in transit</li> <li>• equipment and materials stowed to prevent dislodging during transport to site.</li> </ul> </li> </ul>
<i>Documentation</i> may include:	<ul style="list-style-type: none"> <li>• diary of appointments, descriptions of animals to be bathed and actual work carried out</li> <li>• equipment and supplies records</li> <li>• invoice book</li> <li>• incident reports</li> <li>• time logs for work completed</li> <li>• vehicle log book.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAS409A Provide training advice to companion animal owners

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of developing, conducting and reviewing training plans and programs for companion animals for their owners.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector where training may be required to modify undesirable behaviour traits for a range of breeds and species. Training may be conducted in group or one-on-one sessions with animals and their owners (clients) and may take place in public open spaces, in private residences or at agreed alternative venues.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Determine clients' needs	1.1. Training needs are discussed and determined in conjunction with clients. 1.2. Short and medium-term goals are set in conjunction with clients. 1.3. Initial assessment of animals is conducted. 1.4. Referral to an animal behaviourist or other relevant persons is offered as required.
2. Develop training plans	2.1. <b><i>Behavioural traits</i></b> and conditioning strategies for a range of breeds is researched. 2.2. <b><i>Training strategies</i></b> to achieve desirable behaviours for a range of breeds are determined. 2.3. <b><i>Training plans</i></b> are developed to achieve desirable behaviours for a range of breeds.

ELEMENT	PERFORMANCE CRITERIA
3. Conduct training	<p>3.1. Appropriate <i>training equipment</i> is selected and used in accordance with training plan.</p> <p>3.2. Initial training is explained to clients and conducted in accordance with training plans.</p> <p>3.3. Training is conducted in accordance with industry best practice standards, including <i>animal welfare and ethics requirements</i>.</p> <p>3.4. Training equipment is maintained, hygienically cleaned and stored in accordance with organisation policies and procedures and relevant manufacturers' guidelines.</p>
4. Conduct ongoing assessments	<p>4.1. Progress of animals is reviewed in accordance with training plans and discussed with clients.</p> <p>4.2. Training plans are reviewed and modified accordingly.</p> <p>4.3. Training records are maintained in accordance with industry standards.</p>
5. Instruct client in ongoing management	<p>5.1. Strategies to achieve short and medium-term conditioning objectives are discussed with clients.</p> <p>5.2. Advice on longer-term objectives is provided to clients.</p> <p>5.3. Advice is provided to clients on training plans, including dietary requirements, behavioural enrichment, exercise and maintenance.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- develop, review and update animal training strategies and plans for a range of breeds
- employ appropriate communication skills to determine animals' and clients' needs and provide advice and assistance as required
- employ safe and environmentally responsible organisational systems and procedures when working with and handling a variety of animal breeds
- identify and implement a variety of scientifically-recognised behaviour modification techniques, including the effect of positive and negative

## REQUIRED SKILLS AND KNOWLEDGE

reinforcement

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records and complete relevant workplace documents
- research and determine training strategies to achieve desirable behaviours for a range of breeds
- supervise the training of animals in accordance with training plans
- use and maintain training equipment, including restraint devices
- literacy skills to read and follow organisation policies and procedures, including occupational health and safety (OHS) and infection control procedures; follow sequenced written instructions; record accurately and legibly information collected; select and apply procedures to a range of defined tasks and read, develop and document animal training strategies and plans
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures and data
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- animal dietary, exercise and maintenance requirements
- basic animal anatomy and physiology related to companion animal behaviour management requirements
- behaviour modification techniques and conditioning strategies
- humane training techniques for a range of animals and training requirements
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal welfare and ethics
- range of animals and breeds, their common behavioural traits and temperaments
- range of animal training equipment and its use
- relevant OHS and animal welfare legislative requirements and codes of practice
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- training strategies and plans
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques

**REQUIRED SKILLS AND KNOWLEDGE**

and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- train animals in accordance with animals' abilities, the clients' needs and environmental considerations
- handle and restrain animals appropriately and humanely
- identify and implement a variety of scientifically-recognised behaviour modification techniques, including the effect of positive and negative reinforcement
- select, use and maintain appropriate and humane training equipment
- communicate effectively with clients to determine animal and client needs and provide advice and assistance as required
- maintain records and follow-up with clients as required.

The skills and knowledge required to provide training advice to companion animal owners must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will most appropriately be assessed in companion animal organisations that provide training advice to companion animal owners or in a situation that reproduces normal

<b>EVIDENCE GUIDE</b>	
	<p>work conditions.</p> <p>There must be access to a range of companion animal breeds and species as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Behavioural traits</i></b> of animals may include:</p>	<ul style="list-style-type: none"> <li>• normal behaviour in various contexts:             <ul style="list-style-type: none"> <li>• breeding and parental</li> <li>• eliminative</li> <li>• grooming</li> <li>• ingestive</li> <li>• resting</li> <li>• social</li> </ul> </li> <li>• undesirable behaviour:             <ul style="list-style-type: none"> <li>• aggression</li> <li>• anxiety</li> <li>• compulsive disorders</li> <li>• facility and equipment destruction</li> <li>• fearfulness</li> <li>• self-mutilation.</li> </ul> </li> </ul>
<p><b><i>Training strategies</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• activities to achieve desensitisation</li> <li>• classical, operant and counter conditioning</li> <li>• techniques that are targeted for certain breeds or species</li> <li>• use of positive and negative reinforcement and, when appropriate, punishment</li> <li>• using an appropriate number of repetitions</li> <li>• using learning session timeframes that are appropriate for age, breed, species and stage of training</li> <li>• using logical staging of training to ensure animal can achieve short and medium-term training aims.</li> </ul>
<p><b><i>Training plans</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• a written report and ideally illustrations or video demonstrations for clients detailing a series of humane training exercises recommended to assist them in achieving their training goal</li> <li>• suggested management of an animal during a</li> </ul>



<b>RANGE STATEMENT</b>	
	training program.
<i>Training equipment</i> may include:	<ul style="list-style-type: none"> <li>• items to assist in desensitising animal if required</li> <li>• leads, collars, restraints, head halters and other restraint devices</li> <li>• props and jumps</li> <li>• scent, hunting and retrieving items if required</li> <li>• treats and toys.</li> </ul>
<i>Animal welfare and ethics requirements</i> may include:	<ul style="list-style-type: none"> <li>• avoiding equipment that may cause harm</li> <li>• avoiding the use of punishment and negative reinforcement and discussing their effects on learning with clients</li> <li>• consideration of the animals' breed, age and exercise and housing requirements</li> <li>• consideration of the animals' previous experience, current learning ability and concentration span</li> <li>• referring animals that appear stressed or whose behaviour is abnormal to a veterinarian for advice</li> <li>• referring owners to specialists if problems encountered are beyond trainer's expertise</li> <li>• setting realistic training goals and timeframes</li> <li>• the correct use of restraints and training devices.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMCAS410A Conduct companion animal training classes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of developing, conducting and reviewing training classes for companion animals and their owners.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the companion animal industry sector where training classes may be required to assist owners with modifying undesirable behaviour traits for a range of breeds and species.</p> <p>Training may include behavioural training in obedience, agility and socialisation conducted in group sessions, and will generally take place in public open spaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Develop class training plans	<p>1.1. Research is conducted to explore community and client requirements for classes and to determine current acceptable training methods.</p> <p>1.2. <b><i>Behavioural traits</i></b> for a range of breeds are researched.</p> <p>1.3. <b><i>Training strategies</i></b> to achieve desirable behaviours are determined.</p> <p>1.4. <b><i>Training classes</i></b> to be held are determined in accordance with organisational requirements, community and client needs.</p> <p>1.5. Class <b><i>training plans</i></b> are developed in accordance with organisational requirements and the goals of training classes to be held.</p>
2. Advertise training	2.1. Venues and <b><i>equipment for training</i></b> classes are

ELEMENT	PERFORMANCE CRITERIA
classes	<p>determined, evaluated and prepared.</p> <p>2.2. Documents are prepared that itemise costs involved in training classes.</p> <p>2.3. Advertising materials are prepared and distributed in accordance with organisational requirements.</p> <p>2.4. Bookings for classes are taken and enquiries are responded to appropriately.</p>
3. Conduct training classes	<p>3.1. Appropriate training equipment is selected and used in accordance with training plans.</p> <p>3.2. Training is conducted in accordance with training plans, industry best practice standards, including <i>occupational health and safety (OHS)</i> and <i>animal welfare and ethics requirements</i>.</p> <p>3.3. Behaviour of individual breeds and interaction between breeds is observed and managed to minimise stress in animals, owners and class participants.</p> <p>3.4. Training equipment is maintained, hygienically cleaned and stored in accordance with organisation policies and procedures and relevant manufacturers' guidelines.</p> <p>3.5. Progress of class participants is discussed with handlers or owners.</p> <p>3.6. Training plans are reviewed and updated as required.</p> <p>3.7. Records are maintained in accordance with training plans and organisational policies and procedures.</p>
4. Conduct ongoing assessments	<p>4.1. Progress of animals is reviewed in accordance with training plans and discussed with clients.</p> <p>4.2. Training plans are reviewed and modified accordingly.</p> <p>4.3. Training records are maintained in accordance with industry standards.</p>
5. Instruct classes in ongoing training maintenance	<p>5.1. Strategies to achieve short and medium-term conditioning objectives are discussed with classes.</p> <p>5.2. Advice on longer-term objectives is provided to classes.</p> <p>5.3. Advice is provided to classes as required on animal's dietary, exercise and maintenance requirements in accordance with the training plans.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- conduct initial and ongoing assessment of animals to assess progress against the training plan's behaviour management and conditioning strategies
- develop, review and update animal training strategies and plans for a range of breeds
- employ appropriate communication skills to determine animals' and clients' needs and provide advice and assistance as required
- employ safe and environmentally responsible organisational systems and procedures when working with and handling a variety of animal breeds
- identify and implement a variety of scientifically-recognised behaviour modification techniques, including the effect of positive and negative reinforcement
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain and update records
- observe and interpret the behaviour of owners and animals
- research venues, community needs, training methods and behavioural traits and conditioning strategies for a range of breeds
- use and maintain training equipment, including restraint devices
- literacy skills to read and follow organisation policies and procedures, including OHS and infection control procedures; follow sequenced written instructions; record accurately and legibly information collected; select and apply procedures to a range of defined tasks and read, develop and document animal training strategies and plans
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning techniques, active listening and asking for clarification
- numeracy skills to estimate, calculate and record routine and more complex workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- advertising strategies
- animal dietary, exercise and maintenance requirements

## REQUIRED SKILLS AND KNOWLEDGE

- basic animal anatomy and physiology related to companion animal behaviour management requirements
- behaviour modification techniques and conditioning strategies
- humane training techniques for a range of animals and training requirements
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal welfare and ethics
- range of animals and breeds, their common behavioural traits and temperaments
- range of animal training equipment and its use
- relevant OHS and animal welfare legislative requirements and codes of practice
- relevant recordkeeping systems
- safe animal handling and restraint techniques and procedures
- safe work practices
- training strategies and plans
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- research venues, community needs, training methods and behavioural traits
- communicate effectively with animal owners and training class participants to determine animal and client needs and provide advice and assistance as required
- develop class training plans
- develop and distribute advertising materials
- train owners to train their animals in accordance with

<b>EVIDENCE GUIDE</b>	
	<p>training plans and class requirements through demonstration of animal training techniques, including positive reinforcement</p> <ul style="list-style-type: none"> <li>• handle and restrain animals appropriately and humanely</li> <li>• select, use and maintain training equipment</li> <li>• maintain records and follow-up with clients as required.</li> </ul> <p>The skills and knowledge required to conduct companion animal training classes must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in companion animal organisations that provide animal training classes or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of companion animal breeds and species as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>



<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Behavioural traits</i></b> of animals may include:</p>	<ul style="list-style-type: none"> <li>• normal behaviour in various contexts: <ul style="list-style-type: none"> <li>• breeding and parental</li> <li>• eliminative</li> <li>• grooming</li> <li>• ingestive</li> <li>• resting</li> <li>• social</li> </ul> </li> <li>• undesirable behaviour: <ul style="list-style-type: none"> <li>• aggression</li> <li>• anxiety</li> <li>• compulsive disorders</li> <li>• facility and equipment destruction</li> <li>• fearfulness</li> <li>• self-mutilation.</li> </ul> </li> </ul>
<p><b><i>Training strategies</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• activities to achieve desensitisation</li> <li>• classical, operant and counter conditioning</li> <li>• techniques that are targeted for certain breeds</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>or species</li> <li>• use of positive and negative reinforcement and when appropriate punishment</li> <li>• using an appropriate number of repetitions</li> <li>• using learning session timeframes that are appropriate for age, breed, species and stage of training</li> <li>• using logical staging of training to ensure animal and owner can achieve short and medium-term training aims</li> <li>• using techniques that owners can understand and repeat.</li> </ul>
<i>Training classes</i> may include:	<ul style="list-style-type: none"> <li>• puppy training</li> <li>• home manners</li> <li>• tricks, agility or obedience</li> <li>• fly ball or other games</li> <li>• tracking.</li> </ul>
<i>Training plans</i> may include:	<ul style="list-style-type: none"> <li>• a detailed list of activities for the duration of the class including timeframes and rest breaks</li> <li>• a risk assessment plan that suggests tactics to: <ul style="list-style-type: none"> <li>• assist owners to control their animal during training session</li> <li>• control interaction between animals during the training session</li> <li>• identify potential hazards in public and private spaces used for training sessions</li> <li>• manage group dynamics between instructor, animal owners and others</li> </ul> </li> <li>• opportunities to review previous lessons and to practice new exercises under instruction.</li> </ul>
<i>Training equipment</i> may include:	<ul style="list-style-type: none"> <li>• animal socialising opportunities</li> <li>• fly ball and other games equipment</li> <li>• hunting and retrieving items</li> <li>• leads, collars, restraints, head halters and other restraint devices</li> <li>• obstacles and jumping challenges</li> <li>• scent training</li> <li>• treats and toys</li> <li>• toilet training equipment.</li> </ul>
<i>OHS</i> risks when working with	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> </ul>

<b>RANGE STATEMENT</b>	
animals may include:	<ul style="list-style-type: none"> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal welfare and ethics requirements</i> may include:	<ul style="list-style-type: none"> <li>• avoiding equipment that may cause harm</li> <li>• avoiding the use of punishment and negative reinforcement and discussing their effects on learning with clients</li> <li>• consideration of the animals' breed, age and exercise and housing requirements</li> <li>• consideration of the animals' previous experience, current learning ability and concentration span</li> <li>• referring animals that appear stressed or whose behaviour is abnormal to a veterinarian for advice</li> <li>• referring owners to specialists if problems encountered are beyond trainer's expertise</li> <li>• setting realistic training goals and timeframes</li> <li>• the correct use of restraints and training devices.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Companion animal services
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMFAR301A Handle horses safely in the provision of farriery services

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of identifying, safe catching and controlling of horses for the purpose of undertaking farriery work.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the range of equine industries where farriery services are provided. Farriery services are performed on fully broken in horses and on 'well-educated' horses.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify horse behaviour and level of education of a horse prior to handling	<p>1.1.The <i>senses</i> of a horse are identified and responded to appropriately, as well as methods used by horses to <i>communicate</i>.</p> <p>1.2.<i>Level of education</i> of the horse is identified.</p> <p>1.3.A range of <i>nervous behaviours, vices and horse behavioural problems</i> are identified, together with the <i>external factors</i> that may cause behavioural changes.</p> <p>1.4.A decision whether to proceed with farriery services is based on the consideration of the behaviour and level of education of the animal prior to handling.</p>
2. Identify and safely catch and control a horse	<p>2.1.Horse is correctly identified by its <i>features</i>.</p> <p>2.2.Appropriate <i>gear</i> for catching, handling and controlling horses is identified and applied.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.3. Appropriate <i>calm and reassuring climate</i> is created and maintained for the horse.</p> <p>2.4. Horse is <i>caught, handled, controlled and restrained</i> in a safe, humane and appropriate manner.</p>
3. Perform the farriery service safely	<p>3.1. The <i>team</i> required for the shoeing process is identified, together with choice of restraining devices as required.</p> <p>3.2. Nervous behaviours are identified and minimised, together with anticipation and appropriate response to any <i>changes in horse behaviour</i> during the farriery service.</p> <p>3.3. Evasive or humane corrective action is taken, and others given timely warning of risk, when any adverse reaction from a horse is anticipated.</p> <p>3.4. <i>Occupational health and safety (OHS)</i> considerations applicable to the task are adhered to.</p> <p>3.5. The correct shoeing position is adopted in order to allow the service to be conducted safely and <i>humanely</i>, to allow the horse to remain balanced and of no danger to itself, the farrier or others.</p> <p>3.6. Waste materials are disposed of, consistent with manufacturer's guidelines, OHS requirements, good biosecurity practice and enterprise processes.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- catch, handle and restrain horses in a safe and humane manner
- identify individual horses
- perform farrier services in a safe and humane manner
- recognise and respond appropriately to a range of horse behaviours
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- problem-solving skills to anticipate horse behaviour and take appropriate action

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
<ul style="list-style-type: none"> <li>• use safe manual handling techniques and/or equipment</li> <li>• use safe waste handling and disposal procedures</li> <li>• work as part of a team.</li> </ul>
<b>Required knowledge</b>
<ul style="list-style-type: none"> <li>• common horse behaviour, social traits and vices</li> <li>• factors which might influence a range of horse behaviours</li> <li>• purpose of using different items of handling gear and appropriate personal protective equipment</li> <li>• safe work practices.</li> </ul>

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify horse behaviour and level of education of a horse prior to handling</li> <li>• identify, catch and control horses in a safe and humane manner</li> <li>• perform farriery service in a safe and humane manner</li> <li>• use appropriate personal protective equipment and maintain safety of self and others in the workplace.</li> </ul> <p>The skills and knowledge required to handle horses safely in the provision of farriery services must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for</b>	Assessment of this unit is to be practical in nature and



<b>EVIDENCE GUIDE</b>	
<b>assessment</b>	<p>will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of horses of different temperaments, alone and in a group, in strange and familiar surroundings, and being subjected to standard and unusual treatments as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

*Senses* of the horse may include:

- physical senses:
  - eyesight
  - hearing
  - smell
  - taste
  - touch
- sensitivity to changes in:
  - weather
  - behaviour of other horses, animals or humans
  - layout of equipment, property or surrounds.

Methods used by horses to *communicate* may include:

- verbal
- non-verbal means:
  - mouth and face
  - body postures, which might include ears back or kicking.

Indication of the *level of education* of the horse may include:

- horse can be lead into position where farrier needs to work
- horse will accept being restrained by head collar and lead
- horse will accept having its feet handled and positioned for farrier procedures
- horse will accept having its legs handled
- horse will accept standing in position for required period of time with consideration of:
  - age
  - breed
  - horse's usual activity or purpose
  - size

Note: Horses presented for farriery services must be well-handled and confident to have their feet

<b>RANGE STATEMENT</b>	
	picked up and held in positions required by a farrier.
<i>Nervous behaviours, common vices and horse behavioural problems</i> may include:	<ul style="list-style-type: none"> <li>• nervous or defensive behaviours: <ul style="list-style-type: none"> <li>• striking</li> <li>• kicking</li> <li>• biting</li> <li>• holding body in tension</li> <li>• shaking</li> <li>• pawing</li> <li>• pushing or barging</li> <li>• sweating</li> <li>• wanting to run away</li> </ul> </li> <li>• behavioural problems: <ul style="list-style-type: none"> <li>• weaving</li> <li>• attempting to sit down or lean on farrier</li> <li>• refusing to allow legs to be handled</li> <li>• refusing to hold legs off the ground</li> </ul> </li> <li>• behaviour may vary to reflect: <ul style="list-style-type: none"> <li>• eating disorders</li> <li>• inability to maintain concentration or lack of physical stamina to hold positions for required time</li> <li>• pain, discomfort or fear</li> <li>• temperament.</li> </ul> </li> </ul>
<i>External factors</i> that could influence horse behaviour may include:	<ul style="list-style-type: none"> <li>• external factors: <ul style="list-style-type: none"> <li>• contact with particular individuals</li> <li>• distractions, such as dogs or other animals, unusual noises or items</li> <li>• herd hierarchy and presence or absence of other horses</li> <li>• weather, season or environment</li> </ul> </li> <li>• the atmosphere and other activities occurring: <ul style="list-style-type: none"> <li>• because of illness or injury</li> <li>• during competition or racing events</li> <li>• during sales preparation</li> <li>• in preparation for and during transport.</li> </ul> </li> </ul>
<i>Features</i> used to identify a horse may include:	<ul style="list-style-type: none"> <li>• age or category (e.g. foal or broodmare)</li> <li>• brands or tattoos</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• colour</li> <li>• head, leg and body markings</li> <li>• height</li> <li>• sex</li> <li>• wounds or permanent scars.</li> </ul>
<p><i>Gear</i> required for catching, handling controlling and restraining horses may include:</p>	<ul style="list-style-type: none"> <li>• catching: <ul style="list-style-type: none"> <li>• head collar or halter and lead</li> <li>• catching yard</li> </ul> </li> <li>• handling: <ul style="list-style-type: none"> <li>• bagging down cloth</li> <li>• muzzles</li> </ul> </li> <li>• controlled or restrained: <ul style="list-style-type: none"> <li>• anti rearing bit</li> <li>• chemical sedatives prescribed by and administered under the supervision of a veterinarian</li> <li>• hobbles</li> <li>• leg ropes</li> <li>• twitches</li> </ul> </li> <li>• personal protective equipment to be used by the farrier.</li> </ul> <p>Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.</p>
<p>A <i>calm and reassuring climate</i> may include:</p>	<ul style="list-style-type: none"> <li>• minimising factors that may make the horse nervous or fearful, such as loud noises</li> <li>• maintaining a situation that is perceived to be hazard or threat-free by the horse</li> <li>• proceeding calmly and slowly</li> <li>• using a quiet and calm voice tone.</li> </ul>
<p>Appropriate manner need for horse to be <i>caught, handled, controlled and restrained</i> may include:</p>	<ul style="list-style-type: none"> <li>• horse catching, handling, controlling and restraining methods must: <ul style="list-style-type: none"> <li>• comply with industry codes of practice</li> <li>• comply with relevant legislation and regulations related to animal welfare and prevention of cruelty to animals</li> </ul> </li> <li>• handling techniques will be selected with</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>consideration of:</p> <ul style="list-style-type: none"> <li>• location of other persons and animals</li> <li>• variables that apply to the range of working environments where horses may be controlled, such as: <ul style="list-style-type: none"> <li>• stables</li> <li>• tracks and event venues</li> <li>• yards</li> </ul> </li> <li>• age and education of horse</li> <li>• location of vehicles, fences and equipment</li> <li>• variables that influence the behaviour of horses (e.g. wind and noise)</li> <li>• handling, control and restraint of horses: <ul style="list-style-type: none"> <li>• feet are picked up using industry approved methods</li> <li>• head collars and leads are used for tying up horses safely</li> <li>• horses are released correctly into paddocks and yards</li> <li>• restraints are fitted only when required and for the shortest time period</li> <li>• monitoring and interpreting the horse's behaviour and traits</li> <li>• awareness of the horse's placement in relation to handler, other horses and hazards.</li> </ul> </li> </ul>
<b>Team</b> required to conduct the farriery service may include:	<ul style="list-style-type: none"> <li>• person to hold horse</li> <li>• assistant for younger, less experienced horses or horses with an identified problem</li> <li>• farrier.</li> </ul>
<b>Changes in horse behaviour</b> may include:	<ul style="list-style-type: none"> <li>• horse may become nervous, frightened or agitated</li> <li>• horse may panic either because of external factors, such as noise, or because of pain and discomfort</li> <li>• horse may become tired and unable to maintain position.</li> </ul>
<b>OHS</b> considerations may include:	<ul style="list-style-type: none"> <li>• alertness of the farrier and adoption of a position that is comfortable and balanced for the farrier</li> <li>• appropriate clothing, applicable to all members</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>of the team</p> <ul style="list-style-type: none"> <li>• manual handling skills: <ul style="list-style-type: none"> <li>• carrying</li> <li>• lifting</li> <li>• shifting</li> </ul> </li> <li>• use of relevant personal protective equipment and other safety devices: <ul style="list-style-type: none"> <li>• hair tied back</li> <li>• jewellery removed</li> <li>• leather apron</li> <li>• sun cream and head covering</li> <li>• work boots</li> <li>• wrist guards.</li> </ul> </li> </ul>
<p>Considerations for providing farriery service <i>humanely</i> may include:</p>	<ul style="list-style-type: none"> <li>• complying with relevant: <ul style="list-style-type: none"> <li>• industry codes of practice</li> <li>• legislation and regulations concerned with: <ul style="list-style-type: none"> <li>• animal welfare</li> <li>• the prevention of cruelty to animals.</li> </ul> </li> </ul> </li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Farriery
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

<b>Co-requisite units</b>		

## ACMFAR302A Work effectively as a farrier in the equine industries

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of working effectively as a farrier on an individual basis and with others within the equine industry.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in a range of equine industries where farriery services are provided. Farriers may work on race tracks (harness and thoroughbred), horse training establishments, spelling/resting establishments, breaking centres, stud farms, dressage schools, polo clubs, trail riding establishments and other centres undertaking recreational activity involving the use of horses.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify rights and responsibilities related to working as a farrier in equine industries	<p>1.1. <b><i>Regulations and legislation</i></b> required for employment as a farrier are described.</p> <p>1.2. Confidentiality and other obligations are adhered to in relation to individual horses receiving farriery services, and security arrangements applicable to the equine establishment.</p> <p>1.3. The relationship between <b><i>industry sector rules</i></b> and farriery services is identified.</p> <p>1.4. <b><i>Key industry personnel</i></b> are identified, together with their <b><i>roles and functions</i></b> in relevant equine</p>

ELEMENT	PERFORMANCE CRITERIA
	industries, including the racing industry.
2. Manage time according to tasks required	2.1. Work tasks are achieved within the nominated <i>timeframe</i> , in the correct order, and in accordance with industry standards.
3. Participate in workplace teams	3.1. The roles of individuals within <i>workplace teams</i> are identified. 3.2. Communication skills appropriate to working within teams are identified. 3.3. Team tasks are completed in a cooperative manner.
4. Maintain personal health and fitness	4.1. Principles and practices of maintaining <i>personal health and fitness</i> are demonstrated. 4.2. <i>Vaccination requirements</i> to maintain personal health in equine industries are followed.
5. Present self according to industry standards of dress and grooming	5.1. Industry <i>dress code</i> is demonstrated, appropriate to different work environments. 5.2. <i>Personal presentation standards</i> are demonstrated, applicable to different work environments and tasks to be performed.
6. Communicate effectively in the equine industries	6.1. Characteristics of the range of equine industries which may be serviced by the farriery industry, are identified. 6.2. Appropriate <i>verbal and written communication strategies</i> are used to communicate within the farriery industry and with clients. 6.3. Appropriate <i>technology</i> is used to support communication within the enterprise and within the equine industries.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete work tasks within acceptable timeframes and to industry standards
- contribute to team outcomes
- interpret work orders/instructions correctly, including task and time requirements
- gather and provide information in response to workplace requirements

**REQUIRED SKILLS AND KNOWLEDGE**

- operate communication equipment as appropriate
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS), waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- numeracy skills to estimate, calculate and record routine workplace measures
- problem-solving skills to select required materials and equipment and prioritise tasks.

**Required knowledge**

- awards and union coverage
- communication procedures and systems, and technology relevant to enterprise and individual work responsibilities
- legislation and regulations related to employment as a farrier
- OHS legislative requirements and farriery industry codes of practice
- personal presentation standards applicable to farriery
- principles and practices of maintaining personal health and fitness
- principles of teamwork
- protocols for entry to a horse establishment
- regulations covering farriers in specific equine industries
- range, use and availability of materials and equipment.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of

<b>EVIDENCE GUIDE</b>	
	<p>this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• comply with the rules and regulations applicable to employers and employees in the farriery industry</li> <li>• comply with the responsibilities of a farrier working in a range of equine industry sectors</li> <li>• perform farriery tasks to industry standards within the nominated timeframe</li> <li>• maintain personal health and fitness and personal presentation standards required by the industry</li> <li>• apply a range of verbal and written communication strategies to communicate effectively within the enterprise and with clients</li> <li>• use technology to assist communication.</li> </ul> <p>The skills and knowledge required to work effectively as a farrier in the equine industries must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Regulations and legislation</i></b> may include:	<ul style="list-style-type: none"> <li>• contract of employment, and related industrial awards, both federal and state or territory</li> <li>• responsibilities of both the employer and the employee under federal and state legislation: <ul style="list-style-type: none"> <li>• affirmative action</li> <li>• OHS, anti-discrimination and harassment</li> <li>• prevention of cruelty to animals</li> <li>• taxation law and superannuation requirements</li> <li>• workers compensation.</li> </ul> </li> </ul>
<b><i>Industry sector rules</i></b> may include:	<ul style="list-style-type: none"> <li>• the Rules of Racing (harness and thoroughbred)</li> <li>• industry and breed associations activities: <ul style="list-style-type: none"> <li>• bushmans' carnival</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• campdrafting</li> <li>• carriage driving</li> <li>• endurance</li> <li>• hacking</li> <li>• Olympic disciplines</li> <li>• polo and polocrosse</li> <li>• pony club</li> <li>• vaulting</li> <li>• western competition.</li> </ul>
<i>Key industry personnel</i> may include:	<ul style="list-style-type: none"> <li>• committees or industry governing bodies: <ul style="list-style-type: none"> <li>• board members</li> <li>• organisation administrators</li> </ul> </li> <li>• race or competition personnel: <ul style="list-style-type: none"> <li>• stewards</li> <li>• technical delegate</li> <li>• ground jury</li> <li>• race day or competition veterinarian.</li> </ul> </li> </ul>
<i>Roles and functions</i> may include:	<ul style="list-style-type: none"> <li>• collaborating with other specialists: <ul style="list-style-type: none"> <li>• other farriers</li> <li>• physical therapists</li> <li>• veterinarians</li> </ul> </li> <li>• providing a consultation service to race or competition personnel</li> <li>• providing a service as a contractor to a stud, agistment or training centre</li> <li>• providing a service to a competition team at a specific event</li> <li>• providing a service to private customer</li> <li>• supervising the work of other farriers</li> <li>• working under the supervision of another farrier.</li> </ul>
<i>Timeframe</i> considerations may include:	<ul style="list-style-type: none"> <li>• allowing adequate travel time between jobs</li> <li>• applying reporting procedures within the enterprise</li> <li>• following standard operating procedures</li> <li>• planning the order of work tasks</li> <li>• responding to requests and completing tasks punctually and within safe work practices and procedures guidelines.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>Personal health and fitness</i></b> issues may include:	<ul style="list-style-type: none"> <li>• personal hygiene</li> <li>• principles of maintaining personal health and fitness: <ul style="list-style-type: none"> <li>• nutrition</li> <li>• exercise covering: <ul style="list-style-type: none"> <li>• core strength and stability</li> <li>• flexibility</li> </ul> </li> </ul> </li> <li>• understanding of the impact of drug/alcohol use on health and fitness levels.</li> </ul>
<b><i>Vaccination</i></b> requirements may include:	<ul style="list-style-type: none"> <li>• influenza</li> <li>• tetanus.</li> </ul>
<b><i>Personal presentation standards</i></b> may include:	<ul style="list-style-type: none"> <li>• clothing is clean, in good repair, suitably durable for physical work performed primarily outdoors and presents a professional impression to clients and others</li> <li>• hair is tied back or able to be kept out of eyes and away from heat sources</li> <li>• language and manner is courteous to others</li> <li>• no jewellery</li> <li>• no loose clothing</li> <li>• personal protective equipment: <ul style="list-style-type: none"> <li>• gloves for some tasks</li> <li>• items for sun and other weather protection</li> <li>• safety footwear and leg protection.</li> </ul> </li> </ul>
<b><i>Verbal and written communication strategies</i></b> may include:	<ul style="list-style-type: none"> <li>• verbal communication: <ul style="list-style-type: none"> <li>• answering questions</li> <li>• describing actions</li> <li>• gathering information from clients and specialists</li> <li>• reporting findings to owners</li> <li>• reporting findings to veterinarians and other specialists</li> </ul> </li> <li>• written communication: <ul style="list-style-type: none"> <li>• documenting work tasks for invoicing clients</li> <li>• completing horse history records.</li> </ul> </li> </ul>
<b><i>Technology</i></b> used to support communication may include:	<ul style="list-style-type: none"> <li>• answering machines, pagers and fax machines</li> <li>• computer: <ul style="list-style-type: none"> <li>• email and internet</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• data storage and retrieval</li> <li>• account software</li> <li>• telephones/mobile phones.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		



## ACMFAR303A Perform routine day-to-day farriery activities

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of participating in workplace communication and the process of planning, coordinating and recording routine farrier work activities under supervision.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in a range of equine industries where farriery services are provided. Responsibility may be for the basic direction of a task remote from the main enterprise, small projects or parts of projects where work is conducted under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Follow routine spoken messages or written <i>notices</i>	<p>1.1. Required information is gathered and interpreted, with clarification sought when procedure or instruction is not understood.</p> <p>1.2. Instructions or procedures for all tasks are followed in accordance with information received.</p>
2. Obtain and provide information in response to workplace requirements	<p>2.1. Specific, relevant information is obtained and interpreted.</p> <p>2.2. Information is recorded in full, accurately and legibly.</p> <p>2.3. <i>Sources of required information</i> are identified, and appropriate contact established.</p> <p>2.4. Use courtesy when <i>interacting with others</i>, and ensure enquiries are carried out clearly and concisely.</p>

ELEMENT	PERFORMANCE CRITERIA
3. Participate in workplace meetings and discussions	<p>3.1. Own opinion is provided clearly, and views of others listened to without interruption.</p> <p>3.2. Meeting inputs are provided, consistent with the meeting purpose and established <i>meeting protocols</i>.</p> <p>3.3. Questions about simple routine procedures and matters concerning conditions of employment are asked and responded to.</p> <p>3.4. Meeting outcomes are interpreted and implemented.</p>
4. Prepare for worksite activities	<p>4.1. <i>Personal presentation</i> standards applicable to the industry are adhered to.</p> <p>4.2. <i>Worksite protocols</i> for entry to the worksite are identified and followed as necessary.</p> <p>4.3. Work requirements are clarified with the supervisor.</p> <p>4.4. The order of activities and time allocation are identified, after which verification is obtained from supervisor.</p> <p>4.5. Personnel, <i>equipment and material resource</i> requirements are identified according to the scope of work and supervisor's instructions.</p> <p>4.6. Hazards are identified, risks assessed and subsequently reported to supervisor.</p> <p>4.7. <i>Occupational health and safety (OHS) requirements</i> are followed and personal protective equipment is selected, used, maintained and stored according to the type of worksite activities to be undertaken.</p> <p>4.8. Tools and equipment are selected, used, cleaned, maintained and stored according to enterprise processes and manufacturers' guidelines.</p> <p>4.9. All safety equipment is checked on a routine basis, consistent with enterprise processes and manufacturers' guidelines.</p>
5. Complete required documentation	<p>5.1. A range of <i>forms</i> relating to conditions of employment are completed.</p> <p>5.2. Basic <i>mathematical processes</i> are used for routine calculations.</p> <p>5.3. Personnel, activities, timelines and resource usage in relation to a given task, are <i>documented</i> according to enterprise procedures.</p> <p>5.4. <i>Contingency situations</i> are recognised and reported, followed by <i>corrective action</i> according to enterprise guidelines.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work related documents
- estimate, calculate and record materials and resource requirements
- follow instructions to perform routine workplace duties
- gather and provide information in response to workplace requirements
- perform OHS risk assessment
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- numeracy skills to estimate, calculate and record routine workplace measures
- problem-solving skills to select required materials and equipment and prioritise tasks
- work as part of a team.

#### Required knowledge

- communication procedures and systems, and technology relevant to enterprise and individual work responsibilities
- OHS legislative requirements and farriery industry codes of practice
- personal presentation standards applicable to farriery
- protocols for entry to a horse establishment
- range, use and availability of materials and equipment.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• communicate and work within a team, including following simple written notices and spoken messages</li> <li>• undertake routine tasks at a range of farriery worksites in accordance with OHS requirements and record outcomes</li> <li>• estimate, calculate and record materials and resource requirements</li> <li>• complete employment and work-related forms required in routine activities of the farriery business</li> </ul> <p>The skills and knowledge required to perform routine day-to-day farriery activities must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>knowledge</p> <ul style="list-style-type: none"> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Notices</i></b> may include:	<ul style="list-style-type: none"> <li>• enterprise-specific data or industry notices</li> <li>• instructions, labels, symbols and rosters</li> <li>• messages</li> <li>• range of personnel forms, including contact details, taxation and insurance, and association membership</li> <li>• receipt and docket books</li> <li>• safety instructions and reports.</li> </ul>
<b><i>Sources of required information</i></b>	<ul style="list-style-type: none"> <li>• animal health authorities</li> <li>• industry bodies</li> </ul>

<b>RANGE STATEMENT</b>	
may include:	<ul style="list-style-type: none"> <li>• local government</li> <li>• materials and equipment suppliers</li> <li>• other professionals, such as veterinarians.</li> </ul>
<i>Interacting</i> with others should be:	<ul style="list-style-type: none"> <li>• courteous and supportive</li> <li>• efficient, effective and responsible</li> <li>• presenting the enterprise in a positive way</li> <li>• using correct forms of greeting, identification and address as require.</li> </ul>
<i>Meeting protocols</i> include:	<ul style="list-style-type: none"> <li>• compliance with meeting decisions</li> <li>• following meeting convention</li> <li>• obeying meeting instructions.</li> </ul>
<i>Personal presentation</i> may include:	<ul style="list-style-type: none"> <li>• clothing is clean, in good repair, suitably durable for physical work performed primarily outdoors and presents a professional impression to clients and others</li> <li>• hair is tied back or able to be kept out of eyes and away from heat sources</li> <li>• language and manner is courteous to others</li> <li>• no jewellery</li> <li>• no loose clothing.</li> </ul>
<i>Worksite protocols</i> may include:	<ul style="list-style-type: none"> <li>• confirming services to be provided to which animals</li> <li>• following worksite safety and horse handling instructions</li> <li>• reporting to worksite supervisor prior to starting work</li> <li>• verifying when worksite staff are to assist.</li> </ul>
<i>Equipment and material resources</i> may include:	<ul style="list-style-type: none"> <li>• diary, invoice and account books and maps</li> <li>• first aid equipment for humans and horses</li> <li>• mobile farriers' workshop: <ul style="list-style-type: none"> <li>• anvil</li> <li>• forge</li> <li>• glue and fillers</li> <li>• horse shoes</li> <li>• nails</li> </ul> </li> <li>• other items used to treat special hoof problems (e.g. hoof pads)</li> <li>• phone</li> <li>• tools to: <ul style="list-style-type: none"> <li>• apply glues and fillers</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• clean shoes</li> <li>• clean and sharpen farrier's tools</li> <li>• operate forge</li> <li>• remove and fit shoes</li> <li>• shape pre-made shoes</li> <li>• trim feet.</li> </ul>
<i>OHS requirements</i> may include:	<ul style="list-style-type: none"> <li>• being prepared to say no to handling an uneducated, stressed or difficult horse</li> <li>• following safe work method statements for: <ul style="list-style-type: none"> <li>• cleaning and sharpening tools</li> <li>• completing farriery tasks: <ul style="list-style-type: none"> <li>• removing, replacing and fitting shoes</li> <li>• trimming feet</li> <li>• applying fillers and other treatments</li> </ul> </li> <li>• handling horses</li> <li>• using bottled gas</li> <li>• using personal protective equipment: <ul style="list-style-type: none"> <li>• eye and ear protection</li> <li>• gloves for some tasks</li> <li>• farrier's apron</li> <li>• items for sun and other protection</li> <li>• safety footwear and leg protection</li> </ul> </li> <li>• working with fire to: <ul style="list-style-type: none"> <li>• shape shoes</li> <li>• shoe horses</li> <li>• weld</li> </ul> </li> <li>• working with tools and metal.</li> </ul> </li> </ul>
<i>Forms</i> may include:	<ul style="list-style-type: none"> <li>• personnel forms</li> <li>• telephone messages</li> <li>• work rosters.</li> </ul>
<i>Mathematical processes</i> may include:	<ul style="list-style-type: none"> <li>• basic addition, subtraction, multiplication and division to complete estimates related to: <ul style="list-style-type: none"> <li>• materials</li> <li>• product characteristics</li> <li>• packing or storing stock/product.</li> </ul> </li> </ul>
<i>Documentation</i> may include:	<ul style="list-style-type: none"> <li>• project details and progress: <ul style="list-style-type: none"> <li>• project name, client and horse identification</li> <li>• date</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• project description</li> <li>• progress of activities</li> <li>• major issues</li> <li>• OHS issues</li> <li>• materials used</li> <li>• time take</li> <li>• need for any future activities that need to be planned</li> <li>• other documentation: <ul style="list-style-type: none"> <li>• accident and incident reports</li> <li>• invoice details</li> <li>• safety reports</li> <li>• worksheets.</li> </ul> </li> </ul>
<i>Contingency situations</i> may include:	<ul style="list-style-type: none"> <li>• adverse weather conditions</li> <li>• horse behaviour</li> <li>• unavailability of required other professionals.</li> </ul>
<i>Corrective action</i> may include:	<ul style="list-style-type: none"> <li>• requirement to analyse and always remain watchful of horse behaviour</li> <li>• complete other work away from the site</li> <li>• delay the task if possible.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Farriery
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	
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<b>Co-requisite units</b>		

## ACMFAR304A Respond to emergencies and apply essential first aid in the equine industries

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes of recognising and responding to emergencies and implementing a range of life support measures across a broad spectrum of situations/incidents.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in the equine industries where it may be necessary to recognise and respond to emergencies and to apply first aid to both humans and to horses.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for emergency situations	<p>1.1. Appropriate actions are taken to maximise safety and minimise health hazards in the workplace.</p> <p>1.2. Options for action in case of <i>emergency situations</i> are identified and evaluated.</p> <p>1.3. Organisational emergency procedures and policies are implemented as part of <i>workplace procedures</i>.</p> <p>1.4. <i>Occupational health and safety (OHS) procedures</i> and safe work practices are applied to the selection of <i>personal protective equipment</i> to suit the emergency situation.</p> <p>1.5. Regular checks of the workplace are carried out to minimise potential hazards.</p> <p>1.6. Emergency procedures are carried out as required by established workplace procedures.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.7. Selected safety equipment and aids required for emergencies are stored and maintained in good order.</p> <p>1.8. Near misses and potential hazards are reported to supervisor and/or documented according to enterprise guidelines.</p>
<p>2. Implement fire protection and control on site and in the workshop</p>	<p>2.1. Fire hazards in the workplace are minimised as specified, along with any hazardous fuelling procedures.</p> <p>2.2. Appropriate fire extinguishers and firefighting equipment must be used in fire situations, and appropriate authorities notified according to established procedures.</p> <p>2.3. Evacuation procedures and nominated assembly points are followed according to enterprise plans and policy.</p> <p>2.4. Specific safety procedures for the handling and use of <i>industrial gases</i> are carried out in line with standard industry practice and regulations.</p>
<p>3. Evaluate the emergency</p>	<p>3.1. Emergency and potential emergency situations are recognised and assessed promptly.</p> <p>3.2. Advice from <i>relevant people</i> is sought in evaluating the emergency.</p> <p>3.3. The possible development of the emergency is assessed and evaluated, along with assessment of further potential hazards to staff, clients or animals.</p> <p>3.4. Emergency needs are prioritised promptly and accurately, including needs for assistance.</p>
<p>4. Act in an emergency</p>	<p>4.1. The plan of action is implemented using techniques appropriate to the situation, available resources and abilities.</p> <p>4.2. Equipment is operated safely, and where necessary, improvising equipment and techniques.</p> <p>4.3. Strategies for group control are established and implemented, including removal of personnel, clients, animals and others from danger.</p> <p>4.4. The condition of all staff, animals and others is monitored on a constant basis.</p> <p>4.5. <i>Information required</i> to assist emergency services is acquired and documented.</p> <p>4.6. <i>Emergency services</i> are notified as necessary.</p> <p>4.7. The plan of action is changed to accommodate changes in <i>situational variables</i>.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>4.8. Casualty evacuation methods are demonstrated as relevant to the context.</p> <p>4.9. Organisation procedures and policies are implemented correctly in the event of a major injury or death.</p>
<p>5. Apply essential first aid techniques</p>	<p>5.1. Immediate risk to self and casualty's health and safety is minimised by isolating the <i>hazard</i>.</p> <p>5.2. The casualty's <i>injuries</i> and vital signs are assessed.</p> <p>5.3. The casualty is reassured in a caring and calm manner and made comfortable using available resources.</p> <p>5.4. First aid is provided in accordance with established first aid procedures.</p> <p>5.5. First aid assistance is sought from others as appropriate.</p>
<p>6. Apply essential first aid techniques to horses</p>	<p>6.1. Signs of common illnesses or diseases of horses are recognised and <i>reported</i>.</p> <p>6.2. <i>Indicators of abnormal system function</i> and <i>vital signs</i> of horses are recognised and reported.</p> <p>6.3. Horses are calmed and restrained prior to first aid assessment.</p> <p>6.4. <i>First aid policy and procedures</i> are followed, with respect to obligations of owners, <i>regulations</i> and duty of care.</p> <p>6.5. Principles of first aid procedures relating to injury or accident are applied.</p> <p>6.6. A policy and system of referral of injury treatment and emergency care is followed and contributed to.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- avoid/control escalation of emergency
- catch, handle and restrain horses in a safe and humane manner

## REQUIRED SKILLS AND KNOWLEDGE

- deal with contingencies
- evaluate emergency, develop and implement a plan of action
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- operate communication equipment as appropriate
- provide first aid care to humans and horses
- recognise and respond appropriately to a range of horse behaviours
- literacy skills to read and follow organisation policies and procedures, including OHS and emergency procedures
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- problem-solving skills to anticipate horse behaviour and take appropriate action
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team.

### Required knowledge

- common illnesses and injuries to horses
- emergency network and local call procedures
- enterprise plan and evacuation procedures
- factors which might influence a range of horse behaviours
- first aid procedures for humans and horses
- OHS legislative requirements and codes of practice
- organisation and legal policies and procedures to deal with an accident/incident
- purpose of using different items of handling gear and appropriate personal protective equipment
- safe work practices
- vital signs and warning signs in horses.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and

The evidence required to demonstrate competence in this

<b>EVIDENCE GUIDE</b>	
<p><b>evidence required to demonstrate competency in this unit</b></p>	<p>unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare for, evaluate and act in emergency situations</li> <li>• implement fire prevention and control on site and in the workshop</li> <li>• apply essential first aid techniques to humans and horses.</li> </ul> <p>The skills and knowledge required to respond to emergencies and apply essential first aid in the equine industries must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of emergency situation case studies and situations requiring first aid for analysis and response as well as first aid equipment and other materials and/or resources to enable one to demonstrate competence.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Emergency situations</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• fire</li> <li>• fuel spillages</li> <li>• hazardous releases:                             <ul style="list-style-type: none"> <li>• biological</li> <li>• chemical</li> <li>• gases</li> </ul> </li> <li>• injuries to animals or humans</li> <li>• machinery or equipment failure</li> <li>• medical emergencies.</li> </ul>
<p><b><i>Workplace procedures</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• activity-specific rescue techniques</li> <li>• administering of first aid</li> <li>• assistance to injured team member</li> <li>• clean up</li> <li>• containment</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• control of fire</li> <li>• emergency procedures in place in a horse establishment</li> <li>• evacuations</li> <li>• prevention of escalation of risk</li> <li>• retrieval of team member</li> <li>• search procedures:                             <ul style="list-style-type: none"> <li>• search of likely routes followed</li> <li>• systematic search</li> <li>• voice or whistle contacts</li> </ul> </li> <li>• use of isolating equipment.</li> </ul>
<i>OHS procedures</i> may include:	<ul style="list-style-type: none"> <li>• safe work method statements covering:                             <ul style="list-style-type: none"> <li>• emergency services and other contact numbers for people and horse emergencies</li> <li>• evacuation procedures for people and horses</li> <li>• exposure to noise, dust, skins and eye irritants</li> <li>• handling horses with due regard to their temperament, age and status</li> <li>• identifying and reporting potential safety hazards and identifying options for minimising risks</li> <li>• keeping tools and equipment in safe working order</li> <li>• using appropriate manual handling techniques</li> <li>• using personal protective equipment</li> <li>• working with a possible quarantine or biohazard risk</li> <li>• working with hazardous items (e.g. electricity, heat, gas and other flammables).</li> </ul> </li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• boots</li> <li>• breathing apparatus</li> <li>• firefighting protective clothing</li> <li>• gloves</li> <li>• helmets and hardhats</li> <li>• protective clothing</li> <li>• protective hose lines or sprays</li> <li>• safety eye washes</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• safety showers.</li> </ul>
<b><i>Industrial gases</i></b> may include:	<ul style="list-style-type: none"> <li>• acetylene</li> <li>• anhydrous ammonia</li> <li>• carbon dioxide</li> <li>• compressed and liquefied fuel gases</li> <li>• nitrogen</li> <li>• oxygen.</li> </ul>
<b><i>Relevant people</i></b> may include:	<ul style="list-style-type: none"> <li>• Animal Health Australia coordinators</li> <li>• Department of Agriculture staff</li> <li>• emergency services people</li> <li>• fire wardens</li> <li>• managers</li> <li>• OHS officers</li> <li>• police</li> <li>• race meeting or competition stewards</li> <li>• veterinarians and RSPCA inspectors</li> <li>• workplace first aiders.</li> </ul>
<b><i>Information required</i></b> may include:	<ul style="list-style-type: none"> <li>• address</li> <li>• chemical hazards on site</li> <li>• contact phone numbers of property owner and manager</li> <li>• emergency equipment and location</li> <li>• number and type of animals</li> <li>• power fusebox or shut off point</li> <li>• property access points</li> <li>• type of emergency</li> <li>• water sources.</li> </ul>
<b><i>Emergency services</i></b> may include:	<ul style="list-style-type: none"> <li>• Ambulance Service</li> <li>• Fire Brigade and non-metropolitan fire services</li> <li>• Land Management Authorities (e.g. National Parks and Forestry)</li> <li>• Police Search and Rescue</li> <li>• State Emergency Service.</li> </ul>
<b><i>Situational variables</i></b> may include:	<ul style="list-style-type: none"> <li>• a change of plan may be required due to: <ul style="list-style-type: none"> <li>• danger of explosion</li> <li>• disease outbreak</li> <li>• involvement of additional persons or horses</li> <li>• loss of communications</li> <li>• spread of fire or flood water</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• threat to adjoining areas.</li> </ul>
<i>Hazards</i> may include:	<ul style="list-style-type: none"> <li>• biological</li> <li>• chemical</li> <li>• climate or weather</li> <li>• competition or pleasure riding/driving accident</li> <li>• electrical</li> <li>• electrical situations</li> <li>• explosive</li> <li>• fire, gas and fumes</li> <li>• loose horses</li> <li>• mechanical</li> <li>• nuclear</li> <li>• proximity of other people</li> <li>• psychological</li> <li>• security related</li> <li>• structural</li> <li>• thermal</li> <li>• vehicles and machinery</li> <li>• wildlife situations.</li> </ul>
<i>Injuries</i> may include:	<ul style="list-style-type: none"> <li>• some injuries that occur around horses:                             <ul style="list-style-type: none"> <li>• bites, kicks and crushes</li> <li>• burns</li> <li>• cuts, abrasions and wounds</li> <li>• motor vehicle or machinery accident</li> <li>• manual labour accident</li> </ul> </li> <li>• body systems that may be affected include:                             <ul style="list-style-type: none"> <li>• cardiovascular</li> <li>• metabolic</li> <li>• respiratory</li> <li>• skeletal and soft tissue.</li> </ul> </li> </ul>
People to whom illness and disease should be <i>reported</i> may include:	<ul style="list-style-type: none"> <li>• employer</li> <li>• horse owner or person responsible</li> <li>• veterinarian</li> <li>• Animal Health Australia staff</li> <li>• race or competition steward.</li> </ul>
<i>Indicators of abnormal system function</i> and <i>vital signs</i> may include:	<ul style="list-style-type: none"> <li>• abnormal system function:                             <ul style="list-style-type: none"> <li>• absence of sweat related to exercise</li> <li>• brown or red urine</li> <li>• change in eye colour</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• choking</li> <li>• coughing</li> <li>• diarrhorrea</li> <li>• elevated temperature, pulse or respiration</li> <li>• excessive drinking</li> <li>• excessive urination</li> <li>• favouring a leg</li> <li>• heat</li> <li>• inappetence</li> <li>• lameness</li> <li>• nasal discharge</li> <li>• no faeces produced</li> <li>• pawing at the ground</li> <li>• reluctance to move</li> <li>• rolling</li> <li>• slow skin rebound</li> <li>• sudden stopping during exercise followed by reluctance to move or muscle stiffness</li> <li>• sweating unrelated to exercise or weather conditions</li> <li>• swelling</li> <li>• vital signs include:               <ul style="list-style-type: none"> <li>• temperature</li> <li>• pulse</li> <li>• respiration</li> <li>• skin rebound</li> <li>• mucous membrane colour.</li> </ul> </li> </ul>
<p><b><i>First aid policy and procedures</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• enterprise policy and procedures will identify persons qualified to provide first aid</li> <li>• contact details for veterinary clinic, farrier and others who should be advised</li> <li>• people identified who can provide first aid</li> <li>• process for reporting incidents and symptoms that may require first aid</li> <li>• evacuation and emergency plans:               <ul style="list-style-type: none"> <li>• quarantine and biosecurity procedures</li> <li>• reporting procedures</li> <li>• roles to be played by relevant personnel in an emergency.</li> </ul> </li> </ul>

**RANGE STATEMENT**

<i>Regulations</i> may include:	<ul style="list-style-type: none"> <li>• prevention of cruelty to animals</li> <li>• animal welfare</li> <li>• OHS</li> <li>• quarantine and animal health.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMFAR305A Perform welding tasks using a forge

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes of identifying welding requirements from instructions, preparing the materials and carrying out routine welding using a forge.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to a farriery environment where the welding requirements are not required to meet the Australian Standard 1554 General Purpose. The materials used are generally low carbon and mild steels.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify weld requirements	1.1. Welding or bending requirements are identified from <i>specifications</i> . 1.2. Locations of welds are identified in accordance with specifications.
2. Prepare materials for welding	2.1. The amount of metal required for bending or welding is calculated. 2.2. Materials are cleaned and prepared using appropriate tools and techniques.
3. Prepare and manage fire for welding	3.1. <i>Fuel</i> is selected, and tools prepared to manage the fuel source. 3.2. The fire is managed to maintain its effectiveness as a forge. 3.3. The correct <i>forge heat</i> is identified for particular



ELEMENT	PERFORMANCE CRITERIA
	operations.
4. Undertake farriery <i>welding tasks</i> using a forge fire	<p>4.1. A range of farriery welding tasks are undertaken using appropriate welds and <i>tools</i>.</p> <p>4.2. <i>Occupational health and safety (OHS)</i> procedures applicable for use of forges are followed, including the use of required personal protective equipment.</p> <p>4.3. The forge fire is safely extinguished, and clean-up procedures are completed.</p>

## Required Skills and Knowledge

### Required skills

- adhere to OHS legislation, regulations and codes of practice
- calculate the amount of metal required for bonding and welding
- complete work tasks within acceptable timeframes and to industry standards
- interpret work orders/instructions correctly including task and time requirements
- judge correct welding heat to perform process on selected material
- set up, manage and shut down a forge
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measure to required tasks
- problem-solving skills to select required materials and equipment and prioritise tasks
- weld metals using forge produced heat
- work as part of a team.

### Required knowledge

- materials to be welded and how they react to heat
- OHS legislative requirements and farriery industry codes of practice
- process of welding by forge produced heat
- regulations covering farriers in specific equine industries
- range, use and availability of materials and equipment
- safe work practices
- types of forge and forge fuel.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify welding requirements</li> <li>• prepare materials for welding</li> <li>• prepare and manage fire for welding</li> <li>• undertake farriery welding tasks using a forge</li> <li>• safely extinguish forge and dispose appropriately of ash and debris.</li> </ul> <p>The skills and knowledge required to perform welding tasks using a forge must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p>

<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Specifications</i></b> may include:	<ul style="list-style-type: none"> <li>• shape and size of shoe</li> <li>• corrective or supportive wedges, bars and other orthotic accessories.</li> </ul>
<b><i>Fuel</i></b> for forge may include:	<ul style="list-style-type: none"> <li>• coke fire</li> <li>• LPG gas</li> <li>• other fuel sources suitable for working metals used in farriery trades.</li> </ul>

<b>RANGE STATEMENT</b>	
Different levels of <i>forge heat</i> may include:	<ul style="list-style-type: none"> <li>• warm heat</li> <li>• black heat</li> <li>• dull red or blood red heat</li> <li>• bright red heat</li> <li>• bright yellow or near welding heat</li> <li>• light welding, sweating or slippery heat</li> <li>• full welding heat</li> <li>• white or snowball heat.</li> </ul>
<i>Tools</i> may include:	<ul style="list-style-type: none"> <li>• fire forge tools: <ul style="list-style-type: none"> <li>• butcher block brush</li> <li>• fire tongs</li> <li>• gas cylinder</li> </ul> </li> <li>• gas fire tools: <ul style="list-style-type: none"> <li>• gas gauge</li> <li>• hammer</li> <li>• ignition source</li> <li>• poker</li> <li>• rake</li> <li>• shovel</li> <li>• swab.</li> </ul> </li> </ul>
<i>Welding tasks</i> may include:	<ul style="list-style-type: none"> <li>• bending</li> <li>• drawing down</li> <li>• forge brazing</li> <li>• forge welding: <ul style="list-style-type: none"> <li>• straight scarf weld</li> <li>• diagonal scarf weld</li> </ul> </li> <li>• punching and drifting</li> <li>• upsetting or jumping up.</li> </ul>
<i>OHS</i> implications may include:	<ul style="list-style-type: none"> <li>• manual handling associated with working with tools and metal</li> <li>• use of bottled gas</li> <li>• use of fire and dangers to the operator from: <ul style="list-style-type: none"> <li>• radiant and direct heat</li> <li>• sparks</li> <li>• weld splatter and hot coals on the floor</li> </ul> </li> <li>• using personal protective equipment: <ul style="list-style-type: none"> <li>• eye and ear protection</li> <li>• farrier's apron</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• gloves</li> <li>• work boots.</li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMFAR306A Maintain, repair and manufacture hand tools used in farriery

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to maintain, repair and make a variety of tools used in standard farriery workplaces.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in a range of equine industries where farriery services are provided. Tools are made by hand by the farrier when commercially unavailable or when commercially available tools are deemed to be unsuitable for the specific purpose identified.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Maintain, repair and manufacture a range of hand tools used in standard farriery workplaces	<p>1.1. Unsafe, faulty or unsuitable <b><i>hand tools</i></b> are identified, and appropriately marked for repair, purchase of replacement stock or manufacture within the workshop.</p> <p>1.2. <b><i>Specifications</i></b> applicable to the hand tool to be <b><i>maintained</i></b>, repaired or manufactured in the workshop are identified.</p> <p>1.3. Safety procedures to be followed during the maintenance, repair and manufacture of hand tools are applied, including appropriate use of <b><i>personal protective equipment</i></b>.</p> <p>1.4. <b><i>Step-by-step procedures</i></b> in making or repairing hand tools are followed.</p> <p>1.5. Appropriate techniques are used to <b><i>temper or</i></b></p>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>harden tools</i> made or repaired.</p> <p>1.6. Appropriate <i>quenching agents</i> are selected and used.</p> <p>1.7. Finished tool is checked against specifications and quality requirements.</p>
2. Complete documentation and store hand tools appropriately	<p>2.1. <i>Documentation</i> is completed to enterprise standards.</p> <p>2.2. Repaired and/or manufactured hand tools are safely stored in appropriate locations in accordance with standard operational procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- complete documentation in accordance with workplace requirements
- maintain, repair and manufacture hand tools used by farriers to given specifications
- store hand tools safely and according to enterprise procedures
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS), waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measure to required tasks
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- enterprise documentation and storage procedures
- commercially available hand tools used by farriers and their purpose
- processes used in making, repairing and manufacturing of hand tools used by farriers



**REQUIRED SKILLS AND KNOWLEDGE**

- safe work practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the need for maintenance, repair or replacement of a range of farriery hand tools
- undertake maintenance and repair of a range of farriery hand tools
- make a variety of hand tools to given specifications.
- store repaired or made hand tools safely and appropriately to reflect enterprise requirements
- complete documentation of tasks.

The skills and knowledge required to maintain, repair and manufacture hand tools used in farriery must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.

There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>

<b>RANGE STATEMENT</b>	
<b><i>Hand tools</i></b> may include:	<ul style="list-style-type: none"> <li>• buffer</li> <li>• forge tongs</li> <li>• uller/creaser</li> <li>• heel cutters</li> <li>• pritchels</li> <li>• punches</li> <li>• stamps</li> <li>• toe knife.</li> </ul>
<b><i>Specifications</i></b> may include:	<ul style="list-style-type: none"> <li>• desired finish and requirements of the farriery service to be provided for a specific horse: <ul style="list-style-type: none"> <li>• corrective or supportive wedges, bars and other orthotic accessories</li> <li>• shape and type of shoe to be used</li> <li>• treatment requirements for of hoof condition</li> </ul> </li> <li>• durability or expected life of tools and the cost-benefit in repairing or replacing items</li> <li>• functionality</li> <li>• materials used</li> <li>• safety.</li> </ul>
Requirements to ensure tools are <b><i>maintained</i></b> may include:	<ul style="list-style-type: none"> <li>• ability to replicate features of tools to new condition</li> <li>• ability to shape and temper materials or tools</li> <li>• condition of handles</li> <li>• sharpness of blades and cutting surfaces.</li> </ul>
<b><i>Personal protective equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• ensuring hair is tied back</li> <li>• jewellery is removed</li> <li>• eye and ear protection</li> <li>• farrier's apron</li> <li>• gloves</li> <li>• work boots</li> <li>• wrist guards.</li> </ul>
<b><i>Step-by-step procedures</i></b> may include:	<ul style="list-style-type: none"> <li>• appropriate steel selection determined by the type of operation the tool is used for</li> <li>• electric powered hand tools</li> <li>• finisher</li> <li>• measuring devices</li> <li>• techniques used to make or repair tools: <ul style="list-style-type: none"> <li>• splitting</li> <li>• twisting</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• riveting</li> <li>• welding</li> <li>• tempering</li> <li>• sharpening</li> <li>• use of the forge and anvil.</li> </ul>
Techniques used to <i>temper or harden</i> tools may include:	<ul style="list-style-type: none"> <li>• application of heating and cooling to change the chemical composition of metal elements.</li> </ul>
<i>Quenching agents</i> may include:	<ul style="list-style-type: none"> <li>• selection of agents will depend on metals being worked:               <ul style="list-style-type: none"> <li>• lime</li> <li>• oil</li> <li>• salt</li> <li>• water.</li> </ul> </li> </ul>
<i>Documentation</i> may include:	<ul style="list-style-type: none"> <li>• tool maintenance register</li> <li>• tool stocktake list.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Farriery
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

## ACMFAR307A Make standard shoes for a range of horses

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to make standard horse shoes for a range of healthy horses to specifications.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to farriers working in standard farriery workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Organise facilities and materials for the manufacture of standard horse shoes	<p>1.1. <b><i>Work methods</i></b> are determined, and appropriate <b><i>materials and hand tools</i></b> for the work are elected.</p> <p>1.2. Hand tools and equipment are checked to ensure they are fit for purpose, and any deficiencies are rectified.</p> <p>1.3. Common <b><i>steel types</i></b> appropriate for shoe fabrication are identified, along with processes used in such identification.</p> <p>1.4. <b><i>Dimensions</i></b> used in standard horse shoes for healthy horses are identified.</p> <p>1.5. The <b><i>most suitable shoe</i></b>, appropriate types of steel and dimensions to be used, is determined for a particular horse and its work.</p> <p>1.6. The horse is examined at rest, walking and at the trot to identify gait and particular needs.</p> <p>1.7. Fore and hind feet of the horse are measured, and allowance is made for a range of <b><i>variants</i></b> as</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>applicable.</p> <p>1.8. <i>Specifications</i> are produced for the required shoes.</p> <p>1.9. Forge fire is maintained at the temperature necessary to work the materials selected.</p>
2. Follow OHS requirements in relation to work	<p>2.1. <i>Occupational health and safety (OHS) requirements</i> concerned with making of horse shoes and use of forges are followed, including use of appropriate personal protective equipment.</p> <p>2.2. Correct positions and balance are utilised when using tools to perform particular activities.</p>
3. Manufacture sets of standard shoes	<p>3.1. The steel length required is determined from measurements and specification, and <i>accurately cut</i>.</p> <p>3.2. Steel is heated in the forge to a <i>malleable working temperature</i>.</p> <p>3.3. <i>Standard steps</i> involved in making shoes are performed.</p> <p>3.4. Final fitting is performed humanely and checked against <i>quality standards</i>.</p> <p>3.5. Minor alterations required to obtain final fit are completed.</p> <p>3.6. The shoe is cooled in preparation for nailing.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- appraise needs of individual horses
- build and maintain forge fire at appropriate temperature
- develop specifications for shoes
- make shoes for a range of healthy horses
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when

**REQUIRED SKILLS AND KNOWLEDGE**

required

- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- movement of the hoof wall with weight bearing
- quality standards
- reasons for use of various metal types and dimensions in shoe making
- safe work practices
- sizes, styles and types of shoes required for a range of horses
- variants that apply in making shoes to fit an individual horse.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- organise facilities and materials
- identify the shoe requirements of particular horses
- produce specifications to make shoes for particular horses
- make front and hind shoes for a range of healthy horses.

The skills and knowledge required to make standard shoes for range of horses must be transferable to a range of work environments and contexts and include the



<b>EVIDENCE GUIDE</b>	
	ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of healthy horses and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Work methods*** may include:

- forging techniques
- use of gas and other forges
- use of grinding equipment
- use of specific parts of the anvil to shape and forge metal
- use of welding equipment.

***Materials and hand tools*** may include:

- materials:
  - steel
  - aluminium
  - rubber
  - plastic and other synthetics
- other metals:
  - copper
  - magnesium
  - titanium
- hand tools:
  - centre punch
  - creaser/fuller
  - heel cropper or hardy
  - horseshoer's anvil
  - nail stamp
  - pritchel
  - rounding hammer
  - ruler and angle gauges
  - vice
  - shoemaking tongs
- fire tools:
  - ash rake
  - fire poker
  - fire rake
  - fire tongs.

<b>RANGE STATEMENT</b>	
<i>Steel types</i> may include:	<ul style="list-style-type: none"> <li>• concave</li> <li>• flat</li> <li>• fullered</li> <li>• round.</li> </ul>
<i>Dimensions used in shoe manufacture</i> may include:	<ul style="list-style-type: none"> <li>• size and shape of feet</li> <li>• work horse is doing</li> <li>• surface horse is working on.</li> </ul>
Considerations in selecting the <i>most suitable shoe</i> may include:	<ul style="list-style-type: none"> <li>• types of horses: <ul style="list-style-type: none"> <li>• competition horse</li> <li>• draught and carriage horse</li> <li>• harness or thoroughbred race horse</li> <li>• Olympic disciplines</li> <li>• pleasure riding horse</li> <li>• endurance</li> <li>• polo and polocrosse horses</li> <li>• working stock horses</li> </ul> </li> <li>• current status of the horse: <ul style="list-style-type: none"> <li>• its gait and conformation</li> <li>• level of work (e.g. whether it is spelling or training)</li> <li>• particular needs: <ul style="list-style-type: none"> <li>• pregnancy, injury or ailment management</li> </ul> </li> </ul> </li> <li>• the gauge of steel selected should be appropriate to foot size</li> <li>• the weight of the shoe in relation to the work to be performed</li> <li>• the style of shoe selected will be influenced by: <ul style="list-style-type: none"> <li>• availability of materials</li> <li>• cost involved</li> <li>• the preference of the owner</li> <li>• the terrain the horse is worked on</li> <li>• the type of work the horse does</li> </ul> </li> <li>• shoes may be machine or handmade: <ul style="list-style-type: none"> <li>• fullered concave</li> <li>• plain stamped</li> <li>• hand fullered</li> </ul> </li> <li>• sizes available in machine made horseshoes</li> <li>• shoes for fore and hind feet.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Variants</i> in shoe size and shape may include:	<ul style="list-style-type: none"> <li>• toe clip</li> <li>• side clip</li> <li>• block heels</li> <li>• tapered heels</li> <li>• trailers</li> <li>• stud holes</li> <li>• rolled toe</li> <li>• set toe.</li> </ul>
<i>Specifications</i> to produce required shoes may include:	<ul style="list-style-type: none"> <li>• a copy of an existing item</li> <li>• drawings</li> <li>• oral instructions</li> <li>• written instructions.</li> </ul>
<i>OHS requirements</i> may include:	<ul style="list-style-type: none"> <li>• being prepared to say no to handling an uneducated, stressed or difficult horse</li> <li>• following safe work method statements for: <ul style="list-style-type: none"> <li>• cleaning and sharpening tools</li> <li>• completing farriery tasks: <ul style="list-style-type: none"> <li>• applying fillers and other treatments</li> <li>• removing, replacing and fitting shoes</li> <li>• trimming feet</li> </ul> </li> <li>• handling horses</li> <li>• using bottled gas</li> <li>• using personal protective equipment: <ul style="list-style-type: none"> <li>• eye and ear protection</li> <li>• farrier's apron</li> <li>• gloves</li> <li>• work boots</li> </ul> </li> <li>• working with fire to shape shoes, shoe horses and weld</li> <li>• working with tools and metal.</li> </ul> </li> </ul>
Considerations to ensure materials are <i>accurately cut</i> may include:	<ul style="list-style-type: none"> <li>• impact of accuracy on the fit and comfort of the final product</li> <li>• impact on final product dimensions if calculations are not correct</li> <li>• tools used are sharp</li> <li>• tools are appropriate for the material being cut and the type of cut required.</li> </ul>
Indicators of <i>malleable working temperature</i> may include:	<ul style="list-style-type: none"> <li>• temperature of heat source</li> <li>• colour or other features to indicate temperature:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• warm heat</li> <li>• black heat</li> <li>• dull red or blood red heat</li> <li>• bright red heat</li> <li>• bright yellow or near welding heat</li> <li>• light welding, sweating or slippery heat</li> <li>• full welding heat</li> <li>• white or snowball heat</li> <li>• time in heat.</li> </ul>
<i>Standard steps</i> in making shoes may include:	<ul style="list-style-type: none"> <li>• marking the length</li> <li>• cutting the bar stock</li> <li>• marking the centre bar stock and the heels</li> <li>• creating the toe bend</li> <li>• marking and punching the nail holes</li> <li>• forming heels</li> <li>• turning the branches</li> <li>• drawing the clips</li> <li>• levelling the shoe</li> <li>• finishing the heels.</li> </ul>
Quality <i>standards</i> in fitting shoes may include:	<ul style="list-style-type: none"> <li>• the shoe is shaped to fit the foot with allowance for expansion at the heels and outline fit</li> <li>• the heels of the shoe cover the buttresses</li> <li>• the foot surface of the shoe and wall of the foot fit tightly against each other and the shoe will not 'rock' from side to side</li> <li>• the heels of the shoe fit flat against the heels of the foot</li> <li>• the shoe has sole relief</li> <li>• the nail holes on the shoe are opened sufficiently for the correct size nail to be used</li> <li>• nail holes are positioned to allow for maximum security and safety when nailing</li> <li>• there are no burrs or sharp edges.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Farriery
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMFAR308A Determine foot care and shoeing plans for horses

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to determine foot care and shoeing plans for the horse and to contribute to the maintenance of horse health and wellbeing.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to farriers working in farriery workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify the anatomical components of the horse of specific relevance to farriers	<p>1.1. Basic <i>features of horse anatomy</i> are specified, in particular anatomical features of the lower limb and foot of the horse.</p> <p>1.2. Basic <i>functions of the foot</i> with specific applicability to farriery are identified, in particular biomechanical functions of components of the lower limb and foot.</p> <p>1.3. Differences between <i>ideal and undesirable feet</i> in determining shoeing needs are identified.</p> <p>1.4. General principles of foot care for horses are identified, and specifically <i>symptoms of malformation, injury and disease</i> of the foot.</p>
2. Develop an appropriate foot care and shoeing program	<p>2.1. Type of work to be done by the horse is appraised, with reference to its <i>gait, conformation and way of going</i>.</p>



ELEMENT	PERFORMANCE CRITERIA
for the horse	<p>2.2. An examination of the feet and of <i>wear patterns</i> of existing shoes is conducted in order to <i>assess the condition of the feet</i>.</p> <p>2.3. Personal responsibilities of the farrier are identified under <i>relevant legislation and codes of practice</i>.</p> <p>2.4. Relevant features of the horse and its health are reported to the owner, and to a veterinarian, as applicable.</p> <p>2.5. Agreement on <i>foot care and shoeing plan</i> is discussed with, and obtained from, the owner or person in charge of the horse.</p> <p>2.6. Advice on <i>routine and preventative hoof care</i> is provided, and applied.</p> <p>2.7. <i>Records</i> on each horse are maintained as required by the enterprise.</p>
3. Provide non-veterinarian horse health care under routine circumstances	<p>3.1. Symptoms of <i>common ailments</i> of the horse are identified.</p> <p>3.2. <i>Appropriate action</i> is taken when malformation, injury and disease are suspected.</p> <p>3.3. Appropriate <i>non-veterinarian treatments</i> are advised, or applied, under routine circumstances.</p>
4. Apply disease and ailment prevention procedures to single or groups of horses	<p>4.1. Principles that apply to isolation and quarantine of infection are identified.</p> <p>4.2. Defined procedures are followed in regard to notifiable diseases and the maintenance of <i>biosecurity</i>.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate

## REQUIRED SKILLS AND KNOWLEDGE

- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS), waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical features of the lower limb and foot of the horse and applicable biomechanical functions
- general anatomy of the horse
- principles and practices of isolation and quarantine
- notifiable diseases and processes to be followed
- relevant legislation and codes of practice and personal responsibilities
- safe work practices.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the anatomical components of the horse relevant to farriers
- assess condition of horse's foot and develop appropriate foot care and shoeing plans for a range of

<b>EVIDENCE GUIDE</b>	
	<p>horses</p> <ul style="list-style-type: none"> <li>• provide advice on routine and preventative hoof care</li> <li>• provide non-veterinarian horse health care under routine circumstances in regard to common ailments</li> <li>• maintain biosecurity procedures</li> <li>• apply disease and ailment prevention procedures including isolation and quarantine principles as appropriate.</li> </ul> <p>The skills and knowledge required to determine foot care and shoeing plans for horses must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of healthy horses, including a young horse, a mature horse, a shod horse and an unshod horse as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Features of horse anatomy</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• features of general anatomical systems: <ul style="list-style-type: none"> <li>• skeletal system</li> <li>• muscular system</li> <li>• nervous system</li> <li>• circulatory system</li> </ul> </li> <li>• lower limb anatomical features: <ul style="list-style-type: none"> <li>• bones</li> <li>• hoof regions</li> <li>• hoof structure</li> <li>• joints</li> <li>• ligaments</li> <li>• major blood vessels</li> <li>• nerve supply</li> <li>• sensitive and insensitive structures</li> <li>• tendons</li> </ul> </li> <li>• the process of and rate of hoof growth.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Functions of the foot</i> may include:	<ul style="list-style-type: none"> <li>• circulatory regulating</li> <li>• biomechanical: <ul style="list-style-type: none"> <li>• anti-concussion</li> <li>• arc of flight and break over patterns</li> <li>• supportive</li> </ul> </li> <li>• non-slipping functions</li> <li>• protective.</li> </ul>
Features of <i>ideal and undesirable feet</i> may include:	<ul style="list-style-type: none"> <li>• ideal feet: <ul style="list-style-type: none"> <li>• general healthy range of hoof angles depending on: <ul style="list-style-type: none"> <li>• age of horse or pony</li> <li>• breed</li> <li>• conformation</li> <li>• front and back feet variations</li> <li>• quality of hoof wall and horn</li> <li>• shape of feet</li> <li>• shape and location of frog</li> <li>• shape and quality of sole</li> </ul> </li> </ul> </li> <li>• undesirable feet: <ul style="list-style-type: none"> <li>• abnormally sloping or oblique feet</li> <li>• brittle feet/shelly walled</li> <li>• club feet</li> <li>• mule feet</li> <li>• dropped sole</li> <li>• excess flares</li> <li>• flat feet</li> <li>• thin or double sole</li> <li>• upright feet.</li> </ul> </li> </ul>
<i>Symptoms of malformation, injury and disease</i> may include:	<ul style="list-style-type: none"> <li>• abscess/gravel</li> <li>• bone/hoof developmental abnormalities</li> <li>• corns</li> <li>• coronary band injuries</li> <li>• false quarter</li> <li>• hoof deformities such as flared hooves</li> <li>• joint ailments: <ul style="list-style-type: none"> <li>• curb</li> <li>• degenerative joint disease</li> <li>• joint injuries</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• navicular disease</li> <li>• sesamoditis</li> <li>• side bone/ring bone</li> <li>• spavin</li> <li>• lacerations and abrasions</li> <li>• lameness/heel pain</li> <li>• laminitis</li> <li>• limb deformities</li> <li>• puncture wounds</li> <li>• sand crack/grass cracks</li> <li>• seedy toe</li> <li>• thin soles</li> <li>• thrush</li> <li>• white line disease</li> <li>• tendon and ligament injuries and disease.</li> </ul>
<i>Gait, conformation and way of going</i> may include:	<ul style="list-style-type: none"> <li>• gaits: <ul style="list-style-type: none"> <li>• walk</li> <li>• trot</li> <li>• pace</li> <li>• canter</li> <li>• gallop</li> <li>• jump action</li> </ul> </li> <li>• common faults of the skeletal system, stance and their effects on gait</li> <li>• common injuries of the muscular system and their effects on gait</li> <li>• the role of the growth plates and their sensitivity to damage due to: <ul style="list-style-type: none"> <li>• improper angulation and balance of the foot</li> <li>• relationship of the conformation of the foot and limb to the way of going</li> </ul> </li> <li>• characteristic actions of various breeds and types of horses.</li> </ul>
Shoe <i>wear patterns</i> may include:	<ul style="list-style-type: none"> <li>• wear patterns may be either uneven or excessive in specific areas: <ul style="list-style-type: none"> <li>• unevenness of wear may be the result of: <ul style="list-style-type: none"> <li>• faulty preparation of the foot</li> <li>• fitting the wrong type of shoe</li> <li>• the horse's gait</li> <li>• undesirable conformation of limb or</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>pastern foot axis</p> <ul style="list-style-type: none"> <li>• excessive wear in the toe may be caused by: <ul style="list-style-type: none"> <li>• the horse goes on its toe to alleviate pain, such as in navicular disease, ligament or tendon injuries</li> <li>• the shoe has excessively high caulkins</li> </ul> </li> <li>• excessive wear in the quarters may be due to: <ul style="list-style-type: none"> <li>• an undesirable pastern foot axis</li> <li>• an uneven bearing surface</li> </ul> </li> <li>• excessive wear in the heels may be due to: <ul style="list-style-type: none"> <li>• chronic laminitis or low ringbone disease.</li> </ul> </li> </ul>
<p><i>Assessment of condition of feet</i> may include:</p>	<ul style="list-style-type: none"> <li>• assessing the special needs of the young horse</li> <li>• identification of: <ul style="list-style-type: none"> <li>• ailments and injuries that may affect hoof and foot growth</li> <li>• unusual deformities of the feet and legs</li> </ul> </li> <li>• observation of the horse at rest and in motion to identify lameness and faults of gait: <ul style="list-style-type: none"> <li>• identification of the position of the foot axis when the horse is standing squarely which will identify whether the feet are balanced</li> <li>• assessing feet: <ul style="list-style-type: none"> <li>• with the shoe on</li> <li>• with the shoe off</li> </ul> </li> <li>• determining need for either new shoes or resetting existing shoes</li> <li>• picking up and cleaning each foot to check for injuries or foreign objects</li> <li>• evaluation, if not straight, of possible causes: <ul style="list-style-type: none"> <li>• uneven wear or growth of the hoof</li> <li>• conformation faults</li> <li>• injuries</li> <li>• poorly fitting tack</li> </ul> </li> </ul> </li> <li>• observation of the horse's conformation to identify faults of gait or unsoundness: <ul style="list-style-type: none"> <li>• abnormalities of gait including: <ul style="list-style-type: none"> <li>• brushing/speedy cutting</li> <li>• cross firing</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• forging</li> <li>• knee hitting</li> <li>• over-reaching</li> <li>• paddling, winging, and plaiting</li> <li>• scalping</li> <li>• seeking information from the owner: <ul style="list-style-type: none"> <li>• any bad habits</li> <li>• history of lameness or prior injury</li> <li>• history of shoeing, type of work or training, preference for style.</li> </ul> </li> </ul>
<i>Relevant legislation and codes of conduct</i> may include:	<ul style="list-style-type: none"> <li>• prevention of cruelty to animals</li> <li>• biosecurity protocols</li> <li>• codes of practice: <ul style="list-style-type: none"> <li>• relationships with professional persons, such as other farriers, veterinarians, horse dentists and others</li> <li>• ethical considerations of the confidentiality of client information</li> </ul> </li> <li>• animal care regulations which place limitations on the roles a farrier may undertake in the diagnosis and treatment of problems and advice that may be given.</li> </ul>
<i>Foot care and shoeing plan</i> may include:	<ul style="list-style-type: none"> <li>• details of the service to be provided: <ul style="list-style-type: none"> <li>• removal of shoes</li> <li>• trimming</li> <li>• fitting new shoes or refitting old shoes</li> <li>• adding accessories to shoes to correct problems, improve horse comfort or performance: <ul style="list-style-type: none"> <li>• bars</li> <li>• caulks or trailers</li> <li>• other orthopaedic treatments</li> <li>• stud holes</li> </ul> </li> </ul> </li> <li>• explaining routine hoof care that can be undertaken by the owner or person responsible</li> <li>• planning a schedule that indicates when shoeing is likely to be required: <ul style="list-style-type: none"> <li>• as a result of changes to the horse's work or other changes</li> <li>• as part of a regular maintenance plan</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• in order to review or adjust current treatment</li> <li>• referring client to veterinarian or other specialist for further investigation or treatment.</li> </ul>
<i>Routine and preventative hoof care</i> may include:	<ul style="list-style-type: none"> <li>• cleaning feet</li> <li>• checking for injuries</li> <li>• checking for foreign objects</li> <li>• ensuring tetanus vaccination is current</li> <li>• applying moisturising or water proofing agents</li> <li>• feeding nutritional supplements</li> <li>• observing horse movement and checking for lameness or irregular gait</li> <li>• planning hoof trimming and shoeing according to: <ul style="list-style-type: none"> <li>• conformation</li> <li>• environmental conditions</li> <li>• hoof quality and growth</li> <li>• horse's age</li> <li>• work load.</li> </ul> </li> </ul>
<i>Records</i> may include:	<ul style="list-style-type: none"> <li>• diary entries</li> <li>• horse health records</li> <li>• horse treatment records</li> <li>• invoices.</li> </ul>
<i>Common ailments</i> may include:	<ul style="list-style-type: none"> <li>• colic</li> <li>• eye injuries</li> <li>• feed and related disorders: <ul style="list-style-type: none"> <li>• condition score</li> <li>• feed allergies</li> <li>• the role of feedstuffs in hoof health</li> <li>• malnutrition</li> </ul> </li> <li>• infectious and non-infectious skin disorders</li> <li>• infectious respiratory diseases</li> <li>• internal and external parasites</li> <li>• lacerations and abrasions</li> <li>• metabolic ailments: <ul style="list-style-type: none"> <li>• azoturia/tying up</li> </ul> </li> <li>• soft tissue: <ul style="list-style-type: none"> <li>• heat</li> <li>• soreness</li> <li>• swelling</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>teeth disorders.</li> </ul>
<i>Appropriate action</i> may include:	<ul style="list-style-type: none"> <li>ethical responses under legislation protecting animals from cruelty require the farrier to report incidents or circumstances where the horse is in need of protection</li> <li>farrier may advise the owner or responsible person that veterinary advice may be appropriate.</li> </ul>
<i>Non-veterinarian treatments</i> may include:	<ul style="list-style-type: none"> <li>treatments provided by farrier: <ul style="list-style-type: none"> <li>adjusting fit of orthotics, pads, wedges or shoes</li> <li>applying poultice</li> <li>cleaning nail prick wounds</li> <li>preparing feet as part of pre-operation procedures by stripping the wall, sole or frog</li> <li>preparing feet for X-ray by cleaning foot and removing shoe, if required</li> <li>providing post-operative care by cleaning and dressing wounds</li> <li>trimming feet to correct angles in accordance with veterinary instructions.</li> </ul> </li> </ul>
<i>Biosecurity</i> principles and procedures may include:	<ul style="list-style-type: none"> <li>the separation/isolation of injured horses to prevent further damage</li> <li>isolation and quarantine protocols to limit the spread of infectious diseases</li> <li>isolation of horses and protective measures while in transit to events and stopovers en route</li> <li>notifying the specified authorities in the case of suspected notifiable diseases</li> <li>standards of hygienic practices required of the farrier to avoid transmission of diseases between individual horses and between properties and locations</li> <li>complying with worksite specific quarantine and security protocols situation.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Farriery
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMFAR309A Fit shoes for normal healthy horses

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the processes required to prepare the feet of normal healthy horses with no obvious problems and the application of standard shoes, which have been hot or cold fitted.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to farriers working in farriery workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<p><b>Prerequisite units</b></p>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify shoeing needs of individual horses	<p>1.1.Horses are handled appropriately to reduce stress and alarm, and behaviour is monitored to eliminate <b><i>risks to horse or handlers</i></b>, and <b><i>restraints</i></b> are used as required.</p> <p>1.2.<b><i>Features of gait and conformation</i></b> of the horse are identified.</p> <p>1.3.A working position is adopted which maintains comfort of the horse and ensures comfort and personal safety of the farrier and any assistants.</p> <p>1.4.Shoes are removed safely, using <b><i>tools</i></b> appropriate for the task and ensuring no damage is caused to the feet of the horse.</p> <p>1.5.Feet are cleaned of all foreign bodies to facilitate examination of the hoof, ensuring all <b><i>relevant factors</i></b> are taken into account.</p> <p>1.6.The shoe is examined, and <b><i>implications of the wear</i></b></p>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>pattern</i> are assessed for trimming and shoeing.</p> <p>1.7. Any conditions requiring higher level treatment are reported to other farriers or to veterinarians involved with hoof care, as required.</p> <p>1.8. The agreed foot care plan is amended with the responsible person, taking into account conditions of the feet not previously identifiable.</p>
2. Trim and prepare feet	<p>2.1. Appropriate shoeing <i>tools</i> are used to safely trim and prepare feet to achieve balance, level and shape, and to correct any identified foot defects.</p> <p>2.2. <i>Trimming</i> operations are conducted without <i>injury to the horse's feet</i>.</p> <p>2.3. Work is visually checked, while in progress and on completion, to ensure <i>quality outcomes of foot preparation</i> have been achieved.</p>
3. Fit shoes	<p>3.1. Correct type, material and size of shoe are selected according to the shoeing plan and modifications are made as required by the individual horse.</p> <p>3.2. Appropriate tools are selected for the purpose of fitting shoes.</p> <p>3.3. Selected shoes are shaped to incorporate any <i>ancillary features</i> as determined by the foot care and shoeing plan.</p> <p>3.4. Shoes are fitted to fore and hind feet, and the need for any final adjustments is assessed.</p> <p>3.5. <i>Final adjustments</i> are made to the shape and size of the shoe to achieve correct fit, with any ancillary features being added to the shoe as determined by the work requirements of the horse.</p> <p>3.6. Health and safety of the horse, self and others is maintained throughout the process.</p>
4. Attach shoes and finish shoeing process	<p>4.1. Tools and nails are selected, suitable for attaching and clenching shoes.</p> <p>4.2. The shoe is safely and securely attached in the correct position, ensuring the <i>relevant factors</i> are taken into account.</p> <p>4.3. The hoof is finished according to specification, and the <i>finished job assessed</i> along with the welfare of the horse.</p> <p>4.4. The horse is trotted to identify any signs of lameness.</p> <p>4.5. The responsible person is informed of actions taken, and advised on horse's future foot care requirements.</p>

ELEMENT	PERFORMANCE CRITERIA
	4.6. Appropriate records of service provided are maintained.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to occupational health and safety (OHS) and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate
- recognise and work within own limitations
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team with other professionals, including veterinarians.

#### Required knowledge

- anatomical features of the lower limb and foot of the horse and applicable biomechanical functions
- conformation, normal gait and abnormalities of gait
- effects of trimming on the stance and action of the horse
- general anatomy of the horse
- limits of safe trimming and why these must not be exceeded
- relevant legislation and codes of practice and personal responsibilities

**REQUIRED SKILLS AND KNOWLEDGE**

- safe work practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify shoeing needs of individual horses
- trim and prepare feet
- select and fit appropriate pairs of shoes to normal healthy horses and assess quality of outcome
- provide advice on future hoof care requirements and maintain records of service provided.

The skills and knowledge required to fit shoes for normal healthy horses must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.

There must be access to a range of normal healthy horses, including pleasure, eventing and show jumping horses as well as the appropriate equipment and/or resources to enable one to demonstrate competence.

**Method of assessment**

To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards,



<b>EVIDENCE GUIDE</b>	
	<p>on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Risks to horse or handlers</i></b> may	<ul style="list-style-type: none"> <li>• completing farriery tasks:</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• applying fillers and other treatments</li> <li>• cleaning and sharpening tools</li> <li>• exposure to noise, dust, skin and eye irritants</li> <li>• handling horses</li> <li>• manual handling associated with working with tools and metal</li> <li>• removing, replacing and fitting shoes</li> <li>• trimming feet</li> <li>• working with fire to shape shoes, shoe horses and weld</li> <li>• working with hazardous items (e.g. electricity, heat, gas and other flammables)</li> <li>• outside distractions: <ul style="list-style-type: none"> <li>• noise</li> <li>• movement</li> <li>• other animals</li> <li>• vehicles</li> </ul> </li> <li>• uneducated, stressed or difficult horses.</li> </ul>
<b><i>Restraints</i></b> may include:	<ul style="list-style-type: none"> <li>• head collar or halter and lead</li> <li>• muzzles</li> <li>• anti-rearing bit</li> <li>• chemical sedatives prescribed by and administered under the supervision of a veterinarian</li> <li>• hobbles</li> <li>• leg ropes</li> <li>• twitch.</li> </ul> <p>Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.</p>
<b><i>Features of gait and conformation</i></b> may include:	<ul style="list-style-type: none"> <li>• gaits: <ul style="list-style-type: none"> <li>• walk</li> <li>• trot</li> <li>• pace</li> <li>• canter</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• gallop</li> <li>• jump action</li> <li>• characteristic actions of various breeds and types of horses</li> <li>• common faults of the skeletal system, stance and their effects on gait</li> <li>• common injuries of the muscular system and their effects on gait</li> <li>• ideal action and alignment</li> <li>• relationship of the conformation of the foot and limb to the way of going.</li> </ul>
<i>Tools for removing and fitting shoes</i> may include:	<ul style="list-style-type: none"> <li>• anvil</li> <li>• buffer</li> <li>• clenching tongs</li> <li>• nail pullers</li> <li>• pincers</li> <li>• pritchel</li> <li>• rasp</li> <li>• shoe shaper</li> <li>• shoeing hammer</li> <li>• hot shoe tools: <ul style="list-style-type: none"> <li>• hot fit tongs</li> <li>• water bucket and water.</li> </ul> </li> </ul>
<i>Relevant factors</i> when assessing feet may include:	<ul style="list-style-type: none"> <li>• condition of the existing shoe</li> <li>• condition of the hooves</li> <li>• general condition of the horse</li> <li>• temperament of the horse</li> <li>• the approximate age of the horse</li> <li>• the work that the horse will perform</li> <li>• type of surface the horse will work on.</li> </ul>
<i>Implications of wear pattern</i> may include:	<ul style="list-style-type: none"> <li>• indicators of uneven weight bearing: <ul style="list-style-type: none"> <li>• variations in shoe thickness on ground contact surface</li> <li>• uneven hoof wear</li> <li>• shoe movement on foot</li> <li>• indicators of stumbling or other forms of interference</li> </ul> </li> <li>• indicators of poor fit: <ul style="list-style-type: none"> <li>• presence of bruising or corns</li> <li>• shoe is pressing on sensitive structures</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• clenches have risen.</li> </ul>
<p><i>Tools</i> for trimming feet may include:</p>	<ul style="list-style-type: none"> <li>• hoof nippers or cutters</li> <li>• rasp</li> <li>• paring knife</li> <li>• toe knife.</li> </ul>
<p>Considerations required to safely <i>trim</i> and prepare feet may include:</p>	<ul style="list-style-type: none"> <li>• growth rate of the shod versus the unshod hoof</li> <li>• trimming aims to achieve a level bearing surface and a normal pastern foot axis, it involves: <ul style="list-style-type: none"> <li>• study of the shape and proportions of the foot</li> <li>• identification and correction of any defects</li> <li>• balance of the foot in relation to the length of toe and height of heel</li> <li>• adjusting any irregularities or unevenness in the bearing surface</li> <li>• checking the balance of the foot in relation to the pastern foot axis</li> <li>• determining how much hoof needs to be removed in relation to a range of conditions: <ul style="list-style-type: none"> <li>• broken hoof and pastern angle</li> <li>• heels too high</li> <li>• heels too low</li> <li>• medial or lateral growth</li> <li>• toe too long</li> <li>• any problems noticed by owner in relation to breakover of hoof or interference.</li> </ul> </li> </ul> </li> </ul>
<p>Hoof trim considerations in relation to <i>injury to the horse's feet</i> may include:</p>	<ul style="list-style-type: none"> <li>• a badly dressed foot is not only altered in shape but also in position relative to the leg, which in turn influences the action of the limb</li> <li>• faults in dressing the foot: <ul style="list-style-type: none"> <li>• inadequate removal of excess hoof</li> <li>• overparing the frog</li> <li>• overparing the sole</li> <li>• over-lowering the toe</li> <li>• over-lowering the heels</li> <li>• over-lowering the bearing surface</li> <li>• uneven bearing surface</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• opening up the heels</li> <li>• rasping the wall and dumping the toe.</li> </ul>
<i>Quality outcomes</i> of hoof preparation may include:	<ul style="list-style-type: none"> <li>• achieve optimal conformational relationships between angles of leading wall of hoof line, long axis of pastern and angle of shoulder</li> <li>• avoidance of reaching sensitive tissue</li> <li>• checking angles and shape of foot</li> <li>• the weight is evenly distributed over the foot</li> <li>• toe clip is cut in balance with hoof shape if clip is required</li> <li>• when viewed from behind, both heels are the same height and the base of the frog just touches the ground</li> <li>• when viewed from the side, the toe, quarters and heels are proportionate and the pastern foot axis is in a straight line.</li> </ul>
<i>Ancillary features</i> may include:	<ul style="list-style-type: none"> <li>• bar</li> <li>• extra clip</li> <li>• extra nail holes</li> <li>• pads</li> <li>• seating out</li> <li>• shortening or lengthening heel</li> <li>• stud holes.</li> </ul>
<i>Final adjustments</i> may include:	<ul style="list-style-type: none"> <li>• hot or cold shoes may be fitted: <ul style="list-style-type: none"> <li>• surface fitting, where the foot surface has to be adapted exactly to the bearing surface of the hoof</li> <li>• outline fitting, which means adaptation of the shoe to the length and breadth of the hoof with the outer border of the shoe corresponding to the outline of the bearing surface</li> <li>• checking and adjusting shoe to reduce the risk of: <ul style="list-style-type: none"> <li>• close fitting</li> <li>• wide fitting</li> </ul> </li> <li>• checking length of shoe to assess if: <ul style="list-style-type: none"> <li>• heels are too long</li> <li>• heels are too short.</li> </ul> </li> </ul> </li> </ul>
<i>Relevant factors</i> may include:	<ul style="list-style-type: none"> <li>• nailing on a shoe should avoid:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• nail bind</li> <li>• pricks</li> <li>• sole pressure</li> <li>• holding horse's leg at a comfortable angle during nailing to:               <ul style="list-style-type: none"> <li>• discourage horse from moving away during nailing</li> <li>• enable horse to stand in a balanced position</li> <li>• prevent injury to farrier due to poor manual handling techniques.</li> </ul> </li> </ul>
<p>Factors taken into account when <i>finished job is assessed</i> may include:</p>	<ul style="list-style-type: none"> <li>• securing shoe to foot:               <ul style="list-style-type: none"> <li>• using an appropriate number of nails to secure shoe</li> <li>• selecting nails of appropriate size and length for hoof quality and shoe type</li> <li>• setting nails in appropriate position around hoof</li> <li>• nailing on the shoe in sequence</li> <li>• clenches even, flat and broad, nails driven to standard height</li> <li>• nails driven home, with heads fitting the countersinks</li> </ul> </li> <li>• with foot on the ground assess:               <ul style="list-style-type: none"> <li>• front and hind feet are pairs, the same size and shape and the same pastern foot axis</li> <li>• no excessive rasping of the wall</li> <li>• no dumping of the wall (making the foot fit the shoe)</li> <li>• clips low and broad and the toe clip centred with correct angle to the hoof wall</li> <li>• shoe fits the outline of the foot and heels are of correct length</li> </ul> </li> <li>• with foot off the ground assess:               <ul style="list-style-type: none"> <li>• no unnecessary paring of the frog and sole</li> <li>• heels not opened up</li> <li>• toe clip centred and in line with the point of the frog</li> <li>• sole eased at the seat of corn</li> <li>• no daylight between the foot and the shoe</li> <li>• shoe fits the foot and the heels do not</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<p>interfere with the function of the frog</p> <ul style="list-style-type: none"> <li>• shoe is properly finished off</li> <li>• horse shows no sign of lameness when trotted up.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMFAR310A Fit shoes to alleviate moderate faults and defects in horses

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to prepare the feet of a horse exhibiting moderate faults or defects, and to apply appropriate shoes to alleviate the problem.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to farriers working in farriery workplaces who are required to fit shoes to horses who exhibit a range of common faults and defects where the level of assessment and remedial technique is regarded as moderate.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.



## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify shoeing needs of individual horses	<p>1.1.Horses are handled appropriately to reduce stress and alarm, behaviour is monitored to eliminate <b><i>risks to horse or handlers</i></b>, and <b><i>restraints</i></b> are used as required.</p> <p>1.2.<b><i>Features of gait and conformation</i></b> of the horse are identified.</p> <p>1.3.<b><i>Moderate faults and defects</i></b> of the horse that may be alleviated by the farrier are identified.</p> <p>1.4.A working position is adopted which maintains comfort of the horse and ensures comfort and personal safety of the farrier and any assistants.</p> <p>1.5.Shoes are removed safely, using <b><i>tools</i></b> appropriate for the task and ensuring no damage is caused to the feet of the horse.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.6. Feet are cleaned of all foreign bodies to facilitate examination of the hoof, ensuring all <i>relevant factors</i> are taken into account.</p> <p>1.7. The shoe is examined, and <i>implications of the wear pattern</i> are assessed for trimming and shoeing.</p> <p>1.8. Any conditions requiring higher level treatment are reported to other farriers or to veterinarians involved with hoof care, as required.</p> <p>1.9. The agreed foot care plan is amended with the responsible person, taking into account conditions of the feet not previously identifiable.</p>
2. Trim and prepare feet	<p>2.1. Appropriate shoeing <i>tools</i> are used to safely <i>trim</i> and prepare feet to achieve balance, level and shape, and to correct any identified foot defects.</p> <p>2.2. Trimming operations are conducted without <i>injury to the horse's feet</i>.</p> <p>2.3. Work is visually checked, while in progress and on completion, to ensure <i>quality outcomes of foot preparation</i> have been achieved.</p>
3. Fit shoes	<p>3.1. Correct type, material and size of <i>shoes are selected</i> according to the shoeing plan and modifications are made as required by the individual horse.</p> <p>3.2. Appropriate tools are selected for the purpose of fitting shoes.</p> <p>3.3. Selected shoes are shaped to incorporate any <i>ancillary features</i> as determined by the foot care and shoeing plan.</p> <p>3.4. Shoes are fitted to fore and hind feet, and the need for any <i>final adjustments</i> is assessed.</p> <p>3.5. Final adjustments are made to the shape and size of the shoe to achieve correct fit, with any ancillary features being added to the shoe as determined by the work requirements of the horse.</p> <p>3.6. Health and safety of the horse, self and others is maintained throughout the process.</p>
4. Attach shoes and finish shoeing process	<p>4.1. Tools and nails are selected, suitable for attaching and clenching shoes.</p> <p>4.2. The shoe is safely attached, securely and in the correct position, ensuring the <i>relevant factors</i> are taken into account.</p> <p>4.3. The hoof is finished according to specification, and the <i>finished job assessed</i> along with the welfare of</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>the horse.</p> <p>4.4.The horse is trotted to identify any signs of lameness.</p> <p>4.5.The responsible person is informed of actions taken, and advised on horse's future foot care requirements.</p> <p>4.6.Appropriate records of service provided are maintained.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to occupational health and safety (OHS) and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate
- recognise and work within own limitations
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team with other professionals, including veterinarians.

#### Required knowledge

- anatomical features of the lower limb and foot of the horse and applicable biomechanical functions
- conformation, normal gait and abnormalities of gait and how the farrier can

**REQUIRED SKILLS AND KNOWLEDGE**

- alleviate a range of moderate faults and foot problems through shoeing
- effects of trimming on the stance and action of the horse
  - general anatomy of the horse
  - limits of safe trimming and why these must not be exceeded
  - relevant legislation and codes of practice and personal responsibilities
  - safe work practices
  - types of horse shoes and reasons for use of particular shoes.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess the shoeing needs of individual horses exhibiting moderate faults and defects of the foot or lower limb that may be alleviated by the farrier
- trim and prepare feet
- select and fit appropriate shoes to alleviate moderate faults and defects and assess quality of outcomes
- provide advice on future hoof care requirements and maintain records of service provided.

The skills and knowledge required to fit shoes to alleviate moderate faults and defects in horses must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that

<b>EVIDENCE GUIDE</b>	
	<p>reproduces normal work conditions.</p> <p>There must be access to a range of horses presenting with moderate faults and defects as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Risks to horse or handlers*** may include:

- completing farriery tasks:
  - applying fillers and other treatments
  - cleaning and sharpening tools
  - exposure to noise, dust, skin and eye irritants
  - handling horses
  - manual handling associated with working with tools and metal
  - removing, replacing and fitting shoes
  - trimming feet
  - working with fire to shape shoes, shoe horses and weld
  - working with hazardous items including(e.g. electricity, heat, gas and other flammables)
- outside distractions:
  - noise
  - movement
  - other animals
  - vehicles
- uneducated, stressed or difficult horses.

***Restraints*** may include:

- head collar or halter and lead
- muzzles
- anti-rearing bit
- chemical sedatives prescribed by and administered under the supervision of a veterinarian
- hobbles
- leg ropes
- twitch.

Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is

<b>RANGE STATEMENT</b>	
	required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.
<i>Features of gait and conformation</i> may include:	<ul style="list-style-type: none"> <li>• gaits: <ul style="list-style-type: none"> <li>• walk</li> <li>• trot</li> <li>• pace</li> <li>• canter</li> <li>• gallop</li> <li>• jump action</li> </ul> </li> <li>• characteristic actions of various breeds and types of horses</li> <li>• common faults of the skeletal system, stance and their effects on gait</li> <li>• common injuries of the muscular system and their effects on gait</li> <li>• ideal action and alignment</li> <li>• relationship of the conformation of the foot and limb to the way of going.</li> </ul>
<i>Moderate faults and defects</i> in horses' feet may include:	<ul style="list-style-type: none"> <li>• interferences to movement of the foot in flight: <ul style="list-style-type: none"> <li>• brushing/speed cutting</li> <li>• cross-firing</li> <li>• forging</li> <li>• over-reaching</li> <li>• scalping</li> <li>• stumbling</li> <li>• treads</li> </ul> </li> <li>• minor ailments: <ul style="list-style-type: none"> <li>• puncture wounds</li> <li>• thin soles</li> <li>• corns</li> <li>• false quarter</li> <li>• thrush</li> <li>• seedy toe</li> <li>• white line disease</li> <li>• sand crack/grass cracks</li> <li>• hoof deformities such as flared hooves</li> </ul> </li> <li>• the condition of the foot should be assessed: <ul style="list-style-type: none"> <li>• with the shoe on</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• with the shoe off.</li> </ul>
<p><i>Tools for removing and fitting shoes</i> may include:</p>	<ul style="list-style-type: none"> <li>• anvil</li> <li>• buffer</li> <li>• clenching tongs</li> <li>• nail pullers</li> <li>• pincers</li> <li>• pritchel</li> <li>• rasp</li> <li>• shoe shaper</li> <li>• shoeing hammer</li> <li>• hot shoe tools: <ul style="list-style-type: none"> <li>• hot fit tongs</li> <li>• water bucket and water.</li> </ul> </li> </ul>
<p><i>Relevant factors</i> when assessing feet may include:</p>	<ul style="list-style-type: none"> <li>• condition of the existing shoe</li> <li>• condition of the hooves</li> <li>• general condition of the horse</li> <li>• temperament of the horse</li> <li>• the approximate age of the horse</li> <li>• the work that the horse will perform</li> <li>• type of surface the horse will work on.</li> </ul>
<p><i>Implications of wear pattern</i> may include:</p>	<ul style="list-style-type: none"> <li>• indicators of uneven weight bearing: <ul style="list-style-type: none"> <li>• variations in shoe thickness on ground contact surface</li> <li>• uneven hoof wear</li> <li>• shoe movement on foot</li> <li>• indicators of stumbling or other forms of interference</li> </ul> </li> <li>• indicators of poor fit: <ul style="list-style-type: none"> <li>• presence of bruising or corns</li> <li>• shoe is pressing on sensitive structures</li> <li>• clenches have risen.</li> </ul> </li> </ul>
<p><i>Tools for trimming</i> feet may include:</p>	<ul style="list-style-type: none"> <li>• hoof nippers or cutters</li> <li>• rasp</li> <li>• paring knife</li> <li>• toe knife.</li> </ul>
<p>Considerations required to safely <i>trim</i> and prepare feet may include:</p>	<ul style="list-style-type: none"> <li>• growth rate of the shod versus the unshod hoof</li> <li>• trimming aims to achieve a level bearing surface and a normal pastern foot axis, it involves:</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• study of the shape and proportions of the foot</li> <li>• identification and correction of any defects</li> <li>• balance of the foot in relation to the length of toe and height of heel</li> <li>• adjusting any irregularities or unevenness in the bearing surface</li> <li>• checking the balance of the foot in relation to the pastern foot axis</li> <li>• determining how much hoof needs to be removed in relation to a range of conditions: <ul style="list-style-type: none"> <li>• broken hoof and pastern angle</li> <li>• heels too high</li> <li>• heels too low</li> <li>• medial or lateral growth</li> <li>• toe too long</li> <li>• any problems noticed by owner in relation to breakover of hoof or interference.</li> </ul> </li> </ul>
Hoof trim considerations in relation to <i>injury to the horse's feet</i> may include:	<ul style="list-style-type: none"> <li>• a badly dressed foot is not only altered in shape but also in position relative to the leg, which in turn influences the action of the limb</li> <li>• faults in dressing the foot: <ul style="list-style-type: none"> <li>• inadequate removal of excess hoof</li> <li>• overparing the frog</li> <li>• overparing the sole</li> <li>• over-lowering the toe</li> <li>• over-lowering the heels</li> <li>• over-lowering the bearing surface</li> <li>• uneven bearing surface</li> <li>• opening up the heels</li> <li>• rasping the wall and dumping the toe.</li> </ul> </li> </ul>
<i>Quality outcomes of foot preparation</i> may include:	<ul style="list-style-type: none"> <li>• achieve optimal conformational relationships between angles of leading wall of hoof line, long axis of pastern and angle of shoulder</li> <li>• avoidance of reaching sensitive tissue</li> <li>• checking angles and shape of foot</li> <li>• the weight is evenly distributed over the foot</li> <li>• toe clip is cut in balance with hoof shape if clip is required</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• when viewed from behind, both heels are the same height and the base of the frog just touches the ground</li> <li>• when viewed from the side, the toe, quarters and heels are proportionate and the pastern foot axis is in a straight line.</li> </ul>
<i>Shoe selection</i> considerations may include:	<ul style="list-style-type: none"> <li>• characteristics of the horse: <ul style="list-style-type: none"> <li>• assessment of horse's action</li> <li>• conformation</li> <li>• shape of its feet</li> <li>• size and weight</li> <li>• wear patterns of existing shoes</li> <li>• work it performs</li> </ul> </li> <li>• shoe types in various sizes and weights fitted hot or cold: <ul style="list-style-type: none"> <li>• concave fullered shoe</li> <li>• machine made shoes</li> <li>• plain stamped shoe</li> <li>• racing plates</li> <li>• three-quarter fullered shoe</li> </ul> </li> <li>• other considerations in shoe selection: <ul style="list-style-type: none"> <li>• Rules of Racing shoe requirements</li> <li>• other sport and working horse requirements: <ul style="list-style-type: none"> <li>• breed requirements</li> <li>• carriage and draught horse shoes</li> <li>• endurance</li> <li>• hacking and dressage</li> <li>• mule or donkey shoes</li> <li>• polo and polocrosse</li> <li>• showjumping, eventing and hunting</li> <li>• working stock horse and western events.</li> </ul> </li> </ul> </li> </ul>
<i>Ancillary features</i> may include:	<ul style="list-style-type: none"> <li>• bar</li> <li>• extra clip</li> <li>• extra nail holes</li> <li>• pads</li> <li>• seating out</li> <li>• shortening or lengthening heel</li> <li>• stud holes.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Final adjustments</i> may include:	<ul style="list-style-type: none"> <li>• hot or cold shoes may be fitted:               <ul style="list-style-type: none"> <li>• surface fitting, where the foot surface has to be adapted exactly to the bearing surface of the hoof</li> <li>• outline fitting, which means adaptation of the shoe to the length and breadth of the hoof with the outer border of the shoe corresponding to the outline of the bearing surface</li> <li>• checking and adjusting shoe to reduce the risk of:                   <ul style="list-style-type: none"> <li>• close fitting</li> <li>• wide fitting</li> </ul> </li> <li>• checking length of shoe to assess if:                   <ul style="list-style-type: none"> <li>• heels are too long</li> <li>• heels are too short.</li> </ul> </li> </ul> </li> </ul>
<i>Relevant factors</i> may include:	<ul style="list-style-type: none"> <li>• nailing on a shoe should avoid:               <ul style="list-style-type: none"> <li>• nail bind</li> <li>• pricks</li> <li>• sole pressure</li> </ul> </li> <li>• holding horse's leg at a comfortable angle during nailing to:               <ul style="list-style-type: none"> <li>• discourage horse from moving away during nailing</li> <li>• enable horse to stand in a balanced position</li> <li>• prevent injury to farrier due to poor manual handling techniques.</li> </ul> </li> </ul>
Factors taken into account when <i>finished job is assessed</i> may include:	<ul style="list-style-type: none"> <li>• securing shoe to foot:               <ul style="list-style-type: none"> <li>• using an appropriate number of nails to secure shoe</li> <li>• selecting nails of appropriate size and length for hoof quality and shoe type</li> <li>• setting nails in appropriate position around hoof</li> <li>• nailing on the shoe in sequence</li> <li>• clenches even, flat and broad, nails driven to standard height</li> <li>• nails driven home, with heads fitting the countersinks</li> </ul> </li> <li>• with foot on the ground assess:</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• front and hind feet are pairs, the same size and shape and the same pastern foot axis</li> <li>• no excessive rasping of the wall</li> <li>• no dumping of the wall (making the foot fit the shoe)</li> <li>• clips low and broad and the toe clip centred with correct angle to the hoof wall</li> <li>• shoe fits the outline of the foot and heels are of correct length</li> <li>• with foot off the ground assess: <ul style="list-style-type: none"> <li>• no unnecessary paring of the frog and sole</li> <li>• heels not opened up</li> <li>• toe clip centred and in line with the point of the frog</li> <li>• sole eased at the seat of corn</li> <li>• no daylight between the foot and the shoe</li> <li>• shoe fits the foot and the heels do not interfere with the function of the frog</li> <li>• shoe is properly finished off</li> </ul> </li> <li>• horse shows no sign of lameness when trotted up.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>	
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<b>Co-requisite units</b>		

## ACMFAR311A Fit shoes to alleviate severe faults and defects in horses

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to prepare the feet of a horse exhibiting severe faults or defects, and to apply appropriate shoes to alleviate the problem.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to farriers working in farriery workplaces who are required to fit shoes to horses who exhibit a range of severe faults and defects where the level of assessment and remedial technique is regarded as severe. It may be necessary for the farrier to work as part of a team with other professionals such as a veterinarian.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify shoeing needs of individual horses	<p>1.1.Horses are handled appropriately to reduce stress and alarm, behaviour is monitored to eliminate <i>risks to horse or handlers</i>, and <i>restraints</i> are used as required.</p> <p>1.2.<i>Features of gait and conformation</i> of the horse are identified.</p> <p>1.3.<i>Severe faults and defects</i> of the horse that may be alleviated by the farrier are identified, together with the modifications and types of surgical shoes that may alleviate the problem.</p> <p>1.4.A working position is adopted which maintains comfort of the horse and ensures comfort and personal safety of the farrier and any assistants.</p> <p>1.5.Shoes are removed safely, using <i>tools</i> appropriate for</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>the task and ensuring no damage is caused to the feet of the horse.</p> <p>1.6. Feet are cleaned of all foreign bodies to facilitate examination of the hoof, ensuring all <i>relevant factors</i> are taken into account.</p> <p>1.7. The shoe is examined, and <i>implications of the wear pattern</i> are assessed for trimming and shoeing.</p> <p>1.8. Any conditions requiring higher-level treatment are reported to other farriers or to veterinarians involved with hoof care as required.</p> <p>1.9. The agreed foot care plan is amended with the responsible person, taking into account conditions of the feet not previously identifiable.</p>
2. Trim and prepare feet	<p>2.1. Appropriate shoeing <i>tools</i> are used to safely <i>trim</i> and prepare feet to achieve balance, level and shape, and to correct any identified foot defects.</p> <p>2.2. Trimming operations are conducted without <i>injury to the horse's feet</i>.</p> <p>2.3. Work is visually checked, while in progress and on completion, to ensure <i>quality outcomes</i> of foot preparation have been achieved.</p>
3. Fit shoes	<p>3.1. Correct type, material and size of <i>shoes are selected</i> according to the shoeing plan and modifications are made as required by the individual horse.</p> <p>3.2. Appropriate tools are selected for the purpose of fitting shoes.</p> <p>3.3. Selected shoes are shaped to incorporate any <i>ancillary features</i> as determined by the foot care and shoeing plan.</p> <p>3.4. Shoes are fitted to fore and hind feet, and the need for any <i>final adjustments</i> is assessed.</p> <p>3.5. Final adjustments are made to the shape and size of the shoe to achieve correct fit, with any ancillary features being added to the shoe as determined by the work requirements of the horse.</p> <p>3.6. Health and safety of the horse, self and others is maintained throughout the process.</p>
4. Attach shoes and finish shoeing process	<p>4.1. Tools and nails are selected, suitable for attaching and clenching shoes.</p> <p>4.2. The shoe is safely attached, securely and in the correct position, ensuring the <i>relevant factors</i> are taken into account.</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>4.3. The hoof is finished according to specification, and the <i>finished</i> job assessed along with the welfare of the horse.</p> <p>4.4. The horse is trotted to identify any signs of lameness.</p> <p>4.5. The responsible person is informed of actions taken, and advised on horse's future foot care requirements.</p> <p>4.6. Appropriate records of service provided are maintained.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to occupational health and safety (OHS) and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate
- recognise and work within own limitations
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team with other professionals, including veterinarians.

#### Required knowledge

- anatomical features of the lower limb and foot of the horse and applicable

**REQUIRED SKILLS AND KNOWLEDGE**

biomechanical functions

- conformation, normal gait and abnormalities of gait and how the farrier can alleviate a range of severe faults and foot problems through shoeing
- effects of trimming on the stance and action of the horse
- general anatomy of the horse
- limits of safe trimming and why these must not be exceeded
- relevant legislation and codes of practice and personal responsibilities
- safe work practices
- types of surgical horse shoes and modifications that may be made to address the needs of a horse exhibiting severe faults and defects.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess the shoeing needs of individual horses exhibiting severe faults and defects of the foot or lower limb that may be alleviated by the farrier
- report conditions requiring higher-level treatment to other farriers or to veterinarians involved with hoof care as required
- discuss shoeing options with clients
- trim and prepare feet
- select and fit appropriate pairs of shoes to alleviate severe faults and defects and assess quality of outcomes
- provide advice on future hoof care requirements and maintain records of service provided.

The skills and knowledge required to fit shoes to

<b>EVIDENCE GUIDE</b>	
	alleviate severe faults and defects in horses must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of horses presenting with severe faults and defects as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Risks to horse or handlers*** may include:

- completing farriery tasks:
  - applying fillers and other treatments
  - cleaning and sharpening tools
  - exposure to noise, dust, skin and eye irritants
  - handling horses
  - manual handling associated with working with tools and metal
  - removing, replacing and fitting shoes
  - trimming feet
  - working with fire to shape shoes, shoe horses and weld
  - working with hazardous items including electricity, heat, gas and other flammables
- outside distractions:
  - noise
  - movement
  - other animals
  - vehicles
- uneducated, stressed or difficult horses.

***Restraints*** may include:

- head collar or halter and lead
- muzzles
- anti-rearing bit
- chemical sedatives prescribed by and administered under the supervision of a veterinarian

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hobbles</li> <li>• leg ropes</li> <li>• twitch.</li> </ul> <p>Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.</p>
<i>Features of gait and conformation</i> may include:	<ul style="list-style-type: none"> <li>• gaits: <ul style="list-style-type: none"> <li>• walk</li> <li>• trot</li> <li>• pace</li> <li>• canter</li> <li>• gallop</li> <li>• jump action</li> </ul> </li> <li>• characteristic actions of various breeds and types of horses</li> <li>• common faults of the skeletal system, stance and their effects on gait</li> <li>• common injuries of the muscular system and their effects on gait</li> <li>• ideal action and alignment</li> <li>• relationship of the conformation of the foot and limb to the way of going.</li> </ul>
<i>Severe faults and defects</i> in horses' feet that may include:	<ul style="list-style-type: none"> <li>• injuries caused by the shoe: <ul style="list-style-type: none"> <li>• capped elbow</li> <li>• overreach</li> </ul> </li> <li>• defective feet: <ul style="list-style-type: none"> <li>• flat foot</li> <li>• twisted foot</li> <li>• weak or low heels</li> </ul> </li> <li>• injuries caused by abnormalities of gait: <ul style="list-style-type: none"> <li>• brushing/speedy cutting</li> <li>• cross-firing</li> <li>• forging</li> <li>• knee hitting</li> <li>• over-reaching</li> <li>• scalping</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• stumbling</li> <li>• diseases and injuries of the limb and foot which require protection and relief of pressure through the provision of specialist techniques or surgical shoes:               <ul style="list-style-type: none"> <li>• bone spavin</li> <li>• corns</li> <li>• curb</li> <li>• false quarter</li> <li>• fractured pedal bone</li> <li>• keratoma</li> <li>• laminitis</li> <li>• navicular disease</li> <li>• pedal osteitis</li> <li>• ring bone</li> <li>• seedy toe</li> <li>• sidebone</li> <li>• splints</li> <li>• sprained joint</li> <li>• sprained ligament</li> <li>• strained or ruptured tendon</li> </ul> </li> <li>• the condition of the foot should be assessed:               <ul style="list-style-type: none"> <li>• with the shoe on</li> <li>• with the shoe off.</li> </ul> </li> </ul>
<i>Tools for removing and fitting shoes</i> may include:	<ul style="list-style-type: none"> <li>• anvil</li> <li>• buffer</li> <li>• clenching tongs</li> <li>• nail pullers</li> <li>• pincers</li> <li>• pritchel</li> <li>• rasp</li> <li>• shoe shaper</li> <li>• shoeing hammer</li> <li>• hot shoe tools:               <ul style="list-style-type: none"> <li>• hot fit tongs</li> <li>• water bucket and water.</li> </ul> </li> </ul>
<i>Relevant factors</i> when assessing feet may include:	<ul style="list-style-type: none"> <li>• condition of the existing shoe</li> <li>• condition of the hooves</li> <li>• general condition of the horse</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• temperament of the horse</li> <li>• the approximate age of the horse</li> <li>• the work that the horse will perform</li> <li>• type of surface the horse will work on.</li> </ul>
<i>Implications of wear pattern</i> may include:	<ul style="list-style-type: none"> <li>• indicators of uneven weight bearing: <ul style="list-style-type: none"> <li>• variations in shoe thickness on ground contact surface</li> <li>• uneven hoof wear</li> <li>• shoe movement on foot</li> <li>• indicators of stumbling or other forms of interference</li> </ul> </li> <li>• indicators of poor fit: <ul style="list-style-type: none"> <li>• presence of bruising or corns</li> <li>• shoe is pressing on sensitive structures</li> <li>• clenches have risen.</li> </ul> </li> </ul>
<i>Tools for trimming feet</i> may include:	<ul style="list-style-type: none"> <li>• hoof nippers or cutters</li> <li>• rasp</li> <li>• paring knife</li> <li>• toe knife.</li> </ul>
Considerations required to safely <i>trim</i> and prepare feet may include:	<ul style="list-style-type: none"> <li>• growth rate of the shod versus the unshod hoof</li> <li>• trimming aims achieve a level bearing surface and a normal pastern foot axis, it involves: <ul style="list-style-type: none"> <li>• study of the shape and proportions of the foot</li> <li>• identification and correction of any defects</li> <li>• balance of the foot in relation to the length of toe and height of heel</li> <li>• adjusting any irregularities or unevenness in the bearing surface</li> <li>• checking the balance of the foot in relation to the pastern foot axis</li> <li>• determining how much hoof needs to be removed in relation to a range of conditions: <ul style="list-style-type: none"> <li>• achieving normal weight bearing in weak heels</li> <li>• broken hoof and pastern angle</li> <li>• correctly dressing the upright foot</li> <li>• heels too high</li> <li>• heels too low</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hoof wall reduction</li> <li>• medial or lateral growth</li> <li>• paring down the discoloured horn where there is a corn</li> <li>• reducing the side of the wall that is too high until a level bearing surface is obtained in the case of a twisted foot</li> <li>• toe too long</li> <li>• any problems noticed by owner in relation to break over of hoof or interference.</li> </ul>
Hoof trim considerations in relation to <i>injury to the horse's feet</i> may include:	<ul style="list-style-type: none"> <li>• a badly dressed foot is not only altered in shape but also in position relative to the leg, which in turn influences the action of the limb</li> <li>• injury may occur through the following faults in dressing the foot: <ul style="list-style-type: none"> <li>• inadequate removal of excess hoof</li> <li>• overparing the frog</li> <li>• overparing the sole</li> <li>• over-lowering the toe</li> <li>• over-lowering the heels</li> <li>• over-lowering the bearing surface</li> <li>• uneven bearing surface</li> <li>• opening up the heels</li> <li>• rasping the wall and dumping the toe.</li> </ul> </li> </ul>
<i>Quality outcomes</i> of foot preparation may include:	<ul style="list-style-type: none"> <li>• achieve optimal conformational relationships between angles of leading wall of hoof line, long axis of pastern and angle of shoulder</li> <li>• avoidance of reaching sensitive tissue</li> <li>• checking angles and shape of foot</li> <li>• the weight is evenly distributed over the foot</li> <li>• toe clip is cut in balance with hoof shape if clip is required</li> <li>• when viewed from behind, both heels are the same height and the base of the frog just touches the ground</li> <li>• when viewed from the side, the toe, quarters and heels are proportionate and the pastern foot axis is in a straight line.</li> </ul>
<i>Shoe selection</i> considerations	<ul style="list-style-type: none"> <li>• characteristics of the horse:</li> </ul>



<b>RANGE STATEMENT</b>	
may include:	<ul style="list-style-type: none"> <li>• assessment of horse's action</li> <li>• conformation</li> <li>• shape of its feet</li> <li>• size and weight</li> <li>• wear patterns of existing shoes</li> <li>• work it performs</li> <li>• shoe types in various sizes and weights fitted hot or cold: <ul style="list-style-type: none"> <li>• bar shoe</li> <li>• diamond toed shoe</li> <li>• egg bar shoe</li> <li>• feather edged shoe</li> <li>• graduated shoe</li> <li>• heart bar shoe</li> <li>• raised heels</li> <li>• rocker bar shoe</li> <li>• seated out shoe</li> <li>• shoe with quarter clips, heel clips and/or side clips</li> <li>• shoe with set heel</li> <li>• side weights</li> <li>• square toe</li> <li>• three quarter bar shoe</li> <li>• three quarter shoe</li> </ul> </li> <li>• other considerations in shoe selection: <ul style="list-style-type: none"> <li>• Rules of Racing shoe requirements</li> <li>• other sport and working horse requirements: <ul style="list-style-type: none"> <li>• breed requirements</li> <li>• carriage and draught horse shoes</li> <li>• endurance</li> <li>• hacking and dressage</li> <li>• mule or donkey shoes</li> <li>• polo and polocrosse</li> <li>• showjumping, eventing and hunting</li> <li>• working stock horse and western events.</li> </ul> </li> </ul> </li> </ul>
<i>Ancillary features</i> may include:	<ul style="list-style-type: none"> <li>• bar</li> <li>• extra clip</li> <li>• extra nail holes</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• pads</li> <li>• seating out</li> <li>• shortening or lengthening heel</li> <li>• stud holes.</li> </ul>
<i>Final adjustments</i> may include:	<ul style="list-style-type: none"> <li>• hot or cold shoes may be fitted: <ul style="list-style-type: none"> <li>• surface fitting, where the foot surface has to be adapted exactly to the bearing surface of the hoof</li> <li>• outline fitting, which means adaptation of the shoe to the length and breadth of the hoof with the outer border of the shoe corresponding to the outline of the bearing surface</li> <li>• checking and adjusting shoe to reduce the risk of: <ul style="list-style-type: none"> <li>• close fitting</li> <li>• wide fitting</li> </ul> </li> <li>• checking length of shoe to assess if: <ul style="list-style-type: none"> <li>• heels are too long</li> <li>• heels are too short.</li> </ul> </li> </ul> </li> </ul>
<i>Relevant factors</i> may include:	<ul style="list-style-type: none"> <li>• nailing on a shoe should avoid: <ul style="list-style-type: none"> <li>• nail bind</li> <li>• pricks</li> <li>• sole pressure</li> </ul> </li> <li>• holding horse's leg at a comfortable angle during nailing to: <ul style="list-style-type: none"> <li>• discourage horse from moving away during nailing</li> <li>• enable horse to stand in a balanced position</li> <li>• prevent injury to farrier due to poor manual handling techniques.</li> </ul> </li> </ul>
Factors taken into account when <i>finished job is assessed</i> may include:	<ul style="list-style-type: none"> <li>• securing shoe to foot: <ul style="list-style-type: none"> <li>• using an appropriate number of nails to secure shoe</li> <li>• selecting nails of appropriate size and length for hoof quality and shoe type</li> <li>• setting nails in appropriate position around hoof</li> <li>• nailing on the shoe in sequence</li> <li>• clenches even, flat and broad, nails driven to</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<p>standard height</p> <ul style="list-style-type: none"> <li>• nails driven home, with heads fitting the countersinks</li> <li>• with foot on the ground assess: <ul style="list-style-type: none"> <li>• front and hind feet are pairs, the same size and shape and the same pastern foot axis</li> <li>• no excessive rasping of the wall</li> <li>• no dumping of the wall (making the foot fit the shoe)</li> <li>• clips low and broad and the toe clip centred with correct angle to the hoof wall</li> <li>• shoe fits the outline of the foot and heels are of correct length</li> </ul> </li> <li>• with foot off the ground assess: <ul style="list-style-type: none"> <li>• no unnecessary paring of the frog and sole</li> <li>• heels not opened up</li> <li>• toe clip centred and in line with the point of the frog</li> <li>• sole eased at the seat of corn</li> <li>• no daylight between the foot and the shoe</li> <li>• shoe fits the foot and the heels do not interfere with the function of the frog</li> <li>• shoe is properly finished off</li> </ul> </li> <li>• horse shows no sign of lameness when trotted up.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Farriery
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**Competency field**

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMFAR312A Accommodate special needs of particular horses through farriery techniques

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the processes required to prepare the feet of a horse with particular needs and fabricate and apply an appropriate shoe to alleviate the problem.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to farriers working in farriery workplaces and may require the farrier to work as part of a team with other professionals such as a veterinarian. It includes consideration of the needs of foals and young horses, which in most cases do not require shoeing, as well as meeting the particular needs of small ponies, chronically lame or damaged horses and specialised heavy draught animals.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify shoeing needs of individual horses	<p>1.1. Horses are handled appropriately to reduce stress and alarm, behaviour is monitored to eliminate <i>risks to horse or handlers</i>, and <i>restraints</i> are used as required.</p> <p>1.2. <i>Features of gait and conformation</i> of the horse are identified.</p> <p>1.3. <i>Particular needs of the individual horse</i> that may be alleviated by the farrier are identified, together with the types of surgical shoes or modifications that may alleviate the problem.</p> <p>1.4. <i>Needs of foals and young horses</i> are identified.</p> <p>1.5. A working position is adopted which maintains comfort of the horse and ensures comfort and personal safety of the farrier and any assistants.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.6. Shoes are removed safely, using <i>tools</i> appropriate for the task and ensuring no damage is caused to the feet of the horse.</p> <p>1.7. Feet are cleaned of all foreign bodies to facilitate examination of the hoof, ensuring all <i>relevant factors</i> are taken into account.</p> <p>1.8. The shoe is examined, and <i>implications of the wear pattern</i> are assessed for trimming and shoeing.</p> <p>1.9. Any conditions requiring higher-level treatment are reported to other farriers or to veterinarians involved with hoof care as required.</p> <p>1.10. The appropriate course of action is determined, and intended treatment regime is established, and implications are discussed with the client.</p>
<p>2. Fabricate appropriate remedial or surgical shoes</p>	<p>2.1. A range of appropriate <i>remedial or surgical shoes</i> is fabricated or modified to assist in the correction and/or alleviation and treatment for a wide range of horses and their conditions.</p>
<p>3. Trim and repair feet</p>	<p>3.1. Appropriate shoeing <i>tools</i> are used to <i>safely trim</i> and prepare feet to achieve balance, level and shape, and to correct any identified foot defects.</p> <p>3.2. Trimming operations are conducted without <i>injury to the horse's feet</i>.</p> <p>3.3. <i>Hoof reconstruction</i> procedures are performed where necessary.</p> <p>3.4. Work is visually checked, while in progress and on completion, to ensure <i>quality outcomes</i> of foot preparation have been achieved.</p>
<p>4. Fit shoes</p>	<p>4.1. Correct type, material and size of <i>shoes are selected</i> according to the shoeing plan and modifications are made as required by the individual horse.</p> <p>4.2. Appropriate tools are selected for the purpose of fitting shoes.</p> <p>4.3. Selected shoes are shaped to incorporate any <i>ancillary features</i> as determined by the foot care and shoeing plan.</p> <p>4.4. Shoes are fitted to fore and hind feet, and the need for any final adjustments is assessed.</p> <p>4.5. <i>Final adjustments</i> are made to the shape and size of the shoe to achieve correct fit, with any ancillary features being added to the shoe as determined by the</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>work requirements of the horse.</p> <p>4.6. Health and safety of the horse, self and others is maintained throughout the process.</p>
<p>5. Attach shoes and finish shoeing process</p>	<p>5.1. Tools and nails are selected, suitable for attaching and clenching shoes.</p> <p>5.2. The shoe is safely attached, securely and in the correct position, ensuring the <i>relevant factors</i> are taken into account.</p> <p>5.3. The hoof is finished according to specification, and the finished <i>job assessed</i> along with the welfare of the horse.</p> <p>5.4. The horse is trotted to identify any signs of improvement or lameness.</p> <p>5.5. The responsible person is informed of actions taken, and advised on horse's future foot care requirements.</p> <p>5.6. Appropriate records of service provided are maintained.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- adhere to OHS and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate
- recognise and work within own limitations
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements



## REQUIRED SKILLS AND KNOWLEDGE

- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team with other professionals, including veterinarians.

### Required knowledge

- conformation, normal gait and abnormalities of gait and how the farrier can alleviate a range of severe faults and foot problems through shoeing
- effects of trimming on the stance and action of the horse
- general anatomy of the horse
- limits of safe trimming and why these must not be exceeded
- relevant legislation and codes of practice and personal responsibilities
- special requirements of foals and young horses
- safe work practices
- types of surgical horse shoes and modifications that may be made to address the needs of a horse with particular needs.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess the shoeing needs of individual horses with particular needs that may be addressed by the farrier
- report conditions requiring higher-level treatment to other farrier or to veterinarians involved with hoof care as required
- discuss shoeing options with clients
- fabricate or modify a range of remedial or surgical shoes to assist in the correction and/or alleviation of a

<b>EVIDENCE GUIDE</b>	
	<p>horse's problem</p> <ul style="list-style-type: none"> <li>• select and fit appropriate pairs of shoes to horses exhibiting with chronic lameness, damage or engaged in particular sporting, working or other activities and assess quality of outcomes</li> <li>• provide advice on future hoof care requirements and maintain records of service provided.</li> </ul> <p>The skills and knowledge required to accommodate special needs of particular horses through farriery techniques must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range horses for assessment and fitting of pairs of shoes as well as the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Risks to horse or handlers</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• completing farriery tasks:                             <ul style="list-style-type: none"> <li>• applying fillers and other treatments</li> <li>• cleaning and sharpening tools</li> <li>• exposure to noise, dust, skin and eye irritants</li> <li>• handling horses</li> <li>• manual handling associated with working with tools and metal</li> <li>• removing, replacing and fitting shoes</li> <li>• trimming feet</li> <li>• working with fire to shape shoes, shoe horses and weld</li> <li>• working with hazardous items (e.g. electricity, heat, gas and other flammables)</li> </ul> </li> <li>• outside distractions:                             <ul style="list-style-type: none"> <li>• noise</li> <li>• movement</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• other animals</li> <li>• vehicles</li> <li>• uneducated, stressed or difficult horses.</li> </ul>
<b><i>Restraints</i></b> may include:	<ul style="list-style-type: none"> <li>• head collar or halter and lead</li> <li>• muzzles</li> <li>• anti-rearing bit</li> <li>• chemical sedatives prescribed by and administered under the supervision of a veterinarian</li> <li>• hobbles</li> <li>• leg ropes</li> <li>• twitch.</li> </ul> <p>Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.</p>
<b><i>Features of gait and conformation</i></b> may include:	<ul style="list-style-type: none"> <li>• gaits:                             <ul style="list-style-type: none"> <li>• walk</li> <li>• trot</li> <li>• pace</li> <li>• canter</li> <li>• gallop</li> <li>• jump action</li> </ul> </li> <li>• characteristic actions of various breeds and types of horses</li> <li>• common faults of the skeletal system, stance and their effects on gait</li> <li>• common injuries of the muscular system and their effects on gait</li> <li>• ideal action and alignment</li> <li>• relationship of the conformation of the foot and limb to the way of going.</li> </ul>
<b><i>Particular needs of individual horses</i></b> may include:	<ul style="list-style-type: none"> <li>• horses used for special unusual or specific purposes:                             <ul style="list-style-type: none"> <li>• donkeys</li> <li>• draught horses or carriage horses</li> <li>• endurance</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hack and breed classes</li> <li>• harness and thoroughbred racing horses</li> <li>• Olympic disciplines</li> <li>• polo and polocrosse</li> <li>• specific breeds of horses (e.g. Shetland ponies)</li> <li>• sporting events</li> <li>• stage performances</li> <li>• steeple chase events</li> <li>• western events</li> <li>• working horses</li> <li>• needs of chronically lame or injured horses where hoof reconstruction may be required</li> <li>• particular needs of the horse may be determined through consultation with:               <ul style="list-style-type: none"> <li>• allied health service providers</li> <li>• equine veterinarians</li> <li>• owners, trainers, riders, drivers or grooms</li> <li>• others</li> </ul> </li> <li>• condition of the foot should be assessed:               <ul style="list-style-type: none"> <li>• with the shoe on</li> <li>• with the shoe off.</li> </ul> </li> </ul>
Particular <i>needs of foals and young horses</i> may include:	<ul style="list-style-type: none"> <li>• appropriate approach by the farrier to avoid the development of bad habits in the horse</li> <li>• regular review to reflect growth and development</li> <li>• foals having their feet attended for the first time should be halter-broken and have received some preliminary training, including experience in having their legs manipulated, feet picked up, standing on three legs and having their feet tapped with a hammer</li> <li>• foals and young horses are not recommended to be shod although sometimes shoes may be glued to assist in conformational or injury problems</li> <li>• foot care plan or service is developed which may include corrective trimming.</li> </ul>
<i>Tools for removing and fitting shoes</i> may include:	<ul style="list-style-type: none"> <li>• anvil</li> <li>• buffer</li> <li>• clenching tongs</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• nail pullers</li> <li>• pincers</li> <li>• pritchel</li> <li>• rasp</li> <li>• shoe shaper</li> <li>• shoeing hammer</li> <li>• hot shoe tools:                             <ul style="list-style-type: none"> <li>• hot fit tongs</li> <li>• water bucket and water.</li> </ul> </li> </ul>
<p><b>Relevant factors</b> when assessing feet may include:</p>	<ul style="list-style-type: none"> <li>• condition of the existing shoe</li> <li>• condition of the hooves</li> <li>• general condition of the horse</li> <li>• temperament of the horse</li> <li>• the approximate age of the horse</li> <li>• the work that the horse will perform</li> <li>• type of surface the horse will work on.</li> </ul>
<p><b>Implications of wear pattern</b> may include:</p>	<ul style="list-style-type: none"> <li>• indicators of uneven weight bearing:                             <ul style="list-style-type: none"> <li>• variations in shoe thickness on ground contact surface</li> <li>• uneven hoof wear</li> <li>• shoe movement on foot</li> <li>• indicators of stumbling or other forms of interference</li> </ul> </li> <li>• indicators of poor fit:                             <ul style="list-style-type: none"> <li>• presence of bruising or corns</li> <li>• shoe is pressing on sensitive structures</li> <li>• clenches have risen.</li> </ul> </li> </ul>
<p><b>Remedial or surgical shoes</b> may include:</p>	<ul style="list-style-type: none"> <li>• feather edged shoe</li> <li>• shoe with pads</li> <li>• three quarter bar shoe</li> <li>• bar shoe</li> <li>• bonded extension</li> <li>• diamond toed shoe</li> <li>• glue-on shoes</li> <li>• heart bar shoe</li> <li>• hospital plate</li> <li>• lateral extension</li> <li>• pattern rest</li> <li>• remedial or surgical shoes</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• rocker shoe</li> <li>• seated out shoe</li> <li>• shoe with set heel</li> <li>• three quarter shoe.</li> </ul>
<p><i>Tools for trimming feet</i> may include:</p>	<ul style="list-style-type: none"> <li>• hoof nippers or cutters</li> <li>• rasp</li> <li>• paring knife</li> <li>• toe knife.</li> </ul>
<p>Considerations required to <i>safely trim</i> and prepare feet may include:</p>	<ul style="list-style-type: none"> <li>• growth rate of the shod versus the unshod hoof</li> <li>• trimming aims achieve a level bearing surface and a normal pastern foot axis, it involves: <ul style="list-style-type: none"> <li>• study of the shape and proportions of the foot</li> <li>• identification and correction of any defects</li> <li>• balance of the foot in relation to the length of toe and height of heel</li> <li>• adjusting any irregularities or unevenness in the bearing surface</li> <li>• checking the balance of the foot in relation to the pastern foot axis</li> <li>• determining how much hoof needs to be removed in relation to a range of conditions: <ul style="list-style-type: none"> <li>• achieving normal weight bearing in weak heels</li> <li>• any problems noticed by owner in relation to break over of hoof or interference</li> <li>• broken hoof and pastern angle</li> <li>• correctly dressing the upright foot</li> <li>• heels too high</li> <li>• heels too low</li> <li>• hoof wall reduction</li> <li>• medial or lateral growth</li> <li>• paring down the discoloured horn where there is a corn</li> <li>• reducing the side of the wall that is too high until a level bearing surface is obtained in the case of a twisted foot</li> <li>• removal of seedy toe and false quarter</li> <li>• toe too long.</li> </ul> </li> </ul> </li> </ul>

**RANGE STATEMENT**

<p>Hoof trim considerations in relation to <i>injury to the horse's feet</i> may include:</p>	<ul style="list-style-type: none"> <li>• a badly dressed foot is not only altered in shape but also in position relative to the leg, which in turn influences the action of the limb</li> <li>• injury may occur through the following faults in dressing the foot:             <ul style="list-style-type: none"> <li>• inadequate removal of excess hoof</li> <li>• overparing the frog</li> <li>• overparing the sole</li> <li>• over-lowering the toe</li> <li>• over-lowering the heels</li> <li>• over-lowering the bearing surface</li> <li>• uneven bearing surface</li> <li>• opening up the heels</li> <li>• rasping the wall and dumping the toe.</li> </ul> </li> </ul>
<p><i>Hoof reconstruction</i> may be undertaken:</p>	<ul style="list-style-type: none"> <li>• overtime and may include:             <ul style="list-style-type: none"> <li>• reducing the side of the wall that is too high until a level bearing surface is obtained</li> <li>• achieving normal weight bearing in weak heels</li> <li>• removal of damaged hoof wall</li> <li>• cleaning and debraiding the hoof wall</li> <li>• applying acrylic or polyurethane composites using appropriate personal protective equipment including:                 <ul style="list-style-type: none"> <li>• face mask</li> <li>• gloves.</li> </ul> </li> </ul> </li> </ul>
<p><i>Quality outcomes</i> of foot preparation may include:</p>	<ul style="list-style-type: none"> <li>• achieve optimal conformational relationships between angles of leading wall of hoof line, long axis of pastern and angle of shoulder</li> <li>• avoidance of reaching sensitive tissue</li> <li>• checking angles and shape of foot</li> <li>• the weight is evenly distributed over the foot</li> <li>• toe clip is cut in balance with hoof shape if clip is required</li> <li>• when viewed from behind, both heels are the same height and the base of the frog just touches the ground</li> <li>• when viewed from the side, the toe, quarters and heels are proportionate and the pastern foot axis is in a straight line.</li> </ul>



**RANGE STATEMENT**

*Shoe selection* considerations may include:

- characteristics of the horse:
  - assessment of horse's action
  - conformation
  - shape of its feet
  - size and weight
  - wear patterns of existing shoes
  - work it performs
- shoe types in various sizes and weights fitted hot or cold:
  - bar shoe
  - diamond toed shoe
  - egg bar shoe
  - feather edged shoe
  - graduated shoe
  - heart bar shoe
  - raised heels
  - rocker bar shoe
  - seated out shoe
  - shoe with quarter clips, heel clips and/or side clips
  - shoe with set heel
  - side weights
  - square toe
  - three quarter bar shoe
  - three quarter shoe
  - other considerations in shoe selection
  - Rules of Racing shoe requirements
  - other sport and working horse requirements:
    - breed requirements
    - carriage and draught horse shoes
    - endurance
    - hacking, dressage
    - mule or donkey shoes.
    - polo and polocrosse
    - showjumping, eventing, hunting
    - working stock horse and western events.

*Ancillary features* may include:

- bar
- extra clip

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• extra nail holes</li> <li>• pads</li> <li>• seating out shortening or lengthening heel</li> <li>• stud holes.</li> </ul>
<i>Final adjustments</i> may include:	<ul style="list-style-type: none"> <li>• hot or cold shoes may be fitted:                             <ul style="list-style-type: none"> <li>• surface fitting, where the foot surface has to be adapted exactly to the bearing surface of the hoof</li> <li>• outline fitting, which means adaptation of the shoe to the length and breadth of the hoof with the outer border of the shoe corresponding to the outline of the bearing surface</li> <li>• checking and adjusting shoe to reduce the risk of:                                     <ul style="list-style-type: none"> <li>• close fitting</li> <li>• wide fitting</li> </ul> </li> <li>• checking length of shoe to assess if:                                     <ul style="list-style-type: none"> <li>• heels are too long</li> <li>• heels are too short.</li> </ul> </li> </ul> </li> </ul>
<i>Relevant factors</i> may include:	<ul style="list-style-type: none"> <li>• nailing on a shoe should avoid:                             <ul style="list-style-type: none"> <li>• nail bind</li> <li>• pricks</li> <li>• sole pressure</li> </ul> </li> <li>• holding horse's leg at a comfortable angle during nailing to:                             <ul style="list-style-type: none"> <li>• discourage horse from moving away during nailing</li> <li>• enable horse to stand in a balanced position</li> <li>• prevent injury to farrier due to poor manual handling techniques.</li> </ul> </li> </ul>
Factors taken into account when <i>finished job is assessed</i> may include:	<ul style="list-style-type: none"> <li>• securing shoe to foot:                             <ul style="list-style-type: none"> <li>• using an appropriate number of nails to secure shoe</li> <li>• selecting nails of appropriate size and length for hoof quality and shoe type</li> <li>• setting nails in appropriate position around hoof</li> <li>• nailing on the shoe in sequence</li> <li>• clenches even, flat and broad, nails driven to</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>standard height</p> <ul style="list-style-type: none"> <li>• nails driven home, with heads fitting the countersinks</li> <li>• with foot on the ground assess: <ul style="list-style-type: none"> <li>• front and hind feet are pairs, the same size and shape and the same pastern foot axis</li> <li>• no excessive rasping of the wall</li> <li>• no dumping of the wall (making the foot fit the shoe)</li> <li>• clips low and broad and the toe clip centred with correct angle to the hoof wall</li> <li>• shoe fits the outline of the foot and heels are of correct length</li> </ul> </li> <li>• with foot off the ground assess: <ul style="list-style-type: none"> <li>• no unnecessary paring of the frog and sole</li> <li>• heels not opened up</li> <li>• toe clip centred and in line with the point of the frog</li> <li>• sole eased at the seat of corn</li> <li>• no daylight between the foot and the shoe</li> <li>• shoe fits the foot and the heels do not interfere with the function of the frog</li> <li>• shoe is properly finished off</li> </ul> </li> <li>• horse shows no sign of lameness when trotted up.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Farriery
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMGAS101A Investigate job opportunities in animal care and related industries

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the introductory process of investigating work activities undertaken by a cross section of animal care and management businesses and evaluating employment opportunities.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of animal care workplaces, including retail pet stores, kennels, catteries, aviaries, aquariums, shelters, zoos and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify the sectors of the animal care and related industries	1.1.Categories of animal care employment are described. 1.2.Structure of <i>animal care industry sectors</i> is outlined. 1.3. <i>Functionality</i> within each animal care sector is identified.
2. Profile animal care and related industries employment opportunities	2.1.Number of people employed in animal care is investigated. 2.2.General working conditions in functional areas of animal care are described. 2.3.Employment opportunities in animal care and related industries are investigated.
3. Explore animal care workplaces	3.1.Animal care industry workplaces are visited. 3.2.Instructions and relevant regulations are followed during workplace visits.

ELEMENT	PERFORMANCE CRITERIA
	<p>3.3. Role of staff at animal care workplaces (visited) are identified.</p> <p>3.4. Specific <i>conduct and presentation</i> standards required in workplaces (visited) are identified, including <i>animal welfare</i> and ethics requirements.</p>
4. Develop resume and job application	<p>4.1. Resume and job application formats are accessed to identify required content and appropriate styles.</p> <p>4.2. Draft resume and job application, targeting one of the workplaces visited, is developed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- investigate animal care industry sectors and identify a range of job roles and related responsibilities
- literacy skills to read and follow instructions related to workplace visits
- oral communication skills/language to communicate effectively with others
- numeracy skills to complete basic calculations related to animal care industry profiles
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds.

#### Required knowledge

- basic legislative and regulatory compliance requirements in animal care workplaces
- conditions of employment in animal care sectors
- general job responsibilities in a range of animal care sectors
- general occupational health and safety (OHS) and animal welfare issues in animal care workplaces
- industry dress code and behaviour standards
- principles of animal welfare and ethics
- resume and job application formats
- structure of the major animal care industry sectors.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the range of workplaces and employment opportunities in animal care</li> <li>• determine the structure and scope of animal care industries</li> <li>• identify the range of job functions and working conditions, including conduct and presentation standards, required in animal care</li> <li>• evaluate employment opportunities in animal care</li> <li>• develop draft resume and job application.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit will be assessed in an animal care context with access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• portfolio.</li> </ul>



<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Animal care industry sectors</i></b> may include:	<ul style="list-style-type: none"> <li>• animal technology, including biomedical research</li> <li>• animal control and regulation</li> <li>• captive animals</li> <li>• companion animal services</li> <li>• veterinary practices.</li> </ul>
<b><i>Functionality</i></b> within each animal care industry sector may include:	<ul style="list-style-type: none"> <li>• services available in each sector</li> <li>• relationships between sectors and other industries</li> <li>• industry work conditions</li> <li>• legislation that affects the industry</li> <li>• industrial relations and employment terms and conditions</li> <li>• career opportunities within the industry</li> <li>• appropriate industry work ethic and quality assurance standards.</li> </ul>
<b><i>Conduct and presentation</i></b> that may be relevant include:	<ul style="list-style-type: none"> <li>• conduct: <ul style="list-style-type: none"> <li>• safe behaviour when completing work tasks</li> <li>• punctuality and courtesy</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• cooperating with others</li> <li>• following instructions</li> <li>• presentation: <ul style="list-style-type: none"> <li>• personal and workplace hygiene</li> <li>• wearing personal protective clothing.</li> </ul> </li> </ul>
<i>Animal welfare requirements</i> may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations and international conventions</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Animal studies
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMGAS102A Catch and handle a range of quiet animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the techniques required to approach, catch and handle a range of quiet, well-handled domestic animals under supervision.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This is an introductory unit for those with little or no animal handling experience in commercial or professional settings with the emphasis on handling quiet, well-handled domestic animals under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify and describe animals	1.1. Points of external body parts and features of <i>animals</i> are identified by name and location. 1.2. Animals are described using common industry terminology. 1.3. Individual animals are <i>identified</i> and described using <i>specific characteristics</i> and descriptions.
2. Prepare to catch animals	2.1. <i>OHS risks</i> associated with catching animals are evaluated. 2.2. Signs of confident and relaxed behaviour are identified in animals. 2.3. Signs of fear and distress are identified in animals and reported. 2.4. <i>Catching and handling equipment</i> are identified

ELEMENT	PERFORMANCE CRITERIA
	and prepared for use.
3. Catch and move quiet animals	<p>3.1. <i>Behaviour signals</i> are assessed prior to approaching animals.</p> <p>3.2. <i>Catching technique</i> is selected for nominated animals.</p> <p>3.3. Quiet animals are approached and caught.</p> <p>3.4. Secured animals are moved to required location for treatment or inspection.</p>
4. Assist in restraining or handling animals	<p>4.1. Risks associated with handling animals during inspections and treatment are identified.</p> <p>4.2. Approved <i>basic handling</i> methods are practised on quiet animals under supervision.</p> <p>4.3. Assistance is provided during inspection and treatment of animals.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe and environmentally responsible organisational systems and procedures when handling animals, materials and equipment
- follow workplace procedures for hazard identification and risk control in the catching and handling of animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe and report domestic animal behaviour
- participate in arrangements for maintaining the health and safety of all people and animals in the workplace
- prepare materials, tools and equipment for catching and handling animals
- use equipment and materials correctly and in accordance with manufacturers' specifications
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to select required equipment and prioritise tasks

**REQUIRED SKILLS AND KNOWLEDGE**

- use safe and approved animal handling techniques.

**Required knowledge**

- animal temperaments and behaviours in order to develop an understanding of the associated hazards and risks
- basic awareness of natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- hazards associated with handling animals and control measures
- housing, exercise, social and activity needs of domestic animals
- principles of animal welfare and ethics
- occupational health and safety (OHS) and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe work practices
- terminology used to identify animals and describe their behaviour.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify individual animals
- identify the potential risk factors for animal and human safety and wellbeing when approaching and handling animals
- select catching and handling techniques to minimise the risk of injury or distress
- use appropriate verbal and non-verbal communication skills when approaching, catching or handling quiet domestic animals
- assist in the control of animals during animal care

<b>EVIDENCE GUIDE</b>	
	<p>routines or activities</p> <ul style="list-style-type: none"> <li>• follow supervisor instructions and work as part of a team.</li> </ul> <p>The skills and knowledge required to catch and handle a range of quiet animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, domestic animal zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of quiet, well-handled domestic animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and over a number of assessment activities.</p> <p>The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Animals</i></b> may include:	<ul style="list-style-type: none"> <li>• quiet, well-handled domestic animals:               <ul style="list-style-type: none"> <li>• cats</li> <li>• dogs</li> <li>• birds</li> <li>• non-venomous reptiles and amphibians.</li> </ul> </li> </ul>
Reasons that require staff to <b><i>identify</i></b> animals may include:	<ul style="list-style-type: none"> <li>• carrying out supervisors instructions related to catching under supervision and assisting in the handling of animals</li> <li>• developing the skills required to describe animals using industry terminology as well as common terms</li> <li>• developing the skills required to notice differences between animals for future skill development in:               <ul style="list-style-type: none"> <li>• catching, handling and moving the correct animal unsupervised</li> <li>• ensuring feeding, medications and other treatment are provided to the correct animal</li> <li>• making observations of behaviour and</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	health symptoms in individual animals.
<i>Specific characteristics</i> of animals may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Catching and handling equipment</i> may include:	<ul style="list-style-type: none"> <li>• cages, yards, pens and bags</li> <li>• collars, leads, halters and harnesses</li> <li>• treats and toys.</li> </ul>
<i>Behavioural signs</i> may include:	<ul style="list-style-type: none"> <li>• indicators of stress: <ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation</li> </ul> </li> <li>• confidence and willingness to be approached gestures: <ul style="list-style-type: none"> <li>• relaxed body tone and tail wagging</li> <li>• standing still or remaining sitting or laying down when approached</li> </ul> </li> <li>• defensive gestures: <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• growling, barking, hissing and spitting</li> <li>• hair on topline being raised</li> <li>• lunging forward</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• pecking</li> <li>• striking out with paws</li> <li>• submissive gestures: <ul style="list-style-type: none"> <li>• lowering body</li> <li>• rolling onto back</li> <li>• tail between legs</li> <li>• turning away from handler.</li> </ul> </li> </ul>
<i>Catching technique</i> may include:	<ul style="list-style-type: none"> <li>• calling animal by name</li> <li>• encouraging animal to approach by offering a treat</li> <li>• quietly approaching animal, slipping on collar and attaching lead or catching and holding animal with hands</li> <li>• running animal into a small enclosure.</li> </ul>
<i>Basic handling</i> may include:	<ul style="list-style-type: none"> <li>• using hands to: <ul style="list-style-type: none"> <li>• assist supervisor during application of treatments or other care activities</li> <li>• prevent animal moving away during inspection</li> <li>• separate animal from others</li> </ul> </li> <li>• carrying animals</li> <li>• grooming animals for cleaning or brushing when de-knotting.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMGAS103A Assist in the care of animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers introductory level skills in the basic care of quiet, well-handled animals under supervision.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This is an introductory unit for those with little or no experience working with animals in commercial or professional animal care settings with the emphasis on working with and handling quiet, well-handled domestic animals under supervision and complying with animal care requirements to ensure animal and human health and safety.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Explore workplace activities and basic terminology	<p>1.1. Industry terminology is used to describe and identify animal care workplace activities.</p> <p>1.2. <b><i>Animal care workplace tasks</i></b> are identified and ranked in order of importance to animal wellbeing and general health.</p> <p>1.3. Potential <b><i>occupational health and safety (OHS) risks</i></b> when working with animals are identified and reporting requirements confirmed.</p> <p>1.4. <b><i>Daily workplace information and documentation</i></b> requirements are confirmed with supervisor.</p>
2. Maintain a clean workplace	<p>2.1. Floors benches and other flat areas are cleaned in accordance with workplace protocols.</p> <p>2.2. Animal housing areas are cleaned in accordance with workplace protocols.</p>

ELEMENT	PERFORMANCE CRITERIA
	2.3. Waste and soiled bedding is disposed of in accordance with workplace protocols.
3. Assist in feeding animals	3.1. Food stuffs are identified and categorised for specific animal dietary needs. 3.2. Equipment used in food preparation and distribution is made ready for use. 3.3. Assistance is provided to experienced staff in the preparation and distribution of meals. 3.4. Equipment and materials are cleaned and stored in accordance with organisational policies and procedures.
4. Report basic animal behaviour and health status	4.1. <i>Characteristics of animal behaviour</i> are identified. 4.2. Signs of healthy, sick or distressed animals are identified and behaviour and health status is reported to supervisor.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe and environmentally responsible organisational systems and procedures when handling animals and feed
- document and report basic workplace information related to the daily care of animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- participate in arrangements for maintaining the health and safety of all people and animals in the workplace
- undertake work with animals as directed under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- numeracy skills to estimate, calculate and record routine workplace measures
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds

**REQUIRED SKILLS AND KNOWLEDGE**

- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

**Required knowledge**

- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal feeding and cleaning of housing
- basic awareness of natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- basic nutritional requirements for animals, including water
- cleaning techniques and related safety issues for general workplace and animal housing
- principles of animal welfare and ethics
- processes that support environment and resource efficiencies
- relevant organisational policies and procedures, including OHS and emergency procedures, animal welfare and waste disposal requirements
- safe work practices
- storage, preparation and presentation requirements for food
- types of food and food supplements and their basic role in animal diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- confirm industry terminology used to describe daily work routines and to report observations and

<b>EVIDENCE GUIDE</b>	
	<p>activities to supervisor</p> <ul style="list-style-type: none"> <li>• clean work areas and animal housing in accordance with OHS and organisation policies and procedures</li> <li>• assist in the preparation and distribution of food under supervision</li> <li>• relate basic animal behaviour to animal categories and report observations of live animal behaviour and health status to supervisor.</li> </ul> <p>The skills and knowledge required to assist in the care of animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, domestic animal zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of quiet, well-handled domestic animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animal care workplace tasks</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• assisting in health care of animals</li> <li>• enclosure and bed cleaning and bedding replacement</li> <li>• equipment and consumables stocktake and ordering</li> <li>• exercising animals</li> <li>• feeding and watering animals</li> <li>• following environmentally sustainable work practices</li> <li>• grooming and animal cleaning</li> <li>• information collection, record and resource update</li> <li>• observing animal behaviour and reporting</li> <li>• taking messages and relaying information to appropriate person</li> <li>• cleaning workplace and equipment.</li> </ul>
<p><b><i>OHS risks</i></b> when working with</p>	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches</li> </ul>

<b>RANGE STATEMENT</b>	
animals may include:	<p>and crush injuries</p> <ul style="list-style-type: none"> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Daily workplace information and documentation</i> may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• OHS and emergency procedures and contact information</li> <li>• equipment inventory, damage and repairs registers</li> <li>• provisions records of current stock and items used and items required</li> <li>• staff work roster.</li> </ul>
<i>Characteristics of animal behaviour</i> may include:	<ul style="list-style-type: none"> <li>• indicators of stress: <ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation</li> </ul> </li> <li>• confidence and willingness to be approached <ul style="list-style-type: none"> <li>gestures: <ul style="list-style-type: none"> <li>• relaxed body tone and tail wagging</li> <li>• standing still or remaining sitting or laying down when approached</li> </ul> </li> </ul> </li> <li>• defensive gestures: <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• growling, barking, hissing and spitting</li> <li>• hair on topline being raised</li> <li>• lunging forward</li> <li>• pecking</li> <li>• striking out with paws</li> </ul> </li> <li>• submissive gestures:</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• lowering body</li> <li>• rolling onto back</li> <li>• tail between legs</li> <li>• turning away from handler.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	General animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS201A Work in the animal care industry

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the terminology, culture and working conditions of an animal care workplace when working on an individual basis and with others.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Contribute to a productive work environment	<p>1.1.<b><i>Information</i></b> on working in the industry, including employment terms and conditions is collected and interpreted.</p> <p>1.2. Personal work practices are performed to contribute positively to quality, productivity and effective relationships in the work environment.</p> <p>1.3. Industry and workplace-specific management structures and lines of reporting are complied with.</p> <p>1.4. Work schedule is followed in accordance with organisational <b><i>policies and procedures</i></b></p> <p>1.5. Job-specific work practices are performed to comply with the principles of ethical conduct, <b><i>occupational health and safety (OHS)</i></b> guidelines, environmental processes and industry best practice.</p>

ELEMENT	PERFORMANCE CRITERIA
	1.6. The need for workplace confidentiality is understood and observed.
2. Recognise animals in the workplace	2.1. A <i>range of animals</i> commonly found in the workplace is identified in accordance with organisational requirements. 2.2. Animals are described using <i>identifiable characteristics</i> .
3. Use industry terminology	3.1. Industry terminology related to work personnel, equipment and work practices is interpreted and used in work activities 3.2. Language style, terminology and manner used are appropriate to those being communicated with.
4. Incorporate animal needs in conduct of work practices	4.1. Animal facilities and workplace protocols are evaluated in relation to animal needs. 4.2. <i>Work routines</i> are completed with consideration of animal health and wellbeing priorities. 4.3. Animal handling and interaction is conducted with consideration of the social and behavioural characteristics of animals. 4.4. <i>Hygiene protocols</i> are completed to ensure animal health. 4.5. <i>Security protocols</i> are completed to ensure animal safety.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- comply with hygiene practices to ensure human and animal health
- comply with OHS and animal welfare legislations and regulations
- comply with workplace confidentiality requirements
- follow sequenced written instructions, and record information accurately and legibly
- interpret and use industry terminology in a range of situations
- interpret workplace duties and conditions of employment
- literacy skills to read and follow organisational policies and procedures, including

## REQUIRED SKILLS AND KNOWLEDGE

### OHS

- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe and approved animal handling techniques.

### Required knowledge

- animal temperaments and behaviours in order to develop an understanding of the associated hazards and risks
- appropriate behaviour relating to anti-discrimination and sexual harassment
- basic legislative and regulatory compliance requirements in animal care workplaces
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- communication procedures, systems, and technology relevant to the organisation and the individual's work responsibilities
- effective communication in a work team
- environmental impacts on animal health and wellbeing
- general job responsibilities in a range of animal care sectors
- hazards associated with handling animals and control measures
- housing, exercise, social and activity needs of animals
- industry employment terms and conditions and career pathways
- industry expectations of conduct, presentation and work performance, including quality and productivity
- terminology and language variations used by workplace staff and the public to describe animals, their behaviour, status, health and treatments
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials
- zoonotic diseases associated with animal care and methods of prevention and control.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• conduct animal care work practices with consideration to animal needs in an ethical and humane manner</li> <li>• comply with relevant legislation, regulations and codes of practice, including animal welfare and OHS legislation</li> <li>• communicate effectively with supervisor and other staff using industry related terminology and follow task instructions to complete work activities.</li> </ul> <p>The skills and knowledge required to work in the animal care industry must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, mobile animal facilities, veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p>



<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Industry information</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• services available in each sector: <ul style="list-style-type: none"> <li>• animal technology, including biomedical research</li> <li>• animal control and regulation</li> <li>• captive animals</li> <li>• companion animal services</li> <li>• veterinary practices</li> </ul> </li> <li>• relationships between sectors and other</li> </ul>

<b>RANGE STATEMENT</b>	
	industries <ul style="list-style-type: none"> <li>• industry work conditions</li> <li>• legislation that affects the industry</li> <li>• industrial relations and employment terms and conditions</li> <li>• career opportunities within the industry</li> <li>• appropriate industry work ethics</li> <li>• industry quality assurance standards.</li> </ul>
<i>Policies and procedures</i> may include:	<ul style="list-style-type: none"> <li>• animal welfare, including ethical use of animals for scientific or teaching purposes</li> <li>• environmental sustainability practices</li> <li>• infection control plans</li> <li>• quality assurance systems</li> <li>• standard operating procedures.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Range of animals</i> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species.</li> </ul>
<i>Identifiable animal characteristics</i> may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands</li> <li>• movement and behaviour of animals.</li> </ul>
<i>Work routines</i> may include:	<ul style="list-style-type: none"> <li>• assisting others in completion of tasks within limits of current level of competence</li> <li>• catching and handling animals under</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>supervision</p> <ul style="list-style-type: none"> <li>• checking animals for signs of distress, illness and injury</li> <li>• checking security and repair of animal housing, equipment and general facility</li> <li>• cleaning and grooming animals under supervision</li> <li>• cleaning and preparation of animal cages, enclosures, exhibits, displays, general work areas, office, reception and customer service areas</li> <li>• confirming all animals are in their cages or enclosures</li> <li>• documenting work tasks in accordance with workplace procedures</li> <li>• operating general equipment used to complete workplace cleaning routines</li> <li>• picking up rubbish, removing branches or other unsightly items not part of exhibit or animal housing</li> <li>• reporting animal health concerns to supervisor</li> <li>• stocktaking and re-supply of items</li> <li>• timeframes for completing tasks.</li> </ul>
<i>Hygiene protocols</i> may include:	<ul style="list-style-type: none"> <li>• appropriate reprocessing of reusable equipment</li> <li>• aseptic technique</li> <li>• housing and work area cleaning and disinfecting standards</li> <li>• personal hygiene practices especially washing and drying hands before and after animal contact and/or any activity likely to cause cross-contamination</li> <li>• safe handling and disposal of sharps and other clinical, related and general waste</li> <li>• surface cleaning and management of blood and bodily fluid spills</li> <li>• use of personal protective clothing and equipment and change as appropriate for the intended use.</li> </ul>
<i>Security protocols</i> may include:	<ul style="list-style-type: none"> <li>• checking for pests within animal housing or enclosures</li> <li>• checking there are no unauthorised people in animal enclosures</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• checking that locks and slides are in good working order</li> <li>• ensuring animals are safe and secure in their housing</li> <li>• ensuring medications and treatments are stored in accordance with legislative requirements</li> <li>• identifying any animal housing faults that may result in escape</li> <li>• maintaining structures in good order.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS202A Participate in workplace communications

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of effectively participating in workplace communications in an animal care and management environment.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Follow routine spoken messages	1.1. Required information is gathered by listening and is correctly interpreted. 1.2. Instructions and procedures are followed in an appropriate sequence for the task and in accordance with the information received. 1.3. Clarification is sought from the workplace supervisor on all occasions when any instruction or procedure is not understood.
2. Perform workplace duties following routine written notices	2.1. <b><i>Written notices</i></b> and instructions are read and interpreted correctly. 2.2. Routine written instructions and procedures are followed in sequence. 2.3. Clarification is sought from the workplace supervisor on all occasions when any instruction or

ELEMENT	PERFORMANCE CRITERIA
	procedure is not understood.
3. Obtain and provide information in response to workplace requirements	<p>3.1. Specific <i>relevant information</i> is obtained from the relevant <i>source</i>.</p> <p>3.2. Information is interpreted correctly.</p> <p>3.3. Information is provided clearly and precisely in written or verbal format as required.</p> <p>3.4. Personal <i>interaction</i> is courteous and enquiries are made clearly and concisely.</p> <p>3.5. Defined procedures for the location and <i>storage</i> of information are used.</p>
4. Complete relevant work-related documents	<p>4.1. <i>Work-related documents</i> are completed accurately and legibly.</p> <p>4.2. Workplace data is recorded manually or electronically using standard workplace forms and documents.</p> <p>4.3. Basic mathematical processes are used for <i>routine workplace calculations</i>.</p> <p>4.4. Errors in recording information on forms and documents are identified and rectified.</p> <p>4.5. Reporting requirements to supervisor are completed according to organisational guidelines.</p>
5. Participate in <i>workplace meetings and discussions</i>	<p>5.1. Team meetings are attended on time.</p> <p>5.2. Own opinions are clearly expressed and those of others are listened to without interruption.</p> <p>5.3. Meeting inputs are consistent with the meeting purpose and established <i>protocols</i>.</p> <p>5.4. <i>Workplace interactions</i> are conducted in a courteous manner.</p> <p>5.5. Questions about routine workplace procedures and matters concerning conditions of employment are asked and responded to.</p> <p>5.6. Outcomes of meetings and discussions are interpreted and implemented within own responsibility.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

### Required skills

- literacy skills to read, select and follow organisational policies and procedures, including occupational health and safety (OHS); follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- numeracy skills to estimate, calculate and record routine workplace measures, such as animal vital signs and food and water rations/intake for animals
- problem-solving skills to use available resources and prioritise daily tasks.

### Required knowledge

- different modes of communication (e.g. written, verbal and non-verbal)
- effective communication, including the role of non-verbal communication
- effective communication in a work team
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- OHS legislative requirements and codes of practice.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- follow routine spoken messages
- follow workplace written notices when performing workplace duties, including instructions and



<b>EVIDENCE GUIDE</b>	
	<p>organisational policies and procedures</p> <ul style="list-style-type: none"> <li>• obtain and provide information in response to workplace requirements</li> <li>• communicate effectively with supervisor, clients and other staff</li> <li>• participate in workplace meetings and discussions</li> <li>• complete forms and record workplace data.</li> </ul> <p>The skills and knowledge required to participate in workplace communications must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit may be completed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, mobile animal facilities, veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• workplace documentation</li> <li>• third-party evidence.</li> </ul>

<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Written notices</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• docket with customer/client details</li> <li>• enterprise-specific data</li> <li>• industry network details</li> <li>• instructions</li> <li>• labels, symbols, signs, tables and simple graphs</li> <li>• notes, rosters and messages</li> <li>• organisational policies and procedures</li> <li>• OHS information and safety material</li> <li>• patient treatment sheets, cage cards and client notices</li> <li>• personnel information</li> <li>• standard operating procedures.</li> </ul>
<p><b><i>Relevant information</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal feeding regimes</li> <li>• animal health and welfare procedures</li> <li>• customer/client details</li> <li>• manufacturers' specifications for equipment/machinery</li> <li>• material safety data sheets (MSDS)</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>organisational policies and procedures</li> <li>safe operating procedures</li> <li>terms and conditions of employment.</li> </ul>
<i>Source</i> may include:	<ul style="list-style-type: none"> <li>customer/clients</li> <li>industry associations and bodies</li> <li>local government</li> <li>supervisors</li> <li>suppliers</li> <li>training personnel</li> <li>work/team mates.</li> </ul>
<i>Interaction</i> with others should be conveyed:	<ul style="list-style-type: none"> <li>efficiently, effectively, responsively, courteously and supportively</li> <li>presenting the organisation in a positive way</li> <li>using correct forms of greeting, identification and address as required.</li> </ul>
Data <i>storage</i> may include:	<ul style="list-style-type: none"> <li>manual or computer-based filing systems relevant to the organisation.</li> </ul>
<i>Work-related documents</i> may include:	<ul style="list-style-type: none"> <li>animal health records within level of own responsibility</li> <li>animal nutrition records within level of own responsibility</li> <li>cleaning and maintenance records</li> <li>personnel forms</li> <li>telephone message forms</li> <li>safety reports</li> <li>work rosters and daily work schedules.</li> </ul>
<i>Routine workplace calculations</i> may be required to:	<ul style="list-style-type: none"> <li>measure and record animal vital signs</li> <li>record animal food rations and water provided</li> <li>record animal food and water intake.</li> </ul>
<i>Workplace meetings and discussions</i> may include:	<ul style="list-style-type: none"> <li>formal and informal group or team meetings</li> <li>small and large groups or teams</li> <li>teams based on work function, level of supervision work rosters or other criteria.</li> </ul>
<i>Protocols</i> may include:	<ul style="list-style-type: none"> <li>complying with meeting decisions and obeying meeting instructions</li> <li>observing meeting conventions.</li> </ul>
<i>Workplace interactions</i> may include:	<ul style="list-style-type: none"> <li>verbal discussions: <ul style="list-style-type: none"> <li>electronic and two-way radio</li> <li>face to face</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• telephone</li> <li>• written interactions: <ul style="list-style-type: none"> <li>• electronic</li> <li>• memos</li> <li>• diagrams</li> <li>• instructions and forms</li> <li>• notice boards</li> </ul> </li> <li>• non-verbal interactions: <ul style="list-style-type: none"> <li>• body language</li> <li>• gestures</li> <li>• signals and signs.</li> </ul> </li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	General animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS203A Complete animal care hygiene routines

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the responsibilities and procedures required to provide daily care of animals, including the cleaning of animal housing and grooming or cleaning of animals under supervision.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Confirm workplace animal care routine schedules	1.1. Daily, weekly and periodical <b><i>workplace routine</i></b> schedules are identified and confirmed with supervisor. 1.2. Personal workplace responsibilities are clarified. 1.3. Workplace schedule and recording documents are collected and updated as required.
2. Check animals	2.1. <b><i>Animals</i></b> under personal responsibility during shift are clarified. 2.2. <b><i>Animal status</i></b> is verified via records or verbal reports. 2.3. Animals are counted and basic behaviour is noted at beginning of shift. 2.4. Changes in animal numbers, behaviour or condition

ELEMENT	PERFORMANCE CRITERIA
	<p>are reported to supervisor.</p> <p>2.5. Animals under personal responsibility are checked and status reported.</p>
3. <i>Maintain a clean workplace</i>	<p>3.1. Floors benches and other flat areas are cleaned in accordance with workplace protocols.</p> <p>3.2. Animal housing areas are cleaned in accordance with workplace protocols.</p> <p>3.3. Waste and soiled bedding is disposed of in accordance with workplace protocols.</p> <p>3.4. Damage to housing and equipment is identified and reported.</p> <p>3.5. Post-cleaning procedures are completed.</p>
4. Complete hygiene practices for animals	<p>4.1. <i>Hygiene control</i> methods for a range of animals are identified and practiced.</p> <p>4.2. Basic animal hygiene inspection is performed and cleaning needs of nominated animals are identified.</p> <p>4.3. Animals are bathed or cleaned under supervision.</p> <p>4.4. Grooming techniques are determined in accordance with individual animal requirements.</p> <p>4.5. Animals are groomed according to individual needs under supervision.</p>
5. Complete post-hygiene care of animals	<p>5.1. Animals are returned to housing.</p> <p>5.2. Washing equipment is cleaned and stored.</p> <p>5.3. Grooming tools are cleaned, checked and stored.</p> <p>5.4. Damaged tools are reported to supervisor.</p> <p>5.5. Supplies are audited and documented in accordance with workplace procedures.</p> <p>5.6. <i>Workplace documents</i> are updated as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ safe and environmentally responsible organisational systems and procedures when working with animals

## REQUIRED SKILLS AND KNOWLEDGE

- identify common indicators of the presence of disease, injury, compromised health or distress in animals
- interpret and report basic workplace information related to the daily care of animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe, document and report findings on animal health and behaviour using workplace protocols and procedures
- participate in arrangements for maintaining the health and safety of all people and animals in the workplace
- prepare materials, tools and equipment
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to follow sequenced written instructions, and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

## Required knowledge

- animal care and hygiene principles
- animal housing cleaning techniques and equipment
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal handling and cleaning of housing
- basic animal grooming techniques and equipment
- basic awareness of natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- housing, exercise, social and activity needs of animals
- indicators of poor response to treatment or management of young, ill, injured or compromised animals
- organisation policies, procedures and requirements, including OHS and emergency procedures
- principles of animal welfare and ethics
- protocols, legal and ethical considerations in documenting observations, measurements, treatments and decisions on animal care
- regulations relating to the disposal of hazardous waste



**REQUIRED SKILLS AND KNOWLEDGE**

- relevant occupational health and safety (OHS) and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe use of chemicals and cleaning agents
- terminology used to identify animals and describe their behaviour
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- confirm animal care routines required, clean and maintain animal housing and related facilities
- maintain animal comfort and health through cleaning and grooming of animals
- report and document personal animal care duties
- monitor animals and report issues as required according to workplace protocols and procedures.

The skills and knowledge required to complete animal care hygiene routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal

<b>EVIDENCE GUIDE</b>	
	<p>shelters, zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of one species from at least two of the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Workplace routines</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• assisting others in completion of tasks within limits of current level of competence</li> <li>• catching and handling animals under supervision</li> <li>• checking animals for signs of distress, illness and injury</li> <li>• checking security and repair of animal housing, equipment and general facility</li> <li>• cleaning and grooming animals under supervision</li> <li>• cleaning and preparation of animal cages, enclosures, exhibits, displays, general work areas, office, reception and customer service areas</li> <li>• confirming all animals are in their cages or enclosures</li> <li>• documenting work tasks in accordance with workplace procedures</li> <li>• operating general equipment used to complete workplace cleaning routines</li> <li>• picking up rubbish, removing branches or other unsightly items not part of exhibit or animal housing</li> <li>• reporting animal health concerns to supervisor</li> <li>• stocktaking and re-supply of items</li> <li>• timeframes for completing tasks.</li> </ul>
<p><b><i>Animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<p><b><i>Animal status</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• counting animals</li> <li>• observing and reporting unusual behaviour for nominated animal:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• aggression or docility (depending on animal)</li> <li>• disinterest in surroundings, other animals, people or usual stimuli</li> <li>• excessive licking, scratching and rubbing</li> <li>• lethargy</li> <li>• nest building</li> <li>• self mutilation</li> <li>• trembling</li> <li>• vocalising</li> <li>• observing and reporting indicators of illness or injury: <ul style="list-style-type: none"> <li>• bleeding</li> <li>• changes in drinking or eating patterns</li> <li>• lameness or reluctance to move and vocalising when attempting to move</li> <li>• swelling</li> <li>• unusual amounts, colour or texture of faeces.</li> </ul> </li> </ul>
<p><i>Maintaining a clean workplace</i> may include:</p>	<ul style="list-style-type: none"> <li>• animal housing: <ul style="list-style-type: none"> <li>• adjusting animal housing features according to weather and climatic conditions</li> <li>• collection and removal of faeces</li> <li>• completing cleaning routines for sick or quarantined animals to avoid cross-contamination</li> <li>• emptying and cleaning water and feeding receptacles using approved cleaning products and methods</li> <li>• refilling water containers</li> <li>• removing rubbish from housing and surrounding areas</li> <li>• removing soiled bedding and disposing in approved area</li> <li>• replacement of housing furniture items, such as vegetation and behaviour stimulation items under direction of supervisor</li> <li>• resetting of clean bedding materials</li> <li>• washing down of toilet areas to remove urine and faeces using approved cleaning</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>products and methods</p> <ul style="list-style-type: none"> <li>• general work area cleaning: <ul style="list-style-type: none"> <li>• emptying rubbish bins, picking up general litter within the workplace</li> <li>• vacuuming, sweeping, floor cleaning</li> <li>• using non-disrupting cleaning methods to control potential biohazards, when required</li> <li>• washing and wiping down work areas, benches and equipment</li> </ul> </li> <li>• storing equipment to avoid slip and trip hazards</li> <li>• reporting damaged equipment.</li> </ul>
<p><i>Hygiene control</i> practices may include:</p>	<ul style="list-style-type: none"> <li>• aseptic technique</li> <li>• checking animals skin, coat, shell, carapace or other external features for: <ul style="list-style-type: none"> <li>• foreign objects such as grass seeds, sticks or other vegetation and hardware, such as nails</li> <li>• general condition</li> <li>• signs of coat, skin, shell and carapace shedding</li> <li>• signs of damage, including cracks, breaks, splits, exudates and, tenderness</li> <li>• signs of dirt, faeces, food or other items</li> <li>• signs of parasites, including presence of eggs, blisters or other lesions, rubbed areas of coat, skin texture changes and colour changes</li> </ul> </li> <li>• completing infection control procedures as required</li> <li>• grooming animals to remove shedding coat or skin, if required, or for general health and wellbeing</li> <li>• isolating potentially contagious or ill animals under supervision</li> <li>• personal hygiene practices especially washing and drying hands (e.g. before and after animal contact)</li> <li>• providing housing furnishings to assist animal to complete own shedding process</li> <li>• referring to supervisor animals that may require: <ul style="list-style-type: none"> <li>• wound and injury management treatment</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• examination in relation to potential contagious conditions</li> <li>• repairs to shell</li> <li>• use of personal protective equipment</li> <li>• washing animal to remove dirt, foreign objects, parasites and other undesirable items.</li> </ul>
<i>Workplace documents</i> may include:	<ul style="list-style-type: none"> <li>• animal health records</li> <li>• chemical register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• facility damage and repair register</li> <li>• incident reports</li> <li>• message recording systems</li> <li>• stock control records</li> <li>• safe operating procedures.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	General animal studies
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

## ACMGAS204A Feed and water animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of preparing, presenting and distributing food and water for animals under supervision and according to workplace diet requirements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for feeding	<p>1.1. Basic nutritional needs of common companion <i>animals</i> are identified.</p> <p>1.2. Food and <i>food supplements</i> are identified and prepared in line with <i>feeding plans</i>.</p> <p>1.3. Food temperature requirements for preparation and storage are followed.</p> <p>1.4. <i>Hazards to human and animal health</i> in food preparation and distribution are identified and reported to supervisor.</p> <p>1.5. Food and water containers appropriate to the animal and situation are checked for cleanliness before use.</p>
2. Feed and water animals	2.1. Food and food supplements are provided in accordance with feeding plans and organisational policies and procedures.



ELEMENT	PERFORMANCE CRITERIA
	<p>2.2. Food and water supply are checked and maintained according to feeding plans.</p> <p>2.3. Feeding process is monitored to ensure animals are feeding effectively in accordance with feeding plans.</p> <p>2.4. Variations to individual eating and drinking patterns are noted and reported to supervisor.</p>
3. Complete the feeding and watering process	<p>3.1. Feeding and watering process is recorded in accordance with organisational procedures.</p> <p>3.2. <i>Eating and drinking abnormalities</i> are recorded and reported to the supervisor according to organisational policies and procedures.</p> <p>3.3. Feeding equipment and supplies are hygienically cleaned and stored according to organisational policies and procedures.</p> <p>3.4. Food and food supplement stock levels are recorded and reported to supervisor.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- comply with basic legislative and regulatory compliance requirements in animal care workplaces
- employ safe and environmentally responsible organisational systems and procedures when handling animals and feed
- identify common feedstuffs and relate these to animal dietary requirements
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- use chemicals and cleaning agents to clean feeding equipment and workplace in accordance with state or territory legislation and organisational policies and procedures
- use equipment and machinery correctly and safely
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS); follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfill the job role as specified by the

## REQUIRED SKILLS AND KNOWLEDGE

organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor

- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- use personal protective clothing and equipment correctly
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- animal care and hygiene principles
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal feeding
- basic nutritional needs, including water of animals and feedstuffs suitable to provide these nutrients to a range of animals of various ages, status and conditions
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- hazards to animals and humans in the preparation, distribution and storage of feedstuffs
- methods of transmission of disease and infection
- methods used to prepare and present feedstuff to animals according to dietary, physiological and behavioural needs
- organisational policies, procedures and requirements, including OHS, emergency procedures and feeding animals
- physiological features of animals
- principles of animal welfare and ethics
- protocols and ethical considerations in the relay of information to others
- regulations relating to the disposal of hazardous waste
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe use of chemicals and cleaning agents
- storage requirements for food
- terminology used to identify animals and describe their behaviour
- types of mould and bacteria in food preparation areas
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• follow feeding plan to meet the nutritional requirements of animals and report variations</li> <li>• handle and store feed to maintain nutritional value and safe-to-feed status</li> <li>• provide appropriately prepared and presented food and water to animal</li> <li>• document feed supplies usage and feeding habits of animals, including eating and drinking abnormalities, and report to supervisor.</li> </ul> <p>The skills and knowledge required to feed and water animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of one species from at least two of the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</p>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>

<b>RANGE STATEMENT</b>	
<b><i>Animals</i></b> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<b><i>Food supplements</i></b> may include:	<ul style="list-style-type: none"> <li>• trace elements, vitamins, minerals and sources of specific-purpose nutrients that cannot be adequately provided in feedstuffs for specific dietary requirements.</li> </ul>
<b><i>Feeding plans</i></b> may consider:	<ul style="list-style-type: none"> <li>• available food sources</li> <li>• feeding frequency and rates</li> <li>• feeding methods and procedures</li> <li>• how to introduce animals to dietary changes</li> <li>• nutrient requirements for particular animal status and condition</li> <li>• presentation of food that stimulates activity and allows animal to mimic normal wild activity</li> <li>• reporting and recording requirements</li> <li>• supervisor's instructions</li> <li>• target weights</li> <li>• weed and pest control strategy.</li> </ul>
<b><i>Hazards to animals and humans</i></b> in food preparation and distribution may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• excessive noise</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• organic and other dusts</li> <li>• possibility of zoonotic infection</li> <li>• shelf life of foodstuffs.</li> </ul>
<b><i>Eating and drinking abnormalities</i></b> may include:	<ul style="list-style-type: none"> <li>• changes in feeding behaviours: <ul style="list-style-type: none"> <li>• gorging</li> <li>• increased water intake</li> <li>• reluctance to eat</li> <li>• reluctance to eat previously accepted feedstuffs</li> </ul> </li> <li>• general observation of sick animals, weight loss, scouring and ill thrift.</li> </ul>

### Unit Sector(s)

Unit sector	Animal studies
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMGAS205A Assist in health care of animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing assistance to experienced staff in the capture, restraint and assessment of animals and the preparation, application and documentation of treatments.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assist in capture of animals	<p>1.1. <b><i>Animal</i></b> behaviour is observed and noted prior to capture.</p> <p>1.2. <b><i>Methods to be used to capture animals</i></b> are confirmed with supervisor.</p> <p>1.3. Role of self and others in capture process are clarified in accordance with <b><i>occupational health and safety (OHS)</i></b> and workplace requirements.</p> <p>1.4. <b><i>Positive identification</i></b> of animals to be treated is confirmed with supervisor.</p> <p>1.5. Assistance is provided in moving animal to inspection area.</p>
2. Assist in assessment of animals	<p>2.1. Animal is appropriately <b><i>restrained</i></b> under supervision.</p> <p>2.2. <b><i>External features</i></b> and <b><i>vital signs</i></b> of animal health</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>are determined.</p> <p>2.3. Animal is inspected under supervision for general health and wellbeing and findings reported.</p> <p>2.4. Supervisor's observations on animal health are recorded.</p>
3. Assist in treatment of animals	<p>3.1. <i>Equipment and supplies</i> are prepared according to instructions.</p> <p>3.2. Treatment protocols for <i>common health maintenance issues</i> are determined.</p> <p>3.3. Assistance is provided in the application of treatments.</p> <p>3.4. Treatment is documented using workplace protocols.</p> <p>3.5. <i>Post-treatment routines</i> are completed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- comply with basic legislative and regulatory compliance requirements in animal care workplaces
- employ safe and environmentally responsible organisational systems and procedures when working with animals
- identify common indicators of the presence of disease and infection processes
- identify signs of progress or deterioration in condition or health of animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure animal vital signs and hydration status
- participate in arrangements for maintaining the health and safety of all people and animals in the workplace
- use chemicals and cleaning agents to clean treatment areas and workplace in accordance with state or territory legislation and organisational policies and procedures
- use equipment and machinery correctly and safely
- literacy skills to read and follow organisational policies and procedures, including OHS
- oral communication skills/language to fulfill the job role as specified by the

## REQUIRED SKILLS AND KNOWLEDGE

organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor

- numeracy skills to estimate, calculate and record routine workplace measures
- use personal protective clothing and equipment correctly
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- animal care and hygiene principles
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal capture, restraint, inspection and treatment
- common ailments, disease and injury indicators
- common health maintenance issues and treatment protocols
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- examination techniques for health status
- methods of transmission of disease and infection
- methods used to capture, restrain and examine animals
- organisational policies, procedures and requirements, including OHS, emergency procedures and treatment programs
- physiological features of animals
- principles of animal welfare and ethics
- regulations relating to the disposal of hazardous waste
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- storage and security requirements for medications
- terminology used to identify animals and describe their behaviour
- vital signs, their normal range and reasons for concern for measurements outside normal range
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• observe animal behaviour to identify potential health problems and in order to determine tactics required to catch animals</li> <li>• assist others in the capture, removal and restraint of animals in accordance with OHS and workplace requirements</li> <li>• identify individual animals, measure their vital signs and conduct a basic visual and external assessment under supervision</li> <li>• assist in the application or administration of treatment</li> <li>• document observations and treatments</li> <li>• clean inspection and treatment areas.</li> </ul> <p>The skills and knowledge required to assist with the health care of animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of one species from at least two of the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</p>
<b>Method of assessment</b>	To ensure consistency in one's performance, competency

<b>EVIDENCE GUIDE</b>	
	<p>should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Animals</i></b> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and introduced species</p> <ul style="list-style-type: none"> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<p><i>Capture methods to be used</i> may include:</p>	<ul style="list-style-type: none"> <li>• calling animal by name and approaching using non-threatening body language</li> <li>• collecting animal from cage or enclosure</li> <li>• holding barriers in place whilst supervisor catches animal</li> <li>• using catching poles, leads, blankets or nets</li> <li>• waiting for supervisor to initially catch animal</li> <li>• working with supervisor to corner animal.</li> </ul>
<p><i>OHS risks</i> when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<p>Relevant <i>OHS requirements</i> may include:</p>	<ul style="list-style-type: none"> <li>• following safe work method statements in the conduct of work tasks</li> <li>• hazard identification and risk minimisation procedures for the handling of animals</li> <li>• hazard identification and risk minimisation procedures for the handling, use, storage, transport and disposal of chemicals</li> <li>• manual handling strategies</li> <li>• procedures for the handling and disposal of biological wastes</li> <li>• use of personal protective clothing and equipment relevant to the task: <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• gloves</li> <li>• hearing or eye protection</li> <li>• protective masks</li> <li>• work boots.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<i>Positive identification</i> may include:	<ul style="list-style-type: none"> <li>• checking brands, tattoos or other tagging</li> <li>• checking for microchip and verifying number</li> <li>• checking for response when calling animal by name</li> <li>• comparing colour and markings with records</li> <li>• confirming identification of animal with owner</li> <li>• confirming sex of animal.</li> </ul>
Methods used to keep animal <i>restrained</i> may include:	<ul style="list-style-type: none"> <li>• confining animal using a towel or other cloth</li> <li>• holding animal after supervisor has fitted restraints</li> <li>• holding animal ensuring close body contact and ensuring full control over animal's head and limbs</li> <li>• using collar and lead to keep animal still</li> <li>• using hand pressure.</li> </ul>
<i>External features and vital signs</i> may include:	<ul style="list-style-type: none"> <li>• external features: <ul style="list-style-type: none"> <li>• body condition score</li> <li>• coat or skin condition</li> <li>• ear, eye, nose presence or absence of discharge</li> <li>• eye condition and response to light</li> <li>• presence of wounds, lesions, swelling or heat</li> <li>• smell of breath</li> </ul> </li> <li>• vital signs: <ul style="list-style-type: none"> <li>• temperature</li> <li>• pulse</li> <li>• respiration</li> <li>• capillary refill</li> <li>• hydration status.</li> </ul> </li> </ul>
<i>Equipment and supplies</i> may include:	<ul style="list-style-type: none"> <li>• forceps, scissors and clippers</li> <li>• scales</li> <li>• shampoo and skin treatments</li> <li>• thermometer and stethoscope</li> <li>• vaccines, syringes, needles and sharps disposal container</li> <li>• worming syringe or tube and medications</li> <li>• wound cleaning solution, gauze and topical creams.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Common health maintenance issues</i> may include:	<ul style="list-style-type: none"> <li>• annual health check-up</li> <li>• coat or skin care and condition</li> <li>• contagious diseases</li> <li>• control of parasites</li> <li>• digestive upsets and dietary imbalances</li> <li>• immunisation/vaccinations requirements</li> <li>• injuries</li> <li>• insect control</li> <li>• quarantine of sick animals</li> <li>• species specific ailments.</li> <li>•</li> </ul>
<i>Post-treatment routines</i> may include:	<ul style="list-style-type: none"> <li>• checking and reporting stock supply quantities</li> <li>• cleaning and disinfecting treatment area</li> <li>• completing required documentation as directed</li> <li>• disposing of sharps and contaminated or used materials</li> <li>• monitoring animal after treatment</li> <li>• preparing equipment for sterilisation</li> <li>• returning animal to owner or enclosure.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

<b>Co-requisite units</b>		

<b>Co-requisite units</b>		



## ACMGAS206A Provide basic first aid for animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing essential first aid for animals by recognising and responding to an emergency using basic first aid measures. The first aider is not expected to deal with complex casualties or incidents, but to provide an initial response where first aid is required.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care may occur in a wide variety of workplaces, including retail pet stores, kennels and catteries, shelters, veterinary practices, zoos, animal research facilities and others.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Assess the situation	1.1. <b><i>Emergency situation</i></b> is recognised. 1.2. Physical <b><i>hazards</i></b> to self, bystanders, the public and the animal are identified. 1.3. Action is taken to minimise the immediate <b><i>risk</i></b> to self, bystanders, the public and the <b><i>animal</i></b> . 1.4. <b><i>Physical condition and vital signs</i></b> of the animal are assessed.
2. Assist in assessment of animals	2.1. Animal is reassured in a caring manner and made comfortable using available resources. 2.2. Animal is handled safely and humanely to minimise pain and further injuries. 2.3. <b><i>Basic first aid care</i></b> is provided in accordance with established animal first aid principles

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. <i>First aid assistance</i> is sought from others as appropriate and required.</p> <p>2.5. <i>Occupational health and safety (OHS) procedures</i> and <i>personal protective equipment</i> are used at all times when handling animals.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when handling animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- respond to emergencies in line with practised actions
- literacy skills to read and follow organisational policies and procedures, including OHS; follow sequenced written instructions; and record the information accurately and legible
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- use personal protective clothing and equipment correctly
- problem-solving skills to use available resources and determine who to contact for assistance
- use safe manual handling techniques and/or equipment.

#### Required knowledge

- animal emergency network
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal capture, restraint, inspection and treatment
- basic animal care and hygiene principles
- basic first aid techniques

## REQUIRED SKILLS AND KNOWLEDGE

- first aid casualty management principles
- first aid sources for assistance
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- examination techniques for health status
- methods used to capture, restrain and examine animals
- organisation policies and procedures, including OHS and emergency procedures
- physical conditions and vital signs of animals
- physiological features of animals
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques and procedures
- safe work practices
- zoonotic diseases.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess an emergency situation
- determine hazards and minimise risk to self, bystanders, the public and the animal
- apply basic first aid and care to animals
- seek assistance during the application of first aid
- communicate effectively with others and follow instructions.

The skills and knowledge required to provide basic first aid for animals must be transferable to a range of work environments and contexts and include the ability to deal

<b>EVIDENCE GUIDE</b>	
	with unplanned events.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, mobile animal facilities and veterinary practices.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of one species from at least two of the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities,

**EVIDENCE GUIDE**

	Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Emergency situations*** may include:

- natural or human disasters:
  - building destruction
  - drought, flood or earthquakes
  - fire, fuel and/or chemical spillage
- life threatening disease or biohazard
- trauma:
  - cardiac arrest
  - exhaustion due to exercise or workload
  - exposure to climatic conditions
  - electrocution
  - fight or flight response
  - non-infectious diseases (e.g. diabetes and respiratory)
  - poisoning
  - respiratory distress
  - road accidents.

***Hazards*** may include:

- animal:
  - size
  - number
  - temperament
- behaviour
- fire, gas, fumes and electrical situations
- injuries
- lack of oxygen

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• proximity of other people and animals</li> <li>• vehicles and machinery.</li> </ul>
<i>Risks</i> may include:	<ul style="list-style-type: none"> <li>• risks to self, bystanders and public: <ul style="list-style-type: none"> <li>• animal attempting to escape</li> <li>• bites, scratches and wounds associated with animal handling</li> <li>• envenomation</li> <li>• kicks and crushes associated with animal handling</li> <li>• lifting and moving animals</li> <li>• zoonoses</li> </ul> </li> <li>• risks to animals: <ul style="list-style-type: none"> <li>• animal being harmed further (going into shock) as a result of human intervention</li> <li>• animal trying to escape and causing itself further injuries.</li> </ul> </li> </ul>
<i>Animals</i> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<i>Physical condition and vital signs</i> may include:	<ul style="list-style-type: none"> <li>• physical condition: <ul style="list-style-type: none"> <li>• broken bones</li> <li>• burns</li> <li>• lacerations</li> <li>• other injuries, trauma and medical conditions</li> <li>• scratches</li> </ul> </li> <li>• vital signs: <ul style="list-style-type: none"> <li>• hydration status</li> <li>• pulse rates</li> <li>• respiration</li> <li>• temperature.</li> </ul> </li> </ul>
<i>Basic first aid care</i> may include:	<ul style="list-style-type: none"> <li>• stop bleeding</li> <li>• administer oxygen</li> <li>• minimise impact of shock by keeping animal quiet, warm and away from activity or noise</li> <li>• immobilise limb injuries, if soft tissue damage or fractures are suspected, if possible</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hose or apply water, if available, in cases of burns or heat exhaustion</li> <li>• administration of emetics or antidotes under instruction if appropriate</li> <li>• feeding or watering as advised</li> <li>• transporting animal to veterinary assistance as soon as possible.</li> </ul>
<i>First aid assistance</i> may include:	<ul style="list-style-type: none"> <li>• veterinarian</li> <li>• wildlife carer</li> <li>• ranger or supervisor.</li> </ul>
<i>OHS procedures</i> may include:	<ul style="list-style-type: none"> <li>• safe work method statements (SWMS) covering: <ul style="list-style-type: none"> <li>• cleaning, removal of waste and spillage, containment or elimination of risk</li> <li>• emergency procedures: <ul style="list-style-type: none"> <li>• potential escape of an animal</li> <li>• injury to an animal or other animals, staff and potentially the public</li> </ul> </li> <li>• handling animals</li> <li>• hazard identification and risk minimisation</li> <li>• procedures for the handling, use, storage, transport and disposal of chemicals</li> <li>• manual handling techniques</li> <li>• procedures for the handling and disposal of biological wastes</li> <li>• controlling the spread of disease, infection control and biohazard management</li> </ul> </li> <li>• incident reporting</li> <li>• seeking advice from supervisors</li> <li>• referring to material safety data sheets (MSDS)</li> <li>• use of personal protective equipment.</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• animal restraint devices: <ul style="list-style-type: none"> <li>• collars</li> <li>• halters</li> <li>• harnesses</li> <li>• leads</li> </ul> </li> <li>• communication equipment</li> <li>• infection control equipment</li> <li>• protective clothing i: <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> </ul> </li> </ul>



**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• boots, gloves, goggles and helmet</li> <li>• sun or wet weather protection from heat or cold</li> <li>• protection from animal scratches and bites</li> <li>• protection from terrain, chemical spills or other hazards</li> <li>• safety lines and harnesses.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	General animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS207A Provide reception services for an animal care facility

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of coordinating client (animal owner) appointments or bookings and undertaking office administration and basic financial tasks for an animal care facility:</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the animal care and management industry where reception services are required. Workplaces may include for a range of facilities including: breeding or boarding kennels and catteries; companion animal training, grooming establishments, animal shelters or similar.</p> <p>For veterinary reception refer to ACMVET201A Carry out veterinary nursing reception duties.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Complete <i>reception services</i>	1.1. Facility services and fee structure information is provided to clients accurately and courteously. 1.2. Client appointments or bookings are scheduled and monitored. 1.3. Animals are identified according to species, breed and <i>permanent markings</i> . 1.4. <i>Client records</i> are created or updated in accordance with facility policies and procedures. 1.5. Appointment details and client records are compiled

ELEMENT	PERFORMANCE CRITERIA
	<p>and provided to relevant staff.</p> <p>1.6.Drop in and waiting clients are monitored and kept informed of appointment progress or any delays.</p> <p>1.7.Reception area is maintained in a clean, tidy and hygienic state at all times.</p>
2. Maintain office records	<p>2.1.Telephone and mail communications are processed and relayed as required.</p> <p>2.2.<b>Information and records system</b> is maintained to ensure integrity.</p> <p>2.3.<b>Office equipment</b> is used to perform routine tasks, including computer files and programs.</p> <p>2.4.Services and products are invoiced in line with facility fee structure.</p> <p>2.5.Cash control is monitored and <b>basic financial documents</b> prepared.</p>
3. Provide basic animal care assistance	<p>3.1.<b>Routine tasks</b> to assist with animal during appointment or booking are carried out.</p> <p>3.2.Animals are <b>restrained</b> and handled in a safe and humane manner.</p> <p>3.3.<b>Interactions with clients</b> are documented in accordance with facility policies and procedures as directed.</p>
4. Maintain records	<p>4.1.Stock levels are monitored and supplies ordered following supervisor approval.</p> <p>4.2.Client <b>follow-up requirements</b> are identified and documented as directed.</p> <p>4.3.Client records are updated and stored in accordance with facility policies and procedures.</p>

## Required Skills and Knowledge

### Required knowledge

- administrative procedures
- facility policies and procedures and associated services provided
- financial procedures
- methods used to safely restrain and handle animals
- stock management requirements
- recognisable signs and abnormal vital signs in relevant species

**Required knowledge**

- range of species handled by the facility to enable completion of client records.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- effectively coordinate reception services and maintain a clean, tidy and hygienic reception area
- communicate effectively with facility staff and clientele and follow instructions
- perform office administration and basic financial routines and provide basic animal care assistance as directed
- maintain accurate records and assist with stock control.

The skills and knowledge required to provide reception services for an animal care facility must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include breeding or boarding kennels and catteries, companion animal training, grooming establishments, animal shelters or similar.

There must be access to a range of animals as well as relevant information, equipment and/or resources to

<b>EVIDENCE GUIDE</b>	
	enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and

<b>RANGE STATEMENT</b>	
regional contexts) may also be included.	
<b>Reception services</b> may include:	<ul style="list-style-type: none"> <li>• greeting clients</li> <li>• providing information on products and services</li> <li>• completing admission and discharge documentation for animals.</li> </ul>
<b>Permanent markings</b> may include:	<ul style="list-style-type: none"> <li>• brands, tattoos, ear tags and leg bands</li> <li>• colours and markings: <ul style="list-style-type: none"> <li>• body</li> <li>• face</li> <li>• leg</li> <li>• nail or hoof colour</li> </ul> </li> <li>• permanent scars</li> <li>• missing digits or damage to ears, tail or other unusual features of individual animals.</li> </ul>
<b>Client records</b> may include:	<ul style="list-style-type: none"> <li>• animal identification: <ul style="list-style-type: none"> <li>• colour, markings, brands, tattoos and microchip</li> <li>• name</li> <li>• sex and age</li> <li>• species breed</li> </ul> </li> <li>• animal health information: <ul style="list-style-type: none"> <li>• diet</li> <li>• known allergies</li> <li>• past or current injuries</li> <li>• past or current treatment (e.g. vaccination status)</li> <li>• weight</li> </ul> </li> <li>• other animal information: <ul style="list-style-type: none"> <li>• animals' belongings</li> <li>• board or agistment records</li> <li>• breeding records</li> <li>• future appointments planned</li> <li>• regular treatments and/or services used</li> <li>• training plans</li> </ul> </li> <li>• owner information: <ul style="list-style-type: none"> <li>• animals that have attended this business</li> <li>• contact details</li> <li>• name</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• payment records.</li> </ul>
<i>Information and records system</i> may include:	<ul style="list-style-type: none"> <li>• business information: <ul style="list-style-type: none"> <li>• animal admission and discharge information</li> <li>• breeding records</li> <li>• boarding or agistment records and diets</li> <li>• client newsletters</li> <li>• products, equipment and disposables stocktake</li> <li>• product and service charges</li> <li>• supplier contact information</li> <li>• training plans and individual animal progress</li> </ul> </li> <li>• client information: <ul style="list-style-type: none"> <li>• information and advice on breeding, diet and health</li> <li>• care, housing, training and exercise needs of specific animals</li> <li>• need for specialised or technical assistance</li> <li>• range of products and services available.</li> </ul> </li> </ul>
<i>Office equipment</i> may include:	<ul style="list-style-type: none"> <li>• cash register</li> <li>• computer and associated software and hardware: <ul style="list-style-type: none"> <li>• email and social networking software used for business promotion and communication</li> <li>• office sales software</li> <li>• printer, scanner and modem operation</li> <li>• word processing, database and spreadsheet functions</li> </ul> </li> <li>• photocopier</li> <li>• staff communication systems (e.g. two-way radio and intercom)</li> <li>• telephone.</li> </ul>
<i>Basic financial documents</i> may include:	<ul style="list-style-type: none"> <li>• cash register daily total</li> <li>• credit card payments summary</li> <li>• invoice for services and products</li> <li>• receipt for payment by client.</li> </ul>
<i>Routine tasks</i> may include:	<ul style="list-style-type: none"> <li>• collecting admission and discharge information</li> <li>• documenting items to be kept with animal</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• moving animals to housing or handling area</li> <li>• handing animal over to other staff or returning to client</li> <li>• fitting collars, head collars, leads and/or clothing</li> <li>• measuring size for clothing or other items</li> <li>• weighing animal.</li> </ul>
Animal <i>restraints</i> may include:	<ul style="list-style-type: none"> <li>• muzzles, collars, halters and head collars</li> <li>• rearing bits, twitch or hobbles (used on horses)</li> <li>• leads</li> <li>• holding cages</li> <li>• physical holds using hands, gloves and equipment (e.g. towels or bags).</li> </ul> <p>Note: this unit excludes chemical restraints.</p>
<i>Interaction with clients</i> may include:	<ul style="list-style-type: none"> <li>• inquiries about products and services: <ul style="list-style-type: none"> <li>• telephone or face to face</li> <li>• email or internet</li> </ul> </li> <li>• collecting payments</li> <li>• advising of problems with payments</li> <li>• dealing with initial complaints about products, service or staff</li> <li>• dealing with distressed clients</li> <li>• instructions from clients about products and services required</li> <li>• providing information within the limits of business policy and personal responsibility</li> <li>• referring clients to senior staff</li> <li>• reporting on animal welfare or progress</li> <li>• relaying potentially upsetting news.</li> </ul>
<i>Follow-up requirements</i> may include:	<ul style="list-style-type: none"> <li>• home care instructions for client relating to: <ul style="list-style-type: none"> <li>• behaviour management</li> <li>• equipment dimensions or construction</li> <li>• feeding and health care</li> <li>• grooming</li> <li>• training or exercise</li> </ul> </li> <li>• after business communication on animal progress at home: <ul style="list-style-type: none"> <li>• behaviour modification progress</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• operation of equipment or other products</li> <li>• settling in of a new animal</li> <li>• training and exercise plan progress</li> <li>• re-booking of services: <ul style="list-style-type: none"> <li>• advising of seminars or training opportunities</li> <li>• advising of product or other service special offers</li> <li>• reminder of grooming or other appointments.</li> </ul> </li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	General animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS208A Source information for animal care needs

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the processes required to gather information on medications and services for animals and relate these to individual animal requirements and audience needs.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to new entrants to the animal care and management industry where it may be necessary to investigate or clarify information on treatments, services or other animal care items for self, colleagues or clients. Candidates are not required to provide advice to clients at this level but rather to develop the skills required to find information that is current, relevant, accurate and appropriate for the audience and activity needs from a range of credible services.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Read and interpret product labels	1.1. <b>Medication classes</b> and product contents are identified and general use defined. 1.2. <b>Safety precautions</b> are identified and interpreted. 1.3. Dose or application rates are identified. 1.4. Dose or application is prepared for nominated animals as directed.
2. Gather information on <b>products and services</b>	2.1. <b>Information sources</b> for animal care products and services are identified and evaluated. 2.2. Company advisors are contacted for specific

ELEMENT	PERFORMANCE CRITERIA
	<p>information.</p> <p>2.3. Inquiries are made on animal care services for a range of animal care needs.</p>
<p>3. Profile nominated animal physiological features relevant to health and application of treatments</p>	<p>3.1. Animal <i>metabolic processes</i> relevant to health, nutritional needs and medication are identified.</p> <p>3.2. Substances and medications known to produce allergic or toxic reactions in nominated animals are determined.</p> <p>3.3. <i>Methods of administration</i> of treatments and medications are evaluated.</p>
<p>4. Take an <i>animal history</i></p>	<p>4.1. Phone information is documented and information relayed to relevant staff.</p> <p>4.2. <i>Effective listening and research skills</i> are used to verify information on animals.</p> <p>4.3. Animal history is completed using workplace documentation.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate and prepare doses or applications rates for treatments and verify with supervisor
- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when working with animals
- gather and provide information in response to workplace requirements
- identify the potential impact of over or under dosing of medications or treatments
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS), follow sequenced written instructions; and record the information accurately and legibly
- numeracy skills to estimate, calculate and record routine workplace measures
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor

## REQUIRED SKILLS AND KNOWLEDGE

- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use personal protective clothing and equipment
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- verify precautions in application or administration of treatments or services.

### Required knowledge

- animal metabolic processes relevant to health, nutritional needs and medication
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during the administration or application of treatments
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- communication procedures, systems and technology relevant to the organisation and individual job responsibilities
- housing, exercise, social and activity needs of animals related to products and services provided
- organisation policies and procedures, including OHS requirements
- physical conditions and vital signs of animals
- protocols, legal and ethical considerations in consulting with veterinarians and other specialists; documenting observations, measurements, treatments and decisions on animal care; and in the storage and relay of information to others
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practices
- terminology and language variations used by workplace staff and the public to describe animals, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs and symptoms
- terminology used to describe treatments, dose rates, application methods and precautions
- terminology used to identify animals and describe their behaviour
- types and sources of information available for treatments, medications and other animal services
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• differentiate between credible and unreliable information sources</li> <li>• identify precautions, active ingredients and other information that may be relevant to hazards and risk management issues in the care and treatment of animals and OHS considerations for staff</li> <li>• interpret medication and other items directions, dose rates and method of administration</li> <li>• prepare medication and treatment doses</li> <li>• take an animal history and document information using industry protocols and procedures.</li> </ul> <p>The skills and knowledge required to source information for animal care needs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, aquariums, breeding or boarding kennels and catteries, aviaries, companion animal training or grooming establishments or veterinary practices.</p> <p>There must be access to a range of products and types of services as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>



<b>RANGE STATEMENT</b>	
<i>Medication classes</i> relate to:	<ul style="list-style-type: none"> <li>• the national Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP), a document which aims to standardise the scheduling and packaging/labelling of substances throughout Australia.</li> </ul> <p>Note: Differences do exist in the regulation of drugs and poisons between Australian states and territories.</p>
<i>Safety precautions</i> may include:	<ul style="list-style-type: none"> <li>• hazard identification, risk minimisation and workplace procedures for:               <ul style="list-style-type: none"> <li>• animal bites, kicks and scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling, use, storage, transport and disposal of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• control of the release of infective agents (animal and human)</li> <li>• transmission of zoonotic diseases</li> </ul> </li> <li>• use of relevant personal protective equipment.</li> </ul>
<i>Products and services</i> may include:	<ul style="list-style-type: none"> <li>• dietary needs:               <ul style="list-style-type: none"> <li>• feeding and watering frequency and rates</li> <li>• supplements that may be required according to current animal status</li> <li>• types and quantities of commonly available feedstuffs, their preparation and presentation</li> </ul> </li> <li>• grooming and cleaning requirements</li> <li>• handling procedures and equipment</li> <li>• health check-up frequency and procedures</li> <li>• diseases of animals that will require medication:               <ul style="list-style-type: none"> <li>• bacterial, viral and fungal infections</li> <li>• parasite and pest control</li> <li>• potential hazards to specific animal species</li> </ul> </li> <li>• techniques used to minimise trauma during</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>rehousing and socialising with other animals where relevant and humans</p> <ul style="list-style-type: none"> <li>• temperature, climate and habitat needs of specific animal species</li> <li>• animal handling equipment</li> <li>• animal housing and furniture</li> <li>• boarding and holiday care services</li> <li>• books, DVDs and other information sources</li> <li>• feeding equipment, implements and products</li> <li>• filtration systems</li> <li>• parasite control products</li> <li>• transportation equipment and services</li> <li>• veterinary and other products and services.</li> </ul>
<i>Information sources</i> may include:	<ul style="list-style-type: none"> <li>• company representatives and advice service</li> <li>• industry associations</li> <li>• library resources</li> <li>• Medical Information Management System (MIMS) and other veterinary medication reference sources</li> <li>• product brochures and material safety data sheets (MSDS)</li> <li>• supervisor and other workplace staff</li> <li>• validated internet sites.</li> </ul>
<i>Metabolic processes</i> may include:	<ul style="list-style-type: none"> <li>• activity features of nominated animals, related energy needs and processes</li> <li>• food ingestion, digestion processes and nutritional needs</li> <li>• integument features and effect of topical applications</li> <li>• respiration methods</li> <li>• temperature regulation.</li> </ul>
<i>Methods of administration</i> may include:	<ul style="list-style-type: none"> <li>• oral : <ul style="list-style-type: none"> <li>• nutritional supplements</li> <li>• pain medications</li> <li>• parasite control</li> </ul> </li> <li>• eye and ear medications</li> <li>• topical applications: <ul style="list-style-type: none"> <li>• external parasite washes</li> <li>• skin condition medications</li> <li>• wound treatments</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• water treatment and medications for birds, amphibians and fish.</li> </ul>
<p><i>Animal history</i> information may include:</p>	<ul style="list-style-type: none"> <li>• age</li> <li>• behaviour issues (if any)</li> <li>• breed</li> <li>• diet</li> <li>• exercise routine</li> <li>• housing type and location</li> <li>• injuries</li> <li>• known allergies</li> <li>• known health problems</li> <li>• parasite and other health condition control and prevention treatments</li> <li>• reason for consultation or inquiry</li> <li>• sex</li> <li>• vaccination status.</li> </ul>
<p><i>Effective listening and research skills</i> may include:</p>	<ul style="list-style-type: none"> <li>• listening skills: <ul style="list-style-type: none"> <li>• asking both open ended and closed questions</li> <li>• clarifying what has been said</li> <li>• focusing on the issue at hand by drawing speaker's attention back to the information needed</li> <li>• prioritising information for significance and urgency of issue</li> <li>• recognising possible stress and anxiety being experienced by speaker and responding to their concerns whilst still following workplace protocols and priorities</li> <li>• separating emotional responses from facts</li> <li>• summarising what has been said and verifying understanding of information</li> </ul> </li> <li>• research skills: <ul style="list-style-type: none"> <li>• developing networks</li> <li>• identifying valid sources of information</li> <li>• recognising the importance of currency of information for particular issues</li> <li>• using animal care industry recognised sources of information.</li> </ul> </li> </ul>

### Unit Sector(s)

Unit sector	General animal studies
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMGAS209A Provide information on companion animals, products and services

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing basic information to customers on companion animal training, grooming and/or breeding establishments, and on products and services in a range of companion animal settings.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to new entrants to the animal care and management industry. Animal care settings in this context may include pet shops and aquariums, breeding or boarding kennels or catteries, aviaries, companion animal training or grooming establishments, animal shelters or veterinary practices.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify information requirements	<p>1.1. Appropriate <i>interpersonal skills</i> are used to accurately identify <i>customer information needs</i>.</p> <p>1.2. Customer enquiries are handled courteously, promptly and in accordance with organisational and industry requirements.</p> <p>1.3. <i>Personal and professional limitations</i> in addressing customer information needs are identified and assistance is sought from appropriate personnel when required.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Provide information	<p>2.1. <i>Information</i> that addresses customer requirements is provided to customers in a timely and professional manner.</p> <p>2.2. <i>Animals, products and services</i> that may meet customer requirements are appropriately presented to customer as required.</p> <p>2.3. Enquiries that fall outside own area of responsibility or knowledge are referred to another appropriate staff member for follow-up and completion.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- access product information
- determine initial customer needs
- engage customers, especially when giving and receiving information
- seek assistance as required
- literacy skills to read and follow organisation policies and procedures, including occupational health and safety (OHS); access information; follow sequenced written instructions; and select and follow procedures for a range of tasks
- oral communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to access available resources and prioritise daily tasks.

#### Required knowledge

- business values, structure, products and services of the workplace
- common customer requirements in a companion animal setting
- companion animals, products and services in the workplace
- customer service techniques.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• represent the organisation in a professional manner</li> <li>• understand and respond to customers' requests for information</li> <li>• communicate effectively with customers and staff members</li> <li>• seek assistance from other staff members when an enquiry falls outside one's scope of knowledge or responsibility.</li> </ul> <p>The skills and knowledge required to provide information on companion animals, products and services must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a companion animal workplace or in a situation that reproduces normal work conditions. Workplaces can include pet shops, aquariums, boarding kennels or catteries, aviaries, companion animal training or grooming establishments or veterinary practices.</p> <p>There must be access to a range of products and types of services as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order</p>



<b>EVIDENCE GUIDE</b>	
	<p>to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Interpersonal skills</i></b> may include:	<ul style="list-style-type: none"> <li>• having regard for personal space considerations</li> <li>• listening and responding appropriately to what customers are communicating</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• providing an opportunity for customers to confirm their requests</li> <li>• questioning and seeking feedback from customers to confirm understanding of needs</li> <li>• summarising and paraphrasing to check understanding of customers' messages</li> <li>• using appropriate vocal tone and body language.</li> </ul>
<i>Customer information needs</i> may relate to:	<ul style="list-style-type: none"> <li>• products and services available</li> <li>• the customers' specific job requirements and specifications</li> <li>• the need for specialised or technical assistance.</li> </ul>
<i>Personal and professional limitations</i> may include:	<ul style="list-style-type: none"> <li>• lack of knowledge in regard to specific products and product applications</li> <li>• lack of skills in handling difficult customers and in accessing and providing information</li> <li>• organisational policies and procedures</li> <li>• OHS and other legal considerations.</li> </ul>
<i>Information</i> customers might require may be related to:	<ul style="list-style-type: none"> <li>• a specific companion animal</li> <li>• companion animal housing or nutrition requirements</li> <li>• correct usage, installation or limitations of equipment</li> <li>• customer and organisational responsibilities</li> <li>• personal protective equipment requirements</li> <li>• products or services offered</li> <li>• service and maintenance requirements of equipment (e.g. replacement of parts)</li> <li>• warranties.</li> </ul>
Presentation of <i>animals, products and services</i> may include:	<ul style="list-style-type: none"> <li>• an adequate supply of brochures, price lists and products are available</li> <li>• ensuring animal housing is clean and hygienic</li> <li>• operational displays are functioning correctly</li> <li>• using safe handling and usage techniques.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMGAS210A Prepare for and conduct a tour or presentation

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of preparing for a tour or presentation within an animal care facility and conducting it to meet the needs of a wide range of audiences.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in animal care industry sectors where tours or presentations are conducted. The tour may be a regular part of business operations, such as in a captive animal facility or it may be a promotional activity aimed at attracting new clients, such as a boarding kennel.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for tour or presentation	1.1. Appropriate identification and/or uniform are worn whilst on duty in accordance with facility policies and procedures. 1.2. Purpose of tour or presentation is confirmed with supervisor. 1.3. Daily information sheets, if provided, are read and queries are clarified with the supervisor. 1.4. <b>Materials and equipment</b> are collected ready for presentation. 1.5. Standard tour or presentation is adjusted to meet <b>specific group needs</b> .
2. Conduct tour or presentation	2.1. <b>Public speaking and presentation skills</b> are used effectively to engage the audience. 2.2. Current and accurate information is provided in a

ELEMENT	PERFORMANCE CRITERIA
	<p>format suitable for the group.</p> <p>2.3. Animals, if used, are treated humanely and handled in accordance with facility and <i>occupational health and safety (OHS)</i> requirements.</p> <p>2.4. Audience members are encouraged to ask questions and participate where appropriate.</p> <p>2.5. The tour or presentation is completed within the required timeframe and in accordance with the group's needs.</p>
3. Return animals and/or resources after the presentation	<p>3.1. Animals, if used, are returned safely to their section.</p> <p>3.2. Animals' behaviour and food intake are recorded and reported to the supervisor.</p> <p>3.3. Materials and equipment are checked and returned to the appropriate area.</p> <p>3.4. Feedback on tour or presentation is provided to the supervisor in accordance with facility policies and procedures.</p>

## Required Skills and Knowledge

### Required skills

- apply effective presentation and public speaking skills
- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals
- use presentation equipment effectively
- use a two-way radio or other communication methods as required
- literacy skills to read and follow facility policies and procedures, including OHS; follow sequenced written instructions; and select and follow procedures for a range of tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to engage an audience in a limited period of time.

### Required knowledge

- animals at the animal care facility, their habitats and species general natural history

**Required skills**

- animal care facility's structure and function
- basic ecology
- basic animal adaptation and behaviour
- OHS and animal welfare legislative requirements and codes of practice
- organisation policies and procedures, including OHS and emergency procedures
- principles of animal welfare and ethics
- public speaking techniques
- subject matter for the tour
- two-way radio and other communication procedures.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare for and present guided tours or presentations for a range of audiences with different information needs
- communicate effectively with a wide range of people
- listen and respond to enquiries from members of the public
- follow OHS and emergency procedures as required.

The skills and knowledge required to prepare for and conduct a tour or presentation must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work

<b>EVIDENCE GUIDE</b>	
	<p>conditions. Workplaces can include captive animal, companion animal services, animal control and regulation and veterinary facilities.</p> <p>There must be access to relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• presentation documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>Tour or presentation</i></b> may include:	<ul style="list-style-type: none"> <li>• guided tours and presentations for individuals or small and large groups, including members of the public, school groups and specific tourist groups</li> <li>• specific promotional tours of animal care facilities aimed at attracting new clients or providing animal care advice to current clients.</li> </ul>
<b><i>Materials and equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• display items on touch tables</li> <li>• education brochures</li> <li>• electronic audiovisual equipment</li> <li>• enticement food</li> <li>• maps of the facility</li> <li>• marketing materials</li> <li>• torches</li> <li>• two-way radios</li> <li>• toys.</li> </ul>
<b><i>Specific group needs</i></b> may depend on:	<ul style="list-style-type: none"> <li>• audience characteristics (e.g. age, gender, overseas visitors, disabilities or familiarity with the topic)</li> <li>• nature of the occasion</li> <li>• style of the venue and whether the session involves interaction with animals.</li> </ul>
<b><i>Public speaking and presentation skills</i></b> may include:	<ul style="list-style-type: none"> <li>• ability to relate to the particular audience</li> <li>• body language</li> <li>• dress</li> <li>• eye contact</li> <li>• humour</li> <li>• listening techniques</li> <li>• voice control.</li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps</li> </ul>

**RANGE STATEMENT**

	disposal <ul style="list-style-type: none"> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	General animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

# ACMGAS301A Maintain and monitor animal health and wellbeing

## Modification History

Not applicable.

## Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of following animal health management practices to monitor animal health via daily observations of behaviour and condition.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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## Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to those working in animal care industry sectors where it may be necessary to care for a range of animal species and to monitor the wellbeing of healthy, ill or injured animals by observing and measuring indicators of ideal and poor development or response to treatments. These animals may be being kept long term in the workplace or being raised or prepared for sale, rehousing or release to their native habitat.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Follow <i>animal</i> health management practices	<p>1.1. <i>Personal health and hygiene standards</i> are maintained in accordance with <i>occupational health and safety (OHS)</i> and organisation policies and procedures.</p> <p>1.2. <i>Animal diseases</i> and their impact on animals and humans are identified.</p> <p>1.3. Broad categories of <i>parasitic infestations</i> are identified.</p> <p>1.4. <i>Quarantine</i> areas are prepared and maintained in accordance with quarantine protocols</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>1.5. Animals requiring quarantine are identified and isolated.</p> <p>1.6. Quarantine records are maintained in accordance with organisation policies and procedures.</p>
<p>2. Monitor and maintain the physical wellbeing of animals</p>	<p>2.1. Different types of animal's anatomy and physiology are identified, compared and examined to determine physical appearance, particular body structures and observation recording requirements.</p> <p>2.2. <b>Indicators of animal health</b> are regularly monitored and tested in accordance with organisation standard operating procedures and facility demarcation/quarantine requirements involving movement of animals within or between facilities.</p> <p>2.3. The <b>physical environment of animals</b> is assessed for evidence of problems that may affect the physical wellbeing of animals</p> <p>2.4. Animal activity monitoring and health information and records are maintained in accordance with organisation standard operating procedures.</p>
<p>3. Identify and report signs of ill health or injury in animals</p>	<p>3.1. <b>Signs of illness or injury</b> are recognised and reported to supervisor.</p> <p>3.2. <b>Abnormal animal behaviour and conditions</b> are recognised and reported to supervisor.</p> <p>3.3. <b>Samples</b> are collected correctly and recorded as directed in accordance with organisation policies and procedures.</p> <p>3.4. Sick or injured animals are separated from other animals, as required, and cared for in accordance with supervisor or veterinary advice.</p> <p>3.5. Animals that are ill or injured are handled in accordance with OHS and legislative requirements, relevant codes of practice and organisation policies and procedures.</p>
<p>4. Administer and record animal treatments</p>	<p>4.1. <b>Authorised animal treatments</b> are administered under supervision and dosages recorded in accordance with organisation policies and procedures.</p> <p>4.2. <b>Routine preventative health treatments</b> are regularly monitored, administered and recorded in accordance with organisation standard operating procedures.</p> <p>4.3. Appropriate storage of treatments is identified and used in accordance with organisation policies and</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>procedures.</p> <p>4.4. Records relating to animal health status, before and after treatment, and to the specific nature of treatment provided are completed in accordance with organisation policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when handling animals
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- participate in arrangements for maintaining the health and safety of all people and animals in the workplace
- take and record animals temperature, pulse, respiration and hydration indicators where appropriate
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical and physiological structures and functions related to animal health and wellbeing

## REQUIRED SKILLS AND KNOWLEDGE

- broad categories of parasitic infestations
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- housing, exercise, social and activity needs of animals
- indicators of poor response to treatment or management of young, ill, injured or compromised animals
- indicators of recovery from illness or injury
- methods used to measure, interpret and record animals weight and other objective measures of animal health
- principles of animal welfare and ethics
- relevant OHS and animal welfare legislative requirements and codes of practice
- quarantine protocols
- safe work practices
- terminology used to describe and document health and behavioural signs and symptoms
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- carry out routine, consistent monitoring of animal health and physical wellbeing
- maintain personal health and a hygienic work environment
- follow quarantine protocols as required
- identify good health, illness, injury and abnormal behaviour in animals and report to supervisor
- administer authorised animal treatments and

<b>EVIDENCE GUIDE</b>	
	<p>implement routine preventative health programs as directed</p> <ul style="list-style-type: none"> <li>maintain accurate animal activity monitoring, health, treatment and quarantine records.</li> </ul> <p>The skills and knowledge required to maintain and monitor animal health and wellbeing must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities and animal technology facilities.</p> <p>There must be access in either situation to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must be relevant to the industry sector in which candidates are working and must cover a minimum of one species from at least two of the six major animal groups OR at least three breeds from within one of the six major animal groups (mammals, fish, birds, amphibians, reptiles, invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>written and/or oral assessment of candidate's required knowledge</li> <li>observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Animals</i></b> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<b><i>Personal health and hygiene standards</i></b> may include:	<ul style="list-style-type: none"> <li>• appropriate handling reprocessing of reusable equipment</li> <li>• aseptic technique</li> <li>• cover cuts and abrasions with waterproof dressing and change as necessary</li> <li>• maintain personal immunisation/vaccination requirements for working with animals where</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>required</p> <ul style="list-style-type: none"> <li>• personal hygiene practices especially washing and drying hands before and after animal contact and/or any activity likely to cause cross-contamination</li> <li>• safe handling and disposal of sharps and other clinical, related and general waste</li> <li>• use of personal protective clothing and equipment and change as appropriate for the intended use.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal diseases</i> may include:	<ul style="list-style-type: none"> <li>• infectious diseases: <ul style="list-style-type: none"> <li>• bacteria</li> <li>• fungi</li> <li>• internal and external parasites</li> <li>• virus</li> <li>• zoonoses</li> </ul> </li> <li>• non-infectious diseases: <ul style="list-style-type: none"> <li>• allergies</li> <li>• chemical toxicities</li> <li>• genetic</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• nutritional</li> <li>• physical traumas.</li> </ul> </li> </ul>
<i>Parasitic infestations</i> may include:	<ul style="list-style-type: none"> <li>• external parasites: <ul style="list-style-type: none"> <li>• fleas, mites, lice or ticks</li> <li>• flies and midges</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• classes of internal parasites:               <ul style="list-style-type: none"> <li>• cetoda</li> <li>• nemotoda</li> <li>• trematoda.</li> </ul> </li> </ul>
<i>Quarantine</i> requirements may include:	<ul style="list-style-type: none"> <li>• procedures and hygiene standards applied</li> <li>• reasons for quarantine</li> <li>• maintaining required records</li> <li>• quarantine periods for various species.</li> </ul>
<i>Indicators of animal health</i> monitoring may include:	<ul style="list-style-type: none"> <li>• observing and reporting unusual behaviour for nominated animal:               <ul style="list-style-type: none"> <li>• aggression or docility (depending on animal)</li> <li>• disinterest in surroundings, other animals, people or usual stimuli</li> <li>• excessive licking, scratching and rubbing</li> <li>• lethargy</li> <li>• nest building</li> <li>• self mutilation</li> <li>• trembling</li> <li>• vocalising</li> </ul> </li> <li>• observing and reporting indicators of illness or injury:               <ul style="list-style-type: none"> <li>• bleeding</li> <li>• changes in drinking or eating patterns</li> <li>• lameness or reluctance to move and vocalising when attempting to move</li> <li>• swelling</li> <li>• unusual amounts, colour or texture of faeces.</li> </ul> </li> </ul>
<i>Physical environment of animals</i> may include:	<ul style="list-style-type: none"> <li>• absence or presence of vermin and pests</li> <li>• ability to maintain appropriate hygiene standards to ensure animal health</li> <li>• ability to maintain enclosure security</li> <li>• access to sunlight,</li> <li>• air flow and draught</li> <li>• construction materials of enclosure, housing, bedding, feed and water containers, behaviour enrichment items and floor surface</li> <li>• location of enclosure and construction materials that may provide for or hinder positive</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>behavioural stimulation</li> <li>• location of enclosure in regard to other animals, noise and other potentially threatening or challenging stimuli</li> <li>• protection from weather extremes (e.g. heat, cold, precipitation and wind)</li> <li>• temperature range in enclosure and in housing area</li> </ul>
<i>Signs of illness or injury</i> may include:	<ul style="list-style-type: none"> <li>• chewing or licking own body excessively</li> <li>• defensive behaviours</li> <li>• drooling and regurgitating food</li> <li>• excessive drinking</li> <li>• excessive rolling</li> <li>• general changes in normal behaviour or routines</li> <li>• lameness</li> <li>• listlessness or disinterest in surroundings</li> <li>• presence of blood, swelling, excessive heat</li> <li>• reluctance or refusal to eat or drink</li> <li>• reluctance to move</li> <li>• sweating</li> <li>• yelping or other vocalising when touched or if animal attempts to move or perform particular tasks or grooming.</li> </ul>
<i>Abnormal animal behaviour and conditions</i> may include:	<ul style="list-style-type: none"> <li>• aggression in non-aggressive species</li> <li>• cannibalism</li> <li>• reluctance to eat and drink, socialise or move in relation to the usual patterns for nominated species</li> <li>• repetitive movements or behaviours that prevent the animal from functioning normally or lead to injury.</li> </ul>
<i>Samples</i> may include:	<ul style="list-style-type: none"> <li>• blood</li> <li>• faeces</li> <li>• hair</li> <li>• muscle</li> <li>• saliva</li> <li>• semen</li> <li>• skin</li> <li>• uterine secretions.</li> </ul>
<i>Authorised animal treatments</i>	<ul style="list-style-type: none"> <li>• treatments used in the routine preventative</li> </ul>

<b>RANGE STATEMENT</b>	
may include:	<p>health care of animals that are available over the counter and have been approved by supervisor or are part of the approved animal care plan</p> <ul style="list-style-type: none"> <li>• treatments prescribed by a veterinarian.</li> </ul>
<b><i>Routine preventative health treatments</i></b> may include:	<ul style="list-style-type: none"> <li>• control of parasites</li> <li>• grooming</li> <li>• immunisation/vaccinations as required</li> <li>• insect control</li> <li>• quarantine</li> <li>• routine health check-up</li> <li>• routine observation of waste elimination and faecal examination.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	General animal studies
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMGAS302A Provide enrichment for animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing behavioural management and enrichment to stimulate, replenish and maintain appropriate behavioural patterns of animals.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to provide enrichment activities for animals in various animal care sectors. These animals may be being kept long term in the workplace or being raised or prepared for sale, rehousing or release to their native habitat.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Observe and record animal behaviour	<p>1.1. <b><i>Behaviour</i></b> of individual <b><i>animals</i></b> and groups of animals is observed and recorded in accordance with organisation policies and procedures.</p> <p>1.2. Observed behaviour is compared with known normal behavioural patterns for a range of species.</p> <p>1.3. <b><i>Strategies to encourage natural behaviour</i></b> are identified and implemented.</p> <p>1.4. <b><i>Signs of stress</i></b> are recognised, recorded and possible stressors are determined.</p> <p>1.5. <b><i>Abnormal behaviour</i></b> indicating less than optimum physical and behavioural wellbeing is reported to supervisor.</p>
2. Assist with <b><i>managing</i></b>	2.1. Participation in the development and implementation of a long-term strategy to manage undesirable

ELEMENT	PERFORMANCE CRITERIA
<i>undesirable animal behaviour</i>	<p>behaviour is undertaken.</p> <p>2.2.Short-term management of animals exhibiting undesirable behaviour is conducted.</p> <p>2.3.<i>Animal welfare and occupational health and safety (OHS) requirements</i> are complied with during behavioural management processes.</p>
3. Implement <i>enrichment programs</i>	<p>3.1.Physical, social and food-related enrichment strategies appropriate to the species are determined, applied and evaluated in accordance with organisation policies and procedures.</p> <p>3.2.<i>Adverse consequences</i> to an enrichment strategy are researched and assessed.</p> <p>3.3.Used enrichment items are cleaned, decontaminated, disposed of or replaced according to organisation policies and procedures.</p> <p>3.4.Responses to implementation of enrichment strategy are documented and reported.</p> <p>3.5.Enrichment program modification <i>suggestions</i> are reviewed in consultation with supervisor, implemented, where appropriate, and documented.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents
- employ safe and environmentally responsible organisational systems and procedures when handling and working with animals and feed
- evaluate behaviour, signs, symptoms and objective measures that may indicate animal health is at risk
- identify common indicators of the presence of disease, injury, compromised health or distress in animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe animals, document and report behaviour and feeding patterns
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record



## REQUIRED SKILLS AND KNOWLEDGE

information accurately and legibly

- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate strategies and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical and physiological structures and functions related to animal health and wellbeing and enrichment strategies
- common diseases, ailments, injuries and other impacts on animal health and wellbeing
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- housing, exercise, social and activity needs of animals
- methods of rectifying and modifying animal behaviour patterns
- milestones in developmental progress from new born to mature animals
- natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- organisational policies and procedures, including OHS and emergency procedures
- physical, social and food-related enrichment activities
- principles of animal welfare and ethics
- relevant OHS and animal welfare legislative requirements and codes of practice
- safe animal handling techniques
- terminology used to describe and document health and behavioural signs and symptoms
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• observe, record and report normal and abnormal behaviour patterns and conditions, including signs of stress for a range of animals</li> <li>• assist others in the selection of accommodation appropriate to animals' behavioural needs and the requirements of the facility</li> <li>• assist others in the development of long-term behavioural management strategies</li> <li>• conduct short-term behavioural management and enrichment programs</li> <li>• comply with animal welfare and OHS requirements and organisational policies and procedures</li> <li>• maintain accurate records.</li> </ul> <p>The skills and knowledge required to provide enrichment for animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities and animal technology facilities.</p> <p>There must be access in either situation to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate</p>

<b>EVIDENCE GUIDE</b>	
	<p>competence. Assessment must be relevant to the industry sector in which candidates are working and must cover a minimum of one species from at least two of the six major animal groups OR at least three breeds from within one of the six major animal groups (mammals, fish, birds, amphibians, reptiles, invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different

**RANGE STATEMENT**

work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Behaviour</i></b> of animals may include:</p>	<ul style="list-style-type: none"> <li>• animal activities and responses based on:             <ul style="list-style-type: none"> <li>• species, breed, age and sex of the animal</li> <li>• the time of the day or night</li> <li>• the breeding season</li> </ul> </li> <li>• normal behaviour in various contexts:             <ul style="list-style-type: none"> <li>• breeding</li> <li>• eliminative</li> <li>• grooming</li> <li>• ingestive</li> <li>• resting</li> <li>• social</li> </ul> </li> <li>• abnormal behaviour:             <ul style="list-style-type: none"> <li>• aggression</li> <li>• anxiety</li> <li>• compulsive disorders</li> <li>• facility and equipment destruction</li> <li>• fearfulness</li> <li>• self-mutilation.</li> </ul> </li> </ul>
<p><b><i>Animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<p><b><i>Strategies to encourage natural behaviour</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• activities and equipment:             <ul style="list-style-type: none"> <li>• to encourage foraging or hunting for food appropriate for species</li> <li>• to provide exercise and physical fitness and dexterity relevant to animal species</li> <li>• to provide opportunities to live and socialise in an environment appropriate for particular species</li> <li>• to rest, hide or shelter in appropriate housing</li> <li>• to reinforce the role of owner or handler in</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	an appropriate context for the nominated species.
<i>Signs of stress</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• destruction of equipment or habitat</li> <li>• inappetence</li> <li>• over-stimulation of animal</li> <li>• repetitive actions</li> <li>• self mutilation</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Abnormal behaviour</i> may include:	<ul style="list-style-type: none"> <li>• exaggerated forms of a normal behaviour: <ul style="list-style-type: none"> <li>• non-stop barking</li> <li>• constant digging</li> </ul> </li> <li>• repetitive patterns or action: <ul style="list-style-type: none"> <li>• pacing in straight line or figure eight patterns</li> </ul> </li> <li>• restlessness</li> <li>• stationary, non-purposeful movements: <ul style="list-style-type: none"> <li>• head tossing</li> <li>• swaying</li> <li>• self-mutilation.</li> </ul> </li> </ul>
<i>Managing undesirable animal behaviour</i> may include:	<ul style="list-style-type: none"> <li>• consulting behaviour specialists for: <ul style="list-style-type: none"> <li>• behaviour modification of animal</li> <li>• training for owner or handler</li> </ul> </li> <li>• food or food-related enrichment may be provided by: <ul style="list-style-type: none"> <li>• giving animals opportunities to hunt or forage for food by hiding it in substrates</li> <li>• giving the animal food that requires processing (e.g. peeling or shelling fruit or seeds)</li> <li>• gnawing manipulada</li> </ul> </li> <li>• providing equipment to encourage appropriate exercise: <ul style="list-style-type: none"> <li>• access to larger areas for free exercise or lead walking</li> <li>• climbing poles and scratching posts</li> <li>• ladders, ropes and treadmills</li> </ul> </li> <li>• providing equipment and toys for skill</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>development and time occupiers:</p> <ul style="list-style-type: none"> <li>• non-edible items that can be easily added or removed from the environment, such as toys (e.g. balls, bells, toys, puzzles and mirrors)</li> <li>• providing species appropriate housing and bedding: <ul style="list-style-type: none"> <li>• hide boxes, tunnels and ladders</li> <li>• nest building or bedding material: <ul style="list-style-type: none"> <li>• shredded paper</li> <li>• straw</li> <li>• substrate</li> <li>• wood shavings</li> </ul> </li> <li>• perches, roosting shelves and nest boxes</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species or breed</li> <li>• social interactions between the animal and the carer may also be appropriate.</li> </ul> </li> </ul>
<p><i>Animal welfare and OHS requirements</i> may include:</p>	<ul style="list-style-type: none"> <li>• animal welfare requirements: <ul style="list-style-type: none"> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• keeping health and behaviour records</li> <li>• providing adequate housing and stock levels</li> <li>• providing appropriate enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds</li> </ul> </li> <li>• OHS requirements: <ul style="list-style-type: none"> <li>• use of relevant personal protective equipment, such as animal handling gauntlets and eye wear</li> <li>• hazard identification, risk minimisation and workplace procedures for: <ul style="list-style-type: none"> <li>• animal bites, kicks, scratches, crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• gas leakage</li> <li>• handling, use, storage, transport and disposal of chemicals and medicines</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• inhalation of aerosol particles</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• to control the release of infective agents (animal and human)</li> <li>• transmission of zoonotic diseases.</li> </ul>
<i>Adverse consequences</i> to enrichment strategies may include:	<ul style="list-style-type: none"> <li>• destruction of habitat</li> <li>• fighting between animals over access to enrichment items or activities leading to potential for injuries</li> <li>• impact on security of animals, staff and public of enrichment activity</li> <li>• life of enrichment item or activity compared to cost</li> <li>• over-stimulation of animal</li> <li>• refusal of animal to utilise enrichment items</li> <li>• self-mutilation or other signs of stress.</li> </ul>
<i>Suggestions</i> for program modification may include:	<ul style="list-style-type: none"> <li>• changing diet</li> <li>• changing group dynamics by adding or removing other animals</li> <li>• consultation with behavioural specialist</li> <li>• consultation with veterinarian on the use of chemical therapy to assist animal's ability to deal with stressful situation</li> <li>• further education of owner or handler: <ul style="list-style-type: none"> <li>• to control their own responses to animal behaviour</li> <li>• to identify triggers in animal behaviour</li> <li>• to provide more effective leadership</li> </ul> </li> <li>• increasing or decreasing amount and timing of stimulation offered to animal</li> <li>• providing different forms of enrichment</li> <li>• re-locate animal to more suitable environment.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		



## ACMGAS303A Plan for and provide nutritional requirements for animals

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of calculating rations based on animal species needs and availability of feedstuffs.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to plan nutritional requirements for animals in various animal care sectors, including but not restricted to, companion animals in pet shops, boarding kennels and catteries, dog and cat breeding establishments, research technology animals, native and exotic animals in zoos, wildlife parks and animal rescue and rehabilitation facilities.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify <i>nutritional requirements</i> of animals	<p>1.1. <i>Animals</i> are classified according to natural <i>nutrient sources</i> and types of digestive systems.</p> <p>1.2. Normal feeding behaviours and nutritional requirements of a range of animals in the animal care workplace are aligned with natural diet and controlled environment animal requirements.</p> <p>1.3. <i>Feeding strategies and methods</i> to maximise activity and behavioural enrichment are evaluated.</p> <p>1.4. Characteristics of under or over supply of nutrients are identified and <i>methods used to monitor</i></p>

ELEMENT	PERFORMANCE CRITERIA
	<i>nutritional uptake</i> are evaluated and practised.
2. Evaluate food sources and calculate dietary requirements	<p>2.1. Foodstuffs are classified according to nutrient content.</p> <p>2.2. Foodstuffs are evaluated for shelf life, preparation requirements, availability and cost.</p> <p>2.3. <b>Hazards to animal and human health from food sources</b> are identified and methods used to manage potential risks are implemented.</p> <p>2.4. Feed weight and water requirements are estimated based on <b>animal profiles</b>.</p> <p>2.5. Protein, carbohydrate, vitamin and mineral supplement and fibre needs are estimated based on animal profiles.</p> <p>2.6. Other dietary issues relevant to the animal's profile are identified and factored into dietary calculations.</p> <p>2.7. Diet plans are prepared and documented after supervisor approval.</p>
3. Prepare diets and provide food and water	<p>3.1. Food is prepared in accordance with diet plan and stored safely and hygienically</p> <p>3.2. Food and water is presented in accordance to different <b>species requirements</b> and in compliance with organisation policy and procedures.</p>
4. Monitor feeding and watering practices	<p>4.1. Food and water consumption is monitored and recorded in accordance with organisation policy and procedures.</p> <p>4.2. <b>Abnormal feed intake or feeding behaviour</b> are identified and reported in accordance with organisation policy and procedures.</p> <p>4.3. Animals are monitored for condition, metabolic and behavioural changes.</p> <p>4.4. <b>Reasons for poor response to diet</b> are evaluated and specialist advice sought as required.</p> <p>4.5. Required dietary changes are determined in consultation with supervisor and / or others.</p> <p>4.6. Dietary variations are documented and records updated as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record animal weight, length and other relevant objective indicators of change in physiological status
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS) and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical structures and features affecting feeding and nutrition
- animal classifications that influence dietary needs and styles of eating
- behavioural features related to feeding styles and unsuitable responses to diets
- feedstuffs available and approved in Australia for animals, their availability, cost, shelf life, method of storage, preparation and presentation to animals
- methods used to calculate rations, estimate weight of animals, calculate dry feed weight of food stuffs and other relevant measurements and calculations used for diet planning and food preparation
- nutrition related diseases
- organisational policies and procedures, including OHS and emergency procedures
- protein, carbohydrate, vitamin and mineral supplement and fibre needs for a range of animal groups
- physiological features affecting dietary needs
- potential causes of poor response to diets and tests used to investigate dietary problems
- principles of animal welfare and ethics
- relevant federal and state or territory OHS and animal welfare legislative

**REQUIRED SKILLS AND KNOWLEDGE**

- requirements and codes of practice
- safe work practices
  - sources of nutrients for particular animal classes and groups
  - workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- develop diets for animals in consultation with others
- prepare, store and distribute food according to animal needs, workplace protocols and procedures whilst maintaining quality control and hygiene practices
- monitor response to feeding program and modify diets as required in consultation with supervisor.

The skills and knowledge required to plan for and provide nutritional requirements for animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities and

<b>EVIDENCE GUIDE</b>	
	<p>animal technology facilities.</p> <p>There must be access in either situation to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must be relevant to the industry sector in which candidates are working and must cover a minimum of one species from at least two of the six major animal groups OR at least three breeds from within one of the six major animal groups (mammals, fish, birds, amphibians, reptiles, invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Nutritional requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• carbohydrate</li> <li>• protein</li> <li>• fat</li> <li>• roughage</li> <li>• vitamin</li> <li>• mineral and trace elements</li> <li>• water.</li> </ul>
<p><b><i>Animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<p><b><i>Nutrient sources</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• carnivores: <ul style="list-style-type: none"> <li>• insectivores</li> <li>• piscivores</li> </ul> </li> <li>• herbivores: <ul style="list-style-type: none"> <li>• folivores</li> <li>• frugivores</li> <li>• grainivores</li> <li>• mucivores</li> <li>• nectivores</li> <li>• palynivores</li> <li>• xylophages</li> </ul> </li> <li>• omnivores.</li> </ul>
<p><b><i>Feeding strategies and methods</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• locating food sources to ensure adequate supplies throughout the year</li> <li>• modifying diet for younger or special needs animals</li> <li>• providing food at suitable intervals for animal species</li> <li>• presenting food in ways that reflect natural habitat and encourage active foraging or</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>hunting</p> <ul style="list-style-type: none"> <li>• preparation and distribution of food to: <ul style="list-style-type: none"> <li>• minimise opportunities for theft by other animals or pests</li> <li>• encourage consumption before food deteriorates or loses nutritional quality</li> <li>• reflect ways that food would be available in the wild where possible</li> <li>• provide the best source of nutrients available within budget and seasonal availability</li> <li>• ensure all animals in enclosure get adequate access</li> </ul> </li> <li>• removing stale, contaminated or decomposed food to discourage vermin.</li> </ul>
<b>Methods used to monitor nutritional uptake</b> may include:	<ul style="list-style-type: none"> <li>• blood and faecal tests to check nutritional uptake</li> <li>• comparing food distributed and food not eaten</li> <li>• estimating condition scores</li> <li>• weighing animals.</li> </ul>
<b>Hazards to animal and human health from food sources</b> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• contamination from other animal diet materials that are potentially toxic to some species</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• organic and other dusts</li> <li>• plants and other materials thrown into animal enclosures by the public</li> <li>• possibility of zoonotic infection</li> <li>• shelf life of foodstuffs.</li> </ul>
<b>Animal profiles</b> may include:	<ul style="list-style-type: none"> <li>• species classifications: <ul style="list-style-type: none"> <li>• age</li> <li>• sex</li> <li>• breeding status</li> </ul> </li> <li>• other characteristics</li> <li>• seasonal requirements, including hibernating animals</li> <li>• climatic requirements</li> <li>• activity levels</li> </ul>



<b>RANGE STATEMENT</b>	
<p><i>Species requirements</i> may include:</p>	<ul style="list-style-type: none"> <li>• food presentation needs:               <ul style="list-style-type: none"> <li>• fresh grazing</li> <li>• fresh meat</li> <li>• live food</li> </ul> </li> <li>• food sources:               <ul style="list-style-type: none"> <li>• catering for animals recovering from illness or injury</li> <li>• highly specific food sources for particular animals such as koalas</li> <li>• seasonal availability</li> </ul> </li> <li>• food preparation:               <ul style="list-style-type: none"> <li>• dried or semi-dried foodstuffs</li> <li>• stage of decomposition of meat products</li> <li>• stage of development of plants or insects</li> <li>• vitamin, mineral and other supplements</li> <li>• whole items to allow opportunity for animal to prepare</li> </ul> </li> <li>• water requirements:               <ul style="list-style-type: none"> <li>• running water</li> <li>• water from other food sources.</li> </ul> </li> </ul>
<p><i>Abnormal feed intake or feeding behaviour</i> may include:</p>	<ul style="list-style-type: none"> <li>• demonstrating signs of stress during eating activities</li> <li>• disinterest in food</li> <li>• drinking excess water</li> <li>• gorging food</li> <li>• not drinking normal amounts of water</li> <li>• reluctance to eat when other animals are nearby</li> <li>• selectively eating.</li> </ul>
<p><i>Reasons for poor response to diet</i> may include:</p>	<ul style="list-style-type: none"> <li>• health problems:               <ul style="list-style-type: none"> <li>• digestive system disorder</li> <li>• metabolic disorder</li> <li>• parasite load</li> <li>• teeth condition</li> <li>• other underlying illness</li> </ul> </li> <li>• food sources:               <ul style="list-style-type: none"> <li>• food presented in an inappropriate way for species</li> <li>• food quality</li> <li>• food quantity</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• food spoilage due to weather and climatic conditions or poor storage</li> <li>• inappropriate food sources for species</li> <li>• environmental and behavioural conditions: <ul style="list-style-type: none"> <li>• dominant animals taking most of food</li> <li>• lack of space for individual animals to feed</li> <li>• distress caused by proximity of other animals nearby.</li> </ul> </li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS304A Carry out simple breeding procedures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of planning mating and breeding, parturition or hatching and weaning of animals under supervision.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to animal keepers and carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Select animals for breeding	<p>1.1. <b><i>Basic principles of genetics</i></b> are identified and related to breeding program requirements.</p> <p>1.2. <b><i>Breeding program</i></b> requirements are identified and clarified with supervisor.</p> <p>1.3. <b><i>Animals</i></b> for mating are selected in accordance with the requirements of the breeding program, <b><i>animal welfare</i></b> regulations and <b><i>ethical practice principles</i></b> and approved by the supervisor.</p> <p>1.4. Examination and tests are scheduled, as required, to confirm suitability of selected animals for breeding program.</p> <p>1.5. Individual animals are <b><i>monitored</i></b> to determine the current stage of their reproductive cycle.</p>
2. Implement breeding procedures	<p>2.1. <b><i>OHS risks</i></b> associated with working with animals and breeding programs are identified and options for managing the risk are evaluated and preparations are made in case of emergency.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.2. Animals selected for mating are placed in an <b><i>appropriate environment</i></b>.</p> <p>2.3. Appropriate <b><i>breeding systems</i></b> are applied in accordance with the breeding program.</p> <p>2.4. Appropriate <b><i>mating methods</i></b> are applied in accordance with the breeding program and supervisor's instructions.</p> <p>2.5. Animals are monitored during and after the mating period to determine successful mating.</p>
3. Monitor post-mating progress	<p>3.1. Changes in behaviour and condition are observed and documented, where appropriate, in breeding females to determine possible pregnancy.</p> <p>3.2. Examinations and tests are scheduled, if appropriate, to determine pregnancy.</p> <p>3.3. Hatching or parturition dates are estimated and documented.</p>
4. Prepare for and assist with birth or hatching	<p>4.1. <b><i>Suitable media</i></b> are provided to assist with the birth or hatching.</p> <p>4.2. <b><i>Signs</i></b> of hatching or parturition are identified and potential problems reported to supervisor.</p> <p>4.3. Appropriate <b><i>monitoring</i></b> is provided to ensure the safe birth or hatching of young animals.</p> <p>4.4. Offspring are identified, sexed, measured and results documented.</p> <p>4.5. Mother and offspring are monitored to ensure appropriate bonding, feeding and activity behaviours are observed and problems are reported to supervisor.</p>
5. Wean animals	<p>5.1. Offspring diets are modified in preparation for weaning.</p> <p>5.2. Vaccinations, other medications and permanent identification protocols are scheduled as required.</p> <p>5.3. Weaning process is selected and implemented in accordance with workplace protocols.</p> <p>5.4. <b><i>Post-weaning management</i></b> is carried out in accordance with the breeding program and the supervisor's instructions.</p> <p>5.5. <b><i>Breeding records</i></b> are updated.</p> <p>5.6. Breeding outcomes are assessed and updates are recommended to supervisor for inclusion in the workplace breeding plan.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- care for neonates and juveniles
- employ safe, humane and environmentally responsible organisational systems and procedures when working with and handling animals and feed
- evaluate behaviour, signs and objective measures that may indicate animal health is at risk
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare facilities and appropriate environments for breeding animals, embryo development, hatching or parturition and nursing animals
- recognise courtship, copulation, combat and signs of behavioural and physical changes associated with reproduction
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS); breeding programs; infection control and waste management procedures; and record details and information accurately and legibly
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- numeracy skills to estimate, calculate and record routine workplace measures
- problem-solving skills to use available resources and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical and physiological structures and functions related to animal reproductive health and wellbeing of commonly held animals
- anatomical and physiological terminology, glossary of terms and nomenclature related to animal reproduction
- basic principles of genetics
- best breeding systems, methods and traits to produce the best possible production rates, health and wellbeing of animals related to species concerned

## REQUIRED SKILLS AND KNOWLEDGE

- commonly used genetic terms and concepts, including phenotype, genotype, cell differentiation and genetic integrity
- functions and requirements of a breeding colony where relevant
- housing requirements for mother and young of relevant species
- mating behaviour of commonly held animals
- natural breeding behaviours and biology, including seasonal and non-seasonality of reproduction
- nutrition and health requirements of commonly held animals at different stages of their life and reproductive cycle
- normal and abnormal animal behaviour
- organisation policies and procedures, including OHS and emergency procedures and breeding plan
- principles of animal welfare and ethics
- purpose of different aspects of breeding data and records
- methods used to measure, interpret and record animals weight and other objective measures of animal health
- relevant OHS and animal welfare legislative requirements and codes of practice
- reproductive terminology
- safe work practices
- signs of animal well being, illness, injury or other health compromise issues
- weaning procedures
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- follow requirements of breeding program to produce the required species and strains

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• monitor and observe animals and report on breeding cycle</li> <li>• communicate effectively with supervisor and follow instructions</li> <li>• carry out breeding, hatching or parturition and weaning procedures in accordance with organisations policies and procedures</li> <li>• carry out post-weaning management</li> <li>• maintain accurate breeding program and animal health-related records.</li> </ul> <p>The skills and knowledge required to carry out simple breeding procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. This can include work with native, exotic or domestic animals in large or small animal care or research facilities and/or situations.</p> <p>There must be access to a range of animals relevant to the work role as well as the required information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case studies</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Basic principles of genetics</i></b> may include:	<ul style="list-style-type: none"> <li>• chromosomes</li> <li>• genes</li> <li>• inheritance</li> <li>• punnet squares</li> <li>• commonly used genetic terms and concepts including: <ul style="list-style-type: none"> <li>• cell differentiation</li> <li>• genetic integrity</li> <li>• genotype</li> <li>• phenotype.</li> </ul> </li> </ul>
<b><i>Breeding program</i></b> may include:	<ul style="list-style-type: none"> <li>• information about:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• number of breeders required</li> <li>• selection criteria for breeders and retiring breeders</li> <li>• breeding system to be used: <ul style="list-style-type: none"> <li>• backcross</li> <li>• inbred</li> <li>• outbred</li> <li>• genotype</li> </ul> </li> <li>• mating system to be used</li> <li>• fostering requirements</li> <li>• identification system to be used</li> <li>• record systems to be used: <ul style="list-style-type: none"> <li>• books</li> <li>• cards</li> <li>• computer</li> </ul> </li> <li>• data to be collected about: <ul style="list-style-type: none"> <li>• parent information</li> <li>• generation development (e.g. litter numbers, numbers born and sex ratios)</li> <li>• sex and weaning rates.</li> </ul> </li> </ul>
<i>Animals</i> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace: <ul style="list-style-type: none"> <li>• birds</li> <li>• dogs, cats and horses</li> <li>• fish, amphibians and reptiles</li> <li>• invertebrates</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs)</li> <li>• food-producing animals (e.g. cattle, pigs and sheep)</li> <li>• wildlife or exotic mammals</li> </ul> </li> <li>• in an animal technology environment on most occasions the animal species will be common laboratory animals: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rabbits</li> <li>• rats.</li> </ul> </li> </ul>
<i>Animal welfare</i> and <i>ethical</i>	<ul style="list-style-type: none"> <li>• adhering to local, state or territory and federal</li> </ul>

<b>RANGE STATEMENT</b>	
<i>practice principles</i> include:	animal welfare legislation requirements <ul style="list-style-type: none"> <li>• adhering to the responsible care and use of animals by providing for its needs in a reasonable way:               <ul style="list-style-type: none"> <li>• adequate food and water</li> <li>• appropriate accommodation or living conditions</li> <li>• handling animals humanely</li> <li>• the display of normal behavioural patterns</li> <li>• treatment of disease and injury</li> </ul> </li> <li>• providing standards for animal care and use that:               <ul style="list-style-type: none"> <li>• achieve a reasonable balance between the welfare of animals and the interests of people whose livelihood is dependent on animals</li> <li>• allow for the effect of advancements in scientific knowledge about animal biology and changes in community expectations about practices involving animals</li> <li>• protect animals from unjustifiable, unnecessary, or unreasonable pain (i.e. cruelty).</li> </ul> </li> </ul>
Animals may be <i>monitored</i> to determine current reproductive cycle status through:	<ul style="list-style-type: none"> <li>• ongoing observation to identify specific indicators:               <ul style="list-style-type: none"> <li>• evidence of mating</li> <li>• forms of animal communication:                   <ul style="list-style-type: none"> <li>• specific breeding calls</li> <li>• olfactory signals</li> </ul> </li> <li>• identification of oestrus</li> <li>• sexual behaviour:                   <ul style="list-style-type: none"> <li>• aggression between males</li> <li>• copulation</li> <li>• courtship rituals</li> <li>• nesting</li> <li>• preening</li> </ul> </li> <li>• their visual appearance</li> </ul> </li> <li>• relevant signs in the male and female reproductive cycle:               <ul style="list-style-type: none"> <li>• changes in dietary habits</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• fattening up</li> <li>• metamorphosis in amphibians</li> <li>• oestrus</li> <li>• parturition</li> <li>• puberty.</li> </ul>
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• introduction or separation of animals during breeding program</li> <li>• intraocular contamination</li> <li>• manual handling including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Appropriate environment</i></b> for mating may consider:	<ul style="list-style-type: none"> <li>• the species involved and the specific requirements of the breeding program: <ul style="list-style-type: none"> <li>• consideration of appropriate housing for mother</li> <li>• day or night cycle</li> <li>• humidity and temperature</li> <li>• photoperiod</li> <li>• providing suitable media for fertilisation</li> <li>• reduced noise or light</li> <li>• screening and/or privacy</li> <li>• seasonal effects</li> <li>• separation of animal from other animals</li> <li>• simulated natural habitat</li> <li>• special dietary requirements.</li> </ul> </li> </ul>
<b><i>Breeding systems and mating methods</i></b> may include:	<ul style="list-style-type: none"> <li>• breeding systems: <ul style="list-style-type: none"> <li>• cross breeding</li> <li>• inbreeding and controlled outbreeding</li> </ul> </li> <li>• mating methods: <ul style="list-style-type: none"> <li>• paired mating</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• stud mating</li> <li>• the harem system.</li> </ul>
<i>Suitable media</i> to assist with birth or hatching may include:	<ul style="list-style-type: none"> <li>• materials or substrates for: <ul style="list-style-type: none"> <li>• nesting</li> <li>• egg laying and/or incubation.</li> </ul> </li> </ul>
<i>Signs</i> of hatching or parturition may include:	<ul style="list-style-type: none"> <li>• evidence of labour or preparation for birth: <ul style="list-style-type: none"> <li>• breaking through the shell</li> <li>• change in appearance of egg colour</li> <li>• laboured breathing</li> <li>• milk let down</li> <li>• nest making</li> <li>• pushing</li> <li>• territorial behaviour</li> <li>• vaginal discharge.</li> </ul> </li> </ul>
<i>Monitoring</i> may include:	<ul style="list-style-type: none"> <li>• implementation of a 24-hour watch</li> <li>• checking egg viability.</li> </ul>
<i>Post-weaning management</i> may include:	<ul style="list-style-type: none"> <li>• supplement feeding</li> <li>• identification of future breeding animals</li> <li>• health checks</li> <li>• immunisation requirements</li> <li>• recording observations.</li> </ul>
<i>Breeding records</i> may include:	<ul style="list-style-type: none"> <li>• date of birth</li> <li>• numbers born, stillborn, missing or found dead</li> <li>• sexes born</li> <li>• numbers weaned</li> <li>• growth weight</li> <li>• strain and genotype information.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMGAS305A Rescue animals and apply basic first aid

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of rescuing and restraining animals and providing basic first aid.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to animal keepers and carers where it may be necessary to identify where assistance is required in the rescue of animals and the management of animal stress and injuries.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess the situation and plan response	<p>1.1. <i>Risk posed to self, others and animals</i> is assessed.</p> <p>1.2. <i>Options for assisting animals</i> are evaluated and procedures selected with reference to workplace protocols and regulations.</p> <p>1.3. <i>Animals</i> are identified and appropriate <i>equipment</i> is selected for the rescue.</p> <p>1.4. <i>Occupational health and safety (OHS) procedures</i> and <i>personal protective equipment</i> are used at all times when handling animals.</p>
2. Capture and protect animal	<p>2.1. <i>Basic animal care</i> is provided to minimise stress to animals.</p> <p>2.2. Animal is caught and handled <i>safely and humanely</i> to minimise pain and potential injuries.</p> <p>2.3. Animal is reassured in a caring manner and made comfortable using available resources.</p>



ELEMENT	PERFORMANCE CRITERIA
	2.4. Physical condition and vital signs of the animal are assessed.
3. Provide first aid assistance	3.1. Basic first aid is provided in accordance with <i>established animal first aid procedures</i> . 3.2. Treatment is sought from others as appropriate and required. 3.3. <i>Advice and assistance</i> are sought from supervisor or appropriate personnel in respect to future options for animal. 3.4. <i>Information on animal</i> is collected and recorded in accordance with legislative and organisational requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documentation and reports
- employ safe and environmentally responsible organisational systems and procedures when handling animals
- evaluate behaviour, signs, symptoms and objective measures that may indicate animal health is at risk
- follow workplace procedures for hazard identification and risk control
- gather and provide information in response to workplace requirements
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe, document and report findings on animal health and behaviour using workplace protocols and procedures
- respond to emergencies in line with practised actions
- literacy skills to read and follow organisational policies and procedures, including OHS
- numeracy skills to estimate, calculate and record routine workplace measures
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental

## REQUIRED SKILLS AND KNOWLEDGE

abilities

- problem-solving skills to use available resources, prioritise rescue tasks and determine who to contact for assistance
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment.

### Required knowledge

- anatomical orientation terminology
- animal emergency network, including animal welfare bodies and support facilities
- animal first aid techniques
- animal temperaments and behaviours related to the associated hazards and risks to animals and staff during animal capture, restraint, inspection and treatment
- communication procedures and systems, and technology relevant to the organisation and the individual's work responsibilities
- examination techniques for health status
- first aid casualty management principles
- hazards associated with handling animals and control measures
- methods used to identify animals
- methods used to capture, restrain and examine animals including equipment
- natural animal behaviour relating to the characteristics of the species, age, health status and social needs
- organisation policies and procedures, including OHS and emergency procedures
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of animals
- principles of animal welfare and ethics
- physiological features of animals
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS, animal welfare and waste disposal
- safe animal handling techniques and procedures
- safe work practices
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials
- zoonotic diseases.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• plan rescue response through situation assessment</li> <li>• communicate effectively with others and follow instructions</li> <li>• carry out rescue procedures and protect animal in accordance with OHS requirements</li> <li>• apply basic animal care and first aid</li> <li>• seek advice and assistance regarding animal care and future options</li> <li>• gather information on animal and maintain records.</li> </ul> <p>The skills and knowledge required to rescue animals and apply basic first aid must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must be relevant to the industry sector in which candidates are working and must cover a minimum of one species from at least two of the six major animal groups OR at least three breeds from within one of the six major animal groups (mammals, fish, birds, amphibians, reptiles, invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible,</p>

<b>EVIDENCE GUIDE</b>	
	<p>over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Risk posed to self, others and animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• to self and others from animals:             <ul style="list-style-type: none"> <li>• attack by other animals</li> <li>• bites, kicks and scratches</li> <li>• envenomation</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• crush injuries</li> <li>• zoonoses and infective agent release</li> <li>• to self and others from humans: <ul style="list-style-type: none"> <li>• injury caused by inexperienced handling capture techniques or by not following protocols</li> <li>• unsuccessful rescue due to: <ul style="list-style-type: none"> <li>• inexperienced assistants using poor techniques</li> <li>• using inadequate or unsuitable equipment</li> <li>• not following agreed protocols</li> <li>• poor communication of procedures to be followed</li> </ul> </li> </ul> </li> <li>• environmental hazards to self, others and animals: <ul style="list-style-type: none"> <li>• contaminated sites</li> <li>• chemical spillage</li> <li>• electrocution</li> <li>• fire and smoke</li> <li>• flood</li> <li>• potential cave-ins</li> <li>• rocky or unstable terrain</li> <li>• traffic</li> <li>• weather and climatic conditions</li> </ul> </li> <li>• to animals: <ul style="list-style-type: none"> <li>• inability to assess extent of injury and needs due to inaccessible or remote location</li> <li>• inability to rescue due to lack of suitable equipment or poor site access</li> <li>• injury as a result of capture methods used</li> <li>• injury as a result of inexperienced handlers or volunteers</li> <li>• injury or death due to the trauma of rescue or capture.</li> </ul> </li> </ul>
<p><b><i>Options for assisting animals</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal needs: <ul style="list-style-type: none"> <li>• food, water and shelter</li> <li>• reassurance</li> <li>• restraint to prevent further trauma or injury</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• assistance required from others: <ul style="list-style-type: none"> <li>• emergency services agencies</li> <li>• machinery operator</li> <li>• rescuers with specific animal handling skills</li> <li>• utilities operators to control power, gas, water and other services</li> <li>• volunteers with little or no experience to assist</li> <li>• veterinarian or other animal specialist authorised to act in emergencies</li> </ul> </li> <li>• methods and equipment needed to: <ul style="list-style-type: none"> <li>• assess animal condition and possible injuries</li> <li>• catch animal</li> <li>• rescue animal.</li> </ul> </li> </ul>
<i>Animals</i> may include:	<ul style="list-style-type: none"> <li>• animals commonly encountered within the industry workplace and may cover both native and introduced species</li> <li>• animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</li> </ul>
<i>Equipment</i> may include:	<ul style="list-style-type: none"> <li>• catching equipment relevant to species to be rescued: <ul style="list-style-type: none"> <li>• barriers, screens and yards</li> <li>• catch poles and nets</li> <li>• food and enticement toys</li> <li>• halters and collars</li> <li>• nets, bags and hoods</li> <li>• slings and cradles</li> <li>• transport equipment</li> </ul> </li> <li>• rescue equipment: <ul style="list-style-type: none"> <li>• concrete and masonry cutting equipment</li> <li>• cranes and winches</li> <li>• digging equipment and machinery</li> </ul> </li> <li>• animal needs: <ul style="list-style-type: none"> <li>• food, water and shelter</li> <li>• reassurance</li> </ul> </li> <li>• first aid equipment: <ul style="list-style-type: none"> <li>• shock treatment</li> <li>• temperature regulation items (e.g. blankets</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and water)</p> <ul style="list-style-type: none"> <li>wound and injury care items.</li> </ul>
<p><i>OHS procedures</i> and <i>personal protective equipment</i> may include:</p>	<ul style="list-style-type: none"> <li>OHS procedures: <ul style="list-style-type: none"> <li>establishing a clear chain of command</li> <li>ensuring site safety for personnel and animals is assessed and appropriate precautions are taken prior to commencing rescue</li> <li>ensuring equipment is in working order and safe to use in particular circumstances</li> <li>identifying possible escape routes of animals and minimising opportunities of escape during rescue</li> <li>ensuring first aid equipment for personnel and animals is available</li> <li>following workplace protocols for advising of planned routes or locations if working away from regular worksite</li> <li>ensuring staff with experience using rescue equipment are utilised if available</li> <li>taking adequate fluids and w</li> </ul> </li> <li>personal protective equipment: <ul style="list-style-type: none"> <li>communication equipment</li> <li>infection control equipment</li> <li>protective clothing: <ul style="list-style-type: none"> <li>boots, gloves, goggles and helmet</li> <li>sun and wet weather protection from head and cold</li> <li>protection from animal scratches and bites</li> <li>protection from terrain, chemical spills or other hazards</li> </ul> </li> </ul> </li> <li>safety lines and harness.</li> </ul>
<p><i>Basic animal care</i> may include:</p>	<ul style="list-style-type: none"> <li>suitable containment and transport</li> <li>provision of warmth</li> <li>not feeding if advised</li> <li>providing a quiet environment or darkness when appropriate.</li> </ul>
<p><i>Safely and humanely</i> handling animals may include:</p>	<ul style="list-style-type: none"> <li>appropriate use of restraints</li> <li>correct use of personal protective equipment</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>and rescue equipment</li> <li>• observing stress to the animal</li> <li>• allocating sufficient time to the process</li> <li>• considering animals' welfare at all times</li> </ul>
<i>Established animal first aid procedures</i> may include:	<ul style="list-style-type: none"> <li>• stop bleeding</li> <li>• minimise impact of shock by keeping animal quiet, warm and away from activity or noise</li> <li>• immobilise limb injuries if soft tissue damage or fractures are suspected if possible</li> <li>• hose or apply water if available in cases of burns or heat exhaustion</li> <li>• administration of emetics or antidotes under instruction if appropriate</li> <li>• feeding or watering as advised</li> <li>• transporting animal to veterinary assistance as soon as possible.</li> </ul>
<i>Advice and assistance</i> may include:	<ul style="list-style-type: none"> <li>• veterinary consultation: <ul style="list-style-type: none"> <li>• immediate first aid care and treatment</li> <li>• surgical or medication needs</li> <li>• potential of animal to recover from emergency situation</li> <li>• animal quality of life evaluation post-emergency recovery</li> <li>• diet options</li> </ul> </li> <li>• rehabilitation and therapy options: <ul style="list-style-type: none"> <li>• carers or volunteers looking after animals</li> <li>• devising structured rehabilitation and release programs for wildlife</li> <li>• returning domestic pets to owners</li> <li>• giving animals to a captive animal facility</li> </ul> </li> <li>• insurance considerations: <ul style="list-style-type: none"> <li>• if animal was insured what are instructions from underwriter regarding care, treatment option and future use</li> <li>• if animal rescue has impact on business insurance what are instructions from underwriter.</li> </ul> </li> </ul>
<i>Information on animal</i> may include:	<ul style="list-style-type: none"> <li>• identification of animal</li> <li>• extent of injuries</li> <li>• treatment provided</li> </ul>



**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• equipment used</li> <li>• witness details and version of events</li> <li>• owner contact details if owner identified</li> <li>• reasons for animal emergency in the first place</li> <li>• procedure followed during rescue</li> <li>• issues arising from rescue that could lead to improved success in future operations.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Animal studies
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMGAS306A Assist with conditioning animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of conditioning animals in order to modify their behaviour through assisting with formulating and demonstrating a conditioning plan based on operant conditioning techniques.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to animal keepers and carers who are expected to perform tasks under supervision.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Develop a conditioning plan	1.1. Range of <i>desirable and undesirable behaviours</i> is identified for specific animals. 1.2. Behaviour to be trained is identified in consultation with supervisor. 1.3. Appropriate <i>positive reinforcement</i> to be used for conditioning is identified. 1.4. A <i>conditioned reinforcer</i> is identified in consultation with the supervisor. 1.5. <i>Conditioning plan</i> is compiled in consultation with the supervisor and presented in accordance with <i>occupational health and safety (OHS)</i> , animal welfare and organisation policies and procedures.
2. Condition a behaviour	2.1. A conditioned reinforcer is established with the animal under supervision.

ELEMENT	PERFORMANCE CRITERIA
	<p>2.2. <i>Approximations</i> are demonstrated under supervision, to condition animal.</p> <p>2.3. Behaviour <i>under stimulus control</i> is demonstrated in accordance with animal welfare and ethics requirements.</p> <p>2.4. Documentation of the behaviour being conditioned is <i>recorded</i> in accordance with organisation policies and procedures.</p>
3. Monitor and review a conditioning plan	<p>3.1. Conditioning plan's short and long-term objectives are reviewed regularly in consultation with the supervisor and other relevant personnel.</p> <p>3.2. Plan is regularly updated in accordance with organisation policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant workplace documentation including conditional plans
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- follow instructions and assist safely with tasks
- implement organisation policies and procedures related to conditioning
- monitor animal health and condition and recognise abnormalities
- literacy skills to read and follow organisation policies and procedures, including OHS; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, training others and consulting with team members and supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment.

## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- anatomy and physiology of animals as it relates to conditioning
- behavioural needs, including housing, feeding, enclosure maintenance and breeding
- normal and abnormal animal behaviour and behaviour patterns
- principles of and reasons for animal learning and operant conditioning techniques
- principles of animal ethics and welfare
- principles of behaviour and environmental enrichment
- organisation policies and procedures, including OHS and emergency procedures, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation, regulations and codes of practice including OHS and animal welfare
- safe animal handling techniques and procedures
- safe work practices
- techniques and tools used to condition behaviour
- terminology used in conditioning animals.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- formulating a conditioning plan in consultation with others that complies with OHS and animal welfare requirements
- apply principles of learning in relation to operant conditioning techniques
- apply positive reinforcement methods and use appropriate techniques and tools to condition behaviour

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>maintain accurate records.</li> </ul> <p>The skills and knowledge required to assist with conditioning animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. This can include work with native, exotic or domestic animals in large or small animal care facilities and/or situations.</p> <p>There must be access to a range of animals relevant to the work role as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>written and/or oral assessment of candidate's required knowledge</li> <li>observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>simulation exercises that reproduce normal work conditions</li> <li>third-party evidence</li> <li>workplace documentation</li> <li>portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>

**EVIDENCE GUIDE****Guidance information for assessment**

Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Desirable and undesirable behaviours*** may include:

- desirable behaviour:
  - appropriate nocturnal behaviour
  - normal appetite
  - normal activity levels
  - social interaction
  - visual and vocal interaction
- undesirable behaviour:
  - biting or kicking
  - hissing
  - inappropriate aggression
  - poor appetite
  - repetitive or stereotypical behaviour patterns
  - restlessness
  - self-mutilation
  - vocalisation.

***Positive reinforcement*** may include:

- primary reinforcers (e.g. food)
- secondary reinforcers:
  - play
  - touch
  - toys

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• verbal interaction.</li> </ul>
<i>Conditioned reinforcers</i> may include:	<ul style="list-style-type: none"> <li>• something that the animal does not initially perceive as having reinforcing or rewarding value (e.g. a whistle or clicker) taking on a reinforcing value of its own when paired with a known reinforcer (e.g. food).</li> </ul>
<i>Conditioning plan</i> may include:	<ul style="list-style-type: none"> <li>• the animal's profile</li> <li>• the behavioural goal and reasons for it</li> <li>• the number and type of sessions planned</li> <li>• the staff to be used</li> <li>• tools required (e.g. target poles, stations and props)</li> <li>• types of reinforcers to be used.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Approximations</i> may include:	<ul style="list-style-type: none"> <li>• the successive steps that a trainer will go through in order to condition a behaviour.</li> </ul>
<i>Under stimulus control</i> refers to:	<ul style="list-style-type: none"> <li>• a behavioural response from a verbal and/or visual cue.</li> </ul>
Type of items <i>recorded</i> may include:	<ul style="list-style-type: none"> <li>• progress</li> <li>• problems encountered</li> <li>• solutions.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	General animal studies
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMINF301A Comply with infection control policies and procedures in animal work

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process required to comply with infection control policies and procedures in animal care workplaces and relevant field locations.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to all animal care workers who have a duty of care to ensure workplace procedures are followed in order to maintain infection control standards. All procedures must be carried out in accordance with current infection control guidelines, Australian and New Zealand Standards for maintaining infection control and the policies and procedures of the organisation.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Follow infection control guidelines	<p>1.1. The application of <i>standard precautions</i> to prevent the spread of infection is demonstrated in accordance with the organisation infection control plan.</p> <p>1.2. The application of <i>additional precautions</i> is demonstrated when standard precautions alone may not be sufficient to prevent transmission of infection.</p> <p>1.3. Organisation and legislative <i>reporting and documentation</i> requirements related to infection control procedures are followed.</p>
2. Identify and respond to infection risks	<p>2.1. <i>Infection risks</i> are identified, reported and appropriate response implemented within own role and responsibility.</p> <p>2.2. Procedures for risk control and risk containment for specific risks are followed.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.3. Protocols for care following needle stick injury or bodily fluid exposure are followed as required.</p> <p>2.4. Spills are removed in accordance with organisation policies and procedures.</p> <p>2.5. Suspicions of a <i>notifiable disease</i> or <i>potential infectious disease signs</i> are reported in accordance with organisation procedures and legislative requirements within own role and responsibility.</p> <p>2.6. Infection control accidents/incidents are reported and risk control procedures actioned in accordance with legislative regulations and infection control requirements within limits of own role and responsibility.</p>
3. Maintain personal protection	<p>3.1. Hand hygiene is maintained before and after animal contact and/or any activity likely to cause cross-contamination in accordance with Australian/New Zealand Standards.</p> <p>3.2. Hand care procedures are implemented.</p> <p>3.3. Cuts and abrasions are covered with waterproof dressing and changed as necessary.</p> <p>3.4. Personal protective clothing and equipment that complies with Australian/New Zealand Standards are worn and changed, as appropriate, for the intended use.</p> <p>3.5. Personal immunisation/vaccination requirements for working with animals are identified, obtained (where required) and boosters kept up to date.</p>
4. Limit contamination	<p>4.1. <i>Clean and contaminated zones</i> are demarcated and maintained in all aspects of animal care work.</p> <p>4.2. Demarcation procedures involving the movement of animals within or between facilities are followed in accordance with legislative requirements and infection control guidelines.</p> <p>4.3. Animals identified and/or suspected of presenting with a contagious or zoonotic disease are housed in isolation as soon as possible.</p> <p>4.4. Work surfaces, materials, equipment and instruments are cleaned, disinfected and sterilised, where required, in accordance with infection control guidelines.</p> <p>4.5. Soiled laundry and protective clothing are handled and processed in accordance with organisation infection control procedures.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>4.6. <b>Hazards to animal and human health from food sources</b> are identified and methods used to manage potential risks are implemented.</p> <p>4.7. Organisation <b>rodent and vector control procedures</b> are followed.</p> <p>4.8. Clinical, related and general waste, including sharps, are handled and <b>disposed</b> of in accordance with legislative requirements and organisation policies and procedures.</p> <p>4.9. Animal care facility clients/customers are provided with information regarding infection control, including risks of zoonosis.</p>
5. Contribute to incursion readiness processes	<p>5.1. <b>Infectious Disease Control Kit</b> is maintained in accordance with infection control guidelines in readiness for facility or field activity requirements.</p> <p>5.2. Contributions are made to the review and revision of the organisation's infection control plan and incident response procedures when problems are identified or government recommendations change.</p> <p>5.3. Infection control documentation is updated and maintained in accordance with organisation policies and procedures.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- comply with relevant Australian/New Zealand Standards
- employ safe, humane and environmentally responsible organisational systems and procedures when working with animals
- introduce additional precautions, when standard precautions are not sufficient, tailored to the specific infection agent involved and its mode of transmission
- identify common indicators of the presence of disease, injury, compromised health or distress in animals and respond in compliance with animal welfare and workplace project protocols
- identify emergency situations and respond according to workplace protocols in order to minimise the risk of injury/infection to self, others and animals
- maintain the highest standards of hygiene and infection control at all times to

## REQUIRED SKILLS AND KNOWLEDGE

- reduce the risk of infection and cross-infection
- prepare and maintain appropriate records and reports relevant to infection control procedures
- literacy skills to read, interpret and apply facility policies and procedures, including occupational health and safety (OHS), infection control, containment and exclusion and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and consulting with or seeking advice from team members, senior or more experienced staff or other relevant persons
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available information and resources including recording information and prioritise daily tasks.

### Required knowledge

- standard precautions for the care and treatment of all animals, regardless of their perceived or confirmed infectious status for animal care
- additional precautions, when standard precautions are not sufficient, tailored to the specific infection agent involved and its mode of transmission
- aseptic techniques
- aspects of infectious diseases, including:
  - pathogens
  - opportunistic organisms
- Australian/New Zealand Standards that are relevant including:
  - AS/NZS 3816:1998 Management of clinical and related wastes
  - AS/NZS 4187 2003 Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities
  - AS/NZS 4261:1994 and Amendment 1:1997 Reusable containers for the collection of sharp items used in human and animal medical applications
  - AS/NZS 4815:2006 Office-based health care facilities - Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment
- basic microbiology, including:
  - bacteria and bacterial spores
  - fungi
  - viruses

## REQUIRED SKILLS AND KNOWLEDGE

- common diseases, ailments, injuries and other impacts on animal health and wellbeing and characteristics of healthy, sick or distressed animals
- disease transmission, including:
  - sources of infection microorganisms, including persons who are carriers, in the incubation phase of the disease or are acutely ill
  - paths of transmission including direct contact, aerosols and penetrating injuries
  - risk of acquisition
- Environmental Protection (Waste Management) legislation and regulations
- immunisation/vaccination requirements for animal care workers where applicable
- manufacturers' specifications for relevant equipment and materials
- National Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting (2004)
- organisation infection control policies and procedures, including animal movement tracking
- rodent and vector control procedures
- relevant state or territory legislation and regulations relating to OHS, animal welfare, biosecurity procedures and waste disposal
- safe animal handling techniques
- susceptible hosts including persons who are immune suppressed, have chronic diseases, such as diabetes and the very young and very old
- terminology used to describe and document animal health and behavioural signs and symptoms
- the purpose and use of containment facilities
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• comply with effective infection control guidelines to ensure the prevention of transmission of infections from animal to person, animal to animal and/or person to animal</li> <li>• identify and respond to infection risks</li> <li>• maintain personal protection</li> <li>• limit contamination and contribute towards incursion readiness processes</li> <li>• report suspicions of a notifiable disease or unusual disease signs</li> <li>• maintain documentation.</li> </ul> <p>The skills and knowledge required to comply with infection control policies and procedures in animal work must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Industry sectors can include veterinary practices, pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training or grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities, animal technology facilities or similar workplaces.</p> <p>There must be access in either situation to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<p>knowledge</p> <ul style="list-style-type: none"> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Standard precautions</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• appropriate reprocessing of reusable equipment</li> <li>• aseptic technique</li> <li>• environmental controls (e.g. design and maintenance of premises and cleaning)</li> <li>• personal hygiene practices especially washing and drying hands (e.g. before and after animal contact)</li> <li>• safe handling and disposal of sharps and other clinical, related and general waste</li> <li>• surface cleaning and management of blood and</li> </ul>

<b>RANGE STATEMENT</b>	
	bodily fluid spills <ul style="list-style-type: none"> <li>• techniques to limit contamination</li> <li>• use of personal protective equipment.</li> </ul>
<i>Additional precautions</i> may include:	<ul style="list-style-type: none"> <li>• additional use of personal protective equipment</li> <li>• dedicated equipment (e.g. to each animal or as appropriate to work function)</li> <li>• isolation/cohorting</li> <li>• restricted movement of animal, staff and visitors/customers</li> <li>• special ventilation requirements</li> <li>• use of a special facility.</li> </ul>
<i>Reporting and documentation</i> may include:	<ul style="list-style-type: none"> <li>• animal health records</li> <li>• animal movement records:               <ul style="list-style-type: none"> <li>• exclusion and containment movements</li> <li>• isolation of new stock arrivals</li> <li>• movement of animals within and between facilities</li> </ul> </li> <li>• incident reporting and documenting details of injuries or potential exposures to zoonotic pathogens</li> <li>• maintaining currency of infection control plans and incident response procedures</li> <li>• relevant federal, state and territory legislative reporting requirements for suspected infectious diseases.</li> </ul>
<i>Infection risks</i> may include:	<ul style="list-style-type: none"> <li>• airborne transmission of respiratory secretions</li> <li>• animal waste and animal tissues</li> <li>• clinical, related and general waste</li> <li>• contact with blood and other body substances</li> <li>• droplet transmission of respiratory secretions</li> <li>• humans</li> <li>• other animals, insects and vermin</li> <li>• personal contact with infectious materials, substances and/or animals</li> <li>• sharps injury</li> <li>• stock, including food, due to contamination or passed 'used-by' dates.</li> </ul>
Current <i>notifiable diseases information</i> may be accessed from:	<ul style="list-style-type: none"> <li>• relevant state or territory Departments of Primary Industries or equivalent websites.</li> </ul>

<b>RANGE STATEMENT</b>	
Indicators of <i>potential infectious disease signs</i> may include:	<ul style="list-style-type: none"> <li>• infectious diseases: <ul style="list-style-type: none"> <li>• bacteria</li> <li>• fungi</li> <li>• internal and external parasites</li> <li>• virus</li> <li>• zoonoses</li> </ul> </li> <li>• infectious disease signs: <ul style="list-style-type: none"> <li>• blisters, ulceration or erosions</li> <li>• dead animals</li> <li>• hair loss or skin disease</li> <li>• nervousness or other behaviour changes</li> <li>• profuse and bloody diarrhoea</li> <li>• rapid spread of signs and symptoms throughout facility</li> <li>• unexplained lethargy, listlessness or depression</li> <li>• unusually high numbers of sick animals</li> <li>• severe hacking cough.</li> </ul> </li> </ul>
<i>Clean and contaminated zones</i> may include:	<ul style="list-style-type: none"> <li>• clean zone: <ul style="list-style-type: none"> <li>• storage areas for materials, equipment and medications</li> </ul> </li> <li>• contaminated zones: <ul style="list-style-type: none"> <li>• area used for items that have become contaminated during use.</li> </ul> </li> </ul>
<i>Hazards to animal and human health from food sources</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Rodent and vector control procedures</i> may include:	<ul style="list-style-type: none"> <li>• rodent control: <ul style="list-style-type: none"> <li>• eliminate nesting sites for rodents and birds</li> <li>• remove spilt or uneaten feed</li> <li>• sealed feed rooms</li> </ul> </li> <li>• vector control: <ul style="list-style-type: none"> <li>• animal care facility pen/cage/stall security</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• insect screening</li> <li>• pest control annual reduction program</li> <li>• remove mosquito breeding sites (e.g. sources of standing water)</li> <li>• remove access points for native animals (e.g. possums, macropods and reptiles).</li> </ul>
<i>Disposal</i> of waste requirements may include:	<ul style="list-style-type: none"> <li>• disposal in accordance with: <ul style="list-style-type: none"> <li>• Environmental Protection (Waste Management) policy and regulations</li> <li>• Australian and New Zealand Standards.</li> </ul> </li> </ul>
<i>Infectious Disease Control Kit</i> may include:	<ul style="list-style-type: none"> <li>• cap</li> <li>• gloves</li> <li>• goggles/face shield</li> <li>• ground sheet</li> <li>• overalls</li> <li>• sanitising wipes</li> <li>• shoe covers</li> <li>• surgical masks (p2/n95).</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Infection control
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	



## ACMMIC401A Implant microchip in cats and dogs

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of competently and aseptically performing microchip implantation procedures on cats and dogs, with minimum discomfort to the animal, for identification and traceability purposes.</p> <p>Delivery and assessment of this unit must comply with the relevant state or territory legislation and regulations which may stipulate pre-entry requirements to be able to undertake this unit. This unit also requires the use of animals for educational activities and delivery and must comply with the requirements of relevant state or territory legislation. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to implant microchips into cats or dogs. Participants may include veterinary practitioners, veterinary nurses, nominated employees and shelter managers of animal welfare agencies, local government animal management officers and pound managers, animal technicians in the role of managers or supervisors in animal research laboratories and animal control officers.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the Animal Care and Management Training Package have the requirement for animals to be</p>
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	handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for microchip implantation	1.1. <i>Statutory and local authority requirements</i> , including current and verifiable professional indemnity and public liability cover for the implanter, are complied with.

ELEMENT	PERFORMANCE CRITERIA
	<p>1.2. Details of the procedure are explained to the animal owner prior to commencement of the process.</p> <p>1.3. <b>Location</b> for conducting the microchipping procedure is selected, taking into account <i>likely species behaviour</i>.</p> <p>1.4. Availability of <i>supervisory veterinarian</i> is confirmed in case of adverse animal reaction to procedure.</p> <p>1.5. Australian Veterinary Association policy and relevant Australian Standards for implantation and scanning devices are read and followed throughout the process.</p>
2. Prepare equipment	<p>2.1. <b>Implantation equipment</b> is inspected and checked.</p> <p>2.2. <b>First aid equipment</b> for animals and humans is inspected and prepared for use.</p> <p>2.3. <b>Electronic reader</b> is selected and checked against a 'reference chip' of known performance.</p> <p>2.4. <b>Microchip</b> to be implanted is checked to ensure it meets legislative and Australian Standards requirements and scanned for serial number against packaging number.</p>
3. Prepare animal	<p>3.1. <b>Prescribed identifying information</b> is obtained and recorded on the approved form.</p> <p>3.2. Animal is assessed for likely behavioural problems during the procedure and where unmanageable aggressive tendencies are noted, animal is referred to veterinarian for implantation procedure.</p> <p>3.3. Details of animal's previous health history are ascertained for possible complications.</p> <p>3.4. Owner's permission to appropriately restrain the animal if necessary is obtained.</p> <p>3.5. <b>Protective equipment</b> is used as required.</p> <p>3.6. Health of animal is visually assessed and <i>signs of ill health</i> identified.</p> <p>3.7. <b>Animal restraint device</b> is selected and fitted if required.</p> <p>3.8. Animal is scanned according to <i>legislative and industry practice</i> to check if previous implantation has occurred, and where found, action is in accordance with <i>industry and legislatively approved procedure for previously implanted microchips</i>.</p>
4. Undertake	4.1. Implantation site is checked for <i>abnormalities</i> and



ELEMENT	PERFORMANCE CRITERIA
implantation procedure	<p>owner referred to veterinarian in the event of observed concerns.</p> <p>4.2. Animal is positioned for implantation taking into account size, species, previous behavioural assessment and relevant <b>occupational health and safety (OHS) risks</b>.</p> <p>4.3. Injection site between shoulder blades is inspected, prepared aseptically and aseptic technique is used throughout the implantation procedure.</p> <p>4.4. Sterile pack is opened and needle is attached to the implanting device while <b>maintaining asepsis</b>.</p> <p>4.5. Skin is grasped and lifted away from the body and needle containing the microchip is inserted subcutaneously at <b>recommended angle</b> limited to the number of attempts permitted as outlined in relevant legislation.</p> <p>4.6. Microchip is discharged and needle withdrawn and <b>inspected</b> and <b>procedures</b> followed to ensure the chip does not come out.</p> <p>4.7. Needles are disposed of in an approved sharps container in accordance with relevant waste disposal legislation and regulations.</p> <p>4.8. <b>Injuries sustained to humans</b> are assessed and first aid treatment provided and/or medical attention sought as required.</p> <p>4.9. Injuries sustained to animals are assessed and appropriate first aid treatment provided and/or veterinary attention sought as required.</p>
5. Conduct post-implantation procedures	<p>5.1. Implantation site is visually checked and scanned to ensure success of implantation and correct functioning of the microchip.</p> <p>5.2. <b>Post-implantation advice</b> is provided to owner.</p> <p>5.3. Animal condition at time of departure is noted and if there are any <b>signs of adverse reactions</b>, veterinary assistance is obtained.</p> <p>5.4. Processes undertaken by <b>relevant animal registry service</b> are communicated to the owner and distinguished from registering the animal with local government/council.</p> <p>5.5. Procedure to be followed in the event of loss of animal is provided to owner and importance of maintenance of updated ownership records impressed upon the owner/keeper.</p>

ELEMENT	PERFORMANCE CRITERIA
6. Maintain records	<p>6.1. Procedure is recorded using prescribed identifying information, ensuring legibility and signatures and identification number of implanter are included.</p> <p>6.2. Documentation is forwarded to the relevant animal registry service in accordance with legislative requirements.</p> <p>6.3. Copy is maintained and filed by implanter in accordance with legislative requirements.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- prepare and use materials, tools and equipment correctly and in accordance with Australian Veterinary Association policies and Australian Standards requirements
- literacy skills to read and follow required policies and procedures, including OHS, infection control and waste management; follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfill the job role, including questioning, active listening, asking for clarification and consulting with or seeking advice from other relevant persons
- effective questioning skills to ascertain from animal owner the animal's susceptibility to existing or previous conditions (e.g. seizures and haemophilia)
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures, including disposal of sharps
- written communication skills to accurately and legibly complete the required implantation documentation.

#### Required knowledge

- anatomical and physiological structures and functions related to implantation procedures as well as likely migration sites for chips on animals' bodies

## REQUIRED SKILLS AND KNOWLEDGE

- animal temperaments and behaviours in order to develop an understanding of the associated hazards and risks and appropriate control measures
- Australian Standards covering electronic animal identification (e.g. AS 5018:2001 Electronic animal identification - National coding scheme and AS 5019:2001 Electronic animal identification - Radiofrequency methods, including informative Annexes)
- basic animal first aid techniques
- biohazards in the workplace of significance to animals and humans
- compliant microchip as defined in the relevant state or territory regulations
- determining a point at which an animal's condition should be referred to a veterinary practitioner upon suspicion of health problems
- general knowledge of possible complications that can arise from the breakdown of asepsis
- hygiene standards and infection control protocols
- indicators of stress and wellbeing in animals
- industry terminology used to identify animals and describe their behaviour
- information that should be documented related to the identification of animals and implantation of microchips
- medical conditions which may be triggered by the procedure, such as seizures and bleeding resulting from haemophilia and shock
- organisational policies and safe work procedures, including OHS and accident requirements
- patterns of animal behaviour for different species to be understood particularly for signs of aggression
- personal protective clothing and equipment and when and how it should be used
- possible health complications and/or adverse reactions to microchip implantation in cats and dogs
- possible legal and animal welfare consequences resulting from poor quality implantation
- procedures for the safe manual handling of live, conscious dogs and cats
- professional indemnity and public liability insurance requirements
- processes and procedures undertaken by animal registries
- range of implanting equipment and sources of microchips and readers
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics, microchip implantation, domestic animal management and waste disposal
- requirements for use of only approved microchips as defined under the relevant state or territory legislation and regulations
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• comply with statutory and local authority requirements associated with identification of companion animals and the responsibilities and obligations of accredited animal identifiers</li> <li>• prepare documentation and geographic location for microchip implantation of a cat or dog</li> <li>• prepare all equipment required to perform the microchip procedures</li> <li>• explain procedures to owner and obtain necessary consents and permissions</li> <li>• take details of animal's history, visually assess health of the animal and refer the animal to a veterinarian where necessary</li> <li>• implant microchip in cat or dog following correct procedures and with consideration of OHS and welfare issues</li> <li>• provide owner with post-procedure instructions</li> <li>• complete and lodge legislated documentation.</li> </ul> <p>The skills and knowledge required to implant microchip in cats and dogs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be under the direct supervision of a registered veterinarian practitioner, who is an authorised implanter, in an actual workplace or in a situation that reproduces normal work conditions.</p>

<b>EVIDENCE GUIDE</b>	
	<p>To ensure consistency in one's performance, competency should be demonstrated on at least fifteen (15) occasions, including a minimum of five (5) cats and five (5) dogs of a range of breeds, ages and sizes.</p> <p>There must be access a range of dogs and cats as well as relevant information, equipment and/or resources to enable one to demonstrate competence.</p> <p>The animals are to be restrained manually without the use of sedative or anaesthetics. The microchip implantation of a cat or dog must be postponed if there have been two unsuccessful attempts on the one animal during the one day or in accordance with the relevant state or territory legislation.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,</p>

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>Statutory and local authority requirements</i></b> may include:	<ul style="list-style-type: none"> <li>• local government requirements for registration subsidies</li> <li>• microchipping processes</li> <li>• specified types of animals, such as dangerous dogs or restricted breed dogs and/or cats</li> <li>• technology used.</li> </ul>
<b><i>Location</i></b> for conducting the microchipping procedure should take into consideration:	<ul style="list-style-type: none"> <li>• the species, for example: <ul style="list-style-type: none"> <li>• locations for cats should be enclosed and escape-proof with minimal damageable equipment.</li> </ul> </li> </ul>
<b><i>Likely species behaviour</i></b> that may be encountered may include:	<ul style="list-style-type: none"> <li>• animals exhibiting aggressive behaviour</li> <li>• animals exhibiting anxious or fearful behaviour</li> <li>• flight of the animal</li> <li>• loss of control.</li> </ul>
<b><i>Supervisory Veterinarian</i></b> is required to be:	<ul style="list-style-type: none"> <li>• a registered veterinarian who is an authorised implanter with whom you have a prior agreement to attend the animal being microchipped, if necessary.</li> </ul>
<b><i>Implantation equipment</i></b> includes:	<ul style="list-style-type: none"> <li>• only approved microchips that meet current legislative requirements and comply with AS 5018:2001 Electronic animal identification - National coding scheme and AS 5019:2001 Electronic animal identification - Radiofrequency methods and disposable implantation needles may be used.</li> </ul>
<b><i>First aid equipment</i></b> may include:	<ul style="list-style-type: none"> <li>• antiseptic and saline solutions</li> <li>• adhesive strips</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>sterile bandages and dressings.</li> </ul>
<i>Electronic reader</i> required for the procedure means:	<ul style="list-style-type: none"> <li>a scanner capable of detecting and decoding approved microchip information</li> <li>approved multiple frequency scanners that scan for FDXA and FDXB only may be used</li> <li>familiarity with multi-frequency scanners is required to scan chips from various manufacturers that respond to varying frequencies from 125 kHz non-encrypted and 128 kHz devices.</li> </ul>
<i>Microchip</i> means:	<ul style="list-style-type: none"> <li>a Permanent Identification Device (PID) which: <ul style="list-style-type: none"> <li>is able to be permanently implanted in an animal</li> <li>is designed to transmit stored information when activated by a reader</li> <li>complies with the requirements of AS 5019:2001 Electronic animal identification - Radiofrequency methods</li> <li>contains a unique identification number that: <ul style="list-style-type: none"> <li>complies with AS 5018:2001 Electronic animal identification - National coding scheme</li> <li>the first 6 digits displayed are the manufacturers code for the device as set by the International Committee for Animal Recording (ICAR)</li> <li>any permanent identification device (microchip) implanted before May 2003 that uniquely identifies the animal.</li> </ul> </li> </ul> </li> </ul>
<i>Prescribed identifying information</i> may include:	<ul style="list-style-type: none"> <li>details required in accordance with relevant legislative requirements: <ul style="list-style-type: none"> <li>owner and animal residential and location details and signature</li> <li>local government details</li> <li>microchip details</li> <li>implanter name, contact details, signature and</li> <li>registration number, where applicable.</li> </ul> </li> </ul>
<i>Protective equipment</i> may	<ul style="list-style-type: none"> <li>use of Kelvar sleeves to protect implanter.</li> </ul>

<b>RANGE STATEMENT</b>	
include:	
<i>Signs of ill health</i> which should be referred to veterinary practitioner may include:	<ul style="list-style-type: none"> <li>• apparent pain</li> <li>• bleeding or swelling of body parts</li> <li>• bloating of abdomen</li> <li>• diarrhoea, especially if bloodstained</li> <li>• difficulty or inability to urinate or defecate</li> <li>• fits or staggering</li> <li>• inability to stand or walk</li> <li>• inappetence</li> <li>• lameness</li> <li>• red or brown coloured urine</li> <li>• repeated sneezing or coughing</li> <li>• runny nose</li> <li>• runny or inflamed eyes</li> <li>• vomiting</li> <li>• weight loss.</li> </ul>
<i>Animal restraint devices</i> required for the procedure may include:	<ul style="list-style-type: none"> <li>• cat restraining bags</li> <li>• collars and leads</li> <li>• muzzles.</li> </ul> <p>Note: excludes chemical restraint.</p>
Scanned according to <i>legislative and industry practice</i> means:	<ul style="list-style-type: none"> <li>• ensuring that the microchip reader is functioning properly by running it across a reference microchip at a distance of 50-100 mm from the scanner and at a sweep speed of 0.5 m/s</li> <li>• scanning the animal thoroughly to check its microchip status with an operating reader held just above the hairline of the animal <ul style="list-style-type: none"> <li>• this should be done at a distance of no more than 50 mm</li> </ul> </li> <li>• ensuring the animal is properly scanned <ul style="list-style-type: none"> <li>• two slow sweeps along the long axis from head to mid-back, and two sweeps over the shoulders from elbow to elbow at a distance of not more than 50 mm from the body and a speed of 0.5 m/s is recommended</li> </ul> </li> <li>• ensuring a slow, even pace (0.5 m/s) is employed in scanning</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>continue scanning if a microchip is found as the animal must be thoroughly scanned to ensure that all microchips are detected (in case there is more than one).</li> </ul> <p>Please note: Where two different readers are being used, scanning operations need to be repeated for each reader.</p>
<p><b><i>Industry and legislatively approved procedure for previously implanted microchips</i></b> means:</p>	<ul style="list-style-type: none"> <li>in situations where an implanter is approached to scan an animal to check for a microchip, or find a microchip where registration records do not match, the procedure to be followed includes: <ul style="list-style-type: none"> <li>notify the registry to ascertain the current owner details</li> <li>inform this person that proof of the change of ownership involving notification and consent of the previous owner will need to be provided before the animal can be entered into the registry under their name</li> <li>the implanter must contact the appropriate registry to flag the ownership issue with them and provide the registry with the details of the person presenting the animal</li> <li>ownership disputes are a civil matter and people should be advised to seek legal advice and/or representation</li> </ul> </li> </ul> <p>Note: It is the responsibility of the person presenting the animal to provide adequate proof of ownership.</p>
<p><b><i>Abnormalities</i></b> likely to be encountered at implantation site includes:</p>	<ul style="list-style-type: none"> <li>injuries</li> <li>rashes</li> <li>swellings</li> <li>ulcers.</li> </ul>
<p><b><i>OHS risks</i></b> when working with animals may include:</p>	<ul style="list-style-type: none"> <li>animal bites, kicks, scratches and crush injuries</li> <li>biological hazardous waste and sharps disposal</li> <li>handling of chemicals and medicines</li> <li>gas leakage</li> <li>inhalation of aerosol particles</li> <li>intraocular contamination</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Maintaining asepsis</i> during procedure may include:	<ul style="list-style-type: none"> <li>• ensuring: <ul style="list-style-type: none"> <li>• needles or microchip are not contaminated</li> <li>• there is no damage to sterile packs prior to use.</li> </ul> </li> </ul>
<i>Recommended angle</i> for insertion of the needle means:	<ul style="list-style-type: none"> <li>• needle should be directed at an angle of 30-45 degrees to the skin plane, bevel side up, to minimise emergence of needle from the skin.</li> </ul>
Needle <i>inspected</i> means:	<ul style="list-style-type: none"> <li>• inspect needle to ensure the microchip has been injected into the animal.</li> </ul>
<i>Procedures</i> to ensure microchip does not come out may include:	<ul style="list-style-type: none"> <li>• application of tissue glue</li> <li>• applying digital pressure wearing gloves to protect both the animal and the operator, followed by inspection and light coat brushing to ensure the device is not lodged in the coat.</li> </ul>
<i>Injuries sustained to humans</i> during procedure may include:	<ul style="list-style-type: none"> <li>• back injuries</li> <li>• bites</li> <li>• fainting</li> <li>• muscle tears</li> <li>• needle stick injuries</li> <li>• scratches.</li> </ul>
<i>Post-implantation advice</i> which should be provided to the owner includes:	<ul style="list-style-type: none"> <li>• limitations on exercise</li> <li>• limiting site palpation after procedure is performed</li> <li>• restriction from bathing and swimming for recommended period</li> <li>• procedures to be followed in the event of possible complications.</li> </ul>
<i>Signs of adverse reactions</i> may include:	<ul style="list-style-type: none"> <li>• haemorrhage</li> <li>• infection</li> <li>• redness, heat, pain and swelling at the implantation site</li> <li>• seizures</li> <li>• shock</li> <li>• subcutaneous lumps.</li> </ul>

**RANGE STATEMENT**

*Relevant animal registry service* means:

- an animal registry licensed in the relevant state or territory, example registries include:
  - Australasian Animal Registry (AAR)
  - Central Animal Records (CAR)
  - National Pet Register (NPR)
  - PetSafe Registry.

**Unit Sector(s)**

<b>Unit sector</b>	Microchipping
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMOHS201A Participate in occupational health and safety processes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process required for an entry level employee to participate in occupational health and safety (OHS) processes in the workplace, in order to ensure their own health and safety at work, as well as that of others in the workplace who may be affected by their actions.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is intended for application during induction of new entrants to the workplace and where the employee has basic operational knowledge and skills for a limited range of tasks and problems. It includes apprentices, trainees and casual workers.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan and prepare to work safely	1.1. <b><i>Hazards</i></b> in the work area are identified, and action is taken to control <b><i>risk</i></b> for those hazards the employee can correct. 1.2. Hazards the employee cannot correct and inadequacies in control measures are reported, in accordance with organisation procedures. 1.3. Pre-start checks are carried out as required in accordance with work procedures.
2. Conduct work safely	2.1. <b><i>Personal protective equipment</i></b> is used correctly and

ELEMENT	PERFORMANCE CRITERIA
	<p>maintained when required.</p> <p>2.2. Work procedures and workplace instructions for ensuring safety when planning and conducting work are followed.</p> <p>2.3. <i>Incidents</i> and injuries are reported to <i>designated personnel</i>.</p> <p>2.4. <i>OHS housekeeping</i> is undertaken in work area.</p>
3. Participate in OHS consultative activities	<p>3.1. Knowledge of roles and responsibilities of OHS representatives and OHS committees are applied.</p> <p>3.2. Constructive contribution to workplace meetings, workplace inspections or other OHS consultative activities is made.</p> <p>3.3. OHS issues are raised with <i>designated personnel</i> in accordance with organisation procedures.</p> <p>3.4. Input to improve workplace OHS systems and processes is provided, in accordance with organisation procedures, to eliminate hazards or reduce risk.</p>
4. Follow emergency response procedures	<p>4.1. <i>OHS emergency situations</i> are identified and reported.</p> <p>4.2. Organisation procedures for responding to OHS emergencies are followed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- clarify meaning with peers and supervisors
- follow clear, logical verbal or clear, logical plain English written instructions
- give accurate verbal or written descriptions of incidents or hazards
- interpret selected pictorial/graphical and written signs/instructions
- preparedness to be involved in OHS activities, including inspections, meetings and risk assessments.

#### Required knowledge

- applicable commonwealth, state or territory OHS legislation, regulations, standards, codes of practice and industry standards/guidance notes relevant to own

## REQUIRED SKILLS AND KNOWLEDGE

- work, role and responsibilities
- legal rights and responsibilities of the workplace parties
  - nature of common workplace hazards, for example, chemicals, bodily fluids, sharps, noise, manual handling, work postures, underfoot hazards and moving parts of machinery
  - potential OHS emergency situations, alarms and signals, and required response
  - roles and responsibilities of OHS representatives, OHS committees and employers
  - safety measures related to common workplace hazards
  - safety signs and their meanings, including signs for:
    - personal protective equipment
    - emergency equipment
    - dangerous goods class signs
    - specific hazards such as sharps, radiation
  - sources of OHS information in the workplace
  - standard emergency signals, alarms and required responses
  - the difference between hazard and risk
  - the elements within the hierarchy of control
  - the roles and responsibilities of employees, supervisors and managers in the workplace
  - workplace specific information including:
    - hazards of the particular work environment
    - potential OHS emergencies relevant to the workplace
    - designated person for raising OHS issues
    - organisation and work procedures particularly those related to performance of own work, specific hazards and risk control, reporting of hazards, incidents and injuries, consultation, use of personal protective equipment and emergency response.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

To demonstrate competence in this unit, a candidate must be able to provide evidence of the application of their

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>knowledge of OHS:</p> <ul style="list-style-type: none"> <li>• in an actual or simulated workplace context involving relevant work processes</li> <li>• to their own health and safety within their work area</li> <li>• to that of others who may be affected by their actions.</li> </ul> <p>A candidate must also be able to provide evidence of participating in workplace OHS processes.</p> <p>Evidence gathered by an assessor to determine competence will include practical demonstration of competence, including:</p> <ul style="list-style-type: none"> <li>• workplace demonstration, simulation exercise, scenario or role play</li> <li>• indirect evidence from workplace supervisor reports and workplace documentation.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p><b>Products that could be used as evidence include:</b></p> <ul style="list-style-type: none"> <li>• verbal and written responses to verbal, pictorial, or physical scenarios</li> <li>• demonstrated action to scenarios, simulations, role plays</li> <li>• completed hazard or incident reports, completed workplace inspection checklists</li> <li>• reports from work group members, supervisor.</li> </ul> <p><b>Processes that could be used as evidence include:</b></p> <ul style="list-style-type: none"> <li>• how contributions were made to consultative processes</li> <li>• how hazard inspections were carried out</li> <li>• how incident investigations reports were completed.</li> </ul>
<b>Method of assessment</b>	This unit should be assessed together with other units of competence relevant to the function or work role.
<b>Guidance information for assessment</b>	<p><b>Access and equity considerations:</b></p> <ul style="list-style-type: none"> <li>• All assessment should be applied with respect to relevant work-related access and equity issues</li> <li>• Competence should reflect an ability to work in a culturally diverse environment.</li> </ul>



**EVIDENCE GUIDE**

- Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

A ***hazard*** is:

- a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these.

***Specific hazards*** may include:

- animal bites, envenomation, kicks, scratches or crush injuries
- biological hazardous waste
- bodily fluids
- chemicals and medicines
- gas leakage
- manual handling, including carrying, lifting, shifting
- moving parts of equipment or machinery
- noise
- radiation
- sharps
- underfoot hazards
- work posture
- zoonoses.

Other workplace ***hazards*** may include:

- occupational violence
- stress
- fatigue
- bullying.

***Risk***: in relation to any hazard

- the probability and consequences of injury, illness or damage resulting from exposure to a

<b>RANGE STATEMENT</b>	
means:	hazard.
Residual <i>risk</i> is:	<ul style="list-style-type: none"> <li>the risk which remains after controls have been implemented.</li> </ul>
<i>Personal protective equipment</i> includes:	<ul style="list-style-type: none"> <li>equipment worn by a person to provide protection from hazards, by providing a physical barrier between the person and the hazard: <ul style="list-style-type: none"> <li>clothing and footwear</li> <li>face and eye protection</li> <li>hand protection</li> <li>head protection</li> <li>hearing protection</li> <li>respiratory protection.</li> </ul> </li> </ul>
<i>Incidents</i> include:	<ul style="list-style-type: none"> <li>any event that has caused, or has the potential for, injury, ill-health or damage.</li> </ul>
<i>Designated personnel</i> may include:	<ul style="list-style-type: none"> <li>team leaders</li> <li>supervisors</li> <li>OHS representatives</li> <li>OHS committee members</li> <li>managers</li> <li>organisation OHS personnel</li> <li>other persons designated by the organisation</li> <li>employers in office based practice.</li> </ul>
<i>OHS housekeeping</i> includes:	<ul style="list-style-type: none"> <li>workplace and personal routines designed to improve health and safety: <ul style="list-style-type: none"> <li>cleaning up spills</li> <li>keeping walkways, exits and traffic areas clear.</li> </ul> </li> </ul>
<i>Emergency OHS situations</i> may include:	<ul style="list-style-type: none"> <li>any abnormal or sudden event that requires immediate action: <ul style="list-style-type: none"> <li>events requiring evacuation</li> <li>explosion and bomb alerts</li> <li>external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation</li> <li>fires and explosions</li> <li>hazardous substance and chemical spills</li> <li>internal emergencies, such as loss of power or water supply and structural collapse</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• security emergencies, such as armed robberies, intruders and disturbed persons</li> <li>• serious injury events.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Occupational health and safety
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMOHS301A Contribute to occupational health and safety processes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process required by an employee to contribute to occupational health and safety (OHS) processes where there is responsibility for own work outputs and possibly limited responsibility for the work output of others.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is intended for application by a skilled worker with little or no responsibility for others. Workers are likely to perform work activities requiring a range of well-developed skills where some discretion and judgment is required.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan and conduct work safely	<p>1.1. Work is planned in accordance with relevant provisions of OHS legislation, standards, codes of practice/compliance codes, guidance material and workplace safe working procedures.</p> <p>1.2. <b>Hazards</b> are identified as part of work planning and work process.</p> <p>1.3. Identified <b>hazards</b> are addressed prior to starting work using judgement within defined scope of responsibilities.</p> <p>1.4. Inadequacies in control measures are reported in accordance with <b>organisation procedures</b>.</p> <p>1.5. Incidents and injuries are reported in line with organisation policies and procedures.</p> <p>1.6. <b>OHS housekeeping</b> is undertaken in work area.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Support others in working safely	<p>2.1. <b>Information</b> on safe work practices and <b>work procedures</b> is provided with members of the work group.</p> <p>2.2. OHS practices of less experienced members of the workgroup are checked.</p> <p>2.3. Guidance and <b>coaching</b> is provided to less experienced members of the workgroup to support them in working safely.</p> <p>2.4. Support is provided to members of the workgroup to accurately record <b>incidents</b> and complete associated <b>workplace documentation</b> in accordance with organisation procedures.</p>
3. Contribute to OHS participative processes	<p>3.1. OHS issues are raised in accordance with organisation procedures</p> <p>3.2. Contributions to workplace meetings, workplace inspections or other consultative activities are provided in a constructive manner to improve safety.</p> <p>3.3. Assistance is provided to workgroup members to contribute to workplace safety.</p> <p>3.4. Knowledge of roles and responsibilities of OHS representatives and OHS committees is applied.</p>
4. Contribute to hazard identification, OHS risk assessment and risk control activities	<p>4.1. Identified hazards and inadequacies in <b>risk controls</b> are reported.</p> <p>4.2. The workplace is checked for hazards using itemised checklists in accordance with work procedures.</p> <p>4.3. Contributions to risk assessments are made.</p> <p>4.4. Input is provided to development and implementation of control measures, with reference to the <b>hierarchy of control</b>.</p>
5. Participate in the control of OHS emergency situations	<p>5.1. <b>OHS emergency signals and alarms</b> are identified and responded to appropriately.</p> <p>5.2. Initial action is taken to control/confine <b>emergency</b> in accordance with organisation procedures, taking account of the nature and scope of the emergency.</p> <p>5.3. Emergency response procedures are implemented within scope of training and competence.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- check the workplace for hazards and risks using an itemised checklist
- provide advice and feedback in a constructive and supportive manner.

#### Required knowledge

- applicable commonwealth, state or territory OHS legislation, regulations, standards, codes of practice and industry standards/guidance notes relevant to own work, role and responsibilities
- basic hazard identification procedures such as workplace inspections and review of workplace data
- hierarchy of control and its application
- nature of common workplace hazards for example chemicals, bodily fluids, noise, manual handling, work postures, underfoot hazards and moving parts of machinery
- personal protective equipment requirements, including use, storage and maintenance
- principles of basic risk assessment
- roles and responsibilities of employees, supervisors and managers in the workplace
- roles and responsibilities of OHS representatives and OHS committees
- safety signs and their meanings, including signs for:
  - personal protective equipment
  - emergency equipment
  - dangerous goods class signs
- specific hazards, such as sharps and radiation
- sources of OHS information within in the workplace with knowledge of external sources of OHS information
- standard emergency signals, alarms and required responses
- the difference between hazard and risk
- the legal rights and responsibilities of the workplace parties
- workplace specific information including:
  - hazards of the particular work environment
  - hazard identification procedures relevant o the hazards in their workplace
  - designated person for raising OHS issues
  - organisation and work procedures particularly those related to performance of own work, specific hazards and risk control, reporting of hazards, incidents and injuries and OHS issue resolution, consultation, use of personal protective equipment and emergency response
  - potential emergency situations, alarms and signals and required response.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>To demonstrate competence in this unit, a candidate must be able to provide evidence of contribution to OHS processes in the workplace. This includes:</p> <ul style="list-style-type: none"> <li>• addressing their own health and safety</li> <li>• addressing that of others who may be affected by their actions</li> <li>• supporting members of the workgroup who may be less experienced in the workplace in regard to OHS matters</li> <li>• taking some initiative to address hazards and manage risks at a systemic level.</li> </ul> <p>Evidence gathered by an assessor to determine competence will include practical demonstration of competence, including:</p> <ul style="list-style-type: none"> <li>• workplace demonstration, simulation exercise, scenario or role play</li> <li>• indirect evidence from workplace supervisor reports, workplace documentation, and written responses to problems, scenarios and case studies.</li> </ul> <p>Evidence of workplace performance over time must be obtained to inform a judgement of competence.</p>
<b>Context of and specific resources for assessment</b>	<p><b>Products that could be used as evidence include:</b></p> <ul style="list-style-type: none"> <li>• verbal and written responses to verbal, pictorial or physical scenarios</li> <li>• demonstrated response to scenarios, simulations, role plays</li> <li>• completed hazard or incident reports, completed workplace inspection checklists</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>reports from workgroup members, supervisors.</li> </ul> <p><b>Processes that could be used as evidence include:</b></p> <ul style="list-style-type: none"> <li>how workplace checks/inspections are carried out</li> <li>how hazards are addressed</li> <li>how mentoring of fellow workgroup members is undertaken</li> <li>how incident investigations reports were completed.</li> </ul>
<b>Method of assessment</b>	This unit should be assessed together with other units of competence relevant to the function or work role.
<b>Guidance information for assessment</b>	<p><b>Access and equity considerations:</b></p> <ul style="list-style-type: none"> <li>All assessment should be applied with respect to relevant work-related access and equity issues</li> <li>Competence should reflect an ability to work in a culturally diverse environment.</li> <li>Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.</li> </ul>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Hazard identification</i></b> is:	<ul style="list-style-type: none"> <li>the process of identifying sources of harm, and may be required: <ul style="list-style-type: none"> <li>before new forms of work and organisation of work are implemented</li> <li>before changes are made to workplace, equipment, work processes or work arrangements</li> <li>as part of planning major tasks or activities,</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>such as equipment shutdowns</p> <ul style="list-style-type: none"> <li>• following an incident report</li> <li>• when new knowledge becomes available</li> <li>• at regular intervals during normal operations</li> <li>• prior to disposal of equipment, or materials.</li> </ul>
A <i>hazard</i> is:	<ul style="list-style-type: none"> <li>• a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these.</li> </ul>
<i>Specific hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches or crush injuries</li> <li>• biological hazardous waste</li> <li>• bodily fluids</li> <li>• chemicals and medicines</li> <li>• gas leakage</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• moving parts of equipment or machinery</li> <li>• noise</li> <li>• radiation</li> <li>• sharps</li> <li>• underfoot hazards</li> <li>• work posture</li> <li>• zoonoses.</li> </ul>
Other workplace <i>hazards</i> may include:	<ul style="list-style-type: none"> <li>• bullying</li> <li>• fatigue</li> <li>• occupational violence</li> <li>• stress.</li> </ul>
Risk in relation to any <i>hazard</i> means:	<ul style="list-style-type: none"> <li>• the probability and consequences of injury, illness or damage resulting from exposure to a hazard.</li> </ul>
Residual <i>risk</i> is	<ul style="list-style-type: none"> <li>• the risk which remains after controls have been implemented.</li> </ul>
<i>Organisation procedures</i> include:	<ul style="list-style-type: none"> <li>• policies and procedures underpinning the management of OHS, including: <ul style="list-style-type: none"> <li>• hazard, incident and injury reporting</li> <li>• hazard identification, risk assessment and control</li> <li>• consultation and participation</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• quality system documentation.</li> </ul>
<b><i>OHS housekeeping</i></b> includes:	<ul style="list-style-type: none"> <li>• workplace and personal routines designed to improve health and safety, for example: <ul style="list-style-type: none"> <li>• cleaning up spills</li> <li>• keeping walkways, exits and traffic areas clear.</li> </ul> </li> </ul>
<b><i>Information</i></b> includes:	<ul style="list-style-type: none"> <li>• employees handbooks</li> <li>• hazard, incident and investigation reports</li> <li>• incident investigation reports</li> <li>• information from external sources on hazards and risk relevant to the work group</li> <li>• information from OHS representatives</li> <li>• job safety analyses (JSAs) and risk assessments</li> <li>• material safety data sheets (MSDSs) and registers</li> <li>• manufacturers' manuals and specifications</li> <li>• minutes of meetings</li> <li>• reports from OHS committee</li> <li>• workplace inspection reports.</li> </ul>
<b><i>Work procedures</i></b> include:	<ul style="list-style-type: none"> <li>• batch specifications</li> <li>• operator or manufacturer manuals</li> <li>• procedures for selecting, fitting, using and maintaining personal protective equipment</li> <li>• standard operating procedures.</li> </ul>
Mentoring and <b><i>coaching</i></b> may include:	<ul style="list-style-type: none"> <li>• assisting with problem solving</li> <li>• providing encouragement</li> <li>• providing feedback</li> <li>• providing guidance and explanation on implementation of work and organisation procedures.</li> </ul>
<b><i>Incidents</i></b> include:	<ul style="list-style-type: none"> <li>• any event that has caused or has the potential for injury, ill-health or damage.</li> </ul>
Other <b><i>workplace documentation</i></b> may include:	<ul style="list-style-type: none"> <li>• job checklists and schedules</li> <li>• workplace inspection checklists.</li> </ul>
<b><i>Risk controls</i></b> include:	<ul style="list-style-type: none"> <li>• the devices and methods to, where practicable, eliminate the hazard or, where this is not practicable, minimise the risk associated with the hazard.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>Designated persons</i></b> may include:	<ul style="list-style-type: none"> <li>• team leaders</li> <li>• supervisors</li> <li>• OHS representatives</li> <li>• OHS committee members</li> <li>• managers</li> <li>• organisation OHS personnel</li> <li>• other persons designated by the organisation.</li> </ul>
<b><i>Hierarchy of control</i></b> is:	<ul style="list-style-type: none"> <li>• the preferred order of control measures for OHS risks: <ul style="list-style-type: none"> <li>• elimination (e.g. controlling the hazard at the source)</li> <li>• substitution (e.g. replacing one substance or activity at the source)</li> <li>• engineering (e.g. installing guards on machinery)</li> <li>• administration (e.g. policies and procedures for safe work practices)</li> <li>• personal protective equipment (e.g. respirators and ear plugs).</li> </ul> </li> </ul>
<b><i>OHS emergency signals and alarms</i></b> may include:	<ul style="list-style-type: none"> <li>• evacuation alarms or announcements</li> <li>• fire alarms</li> <li>• machinery malfunction alarms</li> <li>• reversing beepers on mobile plant.</li> </ul>
<b><i>Emergency</i></b> may include:	<ul style="list-style-type: none"> <li>• any abnormal or sudden event that requires immediate action, such as: <ul style="list-style-type: none"> <li>• events requiring evacuation</li> <li>• explosion and bomb alerts</li> <li>• external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation</li> <li>• fires and explosions</li> <li>• hazardous substance and chemical spills</li> <li>• internal emergencies, such as loss of power or water supply and structural collapse</li> <li>• security emergencies, such as armed robberies, intruders and disturbed persons</li> </ul> </li> <li>• serious injury events.</li> </ul>

### Unit Sector(s)

Unit sector	Occupational health and safety
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMOHS401A Maintain occupational health and safety processes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process required by an employee with supervisory responsibilities, to maintain organisational occupational health and safety (OHS) processes.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is intended to be applied at the level of team leader or supervisor.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Provide information to the work group	<p>1.1.Relevant requirements of <b><i>OHS legislation, standards, codes of practice/compliance codes, guidance material</i></b> and safe working procedures and practices are explained to the work group clearly and accurately.</p> <p>1.2.Information on <b><i>organisation policies and procedures</i></b> is provided to the work group in a readily accessible manner and clearly explained.</p> <p>1.3.Roles and responsibilities of workplace OHS representatives and OHS committees, supervisors and managers are clearly explained.</p> <p>1.4.Information is provided to the work group, in an accessible and understandable format, on <b><i>hazards</i></b>, the outcomes of <b><i>risk assessments</i></b>, and required <b><i>risk</i></b></p>

ELEMENT	PERFORMANCE CRITERIA
	<i>controls.</i>
2. Ensure others are able to implement safe work practices	<p>2.1. <b>Personal protective equipment</b> appropriate to the work is available and functional.</p> <p>2.2. Processes are implemented to confirm that others in the work group can identify hazards, assess risks and required risk controls and are following safe <b>work practices</b>, and organisation policies and procedures.</p> <p>2.3. OHS training needs are identified and either addressed or these needs are reported to those with control.</p>
3. Implement OHS participative processes	<p>3.1. The work group is consulted and provided with advice in relation to OHS matters relevant to their work.</p> <p>3.2. OHS issues raised are dealt with promptly, and in accordance with organisation procedures and legislative requirements, or referred to appropriate personnel.</p> <p>3.3. Outcomes of consultation regarding OHS are recorded and promptly communicated to the work group.</p>
4. Monitor compliance with work procedures	<p>4.1. Work procedures are checked for availability, clarity and completeness, addressing any deficiencies or reporting them to appropriate persons.</p> <p>4.2. Any deviations from procedures are identified and addressed or report to appropriate persons.</p> <p>4.3. <b>Hazard identification</b> and <b>reporting processes</b> are evaluated for effectiveness and any deficiencies are addressed or reported to appropriate persons.</p> <p>4.4. <b>OHS housekeeping practices</b> are monitored to ensure that workplace standards are maintained, and action is taken to address any deficiencies.</p> <p>4.5. Own behaviour is consistent with organisation safe working procedures and practices.</p>
5. Implement hazard identification, risk assessment and risk control procedures	<p>5.1. Hazards are identified, assessed and eliminated with <b>residual risk</b> reported according to organisation procedures.</p> <p>5.2. Risk assessments are conducted.</p> <p>5.3. Control measures are developed, taking account of the <b>hierarchy of control</b>.</p> <p>5.4. Outcomes of risk assessments are implemented and identified risk controls supported.</p> <p>5.5. Deficiencies in OHS risk controls are identified and</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>addressed and/or reported in accordance with organisation procedures.</p> <p>5.6. Personal professional limitations are identified and <i>expert advice</i> is sought as required.</p>
<p>6. Implement organisation procedures for maintaining OHS records</p>	<p>6.1. Feedback is obtained to ensure that workgroup is aware of organisation reporting requirements.</p> <p>6.2. Review <i>OHS records</i> to confirm that they are completed in an accurate, thorough and timely manner in accordance with <i>legislative</i> and organisation requirements.</p> <p>6.3. Use aggregate information and data from records to identify hazards and monitor risk controls.</p>
<p>7. Implement OHS emergency procedures</p>	<p>7.1. Feedback is obtained to ensure that <i>OHS emergency</i> procedures are available and known by the work group.</p> <p>7.2. Processes are implemented to ensure that <i>OHS emergency equipment</i> is available and routinely checked for functionality.</p> <p>7.3. Processes are implemented to ensure that others in the workgroup are able to respond appropriately to OHS emergencies.</p> <p>7.4. Investigations are conducted, or contributed to, to identify cause of OHS emergencies.</p> <p>7.5. Control measures to prevent recurrence and minimise risk of OHS emergencies are identified and implemented or supported.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communicate with personnel in the work team, other work teams, managers and experts advisers
- conduct team meetings
- relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- supervise and direct staff

## REQUIRED SKILLS AND KNOWLEDGE

- use language and literacy skills to interpret OHS documentation
- use technical skills to access OHS information.

### Required knowledge

- sources of OHS information both internal and external to the workplace
- general duty requirements of OHS legislation and also regulatory requirements relevant to the particular industry/type of worksite
- hazard identification procedures such as workplace inspections and review of workplace data
- knowledge and understanding of guidance material including codes of practice/compliance codes relevant to the particular industry/type of work site
- legislative requirements for record keeping and reporting
- nature of common workplace hazards for example chemicals, noise, manual handling, work postures, underfoot hazards and moving parts of machinery
- personal protective equipment requirements, including use, storage and maintenance
- principles of risk management including the hierarchy of control and its application
- roles and responsibilities of OHS representatives and OHS committees
- standards and guidelines related to emergency procedures
- the difference between hazard and risk
- the roles and responsibilities of employees, supervisors and managers in the workplace
- workplace specific information, including:
  - hazards of the particular work environment
  - hazard identification procedures relevant to the hazards in their work place
  - risk controls for specific hazards
  - designated person for raising OHS issues
  - organisation procedures related to OHS including hazard, incident and injury reporting, hazard identification, risk assessment and control, consultation and participation, incident investigation, record keeping
  - work procedures related to the work of the team/work group, including use of personal protective equipment and emergency response
  - potential emergency situations, alarms and signals and required response.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>To demonstrate competence in this unit, a candidate must be able to provide evidence of maintaining OHS processes in the workplace particularly in relation to the supervision of a small workgroup.</p> <p>Evidence gathered by an assessor to determine competence will include:</p> <ul style="list-style-type: none"> <li>• written or verbal responses to scenarios and case studies</li> <li>• provision of workplace examples</li> <li>• evidence from workplace supervisor reports</li> <li>• portfolio of workplace documentation.</li> </ul> <p>Evidence of workplace performance over time must be obtained to inform a judgement of competence.</p>
<b>Context of and specific resources for assessment</b>	<p><b>Products that could be used as evidence include :</b></p> <ul style="list-style-type: none"> <li>• verbal and written responses to verbal, written or physical scenarios</li> <li>• completed examples of information provided to work group, risk assessments, risk controls developed, reports to managers, reports on workplace inspections, audits and emergency exercises</li> <li>• reports from work group members and supervisor.</li> </ul> <p><b>Processes that could be used as evidence include :</b></p> <ul style="list-style-type: none"> <li>• how information transfer was organised and conducted</li> <li>• how risk assessments were conducted</li> <li>• how deviations from workplace procedures were addressed.</li> </ul>
<b>Method of assessment</b>	This unit should be assessed together with other units of competence relevant to the function or work role.
<b>Guidance information for assessment</b>	<p><b>Access and equity considerations :</b></p> <ul style="list-style-type: none"> <li>• All assessment should be applied with respect</li> </ul>

**EVIDENCE GUIDE**

	<p>relevant work-related access and equity issues</p> <ul style="list-style-type: none"> <li>• Competence should reflect an ability to work in a culturally diverse environment.</li> <li>• Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.</li> </ul>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>OHS legislation</i></b> includes:	<ul style="list-style-type: none"> <li>• commonwealth, state and territory OHS Acts and regulations.</li> </ul>
<b><i>Standards</i></b> include:	<ul style="list-style-type: none"> <li>• documents produced by national bodies, OHS regulators or industry bodies, that prescribe preventative action to avert occupational deaths, injuries and diseases</li> <li>• standards are of an advisory nature only, except where a law adopts the standard and thus makes it mandatory</li> <li>• they may be called up as evidence in court or other enforcement action.</li> </ul>
<b><i>Codes of practice/compliance codes</i></b> are:	<ul style="list-style-type: none"> <li>• documents generally prepared to provide advice to employers and workers, of an acceptable way of achieving standards. They may: <ul style="list-style-type: none"> <li>• be incorporated into regulations</li> <li>• not relate to a standard</li> <li>• be called up as evidence in court or other enforcement action.</li> </ul> </li> </ul>
<b><i>Guidance material:</i></b>	<ul style="list-style-type: none"> <li>• advises on 'what to do' and 'how to do it'</li> <li>• is an advisory technical document, providing detailed information for use by unions, employers, management, health and safety</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>committee members and representatives, safety officers and others requiring guidance</p> <ul style="list-style-type: none"> <li>• has no legal standing.</li> </ul>
<b>Organisation policies and procedures</b> include:	<ul style="list-style-type: none"> <li>• policies and procedures underpinning the management of OHS, including: <ul style="list-style-type: none"> <li>• hazard, incident and injury reporting</li> <li>• hazard identification, risk assessment and control</li> <li>• consultation and participation</li> <li>• incident investigation</li> <li>• quality system documentation.</li> </ul> </li> </ul>
A <b>hazard</b> is:	<ul style="list-style-type: none"> <li>• a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these.</li> </ul>
<b>Specific hazards</b> may include, but are not limited to:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches or crush injuries</li> <li>• biological hazardous waste</li> <li>• bodily fluids</li> <li>• chemicals and medicines</li> <li>• gas leakage</li> <li>• manual handling, including carrying, lifting, shifting</li> <li>• moving parts of equipment or machinery</li> <li>• noise</li> <li>• radiation</li> <li>• sharps</li> <li>• underfoot hazards</li> <li>• work posture</li> <li>• zoonoses.</li> </ul>
Other workplace <b>hazards</b> may include:	<ul style="list-style-type: none"> <li>• bullying</li> <li>• fatigue</li> <li>• occupational violence</li> <li>• stress.</li> </ul>
<b>Risk</b> :	<ul style="list-style-type: none"> <li>• in relation to any hazard, means the probability and consequences of injury, illness or damage resulting from exposure to a hazard.</li> </ul>
<b>Risk assessments</b> involve analysing a hazard to:	<ul style="list-style-type: none"> <li>• identify factors influencing the risk and the range of potential consequences:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• effectiveness of existing controls</li> <li>• likelihood of each consequence considering exposure and hazard level</li> <li>• and combining these in some way to obtain a level of risk.</li> </ul>
<b>Risk controls</b> include:	<ul style="list-style-type: none"> <li>• the devices and methods to, where practicable, eliminate the hazard or, where this is not practicable, minimise the risk associated with the hazard.</li> </ul>
<b>Personal protective equipment</b> includes:	<ul style="list-style-type: none"> <li>• equipment worn by a person to provide protection from hazards, by providing a physical barrier between the person and the hazard and may include: <ul style="list-style-type: none"> <li>• head protection</li> <li>• face and eye protection</li> <li>• respiratory protection</li> <li>• hearing protection</li> <li>• hand protection</li> <li>• clothing and footwear.</li> </ul> </li> </ul>
<b>Work procedures</b> include:	<ul style="list-style-type: none"> <li>• batch specifications</li> <li>• operator or manufacturer manuals</li> <li>• procedures for selecting, fitting, using and maintaining personal protective equipment</li> <li>• standard operating procedures.</li> </ul>
<b>Hazard identification</b> is:	<ul style="list-style-type: none"> <li>• the process of identifying sources of harm and may be required: <ul style="list-style-type: none"> <li>• at design or pre purchase of equipment and materials</li> <li>• at commissioning or pre-implementation of new processes or practices</li> <li>• before new forms of work and organisation of work are implemented</li> <li>• before changes are made to workplace, equipment, work processes or work arrangements</li> <li>• as part of planning major tasks or activities, such as equipment shutdowns</li> <li>• following an incident report</li> <li>• when new knowledge becomes available</li> <li>• at regular intervals during normal</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>operations</p> <ul style="list-style-type: none"> <li>• prior to disposal of equipment, buildings or materials.</li> </ul>
<b>Reporting processes</b> include:	<ul style="list-style-type: none"> <li>• hazards reports</li> <li>• incident reports</li> <li>• maintenance requests and reports</li> <li>• reports on completion of inspections</li> <li>• reports of non-compliance with work procedures</li> <li>• reporting on progress of action plans.</li> </ul>
<b>OHS housekeeping practices</b> address items such as:	<ul style="list-style-type: none"> <li>• functioning services, such as lighting, air flow and ventilation, emergency lighting</li> <li>• storage areas, including manual handling issues, storage, personal protective equipment</li> <li>• signage</li> <li>• underfoot conditions</li> <li>• unobstructed walkways and emergency exits</li> <li>• work space around equipment and machinery</li> <li>• workplace cleanliness and tidiness.</li> </ul>
<b>Residual risk</b> is:	<ul style="list-style-type: none"> <li>• the risk which remains after controls have been implemented.</li> </ul>
<b>Hierarchy of control</b> is:	<ul style="list-style-type: none"> <li>• the preferred order of control measures for OHS risks: <ul style="list-style-type: none"> <li>• elimination (e.g. controlling the hazard at the source)</li> <li>• substitution (e.g. replacing one substance or activity at the source)</li> <li>• engineering (e.g. installing guards on machinery)</li> <li>• administration (e.g. policies and procedures for safe work practices)</li> <li>• personal protective equipment (e.g. respirators and ear plugs).</li> </ul> </li> </ul>
<b>Expert advice</b> can be obtained from:	<ul style="list-style-type: none"> <li>• persons either internal or external to the organisation including: <ul style="list-style-type: none"> <li>• audiologists</li> <li>• ergonomists</li> <li>• occupational health professionals</li> <li>• occupational hygienists</li> <li>• OHS representatives</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• OHS committees</li> <li>• safety engineers</li> <li>• safety professionals</li> <li>• toxicologists</li> <li>• other persons providing specific technical knowledge or expertise in areas related to OHS including: <ul style="list-style-type: none"> <li>• engineers (e.g. design, acoustic, mechanical, civil)</li> <li>• health professionals</li> <li>• injury management advisors</li> <li>• legal practitioners with experience in OHS</li> <li>• maintenance and trade persons</li> <li>• regulatory bodies</li> <li>• risk managers</li> <li>• security and emergency response personnel</li> <li>• workplace trainers and assessors.</li> </ul> </li> </ul>
<i>OHS records</i> may include:	<ul style="list-style-type: none"> <li>• employees handbooks</li> <li>• environmental monitoring records</li> <li>• first aid records</li> <li>• hazard, incident and investigation reports</li> <li>• health surveillance records</li> <li>• job safety analyses (JSAs), safe work method statements and risk assessments</li> <li>• maintenance and testing reports</li> <li>• material safety data sheets (MSDSs) and registers</li> <li>• minutes of meetings</li> <li>• plant and equipment operation records, including those relevant to registered plant</li> <li>• training records</li> <li>• workplace inspection reports.</li> </ul>
<i>Legislative</i> requirements for record keeping include those specified under:	<ul style="list-style-type: none"> <li>• OHS legislation for: <ul style="list-style-type: none"> <li>• serious incident and injury reporting</li> <li>• registered plant</li> <li>• hazardous substances and dangerous goods</li> <li>• environmental monitoring</li> <li>• health surveillance</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• Privacy legislation.</li> </ul>
<p><i>OHS emergencies</i> may include any abnormal or sudden event that requires immediate action, such as:</p>	<ul style="list-style-type: none"> <li>• events requiring evacuation serious injury events</li> <li>• explosion and bomb alerts</li> <li>• external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation</li> <li>• fires and explosions</li> <li>• hazardous substance and chemical spills</li> <li>• internal emergencies, such as loss of power or water supply and structural collapse</li> <li>• security emergencies, such as armed robberies, intruders and disturbed persons.</li> </ul>
<p><i>OHS emergency equipment</i> is equipment required as part of the emergency response by the organisation and includes:</p>	<ul style="list-style-type: none"> <li>• communication equipment</li> <li>• evacuation alarms</li> <li>• evacuation equipment, especially that for disabled persons</li> <li>• eye wash shower or portable eye washes</li> <li>• fire extinguishers and equipment</li> <li>• first aid equipment</li> <li>• items of clothing, such as coloured hats and vests.</li> <li>• torches.</li> </ul>
<p><i>Incidents</i> include:</p>	<ul style="list-style-type: none"> <li>• any event that has caused or has the potential for injury, ill-health or damage.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Occupational health and safety
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMOHS501A Manage occupational health and safety processes

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process required by an individual responsible for ongoing management of occupational health and safety (OHS) within an area of management responsibility, where the OHS management processes have been set up by other persons, either internal or external to the organisation.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is intended for application by a manager of a small organisation or several work groups or a larger group within an organisation. Work is likely to have a focus on maintaining already established processes and the unit assumes that OHS advice and expertise would be available.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Manage OHS information and records	<p>1.1.Relevant OHS legislation, <i>standards, codes of practice/compliance codes, guidance material</i> and <i>other sources of OHS information</i> are identified, accessed and evaluates for their relevance to the specific work context.</p> <p>1.2.Information on OHS requirements, trends and <i>risk controls</i> are collected, collated and provided.</p> <p>1.3.Records and record keeping processes are reviewed to ensure that <i>legal requirements</i> for <i>OHS record</i> keeping are identified and addressed.</p> <p>1.4.Processes are implemented and monitored to ensure that OHS records are accurately completed, collected and stored in accordance with legal requirements and</p>

ELEMENT	PERFORMANCE CRITERIA
	workplace procedures.
2. Manage OHS participative processes	<p>2.1. <b>Participative processes</b> are monitored to ensure compliance with legislative requirements and <b>organisation procedures</b>.</p> <p>2.2. Information provided to employees is evaluated to ensure it is in a readily accessible and understandable format.</p> <p>2.3. Processes are implemented and monitored to ensure that workgroup members have an opportunity, either directly or through their representative, to contribute to decisions that may affect their health and safety.</p> <p>2.4. Processes for addressing OHS issues are evaluated to ensure issues raised through <b>consultation</b> are resolved promptly and in line with organisation procedures and legislative requirements.</p> <p>2.5. Information is provided promptly about the outcomes of consultation in a format and medium that is readily accessible to employees.</p>
3. Manage OHS risk management processes	<p>3.1. Processes for hazard, incident, and injury reporting and investigation are reviewed to ensure compliance with legislative requirements and to inform future prevention strategies.</p> <p>3.2. Processes are monitored to ensure that <b>hazard identification</b> and <b>risk assessments</b> occur according to organisation procedures.</p> <p>3.3. Risk controls and hazard specific procedures are checked to ensure consistency with the <b>hierarchy of control</b> and are monitored to support compliance with legislative and regulatory requirements.</p> <p>3.4. Any OHS implications of either proposed or implemented changes to the workplace, work processes or organisation of work are identified and addressed.</p> <p>3.5. Limits of own professional expertise are recognised and expert advisors are consulted as required.</p>
4. Manage OHS training program	<p>4.1. OHS training needs assessment is undertaken for workgroup members that takes account of legislative and regulatory requirements, internal policies and procedures, existing skills of workgroup members and risk control requirements.</p> <p>4.2. Training programs are implemented and monitored to ensure identified OHS training requirements are addressed.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>4.3. Processes to ensure that all new employees receive <b><i>OHS induction</i></b> are implemented and monitored.</p> <p>4.4. Relevant OHS and training specialists are accessed and consulted as required, in the development and implementation of the OHS training program.</p>
5. Manage OHS continuous improvement process	<p>5.1. Input from individuals and workgroup is considered in identifying and implementing OHS improvement.</p> <p>5.2. OHS priorities are determined in consultation with appropriate managers and <b><i>stakeholders</i></b>.</p> <p>5.3. <b><i>OHS action plans</i></b> are developed taking account of priorities and training needs.</p> <p>5.4. Achievements against the OHS plans are monitored and plans updated accordingly.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply an action planning process
- assimilate information from a range of sources to evaluate effectiveness of processes
- communicate with supervisors, other managers, staff, OHS inspectors and expert advisers in a range of contexts, and using a range of media and formats
- conduct effective meetings
- develop solutions to complex OHS problems, utilising information from a range of sources
- relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- technical skills to access OHS information
- language and literacy and conceptual skills to analyse and evaluate OHS information.

#### Required knowledge

- knowledge and understanding of guidance material including codes of practice/compliance codes relevant to the particular industry/type of work site
- legal and practical requirements for OHS training
- legal requirements for OHS record keeping and reporting

## REQUIRED SKILLS AND KNOWLEDGE

- legislative requirements for record keeping and reporting
- legislative requirements for consultation
- risk assessment process including:
  - hazard identification procedures
  - principles of risk assessment
  - the hierarchy of control and its application
- sources of OHS information both internal and external to the workplace
- systems for identifying skill needs, for example:
  - performance reviews
  - training needs analysis
  - identifying additional training needs of learners
- the characteristics and composition of the workforce and how they may impact on the management of OHS
- the difference between hazard and risk
- the roles and responsibilities of employees, supervisors and managers in the workplace
- understanding of OHS legislation and regulatory requirements relevant to the particular industry/type of work site
- workplace specific information, including:
  - hazards of the particular work environment and how they cause harm
  - hazard identification procedures relevant to the hazards in their workplace
  - designated person for raising OHS issues
  - organisation procedures related to OHS including hazard, incident and injury reporting, hazard identification, risk assessment and control, consultation and participation, incident investigation, record keeping
  - awards and enterprise agreements that impact on the particular workplace.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

To demonstrate competence in this unit, a candidate must be able to provide evidence of managing OHS processes for a small organisation or a group of persons

<b>EVIDENCE GUIDE</b>	
	<p>undertaking a range of work.</p> <p>Evidence gathered by an assessor to determine competence will include:</p> <ul style="list-style-type: none"> <li>written or verbal responses to scenarios and case studies</li> <li>reports from persons who have been involved in the management processes</li> <li>portfolio of workplace documents.</li> </ul> <p>Evidence of workplace performance over time must be obtained to inform a judgement of competence.</p>
<b>Context of and specific resources for assessment</b>	<p><b>Products that could be used as evidence include :</b></p> <ul style="list-style-type: none"> <li>verbal and written responses to verbal, pictorial or physical scenarios</li> <li>demonstrated action to scenarios, simulations and role plays</li> <li>completed reports to senior managers</li> <li>written directions, emails, memos and other information provided to supervisors in area of responsibility</li> <li>reports from team leaders, senior managers, other managers, specialist advisors.</li> </ul> <p><b>Processes that could be used as evidence include :</b></p> <ul style="list-style-type: none"> <li>how training needs were identified and addressed</li> <li>how action plans are developed, monitored and updated</li> <li>how hazard identification and risk assessment occur</li> <li>how incident investigation occurs.</li> </ul>
<b>Method of assessment</b>	This unit should be assessed together with other units of competence relevant to the function or work role.
<b>Guidance information for assessment</b>	<p><b>Access and equity considerations :</b></p> <ul style="list-style-type: none"> <li>All assessment should be applied with respect to relevant work-related access and equity issues</li> <li>Competence should reflect an ability to work in a culturally diverse environment.</li> <li>Assessors and trainers must take into account</li> </ul>



**EVIDENCE GUIDE**

	relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***OHS legislation*** includes:

- commonwealth, state and territory OHS Acts and regulations.

***Standards*** include:

- documents produced by national bodies, OHS regulators or industry bodies, that prescribe preventative action to avert occupational deaths, injuries and diseases
- standards are of an advisory nature only, except where a law adopts the standard and thus makes it mandatory
- they may be called up as evidence in court or other enforcement action.

***Codes of practice/compliance codes*** are:

- codes of practice/compliance codes may:
  - be incorporated into regulations
  - not relate to a standard
  - be called up as evidence in court or other enforcement action
- documents generally prepared to provide advice to employers and workers, of an acceptable way of achieving standards.

***Guidance material:***

- advises on 'what to do' and 'how to do it'
- has no legal standing
- is an advisory technical document, providing detailed information for use by unions, employers, management, health and safety committee members and representatives, safety officers and others requiring guidance.

**RANGE STATEMENT**

*Other sources* of OHS information include:

- persons, organisations and references where knowledge about OHS may be obtained
- these sources may be:
  - internal including:
    - hazard, incident and investigation reports
    - workplace inspections
    - incident investigations
    - minutes of meetings
    - job safety analyses (JSAs) and risk assessments
    - organisation data such as insurance records, enforcement notices and actions, workers compensation data, OHS performance data
    - reports and audits
    - material safety data sheets (MSDSs) and registers
    - employees handbooks
    - employees including questionnaire results
    - OHS advisors
    - manufacturers' manuals and specifications
  - external, including:
    - regulatory bodies and OHS Acts, regulations, codes and guidance material
    - other relevant legislation
    - Office of the Australian Safety and Compensation Council (ASCC) and the former National Occupational Health and Safety Commission (NOHSC) documents
    - Databases, such as national and state injury data
    - OHS specialists and consultants
    - newspapers and journals, trade/industry publications
    - internet sites
    - industry networks and associations,

<b>RANGE STATEMENT</b>	
	<p>including unions and employer groups</p> <ul style="list-style-type: none"> <li>• OHS professional bodies</li> <li>• specialist advisors</li> <li>• research information.</li> </ul>
<b><i>OHS information</i></b> includes:	<ul style="list-style-type: none"> <li>• collated information on hazard incidents and injuries</li> <li>• information on hazards, including MSDS</li> <li>• investigation and audit reports</li> <li>• outcomes of hazard identifications and workplace inspections</li> <li>• requirements under OHS legislation, regulations, standards, codes of practice/compliance codes and guidelines</li> <li>• rights and responsibilities</li> <li>• risk assessments</li> <li>• risk controls</li> <li>• training records</li> <li>• workplace OHS policies and procedures</li> <li>• work procedures.</li> </ul>
<b><i>Risk controls</i></b> include:	<ul style="list-style-type: none"> <li>• the devices and methods to, where practicable, eliminate the hazard or, where this is not practicable, minimise the risk associated with the hazard.</li> </ul>
<b><i>Legal requirements</i></b> for record keeping include:	<ul style="list-style-type: none"> <li>• that specified under OHS legislation and regulations for: <ul style="list-style-type: none"> <li>• serious incident and injury reporting</li> <li>• registered plant</li> <li>• hazardous substances and dangerous goods</li> <li>• environmental monitoring</li> <li>• health surveillance</li> <li>• privacy legislation.</li> </ul> </li> </ul>
<b><i>OHS records</i></b> may include:	<ul style="list-style-type: none"> <li>• hazard, incident and investigation reports</li> <li>• workplace inspection reports</li> <li>• incident investigation reports</li> <li>• first aid records</li> <li>• minutes of meetings</li> <li>• JSA and risk assessments</li> <li>• MSDS and registers</li> <li>• plant and equipment operation records, including those relevant to registered plant</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• maintenance and testing reports</li> <li>• training records</li> <li>• environmental monitoring records</li> <li>• health surveillance records.</li> </ul>
<i>Participative processes</i> include:	<ul style="list-style-type: none"> <li>• processes that: <ul style="list-style-type: none"> <li>• inform employees and other stakeholders of OHS matters</li> <li>• seek their input</li> <li>• offer opportunity for stakeholders to participate in decisions that may impact on their health and safety</li> </ul> </li> <li>• participative processes may also be referred to as 'consultative processes', however 'participation' implies a higher level of involvement.</li> </ul>
<i>Organisation policies and procedures</i> include:	<ul style="list-style-type: none"> <li>• policies and procedures underpinning the management of OHS including: <ul style="list-style-type: none"> <li>• hazard, incident and injury reporting</li> <li>• hazard identification, risk assessment and control</li> <li>• consultation and participation</li> <li>• incident investigation</li> <li>• quality system documentation.</li> </ul> </li> </ul>
<i>Consultation</i> includes processes for:	<ul style="list-style-type: none"> <li>• seeking information or the opinions from one or more people prior to decision making</li> <li>• consultation should particularly include those who may affect the outcomes or be affected by the decisions made but may also include specialist sources.</li> </ul>
A <i>hazard</i> is:	<ul style="list-style-type: none"> <li>• a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these.</li> </ul>
<i>Specific hazards</i> may include, but are not limited to:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches or crush injuries</li> <li>• biological hazardous waste</li> <li>• bodily fluids</li> <li>• chemicals and medicines</li> <li>• gas leakage</li> <li>• manual handling, including carrying, lifting and shifting</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• moving parts of equipment or machinery</li> <li>• noise</li> <li>• radiation</li> <li>• sharps</li> <li>• underfoot hazards</li> <li>• work posture</li> <li>• zoonoses.</li> </ul>
Other workplace <i>hazards</i> may include:	<ul style="list-style-type: none"> <li>• bullying</li> <li>• fatigue</li> <li>• occupational violence</li> <li>• stress.</li> </ul>
<i>Incident</i> includes:	<ul style="list-style-type: none"> <li>• any event that has caused or has the potential for injury, ill-health or damage</li> </ul>
<i>Hazard identification</i> is:	<ul style="list-style-type: none"> <li>• the process of identifying sources of harm and may be required: <ul style="list-style-type: none"> <li>• at design or pre-purchase of equipment and materials</li> <li>• at commissioning or pre-implementation of new processes or practices</li> <li>• before new forms of work and organisation of work are implemented</li> <li>• before changes are made to workplace, equipment, work processes or work arrangements</li> <li>• as part of planning major tasks or activities, such as equipment shutdowns</li> <li>• following an incident report</li> <li>• when new knowledge becomes available</li> <li>• at regular intervals during normal operations</li> <li>• prior to disposal of equipment, buildings or materials.</li> </ul> </li> </ul>
<i>Risk</i> :	<ul style="list-style-type: none"> <li>• in relation to any hazard, means the probability and consequences of injury, illness or damage resulting from exposure to a hazard.</li> </ul>
<i>Risk assessments</i> involve:	<ul style="list-style-type: none"> <li>• analysing a hazard to: <ul style="list-style-type: none"> <li>• identify factors influencing the risk and the range of potential consequences</li> <li>• effectiveness of existing controls</li> <li>• likelihood of each consequence considering</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>exposure and hazard level</p> <ul style="list-style-type: none"> <li>• and combining these in some way to obtain a level of risk.</li> </ul>
<i>Hierarchy of control</i> is:	<ul style="list-style-type: none"> <li>• the preferred order of control measures for OHS risks: <ul style="list-style-type: none"> <li>• elimination (e.g. controlling the hazard at the source)</li> <li>• substitution (e.g. replacing one substance or activity at the source)</li> <li>• engineering (e.g. installing guards on machinery)</li> <li>• administration (e.g. policies and procedures for safe work practices)</li> <li>• personal protective equipment (e.g. respirators and ear plugs).</li> </ul> </li> </ul>
<i>Expert advisors</i> include:	<ul style="list-style-type: none"> <li>• persons either internal or external to the organisation, including: <ul style="list-style-type: none"> <li>• audiologists</li> <li>• ergonomists</li> <li>• occupational health professionals</li> <li>• occupational hygienists</li> <li>• safety engineers</li> <li>• safety professionals</li> <li>• toxicologists</li> </ul> </li> <li>• other persons providing specific technical knowledge or expertise in areas related to OHS, including: <ul style="list-style-type: none"> <li>• engineers (e.g. design, acoustic, mechanical and civil)</li> <li>• health professionals</li> <li>• injury management advisors</li> <li>• legal practitioners with experience in OHS</li> <li>• maintenance and trade persons</li> <li>• risk managers</li> <li>• security and emergency response personnel</li> <li>• workplace trainers and assessors.</li> </ul> </li> </ul>
<i>OHS induction</i> includes:	<ul style="list-style-type: none"> <li>• the processes by which new employees are introduced to, and acquainted with their job and the new workplace, including familiarisation with:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• hazards and risks associated with the work,</li> <li>• risk control measures,</li> <li>• welfare facilities and</li> <li>• emergency response procedures.</li> </ul>
<i>Stakeholders</i> are:	<ul style="list-style-type: none"> <li>• those people or organisations who may be affected by, or perceive themselves to be affected by an activity or decision, including: <ul style="list-style-type: none"> <li>• employees and contractors</li> <li>• health and safety and other employee representatives</li> <li>• managers</li> <li>• OHS committees</li> <li>• supervisors</li> <li>• the community.</li> </ul> </li> </ul>
<i>OHS action plans</i> include:	<ul style="list-style-type: none"> <li>• documented plans developed within the workplace to implement a systematic approach to OHS management and contain: <ul style="list-style-type: none"> <li>• actions that support an integrated strategy to address deficiencies, meet obligations or provide for improved outcomes</li> <li>• allocated responsibilities</li> <li>• timeframes.</li> </ul> </li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Occupational health and safety
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		



## ACMSPE301A Provide basic care of amphibians

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying amphibians and their behavioural and physical needs, providing daily care requirements, assisting with behaviour requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of native and exotic amphibians. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to care for commonly kept amphibians. This may include animal shelters or rehabilitation organisations, pet shops, zoos or similar workplaces. In some cases, animals may have been rescued from the wild and successful rehabilitation is required to restore animal health and wellbeing before releasing back to their natural environment.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available amphibians	<p>1.1. Profile of <i>amphibians</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Amphibians are classified using industry-specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. <b>Water quality</b> is monitored and <b>adjustments</b> made as required to maintain optimum water quality appropriate for the species being housed as directed by supervisor.</p> <p>2.2. Indicators of <b>animal comfort and normal behaviour</b> are identified and signs of distressed amphibians are recognised and reported to supervisor.</p> <p>2.3. Industry standards and guidelines for <b>housing design, environmental factors</b> and appropriate stocking densities are identified.</p> <p>2.4. <b>Enrichment needs</b> are identified and evaluated for specific animal species.</p> <p>2.5. Current animal housing design is evaluated in relation to the <b>welfare of animals</b> kept and legislation requirements.</p>
3. Approach and handle amphibians	<p>3.1. <b>Occupational health and safety (OHS) risks</b> associated with handling and restraining amphibians are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. Amphibians are <b>approached and handled</b> while minimising risks to animal and others using a range of approved animal welfare procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in amphibians are identified and recorded in animal health and treatment records.</p> <p>4.2. <b>Common health issues</b> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <b>General health maintenance and preventative treatment procedures</b> are identified and implemented according to level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on amphibian health and implemented as directed by supervisor.</p>
5. Feed amphibians	<p>5.1. <b>Digestive system features</b> are identified and related to amphibian-specific feeding routines and diets.</p> <p>5.2. Preferred <b>food sources</b> are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <b>feeding hazards</b> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with</p>

ELEMENT	PERFORMANCE CRITERIA
	workplace routines.
6. Maintain records	6.1. <b>Documentation</b> on the care and management of amphibians is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling amphibians
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record amphibian weight, length and other relevant objective indicators of change in physiological status
- monitor amphibian health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to amphibians as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks

## REQUIRED SKILLS AND KNOWLEDGE

- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for amphibians
- awareness of natural amphibian behaviour relating to the characteristics of the species, age, health status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic amphibian care and hygiene principles
- basic amphibian first aid techniques
- basic water chemical parameters and physical indicators of water quality relevant to the care and husbandry of amphibians
- common aeration and filtration systems
- housing, social and activity needs of amphibians and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of amphibians
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of amphibians
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe amphibian handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe amphibians, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in amphibian diets, including natural dietary requirements for specific species
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of amphibians and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify amphibians by age, sex, reproductive status, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch, handle and restrain amphibians</li> <li>• assess water quality for suitability for maintained species</li> <li>• report and document treatments, behaviours and other information on individual animals in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of amphibians must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters or rehabilitation organisations, pet shops, zoos and wildlife parks or similar workplaces.</p> <p>There must be access to a range of amphibians as well as relevant information, equipment and/or resources to</p>

<b>EVIDENCE GUIDE</b>	
	enable one to demonstrate competence. Assessment must cover a minimum of three commonly available amphibian species.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work

<b>RANGE STATEMENT</b>	
situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Commonly available <i>amphibians</i> may include:	<ul style="list-style-type: none"> <li>• frogs</li> <li>• newts</li> <li>• salamanders</li> <li>• toads.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• aggression or hiding or retreating.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• age, sex, sexual maturity and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>• colour</li> <li>• odour</li> <li>• unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering pH or hardness.</li> </ul>
Indicators of <i>animal comfort and normal behaviour</i> may be identified through:	<ul style="list-style-type: none"> <li>• daily observation and visual examination is the best way to establish the appearance of a healthy amphibian and at the same time allows detection of changes from normal. These observations will include: <ul style="list-style-type: none"> <li>• posture and attitude in and out of water</li> <li>• activity level in and out of water</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• response to stimuli, including handling</li> <li>• withdrawal reflex and ability to right itself</li> <li>• assessment of body condition</li> <li>• assessment of state of hydration</li> <li>• appetite and dietary history</li> <li>• observing faecal matter for any abnormalities.</li> </ul>
<p><i>Housing design and environmental factors</i> may include:</p>	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• aeration rates and supply</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• correct humidity levels</li> <li>• day/night cycle lighting</li> <li>• drainage and weather protection</li> <li>• filtration requirements to maintain the water quality and optimal environmental conditions for target species</li> <li>• fundamentals of the biological process</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• out of direct sunlight</li> <li>• water quality</li> <li>• ventilation, temperature, heating and cooling requirements</li> <li>• water flow rates and currents</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• indoor</li> <li>• outdoor</li> <li>• aquarium</li> <li>• vivarium</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• location considerations</li> <li>• longevity and sturdiness of materials</li> <li>• maintains ambient temperature conditions for the specific species</li> <li>• provides continuous access to water free of ammonia or chlorine</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• provides generous ventilation and is safe from fumes and vapours:               <ul style="list-style-type: none"> <li>• insecticides</li> <li>• cleaning agents</li> </ul> </li> <li>• required floor area, vertical and/or horizontal space for specific species</li> <li>• security considerations</li> <li>• species-specific options for animals to hide or rest</li> <li>• substrate appropriate to the specific species</li> <li>• designs that allow for enrichment activities or species-specific activity, feeding or socialising</li> <li>• social options:               <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygynous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment:               <ul style="list-style-type: none"> <li>• giving animals opportunities to forage for food by hiding it in substrates or hunt by movement</li> </ul> </li> <li>• physical enrichment items:               <ul style="list-style-type: none"> <li>• basking/perching sites</li> <li>• burrowing substrate , if applicable</li> <li>• plants and foliage</li> <li>• retreats</li> <li>• rocks or artificial rocks</li> <li>• shredded paper or leaf litter</li> </ul> </li> <li>• social enrichment:               <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species or breed.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to relevant state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species, breeds and sexes.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Methods used to approach and handle</i></b> amphibians may include:	<ul style="list-style-type: none"> <li>• approaching and handling as quietly as possible with the following considerations: <ul style="list-style-type: none"> <li>• animal should be supported by the palm of the hand with the other hand placed over its shoulders to prevent escape</li> <li>• darkened conditions tend to calm the animals and reduce stress reactions</li> <li>• standard hygiene procedures should be followed, including the use of gloves</li> </ul> </li> <li>• handling of amphibians should always be kept to a minimum to ensure the amphibian is not stressed or accidentally injured.</li> </ul>
<b><i>Common health issues</i></b> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of water due to presence of toxins</li> <li>• exposure to extremes of water quality</li> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• chemical toxicities and allergies</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• nutritional imbalances and disruptions</li> <li>• physical traumas</li> <li>• zoonotic diseases.</li> </ul>
<i>General health maintenance and preventative treatment</i> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• immunisation/vaccinations as required</li> <li>• insect control</li> <li>• temperature, heat and light requirements for specific species</li> <li>• quarantine</li> <li>• routine observation of waste elimination and faecal examination</li> <li>• water quality.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and natural dietary requirements for the species</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<i>Food source</i> considerations include:	<ul style="list-style-type: none"> <li>• captive diets must be similar to the natural diet of the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> <li>• maximise development of natural survival techniques</li> </ul> </li> <li>• food sources include:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• dietary supplements</li> <li>• live food.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of amphibians may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each animal: <ul style="list-style-type: none"> <li>• species and sex of animal</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Species specific
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMSPE302A Provide basic care of birds

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying birds and their behavioural and physical needs, providing daily care requirements, assisting with behavioural requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of native and some international birds. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to care for commonly kept avicultural birds. This may include animal shelters or rehabilitation organisations, pet shops, breeding establishments, zoos or similar workplaces. In some cases, birds may have been rescued from the wild and successful rehabilitation is required to restore bird health and wellbeing before releasing back to their natural environment.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify commonly kept and available birds	1.1. Profile of <i>birds</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i> , is defined. 1.2. External features are described using industry terminology. 1.3. Birds are classified using industry-specific terminology.



ELEMENT	PERFORMANCE CRITERIA
	1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of <i>bird comfort and normal behaviour</i> are identified and signs of distressed birds are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> are identified and evaluated for specific bird species.</p> <p>2.4. Current bird housing design, including nesting requirements, is evaluated in relation to the <i>welfare of animals</i> kept and legislation requirements.</p>
3. Approach and handle birds	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining birds are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <i>Equipment used to catch, handle and restrain birds</i> is prepared and evaluated.</p> <p>3.3. Birds are <i>approached and caught</i> while minimising risks to bird and others.</p> <p>3.4. Birds are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in birds are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on bird health and implemented as directed by supervisor.</p>
5. Feed and water birds	<p>5.1. <i>Digestive system features</i> are identified and related to bird-specific feeding routines and diets.</p> <p>5.2. Preferred <i>food sources</i> are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.5. Feeds are distributed and consumption including abnormalities is reported in accordance with workplace routines.
6. Maintain records	6.1. <b>Documentation</b> on the care and management of birds is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate bird records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling birds
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record bird weight and other relevant objective indicators of change in physiological status
- monitor bird health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to birds as required under supervision
- provide food and food supplements in accordance with feeding plan and report bird eating and drinking abnormalities
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities

## REQUIRED SKILLS AND KNOWLEDGE

- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or techniques
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for birds
- awareness of natural bird behaviour relating to the characteristics of the species, age, health status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic bird care and hygiene principles
- basic bird first aid techniques
- housing, nesting, social and activity needs of birds and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of birds
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of birds
- potential hazards and risks to birds and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe bird handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe birds, their gender, behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in bird diets, including natural dietary requirements for specific species
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the

<b>EVIDENCE GUIDE</b>	
performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of birds and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify birds by age, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch, handle and restrain birds</li> <li>• report and document treatments, behaviours and other information on individual birds in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of birds must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters or rehabilitation organisations, pet shops, breeding establishments, zoos, veterinary practices or similar workplaces.</p> <p>There must be access to a range of birds as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available bird species.</p>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>

<b>RANGE STATEMENT</b>	
Commonly available <i>birds</i> may include:	<ul style="list-style-type: none"> <li>• Budgerigar</li> <li>• Canary</li> <li>• Cockatiel</li> <li>• Duck</li> <li>• Finch</li> <li>• Grass Parrot</li> <li>• Pigeon</li> <li>• Quail</li> <li>• Rainbow Lorikeet</li> <li>• Ringneck Parakeet.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the birds</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels, at certain times of day or night</li> <li>• feeding, foraging and nesting</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• defending territory, other birds or food</li> <li>• aggression or hiding/retreating.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• feather colour and colour pattern and texture</li> <li>• eye colour</li> <li>• gender and mutation differences</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, tattoos and markings and leg bands.</li> </ul>
Indicators of <i>bird comfort and normal behaviour</i> may be identified through:	<ul style="list-style-type: none"> <li>• daily observation and visual examination is the best way to establish the appearance of a healthy bird and at the same time allows detection of changes from normal. These observations will include: <ul style="list-style-type: none"> <li>• activity level</li> <li>• assessment of body condition</li> <li>• excessive self-scratching or self-mutilation</li> <li>• feather plucking</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• posture and attitude</li> <li>• response to stimuli</li> <li>• appetite and dietary history</li> <li>• observing feathers and faecal matter for any abnormalities.</li> </ul>
<p><i>Housing design and environmental factors</i> may include:</p>	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• correct humidity levels</li> <li>• day/night cycle lighting</li> <li>• drainage and weather protection</li> <li>• general bird housing security</li> <li>• housing furniture</li> <li>• ventilation, temperature, heating and cooling requirements</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• indoor</li> <li>• outdoor</li> <li>• free flight</li> <li>• aviary</li> <li>• walk-through</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• brooders and perches</li> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• location considerations</li> <li>• longevity and sturdiness of materials</li> <li>• maintains ambient temperature conditions for the specific species</li> <li>• required floor area, vertical and/or horizontal space for specific species</li> <li>• security considerations</li> <li>• suitability for specific species</li> <li>• species-specific options for birds to hide or rest</li> <li>• substrate appropriate to the specific species</li> <li>• designs that allow species-specific activity, feeding or socialising</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygynous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• extras to daily base diet: <ul style="list-style-type: none"> <li>• fruit and vegetables</li> <li>• mixed prepared treats</li> <li>• pellets</li> <li>• worms and insects</li> </ul> </li> <li>• giving birds opportunities to scratch and forage for food on the ground</li> <li>• giving birds food that requires processing (e.g. breaking nuts open for food)</li> <li>• operant feeders</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• chewing materials</li> <li>• hollow logs and branches</li> <li>• mirrors and toys</li> <li>• nest-boxes and building material</li> <li>• perches, roosting shelves and brooding sites</li> <li>• plants and foliage</li> <li>• ponds and/or muddy areas large enough for bathing</li> <li>• retreats</li> <li>• rocks or artificial rocks</li> <li>• shredded paper or leaf litter</li> <li>• sufficient space for running or flying activity</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• interaction with other birds or animals that personalities match and enjoy each other's company</li> <li>• levels of contact with other birds of the same species or breed.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition, water (fresh and clean) and stock levels</li> <li>• compliance to appropriate state or territory</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment used to catch, handle and restrain birds</i> may include:	<ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• catching nets</li> <li>• gloves</li> <li>• hood or dark cover</li> <li>• towel or paper towel.</li> </ul>
<i>Methods used to approach and handle</i> birds may include:	<ul style="list-style-type: none"> <li>• confining to small area before attempting to catch</li> <li>• encouraging bird to approach by offering a treat</li> <li>• enticing bird into a smaller enclosure</li> <li>• handling techniques for birds should always consider the most appropriate technique to minimise stress and any accidental injuries.</li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> </ul> </li> <li>• feed-related, caused by no fresh and clean water or access to daily base food (e.g. finches having a container full but not digging past the husks)</li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and mould</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infectious diseases:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• chemical toxicities and allergies</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• nutritional imbalances and disruptions</li> <li>• physical traumas.</li> </ul>
<i>General health maintenance and preventative treatment</i> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of internal parasites</li> <li>• insect control both on bird and in environment</li> <li>• temperature, heat and light requirements for specific species</li> <li>• quarantine/isolation</li> <li>• routine observation of waste elimination and faecal examination</li> <li>• clean and appropriate dry formulas</li> <li>• water quality.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach</li> <li>• intestines, rectum and cloaca</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and natural dietary requirements for individual species</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<i>Food source</i> considerations include:	<ul style="list-style-type: none"> <li>• diets created to fulfil the known dietary requirement of the particular species</li> <li>• food sources: <ul style="list-style-type: none"> <li>• seeds, pellets and powders</li> <li>• fruits and vegetables</li> <li>• grasses and nuts</li> <li>• worms and, insects, fruits, vegetables, nuts and grasses</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• dietary supplements.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of birds may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each bird: <ul style="list-style-type: none"> <li>• species and sex of bird</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records: <ul style="list-style-type: none"> <li>• bird stock</li> <li>• supplies and equipment stock.</li> </ul> </li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Species specific
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMSPE303A Provide basic care of common native mammals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying common native mammals, their behavioural and physical needs, providing daily care requirements, assisting with behaviour requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of native mammals. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in the animal care industry where it may be necessary to rear commonly kept native mammals. This may include animal shelters or rehabilitation organisations, zoos or similar workplaces. In some cases, animals may have been rescued from the wild and successful rehabilitation is required to restore animal health and wellbeing before releasing back to their natural environment.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify commonly available native mammals	1.1. Profile of <i>native mammals</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i> , is defined. 1.2. External features are described using industry terminology. 1.3. Native mammals are classified using industry-specific terminology.

ELEMENT	PERFORMANCE CRITERIA
	1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of animal comfort and normal behaviour are identified and <i>signs of distressed native mammals</i> are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> are identified and evaluated for specific animal species.</p> <p>2.4. Current animal housing design is evaluated in relation to the <i>welfare of animals</i> kept and legislation requirements.</p>
3. Catch, handle and restrain native mammals	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining native mammals are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <i>Equipment used to catch, handle and restrain</i> native mammals is prepared and evaluated.</p> <p>3.3. Native mammals are <i>approached and caught</i> while minimising risks to animal and others.</p> <p>3.4. Native mammals are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in native mammals are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on native mammal health and implemented as directed by supervisor.</p>
5. Feed native mammals	<p>5.1. <i>Digestive system features</i> are identified and related to native mammal-specific feeding routines and diets.</p> <p>5.2. Preferred <i>food sources</i> are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options defined.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.4. Feed is prepared in accordance with dietary needs. 5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <b>Documentation</b> on the care and management of native mammals is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling native mammals
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record native mammal weight, length and other relevant objective indicators of change in physiological status
- monitor mammal health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to native mammals as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare, follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities



## REQUIRED SKILLS AND KNOWLEDGE

- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for native mammals
- awareness of natural native mammal behaviour relating to the characteristics of the species, age, health status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic mammal care and hygiene principles
- basic mammal first aid techniques
- housing, social and activity needs of native mammals and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of mammals
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of native mammals
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe native mammal handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe mammals, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in native mammal diets, including natural dietary requirements for specific species and appropriate plant recognition,
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of native mammals and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify native mammals by age, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch, handle and restrain native mammals</li> <li>• report and document treatments, behaviours and other information on individual animals in accordance with animal welfare regulations, industry standards, workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of common native mammals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters or rehabilitation organisations, zoos and wildlife parks or similar workplaces.</p> <p>There must be access to a range of native mammals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available native mammal species.</p>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>

<b>RANGE STATEMENT</b>	
Commonly available <i>native mammals</i> may include:	<ul style="list-style-type: none"> <li>• marsupials</li> <li>• monotremes.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• biting, kicking, charging or spitting</li> <li>• defending territory, other animals or food</li> <li>• growling, barking, hissing or screaming</li> <li>• hair on topline being raised</li> </ul> </li> <li>• dominance gestures: <ul style="list-style-type: none"> <li>• attempts to hump handler's leg or other animal</li> <li>• attempts to get higher than handler or other animals</li> </ul> </li> <li>• hunting or stalking gestures</li> <li>• stereotypical behaviour: <ul style="list-style-type: none"> <li>• repetitive patterns</li> <li>• self-mutilation</li> <li>• restlessness</li> </ul> </li> <li>• submissive gestures: <ul style="list-style-type: none"> <li>• lowering body</li> <li>• rolling onto back</li> <li>• tail between legs</li> <li>• turning away from handler or other animals.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, ear tags, tattoos and markings and leg</li> </ul>

<b>RANGE STATEMENT</b>	
	bands.
<i>Signs of distressed native mammals</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• inappetence</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals allowed</li> <li>• noise control</li> <li>• pest control</li> <li>• restricting access to animals</li> <li>• waste management</li> </ul> </li> <li>• ventilation, heating and cooling requirements</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• caged</li> <li>• fully enclosed</li> <li>• indoor</li> <li>• moated</li> <li>• naturalistic</li> <li>• outdoor</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• location considerations</li> <li>• longevity and sturdiness of materials</li> <li>• required floor area for specific species</li> <li>• security considerations</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• designs that allow for enrichment activities or species-specific exercise, feeding or socialising</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• giving animals opportunities to forage for food by hiding it in substrates</li> <li>• giving the animal food that requires processing (e.g. peeling or shelling fruit or seeds)</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• gnawing manipulada</li> <li>• hide boxes, tunnels and ladders</li> <li>• nest building or bedding material: <ul style="list-style-type: none"> <li>• shredded paper</li> <li>• straw</li> <li>• substrate or wood shavings</li> </ul> </li> <li>• non-edible items that can be easily added or removed from the environment, such as toys</li> <li>• perches, roosting shelves and nest boxes</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• human imprinting and cohabitation with domestic pets should be avoided as this may prevent successful rehabilitation to the wild</li> <li>• levels of contact with other animals of the same species or breed</li> <li>• social interactions between the animal and carer may also be appropriate if it is not planned to release the animal to its natural environment.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>the compatibility of species and breeds.</li> </ul>
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>animal bites, kicks, scratches and crush injuries</li> <li>biological hazardous waste and sharps disposal</li> <li>handling of chemicals and medicines</li> <li>gas leakage</li> <li>inhalation of aerosol particles</li> <li>intraocular contamination</li> <li>manual handling, including carrying, lifting and shifting</li> <li>needle pricks and cuts from other sharps</li> <li>release of infective agents (animal and human)</li> <li>slippery or uneven work surfaces</li> <li>zoonoses.</li> </ul>
<b><i>Equipment used to catch, handle and restrain</i></b> native mammals may include:	<ul style="list-style-type: none"> <li>cages, yards, pens, bags and towels</li> <li>collars, leads, halters and harnesses</li> <li>treats and toys.</li> </ul>
<b><i>Methods used to approach and catch</i></b> native mammals may include:	<ul style="list-style-type: none"> <li>calling animal</li> <li>encouraging animal to approach by offering a treat</li> <li>quietly approaching animal, slipping on collar and attaching lead or catching and holding animal gently with hands</li> <li>running animal into a small enclosure.</li> </ul>
<b><i>Common health issues</i></b> may include:	<ul style="list-style-type: none"> <li>behavioural disorders</li> <li>environmental hazards: <ul style="list-style-type: none"> <li>ventilation</li> <li>temperature extremes</li> <li>exposure to the elements</li> <li>adequate exercise</li> </ul> </li> <li>infectious diseases caused by: <ul style="list-style-type: none"> <li>bacteria, virus, fungus and mould</li> </ul> </li> <li>internal and external parasites</li> <li>non-infection diseases: <ul style="list-style-type: none"> <li>nutritional imbalances and disruptions</li> <li>genetic disorders</li> <li>metabolic</li> <li>neoplastic</li> <li>physical traumas</li> <li>chemical toxicities and allergies</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• zoonotic diseases.</li> </ul>
<p><b>General health maintenance and preventative treatment</b> may include:</p>	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• grooming</li> <li>• immunisation/vaccinations, as required</li> <li>• insect control</li> <li>• quarantine</li> <li>• routine observation of waste elimination and faecal examination.</li> </ul>
<p><b>Digestive system features</b> may include:</p>	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth and teeth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and natural dietary requirements for the species</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<p><b>Food source</b> considerations include:</p>	<ul style="list-style-type: none"> <li>• captive diets must be similar to the natural diet of the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> <li>• maximise development of natural survival techniques</li> </ul> </li> <li>• prior to their release, it is recommended that rehabilitated animals should be eating at least 85 per cent natural diet made up of food that would be available to them in the area where they are to be released.</li> </ul>
<p><b>Feeding hazards</b> may include:</p>	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin,</li> </ul>



<b>RANGE STATEMENT</b>	
	bacteria, fungus, virus and other sources <ul style="list-style-type: none"> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of mammals may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each animal:             <ul style="list-style-type: none"> <li>• species and sex of animal</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Species specific
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	



## ACMSPE304A Provide basic care of dogs

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying dogs and their behavioural and physical needs, providing daily care requirements, assisting with behavioural requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to keeping dogs. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where dogs are bred, reared, trained, cared for or housed. This may include animal shelters, pet shops, breeding or boarding kennels, companion animal training or grooming establishments or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available dogs	<p>1.1. Profile of <i>dog breeds</i> commonly held within facility, including appearance, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. Physical characteristics are described using industry terminology.</p> <p>1.3. Dogs are identified using industry specific-terminology.</p> <p>1.4. <i>Breed, colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of animal comfort and normal behaviour are identified and <i>signs of distressed dogs</i> are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> of specific animals are identified.</p> <p>2.4. Current animal housing design is assessed in relation to the <i>welfare of the animals</i> kept and legislation requirements.</p>
3. Handle and restrain dogs	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining dogs are identified and methods used to minimise risks to the handler and stress to the animal are demonstrated.</p> <p>3.2. Appropriate <i>equipment to restrain and handle</i> dogs is identified, prepared and evaluated.</p> <p>3.3. Dogs are <i>approached and restrained</i> in a manner which optimises their welfare.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in dogs are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on dog health and implemented as directed by supervisor.</p>
5. Feed dogs	<p>5.1. <i>Digestive system features</i> are identified and related to dog-specific feeding routines and diets.</p> <p>5.2. Preferred food sources are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options are defined.</p> <p>5.4. <i>Feed</i> is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including abnormalities, is reported according to workplace routines.</p>
6. Maintain records	<p>6.1. <i>Documentation</i> on the care and management of dogs is completed in accordance with workplace</p>

ELEMENT	PERFORMANCE CRITERIA
	procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling dogs
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record dog weight, height and other relevant objective indicators of change in physiological status
- monitor dog health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to dogs as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical terminology
- anatomical structures and physiological features related to basic care requirements

## REQUIRED SKILLS AND KNOWLEDGE

for dogs

- awareness of natural dog behaviour relating to the characteristics of the species, age, health status behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic dog care and hygiene principles
- basic dog first aid techniques
- dog condition scoring and methods used to measure, interpret and record weight and development
- housing, social and activity needs of dogs and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- milestones in developmental progress from new born to mature dogs
- organisational policies and procedures regarding the care and health maintenance of dogs
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of dogs
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe dog handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe dogs, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in dog diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of dogs and apply these to the best practice industry standard of housing, behaviour, feeding and health management</li> <li>• identify dogs by breed, age, sex, condition, colours, markings and other identifying features using industry accepted terminology</li> <li>• safely and humanely interact with, handle and restrain dogs</li> <li>• report and document treatments, behaviours and other information on individual dogs in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of dogs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters, pet shops, breeding or boarding kennels, companion animal training or grooming establishments, veterinary practices or similar workplaces.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available dog breeds.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p>



<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Common dog breeds</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• the Australian National Kennel Club (<a href="http://www.ankc.org.au">www.ankc.org.au</a>) provides a list of common breeds grouped into toys, terriers, gundogs, hounds, working dogs, utility and non-sporting.</li> </ul>
<p><b><i>Behavioural characteristics</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• body language, vocal and other forms of communication</li> <li>• normal behaviour patterns:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• activity levels appropriate for age and breed</li> <li>• displacement behaviour</li> <li>• normal feeding, resting and eliminative behaviour</li> <li>• social behaviour towards conspecifics and other species, including humans</li> <li>• inappropriate behaviour may include: <ul style="list-style-type: none"> <li>• changes to expected normal behaviour</li> <li>• destructive behaviour</li> <li>• excessive vocalisation</li> <li>• inappropriate arousal levels</li> <li>• repetitive or stereotypic behaviour patterns</li> <li>• signs of anxiety and distress.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• breed, age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, ear tags, tattoos and markings.</li> </ul>
<i>Signs of distress in dogs</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals allowed</li> <li>• noise control</li> <li>• pest control</li> <li>• restricting access to animals</li> <li>• waste management</li> </ul> </li> <li>• ventilation, heating and cooling requirements</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options:</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• communal kennels</li> <li>• individual kennels</li> <li>• exercise areas</li> <li>• whelping and puppy raising kennels</li> <li>• food preparation areas</li> <li>• bathing and grooming areas</li> <li>• companion dogs kept indoors and outside</li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species kept together in a home</li> <li>• food and water distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• suitability</li> <li>• specific areas to rest</li> <li>• designs that allow for enrichment activities (e.g. exercise, feeding or socialising)</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• groups</li> <li>• mixed species</li> </ul> </li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• food dispensing toys, scatter feeding and treasure hunts</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• gnawing manipulada</li> <li>• digging pits</li> <li>• paddle pools</li> <li>• a view</li> <li>• sounds (e.g. music)</li> <li>• scents</li> </ul> </li> <li>• occupational activity options: <ul style="list-style-type: none"> <li>• dog sports</li> <li>• free running exercise</li> <li>• leash walks</li> <li>• training</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• social enrichment:               <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species or other species</li> <li>• social interactions with people, including the carer.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks and scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment used to handle and restrain</i> dogs may include:	<ul style="list-style-type: none"> <li>• collars and leads</li> <li>• treats or toys.</li> </ul>
<i>Methods used to approach and catch</i> dogs may include:	<ul style="list-style-type: none"> <li>• calling animal by name</li> <li>• encouraging animal to approach by offering a treat</li> <li>• quietly approaching animal, slipping on collar and attaching lead or catching and holding animal with hands</li> <li>• running animal into a small enclosure.</li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards:               <ul style="list-style-type: none"> <li>• ventilation</li> <li>• temperature extremes</li> <li>• exposure to the elements</li> <li>• inadequate exercise</li> </ul> </li> <li>• infectious diseases caused by:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• bacteria, virus, fungus and mould</li> <li>• internal and external parasites</li> <li>• non-infectious diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<b>General health maintenance and preventative treatment</b> may include:	<ul style="list-style-type: none"> <li>• annual health check-up</li> <li>• control of parasites</li> <li>• grooming</li> <li>• immunisation/vaccinations as required</li> <li>• insect control</li> <li>• quarantine</li> <li>• routine observation of waste elimination and faecal examination.</li> </ul>
<b>Digestive system features</b> related to specific feeding routines and diets may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth and teeth structures</li> <li>• digestive enzymes and bacteria</li> <li>• oesophagus and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and strategies</li> <li>• normal eating and drinking patterns for species, age and breed</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<b>Feeding hazards</b> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin,</li> </ul>

<b>RANGE STATEMENT</b>	
	bacteria, fungus, virus and other sources <ul style="list-style-type: none"> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Foodstuffs</i> commonly available and suitable for a balanced diet may include:	<ul style="list-style-type: none"> <li>• high quality commercial and veterinary approved home prepared diets.</li> </ul>
Required <i>documentation</i> may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Species specific
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

<b>Co-requisite units</b>		

## ACMSPE305A Provide basic care of domestic cats

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of identifying domestic cats and their behavioural and physical needs, providing daily care requirements, assisting with behavioural requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to keeping domestic cats. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in animal care industry sectors where domestic cats are bred, reared, trained, cared for or housed. This may include animal shelters, pet shops and catteries or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify common domestic cat breeds	<p>1.1. Profile of <i>domestic cat breeds</i> commonly held in facility, including nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Cats are classified using industry-specific terminology.</p> <p>1.4. <i>Breeds, colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of animal comfort and normal behaviour are identified and <i>signs of distressed cats</i> are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> of specific animal species are identified.</p> <p>2.4. Current animal housing design is assessed in relation to the <i>welfare of the animals</i> kept and legislation requirements.</p>
3. Handle and restrain cats	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining cats are identified and methods used to minimise risks to handler and stress to the animal are demonstrated.</p> <p>3.2. Appropriate <i>equipment to restrain and handle cats</i> is prepared and evaluated.</p> <p>3.3. Cats are <i>approached and restrained</i> in a manner which optimises their welfare.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in domestic cats are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on cat health and implemented as directed by supervisor.</p>
5. Feed cats	<p>5.1. <i>Digestive system features</i> are identified and related to cat-specific feeding routines and diets.</p> <p>5.2. Preferred food sources are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options are defined.</p> <p>5.4. <i>Feed</i> is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.</p>
6. Maintain records	6.1. <i>Documentation</i> on the care and management of cats

ELEMENT	PERFORMANCE CRITERIA
	is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling cats
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record cat weight, length and other relevant objective indicators of change in physiological status
- monitor cat health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to cats as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anatomical terminology

## REQUIRED SKILLS AND KNOWLEDGE

- anatomical structures and physiological features related to basic care requirements for cats
- cat condition scoring and methods used to measure, interpret and record weight and development
- awareness of natural cat behaviour relating to the characteristics of the species, age, health status behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic cat care and hygiene principles
- basic cat first aid techniques
- cat condition scoring and methods used to measure, interpret and record weight and development
- housing, social and activity needs of cats and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- milestones in developmental progress from new born to mature cats
- organisational policies and procedures regarding the care and health maintenance of cats
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of cats
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe cat handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe cats, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in cat diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

<b>EVIDENCE GUIDE</b>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of cats and apply these to the best practice industry standard of housing, enrichment, feeding and health management</li> <li>• classify and identify cats breed, by age, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely interact with, handle and restrain cats</li> <li>• report and document treatments, behaviours and other information on individual cats in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of domestic cats must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters, pet shops and catteries or similar workplaces.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available cat breeds.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p>

<b>EVIDENCE GUIDE</b>	
	<p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Common <i>domestic cat breeds</i> may include:</p>	<ul style="list-style-type: none"> <li>• Siamese</li> <li>• Oriental</li> <li>• Burmese</li> <li>• Abyssinian</li> <li>• Birman</li> <li>• Ragdoll</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• Persian.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the breed, age and sex of the animals</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• body language, vocal and other forms of communication</li> </ul> </li> <li>• normal behaviour patterns: <ul style="list-style-type: none"> <li>• normal feeding, resting, eliminative behaviour</li> <li>• activity levels appropriate for age and breed</li> <li>• social behaviour towards conspecifics and other species including humans</li> </ul> </li> <li>• inappropriate behaviour: <ul style="list-style-type: none"> <li>• changes to expected normal behaviour</li> <li>• excessive vocalisation</li> <li>• destructive behaviour</li> <li>• inappropriate elimination</li> <li>• inter-cat aggression</li> <li>• repetitive or stereotypic behaviour patterns</li> <li>• signs of anxiety and distress.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, ear tags, tattoos and markings.</li> </ul>
<i>Signs of distress in cats</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>allowed</p> <ul style="list-style-type: none"> <li>• noise control</li> <li>• pest control</li> <li>• restricting access to animals</li> <li>• waste management</li> <li>• ventilation, heating and cooling requirements</li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• individual or group housing as appropriate</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility with other cats and other species</li> <li>• food and water distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> <li>• designs that allow for enrichment activities or species-specific exercise, feeding or socialising.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• food puzzles and scatter feeding</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• a range of toys</li> <li>• activity centres</li> <li>• scratch poles</li> <li>• vertical space</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• interaction with people</li> <li>• levels of contact with other animals of the same or different species, as appropriate.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks and scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment used to handle and restrain</i> cats may include:	<ul style="list-style-type: none"> <li>• collars and leads</li> <li>• treats or toys.</li> </ul>
<i>Methods used to approach and catch</i> cats may include:	<ul style="list-style-type: none"> <li>• calling animal by name</li> <li>• encouraging animal to approach by offering a treat</li> <li>• quietly approaching animal, slipping on collar and attaching lead or catching and holding animal with hands.</li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• ventilation</li> <li>• temperature extremes</li> <li>• exposure to the elements</li> <li>• inadequate exercise</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and mould</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infectious diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>General health maintenance and preventative treatment</i></b> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• grooming</li> <li>• immunisation/vaccinations as required</li> <li>• insect control</li> <li>• quarantine</li> <li>• routine observation of waste elimination and faecal examination.</li> </ul>
<b><i>Digestive system features</i></b> related to specific feeding routines and diets may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth and teeth structures</li> <li>• digestive enzymes and bacteria</li> <li>• oesophagus and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and strategies</li> <li>• normal eating and drinking patterns for species, age and breed</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<b><i>Feeding hazards</i></b> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, infectious agents and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<b><i>Foodstuffs</i></b> commonly available and suitable for a balanced diet may include:	<ul style="list-style-type: none"> <li>• high quality commercial and veterinary approved home prepared diets.</li> </ul>
Required <b><i>documentation</i></b> may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Species specific
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMSPE306A Provide basic care of marine fish

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying marine fish and their behavioural and physical needs, providing daily care requirements and assisting with behavioural requirements and preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where marine fish are reared and cared for. This may include aquariums, pet stores, zoos, animal technology facilities, catchers and distributors or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available marine fish	<p>1.1. Profile of <i>marine fish</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Marine fish are classified using industry- specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. <b>Water quality</b> is monitored and <b>adjustments</b> made as required to maintain optimum water quality appropriate for the species being housed as directed by supervisor.</p> <p>2.2. Indicators of animal comfort and normal behaviour are identified and <b>signs of distressed marine fish</b> are recognised and reported to supervisor.</p> <p>2.3. Industry standards and guidelines for <b>housing design, environmental factors</b> and appropriate stocking densities are identified.</p> <p>2.4. <b>Enrichment needs</b> are identified and evaluated for specific fish species.</p> <p>2.5. Current animal housing design is evaluated in relation to the <b>welfare of animals</b> kept and legislation requirements.</p>
3. Catch, handle and restrain marine fish	<p>3.1. <b>Occupational health and safety (OHS) risks</b> associated with handling and restraining marine fish are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <b>Equipment used to catch, handle and restrain</b> marine fish is prepared and evaluated.</p> <p>3.3. Marine fish are <b>approached and caught</b> while minimising risks to animal and others.</p> <p>3.4. Marine fish are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in fish are identified and recorded in animal health and treatment records.</p> <p>4.2. <b>Common health issues</b> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <b>General health maintenance and preventative treatment procedures</b> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on marine fish health and implemented as directed by supervisor.</p>
5. Feed marine fish	<p>5.1. <b>Digestive system features</b> are identified and related to marine fish specific feeding routines and diets.</p> <p>5.2. Preferred food sources are identified and food samples are assessed for quality and suitability.</p> <p>5.3. Potential <b>feeding hazards</b> are identified and risk control options defined.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.4. Feed is prepared in accordance with dietary needs. 5.5. Animal and plant species commonly used to feed marine fish are cultured. 5.6. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of marine fish is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- culture live food species for marine fish
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling marine fish
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record marine fish weight, length and other relevant objective indicators of change in physiological status
- monitor marine fish health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to marine fish as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and

## REQUIRED SKILLS AND KNOWLEDGE

seeking advice from supervisor

- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for marine fish
- awareness of natural marine fish behaviour relating to the characteristics of the species, age, health and reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic marine fish care and hygiene principles
- basic marine fish first aid techniques
- basic water chemistry parameters and physical indicators of water quality relevant to the care and husbandry of marine fish
- biology and culture of common food species used to feed marine fish
- common aeration and filtration systems
- housing, social and activity needs of marine fish and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of marine fish
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of marine fish
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe marine fish handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe marine fish, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in marine fish diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques



**REQUIRED SKILLS AND KNOWLEDGE**

and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the specific characteristics and needs of marine fish and apply these to the best practice industry standard of housing, socialising, feeding and health management
- classify and identify marine fish by age, sex, reproductive status, condition, colours, markings and other identifying features using industry terminology
- assess water quality for suitability for maintained species
- safely and humanely catch, handle and restrain fish
- report and document treatments, behaviours and other information on individual fish where relevant in accordance with animal welfare regulations, industry standards, workplace protocols and procedures.

The skills and knowledge required to provide basic care of marine fish must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can

<b>EVIDENCE GUIDE</b>	
	<p>include aquariums, pet stores, zoos, animal technology facilities, catchers or distributors or similar workplaces.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available marine fish species.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p>Commonly available <i>marine fish</i> may include:</p>	<ul style="list-style-type: none"> <li>• Anemone Fish, Angels and Anthias</li> <li>• Bannerfish, Basslets, Boxfish and Butterflies</li> <li>• Chromis and Damsels</li> <li>• Eels and Filefish</li> <li>• Gobies and Groupers</li> <li>• Lionfish and Puffers</li> <li>• Seahorses and Dragons</li> <li>• Sharks, Snappers, Stonefish and Surgeons</li> <li>• Tangs, Tasse and Trigger Fish</li> <li>• Wrasse.</li> </ul>
<p><i>Behavioural characteristics</i> may include:</p>	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to:             <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species:             <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• reproductive behaviours</li> <li>• the environment being kept within</li> <li>• the other marine animals in that environment</li> </ul> </li> <li>• defensive behaviour:             <ul style="list-style-type: none"> <li>• biting</li> <li>• defending territory, other fish or food.</li> </ul> </li> </ul>
<p><i>Colours, markings and other identifying features</i> may include:</p>	<ul style="list-style-type: none"> <li>• age, sex, sexual maturity and size</li> <li>• body shape and fin modifications</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, tattoos and markings</li> <li>• skin and scale colours and texture</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>tail and fin shape, size and location.</li> </ul>
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>colour</li> <li>odour</li> <li>unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>correcting chemical imbalances</li> <li>partial water change</li> <li>raising or lowering pH or hardness.</li> </ul>
<i>Signs of distressed marine fish</i> may include:	<ul style="list-style-type: none"> <li>aggressive behaviour</li> <li>altered respiration rate</li> <li>any change in normal behaviour, including swimming patterns</li> <li>discolouration</li> <li>erratic swimming patterns</li> <li>fins clamped against body</li> <li>floating</li> <li>hiding</li> <li>ill-thrift</li> <li>immobility</li> <li>inappetence</li> <li>presence of external disease organisms</li> <li>subdued behaviour</li> <li>aggressive behaviour.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>environmental: <ul style="list-style-type: none"> <li>aeration rates and supply</li> <li>biological control of waste</li> <li>cleaning routines and methods</li> <li>drainage and weather protection</li> <li>electrical safety</li> <li>escape proofing</li> <li>fundamentals of the biological process</li> <li>general animal housing security</li> <li>filtration requirements to maintain the water quality and optimum environmental conditions for target species</li> <li>heating and lighting</li> <li>housing furniture and compatible plants</li> <li>outdoor predator protection (e.g. protection from fish eating birds)</li> <li>water flow rates and currents</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• housing design:               <ul style="list-style-type: none"> <li>• housing options:                   <ul style="list-style-type: none"> <li>• aquaria</li> <li>• indoor</li> <li>• outdoor</li> </ul> </li> </ul> </li> <li>• housing requirements:               <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• plants, features and substrate materials</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> <li>• designs that allow for enrichment activities or species-specific feeding or socialising</li> <li>• social options:                   <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species.</li> </ul> </li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment:               <ul style="list-style-type: none"> <li>• creation of currents during feedings</li> <li>• creation of feeders such as cone/film canisters with holes for brine shrimp to swim out of</li> <li>• feedings at different times of day</li> <li>• feedings at different places in tank environment (if possible)</li> <li>• providing opportunities to scavenge, graze and forage for food</li> <li>• sinking feeders</li> <li>• variations for types and styles of food and activities (e.g. live animal or plant species)</li> </ul> </li> <li>• physical enrichment:               <ul style="list-style-type: none"> <li>• diverse and varied environment for animals to pick their comfortable spot plus open swimming areas as required</li> <li>• periodic changes of lighting intensity</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• seasonal change of lighting photoperiod</li> <li>• periodic changes to exhibit décor (e.g. changing logs, plants and branches)</li> <li>• random addition of novel items (e.g. shells, rocks, leaves and plants)</li> <li>• social enrichment may include: <ul style="list-style-type: none"> <li>• animals of the same species housed with same to encourage species-specific behaviors</li> <li>• mixed species exhibits to encourage positive inter-species interactions.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to relevant state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species, breeds and sexes.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment used to catch, handle and restrain</i> marine fish may include:	<ul style="list-style-type: none"> <li>• buckets</li> <li>• damp towels or wet sponges</li> <li>• fish anaesthetics: <ul style="list-style-type: none"> <li>• Aqui-S</li> <li>• Clove Oil</li> <li>• MS-222</li> </ul> </li> <li>• fish traps</li> <li>• plastic bags</li> <li>• soft gloves</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• soft, knotless hand nets.</li> </ul>
<i>Methods used to approach and catch</i> marine fish may include:	<ul style="list-style-type: none"> <li>• gradual approach to allow fish to adjust to human presence</li> <li>• prior introduction of capture equipment</li> <li>• removal of tank furniture and plants</li> <li>• use of clear plastic bags to reduce stress.</li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of the water due to the presence of toxins</li> <li>• exposure to extremes of water quality</li> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<i>General health maintenance and preventative treatment</i> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites and insects</li> <li>• immunisation/vaccinations as required</li> <li>• quarantine and isolation procedures</li> <li>• routine water quality checks and analysis</li> <li>• use of 'aged water'</li> <li>• use of prophylactic and therapeutic water treatments.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth size, shape and location</li> <li>• gill rakers, teeth types and locations and teeth structures</li> </ul> </li> <li>• digestive chemicals and bacteria</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• alimentary canal and stomach, pylorus and liver</li> <li>• intestines and cloaca</li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and locations</li> <li>• potential digestive system malfunctions or problems.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of marine fish may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• Australian Quarantine and Inspection Service (AQIS) compliance records, if required, such as: <ul style="list-style-type: none"> <li>• Quarantine Approved Premises (QAP) Tank Charts</li> <li>• noxious species</li> </ul> </li> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>



### Unit Sector(s)

Unit sector	Species specific
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMSPE307A Provide basic care of freshwater fish

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying freshwater fish and their behavioural and physical needs, providing daily care requirements as well as assisting with behavioural requirements and preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where freshwater fish are reared and cared for. This may include aquariums, pet stores, zoos, animal technology facilities, fish farms and distributors, quarantine approved premises or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available freshwater fish	<p>1.1. Profile of <i>freshwater fish</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Freshwater fish are classified using industry-specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. <b>Water quality</b> is monitored and <b>adjustments</b> made as required to maintain optimum water quality appropriate for the species being housed as directed by supervisor.</p> <p>2.2. Indicators of animal comfort and normal behaviour are identified and <b>signs of distressed freshwater fish</b> are recognised and reported to supervisor.</p> <p>2.3. Industry standards and guidelines for <b>housing design, environmental factors</b> and appropriate stocking densities are identified.</p> <p>2.4. <b>Enrichment needs</b> are identified and evaluated for specific fish species.</p> <p>2.5. Current animal housing design is assessed in relation to the <b>welfare of animals</b> kept and legislation requirements.</p>
3. Catch, handle and restrain freshwater fish	<p>3.1. <b>Risks</b> associated with handling and restraining freshwater fish are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <b>Equipment used to catch, handle and restrain</b> freshwater fish is prepared and evaluated.</p> <p>3.3. Freshwater fish are <b>approached and caught</b> while minimising risks to animal and others.</p> <p>3.4. Freshwater fish are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in fish are identified and recorded in animal health and treatment records.</p> <p>4.2. <b>Common health issues</b> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <b>General health maintenance and preventative treatment procedures</b> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on freshwater fish health and implemented as directed by supervisor.</p>
5. Feed freshwater fish	<p>5.1. <b>Digestive system features</b> are identified and related to freshwater fish specific feeding routines and diets.</p> <p>5.2. Preferred food sources are identified and food samples are assessed for quality and suitability.</p> <p>5.3. Potential <b>feeding hazards</b> are identified and risk control options defined.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.4. Feed is prepared in accordance with dietary needs. 5.5. Animal and plant species commonly used to feed freshwater fish are cultured. 5.6. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of freshwater fish is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- culture live food species for freshwater fish
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling freshwater fish
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record freshwater fish weight, length and other relevant objective indicators of change in physiological status
- monitor freshwater fish health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to freshwater fish as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and

## REQUIRED SKILLS AND KNOWLEDGE

seeking advice from supervisor

- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for freshwater fish
- awareness of natural freshwater fish behaviour relating to the characteristics of the species, age, health and reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic freshwater fish care and hygiene principles
- basic freshwater fish first aid techniques
- basic water chemistry parameters and physical indicators of water quality relevant to the care and husbandry of freshwater fish
- biology and culture of common food species used to feed freshwater fish
- common aeration and filtration systems
- housing, social and activity needs of freshwater fish and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of freshwater fish
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of freshwater fish
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe freshwater fish handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe freshwater fish, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in freshwater fish diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques

**REQUIRED SKILLS AND KNOWLEDGE**

and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the specific characteristics and needs of freshwater fish and apply these to the best practice industry standard of housing, socialising, feeding and health management
- classify and identify freshwater fish by age, sex, reproductive status, condition, colours, markings and other identifying features using industry terminology
- assess water quality for suitability for maintained species
- safely and humanely catch, handle and restrain freshwater fish
- report and document treatments, behaviours and other information on individual fish, where relevant, in accordance with animal welfare regulations, industry standards, workplace protocols and procedures.

The skills and knowledge required to provide basic care of freshwater fish must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which

<b>EVIDENCE GUIDE</b>	
	<p>candidates are working or in a situation that reproduces normal work conditions. Workplaces can include aquariums, pet stores, zoos, animal technology facilities, fish farms or distributors, quarantine approved premises or similar workplaces.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available freshwater fish species.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p>Commonly available <i>freshwater fish</i> may include:</p>	<ul style="list-style-type: none"> <li>• commonly maintained families of aquarium fish:             <ul style="list-style-type: none"> <li>• Barbs and Danios</li> <li>• Betts and Gouramis</li> <li>• Catfish and Cichlids</li> <li>• Livebearers and Loaches</li> <li>• Rainbowfish</li> <li>• Tetras</li> </ul> </li> <li>• tropical and coldwater species.</li> </ul>
<p><i>Behavioural characteristics</i> may include:</p>	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to:             <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species:             <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• reproductive behaviours</li> <li>• the environment being kept within</li> <li>• the other marine animals in that environment</li> </ul> </li> <li>• defensive behaviour:             <ul style="list-style-type: none"> <li>• biting</li> <li>• defending territory, other fish or food.</li> </ul> </li> </ul>
<p><i>Colours, markings and other identifying features</i> may include:</p>	<ul style="list-style-type: none"> <li>• age, sex, sexual maturity and size</li> <li>• body shape and fin modifications</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, tattoos and markings</li> <li>• skin and scale colours and texture</li> <li>• tail and fin shape, size and location.</li> </ul>

<b>RANGE STATEMENT</b>	
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>• colour</li> <li>• odour</li> <li>• unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering pH or hardness.</li> </ul>
<i>Signs of distressed freshwater fish</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• altered respiration rate</li> <li>• any change in normal behaviour, such as swimming patterns</li> <li>• discolouration</li> <li>• erratic swimming patterns</li> <li>• fins clamped against body</li> <li>• ill-thrift</li> <li>• floating</li> <li>• hiding</li> <li>• immobility</li> <li>• inappetence</li> <li>• presence of external disease organisms</li> <li>• subdued behaviour.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• aeration rates and supply</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• electrical safety</li> <li>• escape proofing</li> <li>• drainage and weather protection</li> <li>• fundamentals of the biological process</li> <li>• general animal housing security</li> <li>• heating and lighting</li> <li>• filtration requirements to maintain the water quality and optimal environmental conditions for target species</li> <li>• housing furniture and compatible plants</li> <li>• outdoor predator protection e.g. protection from fish eating birds</li> <li>• water flow rates and currents</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options:</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• aquaria</li> <li>• indoor</li> <li>• intensive production fish care systems (commonly used in research facilities)</li> <li>• outdoor</li> <li>• warehousing</li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• plants, features and substrate materials</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> <li>• designs that allow for enrichment activities or species-specific feeding or socialising</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species.</li> </ul> </li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• creation of currents during feedings</li> <li>• creation of feeders such as cone/film canisters with holes for brine shrimp to swim out of</li> <li>• feedings at different times of day</li> <li>• feedings at different places in tank (if possible)</li> <li>• providing opportunities to scavenge, graze and forage for food</li> <li>• sinking feeders</li> <li>• variations for types and styles of food and activities (e.g. live animal or plant species)</li> </ul> </li> <li>• physical enrichment: <ul style="list-style-type: none"> <li>• diverse and varied environment for animals to pick their comfortable spot plus open swimming areas as required</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• periodic changes of lighting intensity</li> <li>• seasonal change of lighting photoperiod</li> <li>• periodic changes to exhibit décor (e.g. changing logs, plants and branches)</li> <li>• random addition of novel items (e.g. shells, rocks, leaves and plants)</li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• animals of the same species housed with same to encourage species-specific behaviors</li> <li>• mixed species exhibits to encourage positive inter-species interactions.</li> </ul> </li> </ul>
<b>Welfare of animals</b> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species, breeds and sexes.</li> </ul>
<b>OHS risks</b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b>Equipment used to catch, handle and restrain</b> freshwater fish may include:	<ul style="list-style-type: none"> <li>• buckets</li> <li>• damp towels</li> <li>• fish anaesthetics: <ul style="list-style-type: none"> <li>• Aqui-S</li> <li>• Clove Oil</li> <li>• MS-222</li> </ul> </li> <li>• fish traps</li> <li>• plastic bags</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• soft gloves</li> <li>• soft, knotless hand nets</li> <li>• wet sponges.</li> </ul>
<b><i>Methods used to approach and catch</i></b> freshwater fish may include:	<ul style="list-style-type: none"> <li>• gradual approach to allow fish to adjust to human presence</li> <li>• prior introduction of capture equipment</li> <li>• removal of tank furniture and plants</li> <li>• use of clear plastic bags to reduce stress.</li> </ul>
<b><i>Common health issues</i></b> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of the water due to presence of toxins</li> <li>• exposure to extremes of water quality</li> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<b><i>General health maintenance and preventative treatment</i></b> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites and insects</li> <li>• immunisation/vaccinations as required</li> <li>• quarantine and isolation</li> <li>• routine observation of waste elimination and faecal examination</li> <li>• routine water quality checks and analysis</li> <li>• use of 'aged water'</li> <li>• use of prophylactic and therapeutic water treatments.</li> </ul>
<b><i>Digestive system features</i></b> may	<ul style="list-style-type: none"> <li>• anatomical features:</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• mouth size, shape and location</li> <li>• gill rakers, teeth types and locations and teeth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach, pylorus and liver</li> <li>• intestines and cloaca</li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and locations</li> <li>• potential digestive system malfunctions or problems.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of freshwater fish may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• Australian Quarantine and Inspection Service (AQIS) compliance records, such as: <ul style="list-style-type: none"> <li>• Quarantine Approved Premises (QAP) Tank Charts</li> <li>• noxious species</li> </ul> </li> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Species specific
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMSPE308A Provide basic care of marine aquatic invertebrates

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying marine aquatic invertebrates and their behavioural and physical needs, providing daily care requirements as well as assisting with behavioural requirements and preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where it may be necessary to care for commonly available marine aquatic invertebrates. This may include aquariums, pet shops, zoos, animal technology facilities or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available marine aquatic invertebrates	<p>1.1. Profile of <i>marine aquatic invertebrates</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Invertebrates are classified using industry-specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. <b>Water quality</b> is monitored and <b>adjustments</b> made as required to maintain optimum water quality appropriate for the species being housed as directed by supervisor.</p> <p>2.2. Indicators of <b>animal comfort and normal behaviour</b> are identified and signs of distressed invertebrates are recognised and reported to supervisor.</p> <p>2.3. Industry guidelines for <b>housing design, environmental factors</b> and appropriate stocking densities are identified.</p> <p>2.4. <b>Enrichment needs</b> are identified and evaluated for specific animal species.</p> <p>2.5. Current animal housing design is evaluated in relation to the <b>welfare of animals</b> kept and legislation requirements.</p>
3. Approach and handle invertebrates	<p>3.1. <b>Risks</b> associated with handling and restraining invertebrates are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. Appropriate <b>equipment to catch and handle invertebrate</b> are identified and prepared.</p> <p>3.3. Invertebrates are approached and handled while minimising risks to animal and others using a range of appropriate animal welfare procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in invertebrates are identified and recorded in animal health and treatment records.</p> <p>4.2. <b>Common health issues</b> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <b>General health maintenance and preventative treatment procedures</b> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on invertebrate health and implemented as directed by supervisor.</p>
5. Feed invertebrates	<p>5.1. <b>Digestive system features</b> are identified and related to invertebrate specific feeding routines and diets.</p> <p>5.2. Preferred <b>food sources</b> are identified and food samples are assessed for quality and suitability.</p> <p>5.3. Potential <b>feeding hazards</b> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including</p>

ELEMENT	PERFORMANCE CRITERIA
	abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of marine aquatic invertebrates is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry guidelines, relevant regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling marine aquatic invertebrates
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record invertebrate weight, length and other relevant objective indicators of change in physiological status
- monitor invertebrate health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities

## REQUIRED SKILLS AND KNOWLEDGE

- use problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for invertebrates
- awareness of natural invertebrate behaviour relating to the characteristics of the species, developmental stage, health and reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic invertebrate care and hygiene principles
- basic water chemistry parameters and physical indicators of water quality relevant to the care and husbandry of marine aquatic invertebrates
- common aeration and filtration systems
- housing, social and activity needs of marine aquatic invertebrates and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of marine aquatic invertebrates
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of marine aquatic invertebrates
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe invertebrate handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe marine aquatic invertebrates, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in marine aquatic invertebrates diets, including natural dietary requirements for specific species
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the

<b>EVIDENCE GUIDE</b>	
performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of marine aquatic invertebrates and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify invertebrates by developmental stage, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch and handle invertebrates</li> <li>• assess water quality for suitability for maintained species</li> <li>• report and document treatments, behaviours and other information on individual animals in accordance with animal welfare regulations, industry guidelines and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of marine aquatic invertebrates must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include aquariums, pet shops, zoos, animal technology facilities or similar workplaces.</p> <p>There must be access in either situation to a range of marine aquatic invertebrates as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available marine aquatic</p>

<b>EVIDENCE GUIDE</b>	
	invertebrate species.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and

<b>RANGE STATEMENT</b>	
regional contexts) may also be included.	
Commonly available <i>marine aquatic invertebrates</i> may include:	<ul style="list-style-type: none"> <li>• crabs, lobsters and crayfish</li> <li>• cuttlefish</li> <li>• octopus and squid</li> <li>• prawns and shrimp</li> <li>• sea anemones, cucumbers and snails</li> <li>• sea stars and starfish.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the family, developmental stage and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding behaviours</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• reproductive behaviours</li> <li>• the other marine animals in that environment</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• hiding or retreating.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• developmental stage, sex and size</li> <li>• skin or shell colours and texture</li> <li>• markings and patterns</li> <li>• tags.</li> </ul>
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>• colour</li> <li>• odour</li> <li>• unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering pH or hardness or salinity.</li> </ul>
Indicators of <i>animal comfort and normal behaviour</i> may be identified by:	<ul style="list-style-type: none"> <li>• daily observation and visual examination is the best way to establish the appearance of a healthy invertebrate and at the same time allows detection of changes from normal. These observations will include: <ul style="list-style-type: none"> <li>• posture and attitude</li> <li>• activity level</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• response to stimuli including handling</li> <li>• assessment of body condition</li> <li>• assessment of state of hydration</li> <li>• appetite and dietary history</li> <li>• presence of external organisms.</li> </ul>
<p><i>Housing design and environmental factors</i> may include:</p>	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• aeration rates and supply</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• electrical safety</li> <li>• escape proofing</li> <li>• day/night cycle lighting</li> <li>• filtration requirements to maintain the water quality and optimal environmental conditions for target species</li> <li>• housing furniture and compatible plants</li> <li>• lighting, ventilation, temperature, heating and cooling requirements</li> <li>• water flows and currents</li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food distribution</li> <li>• location and security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• maintains ambient temperature conditions for the specific species</li> <li>• provides continuous access to water free of ammonia or chlorine</li> <li>• provides generous ventilation and is safe from fumes and vapours: <ul style="list-style-type: none"> <li>• insecticides</li> <li>• cleaning agents</li> </ul> </li> <li>• required floor area, vertical and/or horizontal space for specific species</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> <li>• substrate appropriate to the specific species</li> <li>• designs that allow for species-specific</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<p>activity, feeding or socialising</p> <ul style="list-style-type: none"> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygynous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment</li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• plants and foliage</li> <li>• retreats</li> <li>• rocks or artificial rocks</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species</li> <li>• mixed species exhibits to encourage positive inter-species interactions.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate/relevant state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment to catch and handle</i>	<ul style="list-style-type: none"> <li>• equipment:</li> </ul>

<b>RANGE STATEMENT</b>	
<i>invertebrate</i> may include:	<ul style="list-style-type: none"> <li>• isolation tanks</li> <li>• plastic bags</li> <li>• soft gloves</li> <li>• soft, knotless hand nets</li> <li>• traps</li> <li>• handling of invertebrates should always be minimised to ensure the invertebrate is not stressed or accidentally injured.</li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of the water due to presence of toxins</li> <li>• exposures of extremes of water quality</li> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<i>General health maintenance and preventative treatment</i> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• temperature, heat and light requirements for specific species</li> <li>• quarantine and isolation procedures</li> <li>• routine observation of waste elimination</li> <li>• water quality.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features relevant to the specific species</li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• waste elimination</li> <li>• feeding patterns and natural dietary requirements for the species</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<i>Food source</i> considerations include:	<ul style="list-style-type: none"> <li>• captive diets must be similar to the natural diet of the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> <li>• maximise development of natural survival techniques</li> </ul> </li> <li>• food sources will vary widely subject to the specific species.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of marine aquatic invertebrates may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each animal (or group of animals): <ul style="list-style-type: none"> <li>• species and sex of animal</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>

### Unit Sector(s)

Unit sector	Species specific
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMSPE309A Provide basic care of terrestrial and freshwater invertebrates

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying terrestrial and freshwater invertebrates and their behavioural and physical needs, providing daily care requirements as well as assisting with behavioural requirements and preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where it may be necessary to care for commonly available terrestrial and freshwater invertebrates. This may include aquariums, pet shops, zoos, animal technology facilities or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available terrestrial and freshwater invertebrates	<p>1.1. Profile of <i>terrestrial and freshwater invertebrates</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Invertebrates are classified using industry-specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. <b>Water quality</b> (for freshwater species) is monitored and <b>adjustments</b> made, as required, to maintain optimum water quality appropriate for the species being housed as directed by supervisor.</p> <p>2.2. Indicators of <b>animal comfort and normal behaviour</b> are identified and signs of distressed invertebrates are recognised and reported to supervisor.</p> <p>2.3. Industry guidelines for <b>housing design, environmental factors</b> and appropriate stocking densities are identified.</p> <p>2.4. <b>Enrichment needs</b> are identified and evaluated for specific animal species.</p> <p>2.5. Current animal housing design is evaluated in relation to the <b>welfare of animals</b> kept and legislation requirements.</p>
3. Approach and handle invertebrates	<p>3.1. <b>Occupational health and safety (OHS) risks</b> associated with handling and restraining invertebrates are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. Appropriate <b>equipment to catch and handle invertebrate</b> are identified and prepared.</p> <p>3.3. Invertebrates are approached and handled while minimising risks to animal and others using a range of appropriate animal welfare procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in invertebrates are identified and recorded in animal health and treatment records.</p> <p>4.2. <b>Common health issues</b> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <b>General health maintenance and preventative treatment procedures</b> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on invertebrate health and implemented as directed by supervisor.</p>
5. Feed invertebrates	<p>5.1. <b>Digestive system features</b> are identified and related to invertebrate specific feeding routines and diets.</p> <p>5.2. Preferred <b>food sources</b> are identified and food samples are assessed for quality and suitability.</p> <p>5.3. Potential <b>feeding hazards</b> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <b>Documentation</b> on the care and management of terrestrial and freshwater invertebrates is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry guidelines, relevant regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, catching and handling terrestrial and freshwater invertebrates
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record invertebrate weight, length and other relevant objective indicators of change in physiological status
- monitor invertebrate health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental



## REQUIRED SKILLS AND KNOWLEDGE

abilities

- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for invertebrates
- awareness of natural invertebrate behaviour relating to the characteristics of the species, developmental stage, health and reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic invertebrate care and hygiene principles
- basic water chemistry parameters and physical indicators of water quality relevant to the care and husbandry of marine aquatic invertebrates
- common aeration and filtration systems
- housing, social and activity needs of terrestrial and freshwater invertebrates and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of terrestrial and freshwater invertebrates
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of terrestrial and freshwater invertebrates
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe invertebrate handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe terrestrial and freshwater invertebrates, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in terrestrial and freshwater invertebrates diets, including natural dietary requirements for specific species
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of terrestrial and freshwater invertebrates and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify invertebrates by developmental stage, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch and handle terrestrial and freshwater invertebrates</li> <li>• assess water quality for suitability for maintained species</li> <li>• report and document treatments, behaviours and other information on individual animals in accordance with animal welfare regulations, industry guidelines and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of terrestrial and freshwater invertebrates must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be largely practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Industry sectors can include aquariums, pet shops, zoos, animal technology facilities or similar workplaces.</p> <p>There must be access in either situation to a range of</p>

<b>EVIDENCE GUIDE</b>	
	terrestrial and freshwater invertebrates as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three species including at least one terrestrial and at least one freshwater invertebrate species.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different

<b>RANGE STATEMENT</b>	
work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Commonly available <i>terrestrial and freshwater invertebrates</i> may include:	<ul style="list-style-type: none"> <li>• crickets</li> <li>• freshwater lobsters, shrimp and snails</li> <li>• giant cockroaches</li> <li>• large spiders (e.g. tarantulas)</li> <li>• beetles (e.g. rhinoceros)</li> <li>• stick insects (e.g. goliath and titan)</li> <li>• scorpions.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the species, breed, developmental stage and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding behaviours</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• reproductive behaviours</li> <li>• the other animals in that environment</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• hiding or retreating.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• developmental stage, sex and size</li> <li>• skin or shell colours and texture</li> <li>• markings and patterns</li> <li>• tags.</li> </ul>
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>• colour</li> <li>• odour</li> <li>• unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering pH or hardness.</li> </ul>
Indicators of <i>animal comfort and normal behaviour</i> may be	<ul style="list-style-type: none"> <li>• daily observation and visual examination is the best way to establish the appearance of a healthy</li> </ul>

<b>RANGE STATEMENT</b>	
identified by:	<p>invertebrate and at the same time allows detection of changes from normal. These observations will include:</p> <ul style="list-style-type: none"> <li>• posture and attitude</li> <li>• activity level</li> <li>• response to stimuli including handling</li> <li>• assessment of body condition</li> <li>• assessment of state of hydration</li> <li>• appetite and dietary history</li> <li>• presence of external organisms.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• aeration rates and supply</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• correct humidity levels</li> <li>• day/night cycle lighting</li> <li>• drainage and weather protection</li> <li>• electrical safety</li> <li>• escape proofing</li> <li>• filtration requirements to maintain the water quality and optimal environmental conditions for target species</li> <li>• housing furniture and compatible plants</li> <li>• lighting, ventilation, temperature, heating and cooling requirements</li> <li>• water flows and currents</li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• location and security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• maintains ambient temperature conditions for the specific species</li> <li>• provides continuous access to water free of ammonia or chlorine</li> <li>• provides generous ventilation and is safe from fumes and vapours: <ul style="list-style-type: none"> <li>• insecticides</li> <li>• cleaning agents</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• required floor area, vertical and/or horizontal space for specific species</li> <li>• suitability for specific species</li> <li>• species-specific options for animals to hide or rest</li> <li>• substrate appropriate to the specific species</li> <li>• designs that allow for species-specific activity, feeding or socialising</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygynous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment</li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• plants and foliage</li> <li>• retreats</li> <li>• rocks or artificial rocks</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species</li> <li>• mixed species exhibits to encourage positive inter-species interactions.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate/relevant state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<i>OHS risks</i> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Equipment to catch and handle invertebrate</i> may include:	<ul style="list-style-type: none"> <li>• equipment: <ul style="list-style-type: none"> <li>• isolation tanks or enclosures</li> <li>• plastic bags</li> <li>• soft gloves</li> <li>• soft knotless hand nets</li> <li>• traps</li> </ul> </li> <li>• handling of invertebrates should: <ul style="list-style-type: none"> <li>• always be minimised as excessive handling could result in stress or injury</li> <li>• be undertaken slowly and gently</li> <li>• undertaken with care as many invertebrates are venomous and some can make humans or other animals sick or die.</li> </ul> </li> </ul>
<i>Common health issues</i> may include:	<ul style="list-style-type: none"> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of the water due to presence of toxins</li> <li>• exposures of extremes of water quality</li> <li>• exposure to the elements</li> <li>• humidity and ventilation</li> <li>• inadequate activity</li> <li>• temperature extremes</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<i>General health maintenance and preventative treatment</i> may	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• temperature, humidity, heat and light</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<p>requirements for specific species</p> <ul style="list-style-type: none"> <li>• quarantine and isolation procedures</li> <li>• water quality.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features relevant to the specific species</li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and natural dietary requirements for the species</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<i>Food source</i> considerations include:	<ul style="list-style-type: none"> <li>• captive diets must be similar to the natural diet of the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> <li>• maximise development of natural survival techniques</li> </ul> </li> <li>• food sources will vary widely subject to the specific species.</li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of terrestrial and freshwater invertebrates may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each animal (or group of animals): <ul style="list-style-type: none"> <li>• species and sex of animal</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> </ul>



**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Species specific
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMSPE310A Provide basic care of mammals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying mammals and their behavioural and physical needs, providing daily care requirements, assisting with behavioural and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to keeping mammals. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where mammals are bred, reared, trained, cared for or housed. This may include animal shelters, pet shops, zoos and animal technology facilities or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available mammals	<p>1.1. Profile of <i>placental mammals</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Mammals are classified using industry-specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of animal comfort and normal behaviour are identified and <i>signs of distressed mammals</i> are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> are identified and evaluated for specific animal species.</p> <p>2.4. Current animal housing design is assessed in relation to the <i>welfare of animals</i> kept and legislation requirements.</p>
3. Catch, handle and restrain mammals	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining mammals are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <i>Equipment used to catch, handle and restrain mammals</i> is prepared and evaluated.</p> <p>3.3. Mammals are <i>approached and caught</i> while minimising risks to animal and others.</p> <p>3.4. Mammals are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in mammals are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on mammal health and implemented as directed by supervisor.</p>
5. Feed mammals	<p>5.1. <i>Digestive system features</i> are identified and related to mammal-specific feeding routines and diets.</p> <p>5.2. Preferred food sources are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with</p>

ELEMENT	PERFORMANCE CRITERIA
	workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of mammals is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling mammals
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record mammal weight, length and other relevant objective indicators of change in physiological status
- monitor mammal health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to mammals as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for mammals
- awareness of natural mammal behaviour relating to the characteristics of the species, age, health status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic mammal care and hygiene principles
- basic mammal first aid techniques
- housing and activity needs of mammals and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of mammals
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of mammals
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe mammal handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe mammals, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in mammal diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

<b>EVIDENCE GUIDE</b>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of mammals and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify mammals by age, sex, condition, colours, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch, handle and restrain mammals</li> <li>• report and document treatments, behaviours and other information on individual mammals in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of mammals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces may include pet shops, breeding or boarding kennels and catteries, companion animal training, grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities, animal technology facilities and veterinary practices or similar establishments.</p> <p>There must be access to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available placental mammal species.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards,</p>

<b>EVIDENCE GUIDE</b>	
	<p>on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Commonly available <i>placental mammals</i> may include:</p>	<ul style="list-style-type: none"> <li>• captive animals: <ul style="list-style-type: none"> <li>• exotic placental mammals, carnivores, primates and ungulates</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• domestic animals: <ul style="list-style-type: none"> <li>• cows, sheep, goats, pigs, cats and dogs</li> </ul> </li> <li>• pets and research animals: <ul style="list-style-type: none"> <li>• mice, rats, guinea pigs, rabbits, cats, sheep and pigs.</li> </ul> </li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• biting, kicking, charging or spitting</li> <li>• defending territory, other animals or food</li> <li>• growling, barking, hissing or screaming</li> <li>• hair on topline being raised</li> <li>• throwing items</li> </ul> </li> <li>• dominance gestures: <ul style="list-style-type: none"> <li>• attempts to hump handler's leg or other animal</li> <li>• attempts to get higher than handler or other animals</li> </ul> </li> <li>• hunting or stalking gestures</li> <li>• stereotypical behaviour: <ul style="list-style-type: none"> <li>• repetitive patterns</li> <li>• self-mutilation</li> <li>• restlessness</li> </ul> </li> <li>• submissive gestures: <ul style="list-style-type: none"> <li>• lowering body</li> <li>• rolling onto back</li> <li>• tail between legs</li> <li>• turning away from handler or other animals.</li> </ul> </li> </ul>
<i>Colours, markings and other</i>	<ul style="list-style-type: none"> <li>• age, sex and size</li> </ul>

<b>RANGE STATEMENT</b>	
<i>identifying features</i> may include:	<ul style="list-style-type: none"> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
<i>Signs of distressed mammals</i> may include:	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• inappetance</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<i>Housing design and environmental factors</i> may include:	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to: <ul style="list-style-type: none"> <li>• limits to numbers and types of animals allowed</li> <li>• noise control</li> <li>• pest control</li> <li>• restricting access to animals</li> <li>• waste management</li> </ul> </li> <li>• ventilation, heating and cooling requirements</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• caged</li> <li>• fully enclosed</li> <li>• indoor</li> <li>• moated</li> <li>• naturalistic</li> <li>• outdoor</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• suitability for specific species</li> <li>• species specific options for animals to hide or rest</li> <li>• designs that allow for enrichment activities or species specific exercise, feeding or socialising</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• giving animals opportunities to forage for food by hiding it in substrates</li> <li>• giving the animal food that requires processing (e.g. peeling or shelling fruit or seeds)</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• gnawing manipulada</li> <li>• hide boxes, tunnels and ladders</li> <li>• nest building or bedding material: <ul style="list-style-type: none"> <li>• shredded paper</li> <li>• straw</li> <li>• substrate or wood shavings</li> </ul> </li> <li>• non-edible items that can be easily added or removed from the environment, such as toys (e.g. balls, bells, puzzles and mirrors)</li> <li>• perches, roosting shelves and nest boxes</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species or breed</li> <li>• social interactions between the animal and the carer may also be appropriate.</li> </ul> </li> </ul>
<i>Welfare of animals</i> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Equipment used to catch, handle and restrain</i></b> mammals may include:	<ul style="list-style-type: none"> <li>• cages, yards, pens and bags</li> <li>• collars, leads, halters and harnesses</li> <li>• treats and toys.</li> </ul>
<b><i>Methods used to approach and catch</i></b> mammals may include:	<ul style="list-style-type: none"> <li>• calling animal by name</li> <li>• encouraging animal to approach by offering a treat</li> <li>• quietly approaching animal, slipping on collar and attaching lead or catching and holding animal with hands</li> <li>• running animal into a small enclosure.</li> </ul>
<b><i>Common health issues</i></b> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• ventilation</li> <li>• temperature extremes</li> <li>• exposure to the elements</li> <li>• inadequate exercise</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and mould</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>General health maintenance and preventative treatment</i></b> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• grooming</li> <li>• immunisation/vaccinations, as required</li> <li>• insect control</li> <li>• quarantine</li> <li>• routine observation of waste elimination and faecal examination.</li> <li>•</li> </ul>
<b><i>Digestive system features</i></b> may include:	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth and teeth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<b><i>Feeding hazards</i></b> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<b><i>Documentation</i></b> on the care and management of mammals may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material</li> </ul>

**RANGE STATEMENT**

	<p>safety data sheets (MSDS) and other records</p> <ul style="list-style-type: none"> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Species specific
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMSPE311A Provide basic care of non-venomous reptiles

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of identifying reptiles and their behavioural and physical needs, providing daily care requirements for non-venomous reptiles as well as assisting with behavioural requirements and preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to the protection of native reptiles. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>The unit is applicable to those working in animal care industry sectors where it may be necessary to care for commonly available non-venomous reptiles. This may include animal shelters or rehabilitation organisations, zoos or similar workplaces. In some cases, animals may have been rescued from the wild and successful rehabilitation is required to restore animal health and well-being before releasing back to their natural environment.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify commonly available reptiles	1.1. Profile of <i>non-venomous reptiles</i> commonly held in facility, including habitat, nutrition, health and <i>behavioural characteristics</i> , is defined. 1.2. External features are described using industry terminology. 1.3. Reptiles are classified using industry specific terminology.



ELEMENT	PERFORMANCE CRITERIA
	1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.
2. Identify and evaluate behavioural and housing needs	<p>2.1. <i>Water quality</i> is monitored and <i>adjustments</i> made as required to maintain optimum water quality, if required for the species being housed, as directed by supervisor.</p> <p>2.2. Indicators of <i>animal comfort and normal behaviour</i> are identified and signs of distressed reptiles are recognised and reported to supervisor.</p> <p>2.3. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.4. <i>Enrichment needs</i> are identified and evaluated for specific animal species.</p> <p>2.5. Current animal housing design is evaluated in relation to the <i>welfare of animals</i> kept and legislation requirements.</p>
3. Approach and handle reptiles	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining reptiles are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <i>Equipment used to catch, handle and restrain non-venomous reptiles</i> is prepared and evaluated.</p> <p>3.3. Reptiles are <i>approached and caught</i> while minimising risks to animal and others.</p> <p>3.4. Reptiles are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on reptile health and implemented as directed by supervisor.</p>
5. Feed and water reptiles	<p>5.1. <i>Digestive system features</i> are identified and related to reptile-specific feeding routines and diets.</p> <p>5.2. Preferred <i>food sources</i> are identified and food samples are assessed for quality and suitability.</p>

ELEMENT	PERFORMANCE CRITERIA
	5.3. Potential <i>feeding hazards</i> are identified and risk control options defined. 5.4. Feed is prepared in accordance with dietary needs. 5.5. Feed is distributed and consumption, including abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of non-venomous reptiles is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling non-venomous reptiles
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record reptile weight, length and other relevant objective indicators of change in physiological status
- monitor reptile health, condition and behaviour and recognise normal and abnormal signs
- monitor water quality parameters using physical and chemical assessments and tests
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to reptiles as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and

## REQUIRED SKILLS AND KNOWLEDGE

seeking advice from supervisor

- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for reptiles
- awareness of natural reptile behaviour relating to the characteristics of the species, age, health and reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic reptile care and hygiene principles
- basic reptile first aid techniques
- basic water chemistry parameters and physical indicators of water quality relevant to care and husbandry of reptiles
- common aeration and filtration systems
- housing, social and activity needs of reptiles and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of reptiles
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of reptiles
- potential hazards and risks to animals and staff during feeding and cleaning of housing
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe reptile handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe reptiles, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in reptile diets, including natural dietary requirements for specific species
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques

**REQUIRED SKILLS AND KNOWLEDGE**

and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the specific characteristics and needs of reptiles and apply these to the best practice industry standard of housing, socialising, feeding and health management
- classify and identify reptiles by age, sex, reproductive status, condition, colours, markings and other identifying features using industry terminology
- safely and humanely catch, handle and restrain non-venomous reptiles
- assess water quality for suitability for maintained species
- report and document treatments, behaviours and other information on individual animals in accordance with animal welfare regulations, industry standards and workplace protocols and procedures.

The skills and knowledge required to provide basic care of non-venomous reptiles must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces

<b>EVIDENCE GUIDE</b>	
	<p>normal work conditions. Workplaces can include animal shelters or rehabilitation organisations, zoos and wildlife parks or similar workplaces.</p> <p>There must be access to a range of non-venomous reptiles as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available non-venomous reptile species.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Commonly available <i>non-venomous reptiles</i> may include:	<ul style="list-style-type: none"> <li>• lizards</li> <li>• monitors and goannas</li> <li>• non-venomous snakes</li> <li>• tortoises and turtles.</li> </ul>
<i>Behavioural characteristics</i> may include:	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to:             <ul style="list-style-type: none"> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species:             <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• reproductive behaviours</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• defensive behaviour:             <ul style="list-style-type: none"> <li>• defending territory, other animals or food</li> <li>• hiding or retreating.</li> </ul> </li> </ul>
<i>Colours, markings and other identifying features</i> may include:	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
Indicators of poor <i>water quality</i> may include:	<ul style="list-style-type: none"> <li>• colour</li> <li>• odour</li> <li>• unsuitable water chemistry parameters.</li> </ul>
Water quality <i>adjustments</i> may involve:	<ul style="list-style-type: none"> <li>• correcting chemical imbalances</li> <li>• partial water change</li> <li>• raising or lowering pH or hardness.</li> </ul>

<b>RANGE STATEMENT</b>	
<p>Indicators of <i>animal comfort and normal behaviour</i> may be identified through:</p>	<ul style="list-style-type: none"> <li>• daily observation and visual examination is the best way to establish the appearance of a healthy reptile and at the same time allows detection of changes from normal. These observations will include: <ul style="list-style-type: none"> <li>• posture and attitude in and out of water</li> <li>• activity level in and out of water</li> <li>• response to stimuli including handling</li> <li>• withdrawal reflex and ability to right itself</li> <li>• assessment of body condition</li> <li>• assessment of state of hydration</li> <li>• appetite and dietary history</li> <li>• observing faecal matter for any abnormalities.</li> </ul> </li> </ul>
<p><i>Housing design and environmental factors</i> may include:</p>	<ul style="list-style-type: none"> <li>• environmental: <ul style="list-style-type: none"> <li>• aeration rates and supply</li> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• correct humidity levels</li> <li>• day/night cycle lighting</li> <li>• drainage and weather protection</li> <li>• electrical safety</li> <li>• filtration requirements to maintain the water quality and optimal environmental conditions for target species</li> <li>• general animal housing security</li> <li>• housing furniture and compatible plants</li> <li>• out of direct sunlight</li> <li>• ventilation, temperature, heating and cooling requirements</li> </ul> </li> <li>• housing design: <ul style="list-style-type: none"> <li>• housing options: <ul style="list-style-type: none"> <li>• indoor</li> <li>• outdoor</li> <li>• vivarium</li> </ul> </li> </ul> </li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• location considerations</li> <li>• longevity and sturdiness of materials</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• maintains ambient temperature conditions for the specific species</li> <li>• provides continuous access to water free of ammonia or chlorine</li> <li>• provides generous ventilation and is safe from fumes and vapours: <ul style="list-style-type: none"> <li>• insecticides</li> <li>• cleaning agents</li> </ul> </li> <li>• required floor area, vertical and/or horizontal space for specific species</li> <li>• security considerations</li> <li>• species-specific options for animals to hide or rest</li> <li>• substrate appropriate to the specific species</li> <li>• designs that allow for enrichment activities or species-specific activity, feeding or socialising</li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygynous groups</li> <li>• mixed species.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• giving animals opportunities to forage for food by hiding it in substrates or hunt by movement</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• basking/perching sites</li> <li>• burrowing substrate, if applicable</li> <li>• plants and foliage</li> <li>• retreats</li> <li>• rocks or artificial rocks</li> <li>• shredded paper or leaf litter</li> </ul> </li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• animals housed with same to encourage species-specific behaviours</li> <li>• mixed species exhibits to encourage positive inter-species interactions.</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
<b><i>Welfare of animals</i></b> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations</li> <li>• enrichment opportunities</li> <li>• the absence of predators, pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, envenomation, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• electrical hazards enhanced by the presence of water</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Equipment used to catch, handle and restrain non-venomous reptiles</i></b> may include:	<ul style="list-style-type: none"> <li>• bags</li> <li>• gloves</li> <li>• noose-type devices for large reptiles.</li> </ul>
<b><i>Methods used to approach and catch</i></b> reptiles may include:	<ul style="list-style-type: none"> <li>• approaching and handling as quietly as possible with the following considerations: <ul style="list-style-type: none"> <li>• small reptiles should be supported by the palm of the hand with the other hand placed over its shoulders to prevent escape</li> <li>• darkened conditions tend to calm the animals and reduce stress reactions</li> <li>• standard hygiene procedures should be followed, including the use of gloves</li> </ul> </li> <li>• handling of reptiles should always be kept to a minimum to ensure the animal is not stressed or accidentally injured.</li> </ul>
<b><i>Common health issues</i></b> may include:	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• contamination of the water due to presence of</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>toxins</li> <li>• exposure to extremes of water quality</li> <li>• exposure to the elements</li> <li>• inadequate activity</li> <li>• temperature extremes</li> <li>• ventilation</li> <li>• infectious diseases caused by:               <ul style="list-style-type: none"> <li>• bacteria, virus, fungus and protozoe</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases:               <ul style="list-style-type: none"> <li>• chemical toxicities and allergies</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• nutritional imbalances and disruptions</li> <li>• physical traumas</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<i>General health maintenance and preventative treatment</i> may include:	<ul style="list-style-type: none"> <li>• routine health check-up</li> <li>• control of parasites</li> <li>• immunisation/vaccinations as required</li> <li>• insect control</li> <li>• temperature, heat and light requirements for specific species</li> <li>• quarantine and isolation procedures</li> <li>• routine observation of waste elimination and faecal examination</li> <li>• water quality.</li> </ul>
<i>Digestive system features</i> may include:	<ul style="list-style-type: none"> <li>• anatomical features:               <ul style="list-style-type: none"> <li>• mouth structures</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal and stomach</li> <li>• intestines, rectum and anus</li> </ul> </li> <li>• physiological features:               <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns and natural dietary requirements for the species</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<i>Food source</i> considerations include:	<ul style="list-style-type: none"> <li>• captive diets must be similar to the natural diet of the species to: <ul style="list-style-type: none"> <li>• minimise the impact of captivity</li> <li>• stimulate normal digestive function</li> <li>• maximise development of natural survival techniques</li> </ul> </li> <li>• food sources: <ul style="list-style-type: none"> <li>• dietary supplements</li> <li>• live food.</li> </ul> </li> </ul>
<i>Feeding hazards</i> may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<i>Documentation</i> on the care and management of reptiles may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• chemical and veterinary supplies register</li> <li>• detailed and accurate records for each animal: <ul style="list-style-type: none"> <li>• species and sex of animal</li> <li>• identification and history</li> <li>• feeding, health and treatment records</li> </ul> </li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records</li> <li>• water chemistry and quality records</li> <li>• water change frequencies and amounts.</li> </ul>

### Unit Sector(s)

Unit sector	Species specific
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMSPE312A Provide basic care of rodents and rabbits

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of identifying rodents and rabbits and their behavioural and physical needs, providing daily care requirements, assisting with behavioural requirements and basic preventative health measures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in relation to keeping rodents and rabbits. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit is applicable to those working in animal care industry sectors where rodents and rabbits are bred, reared, cared for or housed. This may include animal shelters, pet shops, zoos and animal technology facilities or similar workplaces.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify commonly available rodents and rabbits	<p>1.1. Profile of <i>rodents and rabbits</i> commonly held in facility, including habitat, nutrition, health, physiology and <i>behavioural characteristics</i>, is defined.</p> <p>1.2. External features are described using industry terminology.</p> <p>1.3. Rodents and rabbits are classified using industry specific terminology.</p> <p>1.4. <i>Colours, markings and other identifying features</i> are defined, interpreted and documented.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Identify and evaluate behavioural and housing needs	<p>2.1. Indicators of animal comfort and normal behaviour are identified and <i>signs of distressed rodents and rabbits</i> are recognised and reported to supervisor.</p> <p>2.2. Industry standards and guidelines for <i>housing design, environmental factors</i> and appropriate stocking densities are identified.</p> <p>2.3. <i>Enrichment needs</i> are identified and evaluated for specific animal species.</p> <p>2.4. Current animal housing design is assessed in relation to the <i>welfare of animals</i> kept and legislated requirements.</p>
3. Catch, handle and restrain rodents and rabbits	<p>3.1. <i>Occupational health and safety (OHS) risks</i> associated with handling and restraining rodents and rabbits are identified and methods used to minimise risks are demonstrated.</p> <p>3.2. <i>Equipment used to catch, handle and restrain</i> rodents and rabbits is prepared and evaluated.</p> <p>3.3. Rodents and rabbits are <i>approached and caught</i> while minimising risks to animal and others.</p> <p>3.4. Rodents and rabbits are restrained using a range of approved animal welfare management procedures.</p>
4. Assist with health care needs	<p>4.1. Signs of good health in rodents and rabbits are identified and recorded in animal health and treatment records.</p> <p>4.2. <i>Common health issues</i> are identified and signs of disease or other conditions are reported to supervisor.</p> <p>4.3. <i>General health maintenance and preventative treatment procedures</i> are identified and implemented in accordance with level of job responsibility, regulatory requirements and supervisor guidance.</p> <p>4.4. Options for activity and enrichment are identified, evaluated for impact on rodent and rabbit health and implemented as directed by supervisor.</p>
5. Feed rodents and rabbits	<p>5.1. <i>Digestive system features</i> are identified and related to rodent and rabbit specific feeding routines and diets.</p> <p>5.2. Preferred food types are identified and samples are assessed for quality and suitability.</p> <p>5.3. Potential <i>feeding hazards</i> are identified and risk control options defined.</p> <p>5.4. Feed is prepared in accordance with dietary needs.</p> <p>5.5. Feed is distributed and consumption, including</p>

ELEMENT	PERFORMANCE CRITERIA
	abnormalities, is reported in accordance with workplace routines.
6. Maintain records	6.1. <i>Documentation</i> on the care and management of rodents and rabbits is completed in accordance with workplace procedures and legislation requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documents and maintain accurate animal records
- comply with OHS, animal care, ethics and industry codes of conduct, codes of practice, regulations and legislations
- employ safe and environmentally responsible organisational systems and procedures when working with, restraining and handling rodents and rabbits
- maintain the highest standards of personal and workplace hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record rodent and rabbit weight, length, behaviour and other relevant objective indicators of change in physiological status
- monitor rodent and rabbit health, condition and behaviour and recognise normal and abnormal signs
- prepare doses for treatments as directed and verified by supervisor
- provide basic first aid to rodents and rabbits as required under supervision
- use equipment and materials correctly and in accordance with manufacturers' specifications
- literacy skills to read and follow organisational policies and procedures, including OHS and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate practices and prioritise daily tasks
- use safe manual handling techniques and/or equipment



## REQUIRED SKILLS AND KNOWLEDGE

- use safe waste handling and disposal procedures.

### Required knowledge

- anatomical and physiological terminology and glossary of terms
- anatomical structures and physiological features related to basic care requirements for rodents and rabbits
- assembly, disassembly, use and maintenance of rodent and rabbit caging
- awareness of natural rodent and rabbit behaviour relating to the characteristics of the species, age, health status, reproductive status, behavioural and social needs and the signs of distress, illness and undesirable behaviours
- basic rodent and rabbit care and hygiene principles
- basic rodent and rabbit first aid techniques
- basic rodent and rabbit treatment processes
- housing, social and activity needs of rodents and rabbits and environmental impacts on health and wellbeing
- methods of transmission of disease and infection
- organisational policies and procedures regarding the care and health maintenance of rodents and rabbits
- personal protective clothing and equipment and when and how it should be used
- physical conditions and vital signs of rodents and rabbits
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics
- safe rodent and rabbit handling techniques and procedures, potential hazards and control measures
- terminology and language variations used by workplace staff and the public to describe rodents and rabbits, their behaviour, status, health and treatments
- terminology used to describe and document health and behavioural signs, including desirable and undesirable features
- types of food and food supplements and their role in rodent and rabbit diets
- types of information that has to be reported and recorded in animal care workplaces
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify the specific characteristics and needs of rodents and rabbits and apply these to the best practice industry standard of housing, socialising, feeding and health management</li> <li>• classify and identify rodents and rabbits by age, sex, condition, colours, reproductive status, markings and other identifying features using industry terminology</li> <li>• safely and humanely catch, handle and restrain rodents and rabbits</li> <li>• report and document treatments, behaviours and other information on individual rodents and rabbits in accordance with animal welfare legislation and regulations, industry standards and workplace protocols and procedures.</li> </ul> <p>The skills and knowledge required to provide basic care of rodents and rabbits must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include animal shelters, pet shops, zoos and animal technology facilities, veterinary practices or similar workplaces.</p> <p>There must be access in to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of three commonly available rodent and/or rabbit species.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards,</p>

<b>EVIDENCE GUIDE</b>	
	<p>on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Commonly available <i>rodents and rabbits</i> may include:</p>	<ul style="list-style-type: none"> <li>• companion animal pets:</li> <li>• guinea pigs</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• mice</li> <li>• rats</li> <li>• strains and breeds of animals used in research facilities: <ul style="list-style-type: none"> <li>• guinea pigs</li> <li>• mice</li> <li>• rats</li> <li>• transgenic mice, rats and rabbits.</li> </ul> </li> </ul>
<p><i>Behavioural characteristics</i> may include:</p>	<ul style="list-style-type: none"> <li>• behaviour characteristics can vary according to: <ul style="list-style-type: none"> <li>• environmental conditions due to: <ul style="list-style-type: none"> <li>• lighting</li> <li>• noise</li> <li>• people</li> <li>• relative humidity</li> <li>• temperature</li> </ul> </li> <li>• the breeding season</li> <li>• the species, breed, age and sex of the animals</li> <li>• the time of day or night</li> </ul> </li> <li>• behaviour characteristics associated with different species: <ul style="list-style-type: none"> <li>• activity levels at certain times of day or night</li> <li>• feeding and foraging</li> <li>• fight or flight</li> <li>• social interaction</li> <li>• feeding behaviours</li> </ul> </li> <li>• enurination/spraying</li> <li>• defensive behaviour: <ul style="list-style-type: none"> <li>• barbering</li> <li>• biting</li> <li>• defending territory, other animals or food</li> <li>• hair on topline being raised</li> <li>• posture</li> </ul> </li> <li>• lordosis</li> <li>• reproductive behaviour</li> <li>• stereotypical behaviour: <ul style="list-style-type: none"> <li>• repetitive patterns</li> <li>• self-mutilation</li> <li>• restlessness</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• submissive gestures:               <ul style="list-style-type: none"> <li>• lowering body</li> <li>• rolling onto back</li> <li>• tail between legs</li> <li>• turning away from handler or other animals.</li> </ul> </li> </ul>
<p><i>Colours, markings and other identifying features</i> may include:</p>	<ul style="list-style-type: none"> <li>• age, sex and size</li> <li>• coat or skin colours and texture</li> <li>• eye colour</li> <li>• markings, patterns and permanent scars</li> <li>• toe nail colour</li> <li>• microchip, ear tags, tattoos and markings and leg bands.</li> </ul>
<p><i>Signs of distressed rodents and rabbits</i> may include:</p>	<ul style="list-style-type: none"> <li>• aggressive behaviour</li> <li>• barbering</li> <li>• excessive grooming</li> <li>• ill-thrift</li> <li>• inappetance</li> <li>• posture</li> <li>• 'starry coat' (hair on end and in disarray)</li> <li>• subdued behaviour</li> <li>• trembling</li> <li>• vocalisation.</li> </ul>
<p><i>Housing design and environmental factors</i> may include:</p>	<ul style="list-style-type: none"> <li>• environmental:               <ul style="list-style-type: none"> <li>• biological control of waste</li> <li>• cleaning routines and methods</li> <li>• detergent and disinfectant types</li> <li>• drainage and weather protection</li> <li>• general animal housing security</li> <li>• housing furniture</li> <li>• local council requirements related to:                   <ul style="list-style-type: none"> <li>• limits to numbers and types of animals allowed</li> <li>• pest control</li> <li>• restricting access to animals</li> <li>• waste management</li> </ul> </li> <li>• ventilation, heating and cooling requirements</li> </ul> </li> <li>• housing design:               <ul style="list-style-type: none"> <li>• housing options:                   <ul style="list-style-type: none"> <li>• barrier maintained</li> </ul> </li> </ul> </li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• caged</li> <li>• fully enclosed</li> <li>• individually ventilated cages</li> <li>• indoor</li> <li>• metabolism cages</li> <li>• naturalistic</li> <li>• outdoor</li> <li>• housing requirements: <ul style="list-style-type: none"> <li>• bedding and nesting materials</li> <li>• compatibility of species housed together</li> <li>• food and water distribution</li> <li>• security considerations</li> <li>• longevity and sturdiness of materials</li> <li>• suitability for specific species</li> <li>• species specific options for animals to hide or rest</li> <li>• designs that allow for enrichment activities or species specific feeding or socialising</li> </ul> </li> <li>• social options: <ul style="list-style-type: none"> <li>• solitary</li> <li>• pairs</li> <li>• single sexed groups</li> <li>• polyandrous/polygamous groups</li> <li>• mixed species</li> <li>• temporary pairs</li> <li>• neutered companion pairing.</li> </ul> </li> </ul>
<i>Enrichment needs</i> may include:	<ul style="list-style-type: none"> <li>• food or food-related enrichment: <ul style="list-style-type: none"> <li>• giving animals opportunities to forage for food by hiding it in substrates</li> <li>• giving the animal food that requires processing (e.g. peeling or shelling fruit or seeds)</li> </ul> </li> <li>• physical enrichment items: <ul style="list-style-type: none"> <li>• gnawing manipulada</li> <li>• hide boxes, tunnels and ladders</li> <li>• nest building or bedding material: <ul style="list-style-type: none"> <li>• shredded paper</li> <li>• straw</li> <li>• substrate or wood shavings</li> </ul> </li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• non-edible items that can be easily added or removed from the environment, such as toys (e.g. balls, bells, puzzles, mirrors and keyrings)</li> <li>• perches, roosting shelves and nest boxes</li> <li>• social enrichment: <ul style="list-style-type: none"> <li>• levels of contact with other animals of the same species or breed</li> <li>• social interactions between the animal and the carer may also be appropriate.</li> </ul> </li> </ul>
<b><i>Welfare of animals</i></b> requirements may include:	<ul style="list-style-type: none"> <li>• adequate housing, nutrition and stock levels</li> <li>• compliance to appropriate state or territory legislation and regulations, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes</li> <li>• disease prevention, control and treatment</li> <li>• enrichment opportunities</li> <li>• the absence of pests and vermin</li> <li>• the compatibility of species and breeds.</li> </ul>
<b><i>OHS risks</i></b> when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• scalds and burns from sterilising and cleaning equipment</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Equipment used to catch, handle and restrain</i></b> rodents and rabbits may include:	<ul style="list-style-type: none"> <li>• cages, bags and towels</li> <li>• collars and leads</li> <li>• treats and toys.</li> </ul>
<b><i>Methods used to approach and catch</i></b> rodents and rabbits may include:	<ul style="list-style-type: none"> <li>• calling animal by name</li> <li>• encouraging animal to approach by offering a treat</li> <li>• gently conditioning by repeated positive capture</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and release programs</p> <ul style="list-style-type: none"> <li>• quietly approaching animal and gently catching and holder with hands</li> <li>• quietly and gently running animal into a smaller enclosure or bag.</li> </ul>
<p><i>Common health issues</i> may include:</p>	<ul style="list-style-type: none"> <li>• behavioural disorders</li> <li>• environmental hazards: <ul style="list-style-type: none"> <li>• exposure to the elements</li> <li>• extreme ventilation rates</li> <li>• humidity extremes</li> <li>• inadequate exercise</li> <li>• temperature extremes</li> </ul> </li> <li>• infectious diseases caused by: <ul style="list-style-type: none"> <li>• bacteria, virus, fungus, mould and protozoa</li> </ul> </li> <li>• internal and external parasites</li> <li>• non-infection diseases: <ul style="list-style-type: none"> <li>• nutritional imbalances and disruptions</li> <li>• genetic disorders</li> <li>• metabolic</li> <li>• neoplastic</li> <li>• physical traumas</li> <li>• post operative infections</li> <li>• chemical toxicities and allergies</li> <li>• zoonotic diseases.</li> </ul> </li> </ul>
<p><i>General health maintenance and preventative treatment</i> may include:</p>	<ul style="list-style-type: none"> <li>• daily observation and record keeping</li> <li>• routine health check-up</li> <li>• control of parasites and protozoa</li> <li>• grooming</li> <li>• immunisation/vaccinations, as required</li> <li>• insect control</li> <li>• prophylactic health programs</li> <li>• quarantine and isolation</li> <li>• routine observation of waste elimination and faecal examination.</li> </ul>
<p><i>Digestive system features</i> may include:</p>	<ul style="list-style-type: none"> <li>• anatomical features: <ul style="list-style-type: none"> <li>• mouth and teeth structures</li> <li>• salivary glands</li> <li>• digestive chemicals and bacteria</li> <li>• alimentary canal, stomach, liver and pancreas</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• intestines, rectum and anus</li> <li>• physiological features: <ul style="list-style-type: none"> <li>• eating processes</li> <li>• nutrient requirements, absorption and storage methods</li> <li>• waste elimination</li> </ul> </li> <li>• feeding patterns</li> <li>• potential digestive system malfunctions or problems</li> <li>• water needs.</li> </ul>
<b>Feeding hazards</b> to animals and humans in food preparation and distribution may include:	<ul style="list-style-type: none"> <li>• animal movement and handling</li> <li>• shelf life of foodstuffs</li> <li>• manual handling and general food preparation, storage and distribution equipment</li> <li>• contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources</li> <li>• organic and other dusts</li> <li>• excessive noise</li> <li>• possibility of zoonotic infection.</li> </ul>
<b>Documentation</b> on the care and management of rodents and rabbits may include:	<ul style="list-style-type: none"> <li>• accident and incident records</li> <li>• Animal Ethics Committee protocols</li> <li>• animal feeding, health and treatment records</li> <li>• animal identification and history</li> <li>• animal production records</li> <li>• animal sale and disposition records</li> <li>• chemical and veterinary supplies register</li> <li>• diary, rosters and task completion and timeframe records</li> <li>• equipment use, damage and repair register</li> <li>• OHS safe work method statements, material safety data sheets (MSDS) and other records</li> <li>• provisions records of current stock and items used and items required</li> <li>• stock control records: <ul style="list-style-type: none"> <li>• animal stock</li> <li>• supplies and equipment stock.</li> </ul> </li> </ul>

### Unit Sector(s)

Unit sector	Species specific
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMSUS201A Participate in environmentally sustainable work practices

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process required to measure current resource use effectively and to carry out improvements, including those that will reduce the negative environment impacts of work practices.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit addresses the knowledge, processes and techniques necessary to participate in environmentally sustainable work practices in animal care and management industry sectors.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify current resource use	1.1. Workplace <i>environmental and resource efficiency issues</i> are identified. 1.2. Resources used in own work role are identified. 1.3. Current usage of resources is measured and documented using <i>appropriate techniques</i> . 1.4. Workplace <i>environmental hazards</i> are identified and reported to appropriate personnel.
2. Comply with environmental regulations	2.1. Procedures are followed to ensure <i>compliance</i> with relevant environmental regulations. 2.2. Breaches or potential breaches of relevant environmental regulations are reported to appropriate personnel.
3. Seek opportunities to	3.1. <i>Organisation plans</i> to improve environmental

ELEMENT	PERFORMANCE CRITERIA
improve resource efficiency and reduce environmental hazards	practices and resource efficiency are followed. 3.2. <i>Suggestions</i> are made for improvements to workplace practices and resource efficiency.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- make suggestions for the more efficient use of resources
- participate in workplace meetings and discussions related to environmentally sustainable work practices
- recognise procedures and follow instructions
- report environmental resource hazards and risks
- support changes to work practices that support environmental and resource efficiencies
- literacy skills to read and interpret information relating to resource usage; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate, measure and record resource usage
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to assess appropriate environmental work practices and prioritise daily tasks.

#### Required knowledge

- basic environmental sustainability principles
- environmental and resource hazards and risks associated with the animal care sector in which the individual works
- environmental laws, regulations and standards and why they are relevant to the work context and animal care and management industries
- procedures and processes relevant to the individual's work area that support environment and resource efficiencies
- procedures for reporting environmental and resource hazards and risks, and environment and resource efficiencies and inefficiencies.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- access, interpret and comply with a range of environment/sustainability legislation and procedural requirements relevant to daily responsibilities
- identify and report on current resource usage measurements and inefficiencies identified and suggest opportunities for improvements
- follow organisation information to participate in and support an improved resource efficiency process and report as required
- identify and report environmental hazards/risks in the workplace and suggest opportunities for improvements.

The skills and knowledge required to participate in environmentally sustainable work practices must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

#### Context of and specific resources for assessment

Assessment of this unit is to be largely practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Industry sectors can include pet shops, breeding or boarding kennels and catteries; aviaries, companion animal training, grooming establishments; zoos, wildlife parks, mobile animal facilities, animal technology facilities, veterinary

<b>EVIDENCE GUIDE</b>	
	<p>practices or similar workplaces or similar workplaces.</p> <p>There must be access to the relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different

<b>RANGE STATEMENT</b>	
work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<b><i>Environmental and resource efficiency</i></b> issues may include:	<ul style="list-style-type: none"> <li>• minimisation of environmental risks and maximisation of opportunities to: <ul style="list-style-type: none"> <li>• improve business environmental performance</li> <li>• promote more efficient production and consumption of natural resources</li> </ul> </li> <li>• this may be achieved by: <ul style="list-style-type: none"> <li>• minimising waste by implementing the waste management hierarchy</li> <li>• efficient energy and water use</li> <li>• seeking alternate sources of energy</li> <li>• efficient animal feeding practices.</li> </ul> </li> </ul>
<b><i>Appropriate techniques</i></b> may include:	<ul style="list-style-type: none"> <li>• examination of invoices from suppliers to compare per unit cost of product or service</li> <li>• examination of relevant information and data: <ul style="list-style-type: none"> <li>• labelling of contents</li> <li>• place of origin and manufacture</li> <li>• efficiency rating tables</li> </ul> </li> <li>• measurement of resource consumption under a range of conditions.</li> </ul>
<b><i>Environmental hazards</i></b> may include:	<ul style="list-style-type: none"> <li>• inappropriate use and disposal of animal treatment products, cleaning agents and chemicals</li> <li>• inappropriate disposal of animal, feed or organic waste or deceased animals</li> <li>• poorly maintained machinery and equipment</li> <li>• poor infection control practices</li> <li>• poor workplace vector management processes.</li> </ul>
<b><i>Compliance</i></b> may include meeting the requirements of:	<ul style="list-style-type: none"> <li>• federal, state and territory environmental legislation such as: <ul style="list-style-type: none"> <li>• Environmental Protection and Biodiversity Conservation Act 1999</li> <li>• Environment Protection and Biodiversity Conservation Regulations 2000</li> </ul> </li> <li>• state and territory environmental protection</li> </ul>



<b>RANGE STATEMENT</b>	
	<p>authorities and agencies</p> <ul style="list-style-type: none"> <li>local government by-laws and regulations, including regional land and water management plans and animal control regulations.</li> </ul>
<i>Organisation plans</i> may include:	<ul style="list-style-type: none"> <li>documented policies and procedures including infection control and biosecurity plans</li> <li>environmental management system</li> <li>work plans, including those relating to minimising waste and increasing the efficiency of water use.</li> </ul>
<i>Suggestions</i> may include ideas that help to:	<ul style="list-style-type: none"> <li>increase use of renewable, recyclable, reusable and recoverable resources</li> <li>maximise opportunities, such as the use of solar or other alternative forms of energy, where appropriate</li> <li>prevent and minimise risks</li> <li>reduce emissions of greenhouse gases</li> <li>reduce use of non-renewable resources.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Environmental sustainability
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	



## ACMSUS301A Implement and monitor environmentally sustainable work practices

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process required to analyse the workplace in an effective manner in relation to environmentally sustainable work practices and to implement improvements and monitor their effectiveness.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices in animal care and management industry sectors, including the development of processes and tools.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Investigate current practices in relation to resource usage	<p>1.1.Environmental regulations applying to the enterprise are identified.</p> <p>1.2.Procedures for assessing <i>compliance</i> with environmental regulations are evaluated for their effectiveness.</p> <p>1.3.Information on environmental and resource efficiency systems and procedures is collected, and where appropriate, provided to the work group.</p> <p>1.4.Current resource usage is measured and documented by members of the work group.</p> <p>1.5.Current <i>purchasing strategies</i> are analysed and documented.</p> <p>1.6.Current work processes are <i>analysed</i> to identify areas for improvement.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Set targets for improvements	2.1. Input is sought from <i>stakeholders, key personnel and specialists</i> . 2.2. External sources of information and data are accessed, as required. 2.3. Alternative solutions to workplace environmental issues are evaluated. 2.4. Efficiency targets are set.
3. Implement performance improvement strategies	3.1. Techniques and tools are sourced to assist in achieving efficiency targets. 3.2. Continuous improvement strategies are applied to own work area and ideas and possible solutions are communicated to work group and management. 3.3. <i>Environmental and resource efficiency improvement plans</i> for own work group are integrated with other operational activities and are implemented. 3.4. <i>Suggestions</i> and ideas to improve the management of environmental and resource efficiency are sought from stakeholders and acted upon where appropriate. 3.5. Costing strategies are implemented to fully value environmental assets.
4. Monitor performance	4.1. Outcomes are documented and reports on targets are communicated to key personnel and stakeholders. 4.2. Strategies are evaluated. 4.3. New targets are set and new tools and strategies are investigated and applied. 4.4. Successful strategies are promoted and, where possible, participants are rewarded.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communicate information about environmental sustainability to the work group
- consult with the work group on implementation and improvements in environmental and energy efficiency

## REQUIRED SKILLS AND KNOWLEDGE

- implement management policies and procedures relating to environmental and energy efficiency relevant to own work area
- manage organisation change associated with the implementation of environmentally sustainable work practices
- participate in workplace meetings and discussions related to environmentally sustainable work practices
- literacy skills to comprehend documentation, interpret environmental and energy efficiency requirements, create tools to measure and monitor improvements and report outcomes
- oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking input and advice from stakeholders or management
- numeracy skills to analyse data on organisational resource consumption and waste product volumes
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to analyse problems, devise solutions and reflect on approaches taken.

## Required knowledge

- basic environmental sustainability principles
- best practice approaches relevant to the animal care industry
- compliance requirements within work area for all relevant environment/sustainability legislation, regulations and codes of practice ,including resource hazards/risks associated with work area, job specifications and procedures
- environmental and resource hazards and risks associated with the animal care sector in which the individual works
- environmental laws, regulations and standards and why they are relevant to the work context and animal care and management industries
- occupational health and safety (OHS) issues and requirements
- procedures and processes relevant to the individual's work area that support environment and resource efficiencies
- procedures for reporting environmental and resource hazards and risks, and environment and resource efficiencies and inefficiencies
- quality assurance systems relevant to the animal care industry
- standards, guidelines and approaches to environmental sustainability relevant to the animal care industry
- strategies to maximise opportunities and minimise impacts relevant to the animal care industry
- strategic and emergency response to reduce environmental risks to livelihoods and natural resources, including terrestrial and marine environments
- supply chain procedures.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• determine compliance requirements within work area</li> <li>• plan and organise work group activities in relation to measuring current use and devising strategies to improve usage</li> <li>• seek input from other relevant stakeholders to set improvement targets</li> <li>• develop plans to make improvements</li> <li>• implement new approaches to work area in an effort to resolve and improve environmental and resource efficiency issues and report, as required</li> <li>• ensure appropriate action is taken within work area in relation to environmental/sustainability compliance and potential hazards.</li> </ul> <p>The skills and knowledge required to implement and monitor environmentally sustainable work practices must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be largely practical in nature and will most appropriately be assessed against the types of processes required in the industry sector in which candidates are working or in a situation that reproduces normal work conditions. Industry sectors can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, zoos, wildlife parks, mobile animal facilities, animal technology facilities, veterinary</p>

<b>EVIDENCE GUIDE</b>	
	<p>practices or similar workplaces or similar workplaces.</p> <p>There must be access in either situation to the relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different



<b>RANGE STATEMENT</b>	
work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Compliance</i> may include:	<ul style="list-style-type: none"> <li>• federal, state and territory environmental legislation such as: <ul style="list-style-type: none"> <li>• Environmental Protection and Biodiversity Conservation Act 1999</li> <li>• Environment Protection and Biodiversity Conservation Regulations 2000</li> <li>• state and territory environmental protection authorities and agencies</li> </ul> </li> <li>• local government by-laws and regulations, including regional land and water management plans.</li> </ul>
<i>Purchasing strategies</i> may include:	<ul style="list-style-type: none"> <li>• influencing suppliers to take up environmental sustainability approaches</li> <li>• researching and participating in programs such as a supply chain program to purchase sustainable products based on ratings for environmental performance.</li> </ul>
<i>Stakeholders, key personnel and specialists</i> may include:	<ul style="list-style-type: none"> <li>• individuals and groups both inside and outside the organisation, that have some interest in the enterprise's conduct, actions, products and services: <ul style="list-style-type: none"> <li>• employees at all levels of the organisation</li> <li>• customers</li> <li>• suppliers</li> <li>• community</li> <li>• regulators</li> <li>• industry associations</li> </ul> </li> <li>• key personnel within the organisation, and specialists outside the organisation who may have particular technical expertise.</li> </ul>
<i>Analysis</i> of work practices may include:	<ul style="list-style-type: none"> <li>• assessment of quality of product/services</li> <li>• comparison with benchmark data</li> <li>• measurement of output, throughput and/or resource usage</li> <li>• observation.</li> </ul>
<i>Environmental and resource</i>	<ul style="list-style-type: none"> <li>• addressing environmental and resource</li> </ul>

<b>RANGE STATEMENT</b>	
<p><i>efficiency improvement plans</i> may include:</p>	<p>sustainability initiatives such as: environmental management systems, action plans, green office programs, surveys and audits</p> <ul style="list-style-type: none"> <li>• applying the waste management hierarchy in the workplace</li> <li>• determining organisation's most appropriate waste treatment, including waste to landfill, recycling, re-use, recoverable resources and wastewater treatment</li> <li>• initiating and/or maintaining appropriate organisational procedures for operational energy consumption, including stationary energy and non-stationary (transport)</li> <li>• preventing and minimising risks, and maximising opportunities: <ul style="list-style-type: none"> <li>• improving resource/energy efficiency</li> </ul> </li> <li>• reducing emissions of greenhouse gases: <ul style="list-style-type: none"> <li>• reducing use of non-renewable resources</li> </ul> </li> <li>• referencing standards, guidelines and approaches: <ul style="list-style-type: none"> <li>• ecological footprinting</li> <li>• Energy Efficiency Opportunities Bill 2005</li> <li>• Global Reporting Initiative</li> <li>• green office program (a cultural change program)</li> <li>• green purchasing</li> <li>• Greenhouse Challenge Plus (Australian government initiative)</li> <li>• ISO 14001:1996 Environmental management systems life cycle analyses</li> <li>• product stewardship</li> <li>• supply chain management</li> <li>• sustainability covenants/compacts</li> <li>• triple bottom line reporting.</li> </ul> </li> </ul>
<p><i>Suggestions</i> may include ideas that help to:</p>	<ul style="list-style-type: none"> <li>• eliminate the use of hazardous and toxic materials</li> <li>• express purchasing power through the selection of suppliers with improved environmental performance (e.g. purchasing renewable energy)</li> <li>• identify strategies to offset or mitigate</li> </ul>

**RANGE STATEMENT**

	<p>environmental impacts, such as:</p> <ul style="list-style-type: none"> <li>• purchase carbon credits</li> <li>• energy conservation</li> <li>• reduce chemical use</li> <li>• reduce material consumption</li> <li>• maximise opportunities to re-use, recycle and reclaim materials</li> <li>• prevent and minimise risks and maximise opportunities, such as: <ul style="list-style-type: none"> <li>• usage of solar or renewable energies, where appropriate</li> <li>• reducing emissions of greenhouse gases</li> <li>• reducing use of non-renewable resources</li> <li>• making more efficient use of resources, energy and water.</li> </ul> </li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Environmental sustainability
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMVET201A Carry out veterinary nursing reception duties

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of compiling patient (animal) and client (animal owner) histories, maintaining records and consulting the veterinarian as required.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the veterinary industry and will provide an individual with the background and ability to carry out basic veterinary reception duties working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Compile <i>patient and client histories</i>	1.1. Patients are identified according to <i>species</i> , breed and permanent identification features. 1.2. Existing client and patient histories are identified and retrieved from clinic records. 1.3. New client and/or patient records are established, if required. 1.4. Patient admission and discharge <i>documentation</i> is promptly and efficiently completed.
2. Consult the duty veterinarian	2.1. <i>Emergency situations</i> are recognised and reported to the duty veterinarian in accordance with <i>clinic policies</i> and procedures. 2.2. Patient details are provided to the duty veterinarian. 2.3. Patient is presented to the duty veterinarian.

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. <b>Restraint</b> is provided as instructed by the veterinarian and in consideration of advice from the owner.</p> <p>2.5. Treatment details are obtained from the veterinarian and recorded if required.</p> <p>2.6. Strict compliance with clinic policy provisions, <b>occupational health and safety (OHS)</b> and relevant <b>legislative requirements</b> is practised in the sale or dispensing of veterinary prescribed products to clients.</p>
3. Identify information required	<p>3.1. Appropriate <b>interpersonal skills</b> are used to accurately identify <b>customer information needs</b>.</p> <p>3.2. Initial customer enquiries are handled courteously and promptly in accordance with clinic policies.</p> <p>3.3. <b>Personal and professional limitations</b> in dealing with customer enquiries and veterinary product needs are identified and assistance is sought from the veterinarian or qualified veterinary nurse when required.</p>
4. Maintain <b>clinic records</b>	<p>4.1. Visit details are recorded and stored in accordance with clinic policies.</p> <p>4.2. Veterinary chemicals and medicines dispensed by the veterinarian are recorded in accordance with clinic policies.</p> <p>4.3. <b>Office routines</b> are completed in accordance with clinic policies.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- employ keen observation skills
- follow the clinic policy manual and relevant OHS requirements
- literacy skills to read, select and apply policies and procedures, including OHS and other clinic policies and procedures; follow sequenced written instructions; and record patient details accurately and legibly
- oral communication skills language required to fulfil the job role as specified by

**REQUIRED SKILLS AND KNOWLEDGE**

the clinic, including questioning techniques, active listening, asking for clarification from the owner, consulting with the duty veterinarian and communicating core clinic regimes

- numeracy skills required to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of social, cultural, religious and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use, and record the use of, chemicals and medicines in accordance with relevant state or territory legislation.

**Required knowledge**

- clinic policies and procedures
- core clinic regimes, such as vaccinations, flea control, worming, heartworm and animals' basic nutritional requirements
- recognisable normal and abnormal vital signs
- relevant legislation and regulations, including OHS, animal welfare and the sale of medications and animal treatments
- specific patient admission and discharge documentation requirements

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify patients and compile accurate patient and client histories
- recognise emergency situations and report these immediately to the duty veterinarian or clinic nurse as applicable
- communicate effectively with the veterinarian and

<b>EVIDENCE GUIDE</b>	
	<p>clinic clientele and follow instructions</p> <ul style="list-style-type: none"> <li>• comply strictly with clinic policies, OHS and other relevant legislative requirements</li> <li>• handle and restrain animals in a safe and humane manner</li> <li>• maintain clinic records and follow basic office routines.</li> </ul> <p>The skills and knowledge required to carry out veterinary nursing reception duties must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to the relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must cover a minimum of one species from at least two of the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and cases and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul>



<b>EVIDENCE GUIDE</b>	
	This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Patient and client histories</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• patient details: <ul style="list-style-type: none"> <li>• species, colour, breed, sex and markings</li> <li>• brands, tattoos and/or microchip</li> <li>• age, height and weight</li> <li>• past or current treatment (e.g. vaccination status)</li> <li>• animals' belongings</li> </ul> </li> <li>• client details: <ul style="list-style-type: none"> <li>• owner's name, address and contact details</li> <li>• preferred payment method and details</li> <li>• payment history.</li> </ul> </li> </ul>
<p>Range of animal <b><i>species</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• birds</li> <li>• dogs, cats and horses</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs)</li> <li>• food-producing animals (e.g. cattle, pigs and sheep)</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>wildlife or exotic animals (e.g. amphibians, reptiles and fish).</li> </ul>
<i>Documentation</i> may include:	<ul style="list-style-type: none"> <li>admission form</li> <li>anaesthetic forms</li> <li>discharge instructions</li> <li>after care sheets.</li> </ul>
<i>Emergency situations</i> may include:	<ul style="list-style-type: none"> <li>birthing problems</li> <li>car accident</li> <li>collapse</li> <li>haemorrhage</li> <li>poisoning</li> <li>respiratory distress.</li> </ul>
<i>Clinic policies</i> may include:	<ul style="list-style-type: none"> <li>guidelines for the sale of medicines and animal treatments prescribed by the veterinary surgeon, differentiating between: <ul style="list-style-type: none"> <li>over-the-counter sales permitted or prohibited</li> <li>responsible use of prescribed medications</li> <li>compliance with relevant legislative requirements.</li> </ul> </li> </ul>
<i>Animal restraints</i> that may be used include:	<ul style="list-style-type: none"> <li>collars and muzzles</li> <li>rearing bits, twitch or hobbles (used on horses)</li> <li>holding leads</li> <li>holding cages.</li> </ul> <p>Note: Chemical restraints are excluded.</p>
<i>OHS and legislative requirements</i> may include:	<ul style="list-style-type: none"> <li>OHS legislation and regulations: <ul style="list-style-type: none"> <li>chemical handling</li> <li>hygiene control</li> <li>manual handling</li> <li>responsibilities of employers, employees, visitors and contractors</li> <li>working with animals</li> </ul> </li> <li>federal, state or territory legislation related to: <ul style="list-style-type: none"> <li>animal welfare considerations</li> <li>client privacy</li> <li>companion animal legislation</li> <li>environmental management</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• handling and dispensing of medications</li> <li>• local council animal and business regulations</li> <li>• notification of animal diseases and biohazards</li> <li>• owner or breeder licence regulations</li> <li>• Veterinary Surgeons Act and regulations</li> <li>• wildlife regulations.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Interpersonal skills</i> may require:	<ul style="list-style-type: none"> <li>• having regard for personal space considerations</li> <li>• listening and responding appropriately to what customers are communicating</li> <li>• providing an opportunity for customers to confirm their requests</li> <li>• questioning and seeking feedback from customers to confirm understanding of needs</li> <li>• summarising and paraphrasing to check understanding of customers' messages</li> <li>• using appropriate vocal tone and body language.</li> </ul>
<i>Customer information needs</i> may include:	<ul style="list-style-type: none"> <li>• range of products and services available</li> <li>• specific needs of customers</li> <li>• specialised or technical assistance needs.</li> </ul>
<i>Personal and professional limitations</i> may include:	<ul style="list-style-type: none"> <li>• clinic policies and procedures relating to the type of information and advice that can be provided by staff</li> <li>• lack of knowledge in regard to: <ul style="list-style-type: none"> <li>• clinic policies and procedures</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• OHS and other legal considerations</li> <li>• specific products and product applications</li> <li>• lack of skills in:               <ul style="list-style-type: none"> <li>• handling difficult customers</li> <li>• accessing and providing information.</li> </ul> </li> </ul>
<i>Clinic records</i> may include:	<ul style="list-style-type: none"> <li>• electronic or manual systems:               <ul style="list-style-type: none"> <li>• patient histories</li> <li>• anaesthetic consent forms and treatment records</li> <li>• clinic activities and individual animal care</li> <li>• accounts</li> <li>• invoice, statement and payment records</li> <li>• restricted medication stocktake and use records</li> <li>• other product stocktake records</li> <li>• environmental control practices</li> <li>• material safety data sheets (MSDS)</li> <li>• safe work method statements (SWMS).</li> </ul> </li> </ul>
<i>Office routines</i> may include:	<ul style="list-style-type: none"> <li>• balancing cash register and credit card transactions</li> <li>• communication by telephone and email</li> <li>• completing animal discharge documents</li> <li>• dispatching pre-packed specimens</li> <li>• making appointments</li> <li>• photocopying</li> <li>• processing credit cards and conducting electronic banking</li> <li>• sending and receiving faxes</li> <li>• unpacking orders</li> <li>• word processing.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMVET202A Carry out daily clinic routines

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of treating patients (animals) on a daily basis, maintaining clinic hygiene and assisting with inventory and clinic security.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is applicable to new entrants to the veterinary industry and will provide an individual with the background and ability to carry out daily clinic routines working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Maintain clinic hygiene	<p>1.1. All <b><i>animals</i></b> retained at the <b><i>clinic</i></b> are regularly checked for condition and vital signs with all details recorded in clinic records.</p> <p>1.2. Animals are temporarily removed from appropriate <b><i>housing</i></b> whilst it is thoroughly cleaned and disinfected in accordance with clinic, <b><i>occupational health and safety (OHS)</i></b> and industry standards.</p> <p>1.3. Animals are cleaned and returned to housing and food, water or treatment regimes are reinstated in accordance with the supervising veterinarian's instructions.</p> <p>1.4. All walkways, floors and fixtures are cleaned and disinfected to maintain clinic hygiene in accordance with industry standards.</p>

ELEMENT	PERFORMANCE CRITERIA
	1.5. Isolation procedures are carried out in accordance with clinic policies. 1.6. Animal waste is disposed of in accordance with local government regulations.
2. Carry out daily treatment of patients	2.1. Treatment area is cleaned and prepared in accordance with clinic policies. 2.2. Specified treatments or <i>daily routine procedures</i> are carried out under instruction. 2.3. Administration of <i>medication</i> is carried out in accordance with <i>legislative requirements</i> and under veterinary supervision. 2.4. <i>Veterinarian support routines</i> are carried out as instructed. 2.5. <i>Appropriate restraints</i> are used to hold patients for examination in accordance with clinic procedures.
3. Assist in stock control and clinic security	3.1. Regular inventory of veterinary supplies and medicines is undertaken in accordance with clinic policies. 3.2. Medicines and supplies are ordered under direction of the duty veterinarian and qualified veterinary nurse. 3.3. Clinic stocks are checked as they are received against quantities ordered and priced. 3.4. Drugs are handled and stored securely in accordance with clinic and legislative requirements. 3.5. Clinic <i>security measures</i> are used in accordance with clinic procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- maintain the highest standards of hygiene and disinfection at all times to reduce the risks of infection and cross-infection
- quickly and accurately measure and monitor the vital signs of animals in care
- recognise early signs of clinical cases, such as diarrhoea, pain or unexpected bleeding, and implement appropriate responses



## REQUIRED SKILLS AND KNOWLEDGE

- recognise abnormality in any given patient through regular observation
- use positive animal behaviour responses
- literacy skills to read, select and apply policies and procedures, including OHS and other clinic policies and procedures; follow sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including questioning techniques, active listening, asking for clarification from the owner and consulting with the duty veterinarian
- numeracy skills required to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of social, cultural, religious and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use, and record the use of, chemicals and medicines in accordance with relevant state or territory legislation
- use, store and control veterinary medicines in a careful manner.

### Required knowledge

- animal first aid procedures and the limits (when professional help is not available) to which they should be applied
- animal vital signs and expected normal ranges
- clinic policies, including OHS requirements
- clinic security procedures
- consequences of administering prescribed medication to animals
- daily clinic routine procedures, including clipping nails, beaks and feathers
- disinfectants, cleaning agents and techniques
- hazards associated with the use, misuse and spillage of veterinary medicines and chemicals
- legislative requirements relating to the handling, storage and security of drugs, including dangerous drugs
- patient histories of all patients housed at the clinic
- relevant regulations with regard to veterinary medicines and their usage
- veterinary terminology pertaining to veterinarian observations of patients.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• clean and disinfect animal housing, treatment area and general clinic areas to maintain clinic hygiene</li> <li>• carry out daily patient treatments and observations</li> <li>• communicate effectively with the veterinarian and follow instructions for food, water and treatment regimes</li> <li>• handle and restrain animals for examination as required</li> <li>• assist in stock control including taking inventory, ordering stock as directed and checking stock when delivered.</li> </ul> <p>The skills and knowledge required to carry out daily clinic routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of animals and the relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills</p>

<b>EVIDENCE GUIDE</b>	
	<p>assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Range of <i>animal</i> species may include:</p>	<ul style="list-style-type: none"> <li>• a wide range of animals typically seen in a veterinary clinic: <ul style="list-style-type: none"> <li>• birds</li> <li>• dogs, cats and horses</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs)</li> <li>• wildlife or exotic animals (e.g. amphibians, reptiles and fish).</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<i>Clinic facilities</i> may include:	<ul style="list-style-type: none"> <li>• accommodation for a wide range of animals including:               <ul style="list-style-type: none"> <li>• birds</li> <li>• dogs, cats and horses</li> <li>• small animals (e.g. rabbits, rodents, ferrets and guinea pigs)</li> <li>• food-producing animals (e.g. cattle, pigs and sheep)</li> <li>• wildlife or exotic animals (e.g. amphibians, reptiles and fish).</li> </ul> </li> </ul>
<i>Animal housing</i> may include:	<ul style="list-style-type: none"> <li>• cages, pens, stables and yards</li> <li>• kennels and catteries</li> <li>• other large animal accommodation.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Daily routine procedures</i> may include:	<ul style="list-style-type: none"> <li>• assistance with:               <ul style="list-style-type: none"> <li>• administering veterinary medicines under veterinary supervision</li> <li>• maintaining fluid therapy lines</li> <li>• clipping nails, beaks and feathers</li> <li>• wound dressing</li> </ul> </li> <li>• assistance in the provision of adequate nutritional support</li> <li>• assistance in the application of animal psychological procedures according to individual animal requirements:               <ul style="list-style-type: none"> <li>• provision of comfort (e.g. touching, stroking, speaking, soothing and reassuring)</li> <li>• privacy (e.g. hiding places for wildlife and shy species)</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• monitoring vital signs.</li> </ul>
Forms of <i>medication</i> may include:	<ul style="list-style-type: none"> <li>• antibiotics, anthelmintics, anti-inflammatory drugs and anaesthetics, some of which may be administered only by the veterinarian.</li> </ul>
<i>Legislative requirements</i> relevant to medication administration will include:	<ul style="list-style-type: none"> <li>• animal codes of welfare</li> <li>• federal, state and territory veterinary drug requirements.</li> </ul>
<i>Veterinary support routines</i> may include:	<ul style="list-style-type: none"> <li>• assistance with: <ul style="list-style-type: none"> <li>• applying casts</li> <li>• renewing fluid therapy bags or bottles</li> <li>• wound dressings</li> </ul> </li> <li>• assisting the veterinarian with: <ul style="list-style-type: none"> <li>• applying Elizabethan collars</li> <li>• euthanasia.</li> </ul> </li> </ul>
<i>Security measures</i> may include:	<ul style="list-style-type: none"> <li>• computer passwords</li> <li>• deadlocks</li> <li>• fireproof safe</li> <li>• lighting</li> <li>• locked cabinets for drugs and fireproof safe</li> <li>• locked petty cash tin</li> <li>• outside security firm</li> <li>• security system.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET203A Assist with surgery preparation

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of assisting with the preparation of patients (animals) and the theatre for surgery, providing pre- and post-operative patient care and cleaning surgical and theatre equipment in a veterinary clinic.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is applicable to new entrants to the veterinary industry and will provide an individual with the background and ability to assist with surgery preparations working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare animal for surgery under direction	1.1. Animal intakes and pre-operative procedures are organised for specified periods as instructed. 1.2. Clinic procedures and <b><i>occupational health and safety (OHS)</i></b> requirements are followed. 1.3. Assist with pre-operative <b><i>animal preparation</i></b> . 1.4. Patient is safely and humanely transferred to theatre for treatment. 1.5. Relevant patient records are provided to the veterinarian as requested.



ELEMENT	PERFORMANCE CRITERIA
2. Prepare theatre or surgical operating area for use	<p>2.1. Operating table, required equipment and environs are cleaned and disinfected in accordance with clinic policies.</p> <p>2.2. <i>Surgical packs and equipment</i> selected by the qualified veterinary nurse are transferred and/or established to/in theatre or the surgical operating area.</p> <p>2.3. <i>Staff preparation support</i> is provided in accordance with clinic policies.</p>
3. Provide pre- and post-operative patient care	<p>3.1. Patient is cleaned in accordance with clinic policies.</p> <p>3.2. Patient is safely transferred to recovery area.</p> <p>3.3. <i>Vital</i> signs' observations are recorded as instructed by the veterinarian.</p> <p>3.4. <i>Signs of pain</i> are recognised and reported.</p>
4. Clean theatre equipment	<p>4.1. <i>Theatre equipment</i> and surrounds are cleaned and disinfected in accordance with clinic policies.</p> <p>4.2. Surgical equipment is cleaned, maintained and sterilised in accordance with clinic policies.</p> <p>4.3. Theatre linen is washed and prepared for sterilisation.</p> <p>4.4. Equipment and gowns are stored safely after use.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- maintain and use clippers and vacuum cleaners
- record observations from veterinarian using correct veterinary terminology
- restrain animals
- safely dispose of biological hazardous waste and sharps
- literacy skills to read, select and apply policies and procedures, including OHS and other clinic policies and procedures; follow sequenced written instructions; and record accurately and legibly patient details
- oral communication skills/language required to fulfil the job role as specified by the clinic, including questioning techniques, active listening, asking for clarification from the owner and consulting with the duty veterinarian

## REQUIRED SKILLS AND KNOWLEDGE

- numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of social, cultural, religious and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use disinfectants and cleaning agents correctly and apply appropriate cleaning and sterilising techniques
- use, and record the use of, chemicals and medicines in accordance with relevant state or territory legislation.

### Required knowledge

- aseptic techniques
- clinic policies and procedures, including OHS requirements
- general theatre etiquette, dress rules and 'no-go' areas
- legislative requirements and health regulations for the storage, use and disposal of chemicals and biological debris from veterinary procedures
- possible requirements of the veterinarian during operations
- range of equipment required in both the preparation and theatre areas
- veterinary terminology pertaining to patient observation.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare animals for scheduled operations in accordance with clinic policies and procedures
- transfer animals safely to and from surgery
- prepare theatre or surgical operating area for use
- provide surgery support as required throughout procedure

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• care for animal pre- and post-operatively</li> <li>• clean and sterilise theatre and equipment after surgery</li> <li>• communicate effectively with the veterinarian and veterinary nurse and follow instructions.</li> </ul> <p>The skills and knowledge required to assist with surgery preparation must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of animals and the relevant information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector,</p>

<b>EVIDENCE GUIDE</b>	
	workplace and job role.
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>OHS</i></b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<p><b><i>Animal preparation</i></b> for surgery may include:</p>	<ul style="list-style-type: none"> <li>• animal restraint</li> <li>• clipping, cleaning and preparation of surgical site</li> <li>• positioning of the patient.</li> </ul>
<p><b><i>Surgical packs and equipment</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• anaesthetic equipment</li> <li>• bandaging</li> <li>• disposables</li> <li>• drapes</li> <li>• surgical instruments</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• sutures.</li> </ul>
<i>Staff preparation support</i> may include:	<ul style="list-style-type: none"> <li>• preparation of surgical gowns, gloves and masks.</li> </ul>
<i>Vital signs</i> include:	<ul style="list-style-type: none"> <li>• pulse rate and quality</li> <li>• respiration rate and effort</li> <li>• temperature</li> <li>• capillary refill time</li> <li>• mucous membrane colour</li> <li>• heart rate.</li> </ul>
<i>Signs of pain</i> may include:	<ul style="list-style-type: none"> <li>• audible, visual or measured signs: <ul style="list-style-type: none"> <li>• arching back</li> <li>• behavioural changes</li> <li>• biting and kicking</li> <li>• displacement of bones</li> <li>• elevated temperature</li> <li>• increased respiration</li> <li>• increased vocalisation</li> <li>• withdrawal of affected limbs</li> <li>• straining</li> <li>• trembling and changes in normal physiology.</li> </ul> </li> </ul>
<i>Theatre equipment</i> may include:	<ul style="list-style-type: none"> <li>• anaesthetic machine and trolleys</li> <li>• instrument trolley</li> <li>• kick buckets</li> <li>• lights</li> <li>• operating table</li> <li>• surgical furniture.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMVET401A Coordinate patient admission and discharge

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of coordinating patient admission and discharge. It also includes providing initial veterinary nursing care to patients (animals) and grief support to clients (animal owners).</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Coordinate clinic admissions	<p>1.1. <b><i>Appointments</i></b> and other clinic procedures are <b><i>scheduled</i></b>.</p> <p>1.2. Routine <b><i>enquiries</i></b> are answered in accordance with clinic policies.</p> <p>1.3. Veterinarian is consulted on relevant details and the intended actions are conveyed to the client.</p>
2. Provide veterinary nursing care	<p>2.1. <b><i>Triage procedures</i></b> are used for all admissions in accordance with clinic policies and <b><i>occupational health and safety (OHS)</i></b> requirements.</p> <p>2.2. <b><i>Personal protective equipment</i></b> is used as relevant to the veterinary nursing care required.</p> <p>2.3. Signs of pain are recognised and reported as required.</p> <p>2.4. <b><i>Animal first aid measures</i></b> are applied to sustain life</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>and to minimise pain as required.</p> <p>2.5. Support is provided in the clinic to the supervising veterinarian.</p> <p>2.6. Veterinary medicines are prepared in accordance with industry protocols, prescriptions and as instructed by the veterinarian.</p>
3. Provide <i><b>grief support</b></i> to clients	<p>3.1. Client needs are identified in consultation with the client and the supervising veterinarian.</p> <p>3.2. Sympathy and comfort are provided to the client in accordance with clinic policies.</p> <p>3.3. Level of grief is identified and <i><b>appropriate action</b></i> is taken.</p> <p>3.4. <i><b>Industry-recognised techniques</b></i> are used in communicating with the client and providing support.</p>
4. Implement discharge procedures	<p>4.1. Final checks on vital signs are recorded in patient record in accordance with clinic policy.</p> <p>4.2. Patient is cleaned, groomed and prepared for discharge in accordance with clinic policies.</p> <p>4.3. The caring transfer of the animal back to its owners is provided.</p> <p>4.4. <i><b>Home care advice</b></i> is provided to the client as instructed.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- accurately prioritise animals for consultation as well as the ability to identify vital signs and apply first aid where necessary
- differentiate between enquiries that can be handled by a veterinary nurse and those that need veterinarian intervention
- follow clinic policies and procedures
- use, and record the use of, chemicals and medicines in accordance with relevant state or territory legislation
- use veterinary terminology pertaining to patient observations
- interpersonal skills to relate to, communicate and negotiate with people from a

**REQUIRED SKILLS AND KNOWLEDGE**

range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities

- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the owner, and acknowledging and responding to a range of views
- numeracy skills required to prepare veterinary medicines
- problem-solving skills to use available resources and prioritise tasks.

**Required knowledge**

- basic first aid procedures
- clinic policies and procedures
- drugs applicable to each drug schedule and the regulations applicable in state or territory legislation
- clinical signs of illness and disease
- interview, listening and questioning techniques
- nutrition, medication, self-trauma, pain and wound management and physiotherapy requirements
- recognisable normal and abnormal vital signs
- the physiology of the range of species handled by the clinic
- the recognised stages of grieving and how to respond
- veterinary terminology pertaining to the observations of patients.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of

<b>EVIDENCE GUIDE</b>	
	<p>this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• schedule appointments and attend to routine enquiries</li> <li>• coordinate clinic admissions in accordance with clinic policies and procedures for non-routine surgeries and procedures</li> <li>• carry out triage procedures and apply animal first aid in accordance with required OHS procedures</li> <li>• provide veterinary nursing care, including grief support, to patients and clients</li> <li>• communicate effectively with the veterinarian and nurse and follow instructions</li> <li>• prepare patients for discharge, provide clients with home care advice and discharge patients.</li> </ul> <p>The skills and knowledge required to coordinate patient admission and discharge must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of admission and discharge cases and the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>conditions</p> <ul style="list-style-type: none"> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Appointments</i></b> may include:	<ul style="list-style-type: none"> <li>• regular consultations</li> <li>• non-routine surgical procedures</li> <li>• support and home or farm visits.</li> </ul>
<b><i>Schedule</i></b> considerations may include:	<ul style="list-style-type: none"> <li>• clinic policy</li> <li>• staff availability</li> <li>• other resource requirements and case priorities.</li> </ul>
<b><i>Enquiries</i></b> may be received by:	<ul style="list-style-type: none"> <li>• electronic/email</li> <li>• phone, fax, written and counter enquiries.</li> </ul>
<b><i>Triage procedures</i></b> requires:	<ul style="list-style-type: none"> <li>• recognising and responding to emergencies and prioritising cases.</li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> <li>•</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• forearm and foot protection</li> <li>• gowns</li> <li>• gloves</li> <li>• masks.</li> </ul>
<i>Animal first aid measures</i> may include:	<ul style="list-style-type: none"> <li>• establish airway</li> <li>• provide oxygen</li> <li>• control haemorrhage</li> <li>• support injured or broken limbs</li> <li>• support the veterinarian in CPR procedures.</li> </ul>
<i>Grief support</i> may be required:	<ul style="list-style-type: none"> <li>• as a result of owner anxiety for an animal's condition or treatment or the loss or euthanasia of an animal.</li> </ul>
Grief support <i>appropriate action</i> and <i>industry recognised techniques</i> may include:	<ul style="list-style-type: none"> <li>• verbal assurance and communication</li> <li>• provision of grief hotline details and literature (e.g. brochures)</li> <li>• providing advice on burial or cremation decisions</li> <li>• follow-up contact and support.</li> </ul>
<i>Home care advice</i> may include:	<ul style="list-style-type: none"> <li>• bandage care</li> <li>• exercise considerations</li> <li>• immediate housing requirements</li> <li>• nutrition</li> <li>• medication and physiotherapy requirements</li> <li>• pain and wound management</li> <li>• prevention of self-trauma.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET402A Apply imaging routines

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of implementing and completing imaging routines, in accordance with established industry sequences and clinic policies and procedures, and follow specific instructions from the veterinarian.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare <i>imaging environment</i>	1.1. Machine is positioned for the required procedure as instructed. 1.2. Image development equipment is prepared for use. 1.3. Support staff are rostered for the required procedure. 1.4. Radiation safety and <i>occupational health and safety (OHS)</i> are followed throughout the procedure.
2. Prepare <i>imaging equipment</i>	2.1. Imaging equipment, factors, film and other required materials are prepared for use under direction and in accordance with clinic technique charts. 2.2. Appropriate <i>chemicals</i> and materials are prepared according to label instructions. 2.3. <i>Contrast media</i> are prepared in accordance with the veterinarian's instructions.



ELEMENT	PERFORMANCE CRITERIA
	2.4. <i>Personal protective equipment</i> is prepared and fitted for all staff.
3. Implement imaging procedures	3.1. Thickness of the area to be imaged is measured. 3.2. Patient is prepared for imaging and protective and <i>positioning aids</i> are applied as instructed. 3.3. Image is produced in accordance with veterinary instructions subject to state or territory licensing. 3.4. Patient is monitored throughout the procedure and observations are recorded. 3.5. Patient is returned to housing or owner as instructed. 3.6. <i>Common imaging faults</i> are recognised and corrected.
4. Carry out post-imaging procedures	4.1. Images and outcomes are recorded and stored, which may include digital filing to computer records. 4.2. Used chemicals and debris are safely disposed of in accordance with clinic policy and legislative requirements. 4.3. Adequate fresh processing chemicals and other stock are maintained. 4.4. Imaging equipment is cleaned and maintained in accordance with manufacturers' specifications and clinic policies and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply safe work practices in the use of radiography and other imaging equipment
- comply with relevant state or territory radiation safety Acts and regulations with regard to licensing, personal monitoring and recordkeeping
- employ safe, humane and environmentally responsible organisational systems and procedures when working with animals
- position animals appropriately
- read imaging technique charts
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; implement sequenced written instructions; and record patient details accurately and legibly

**REQUIRED SKILLS AND KNOWLEDGE**

- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the veterinarian, acknowledging and responding to a range of views
- numeracy skills to complete basic arithmetic calculations and measure volumes
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks
- use safe waste disposal procedures
- work as part of a team and in close working arrangements with the supervising veterinarian.

**Required knowledge**

- animal anatomy and physiology related to radiography and other imaging procedures
- animal anaesthetic monitoring and recording procedures
- common positioning techniques
- medical terminology in relation to directional and positioning terms
- radiography and other imaging equipment
- relevant state or territory legislation and regulations relating to radiation safety, OHS and animal welfare
- safe work practices in the use of radiography and other imaging equipment.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- comply with relevant radiation safety Acts and regulations in regards to licensing, personal

<b>EVIDENCE GUIDE</b>	
	<p>monitoring and recordkeeping</p> <ul style="list-style-type: none"> <li>• prepare equipment, chemicals and environment in a safe manner for scheduled routines</li> <li>• prepare personal protective equipment for all staff, including self</li> <li>• prepare patients for routines and then position them according to the veterinarian's instructions and the clinic technique chart</li> <li>• develop images</li> <li>• handle animals in a safe and ethical manner during examinations</li> <li>• communicate effectively with the veterinarian and clients</li> <li>• complete post-imaging routines and maintain accurate records.</li> </ul> <p>The skills and knowledge required to apply imaging routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>evidence of candidate's application of practical tasks</p> <ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Imaging environment</i></b> preparation may include:</p>	<ul style="list-style-type: none"> <li>• cleaning the facilities and equipment</li> <li>• ensuring required machine or equipment is available and in good working order.</li> </ul>
<p><b><i>OHS</i></b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• radiation exposure</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Imaging equipment</i> may include:	<ul style="list-style-type: none"> <li>• radiographic equipment:               <ul style="list-style-type: none"> <li>• X-ray machine</li> <li>• cassettes</li> <li>• films</li> <li>• table</li> <li>• darkroom chemicals</li> <li>• contrast media, markers and labels</li> </ul> </li> <li>• other imaging equipment:               <ul style="list-style-type: none"> <li>• digital X-ray</li> <li>• scintigraphy</li> <li>• Computed Tomography (CT)</li> <li>• Magnetic Resonance Imaging (MRI).</li> </ul> </li> </ul>
<i>Chemical</i> preparation may include:	<ul style="list-style-type: none"> <li>• the need for accurate dilutions</li> <li>• the need for correct temperatures of the developing and fixing solutions.</li> </ul>
<i>Contrast media</i> may include:	<ul style="list-style-type: none"> <li>• injectable and oral preparations.</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• lead aprons and gloves</li> <li>• mobile shields</li> <li>• personal radiation monitors (subject to legislative provisions)</li> <li>• thyroid shields.</li> </ul>
<i>Positioning aids</i> may include:	<ul style="list-style-type: none"> <li>• cradles</li> <li>• gags</li> <li>• ropes</li> <li>• sand bags</li> <li>• sedation.</li> </ul>
<i>Common imaging faults</i> may occur due to:	<ul style="list-style-type: none"> <li>• inappropriate restraint or movement of patient</li> <li>• failure to adequately maintain machine or equipment</li> <li>• problems with exposure settings or the development process.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET403A Perform clinic pathology procedures

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of collecting biological samples and performing pathology procedures. The integrity of the sample must be maintained in accordance with veterinarian instructions when conducting clinic examinations and in preparing consignments to diagnostic laboratories.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Implement pathology procedures	<p>1.1. <b><i>Pathology equipment</i></b> is cleaned, maintained and prepared for use in accordance with manufacturers' instructions.</p> <p>1.2. Patient is prepared for sampling procedure as instructed and in accordance with <b><i>occupational health and safety (OHS)</i></b> requirements.</p> <p>1.3. <b><i>Samples</i></b> are taken as directed and placed in correctly labelled containers.</p> <p>1.4. Slides are prepared for microscopic examination.</p> <p>1.5. Patient and sample details are recorded.</p> <p>1.6. Sample transfer to laboratory is facilitated as instructed.</p>



ELEMENT	PERFORMANCE CRITERIA
	1.7. <b>Laboratory test</b> results are received, recorded and reported to the veterinarian.
2. Perform and record appropriate tests	2.1. Haematological and blood chemistry tests are performed using specific laboratory equipment. 2.2. Clinic <b>pathology tests</b> are performed as directed by the veterinarian. 2.3. Test results are recorded in clinic patient record and communicated to the attending veterinarian.
3. Assist with post-mortem examination	3.1. Supervising veterinarian is notified of death and details are recorded. 3.2. <b>Equipment</b> and animal are prepared for post-mortem as instructed. 3.3. <b>Samples</b> for pathological examination are stored and labelled. 3.4. Post-mortem debris and biological wastes are disposed of in accordance with legislative requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply veterinary terminology pertaining to cases
- dispose of clinical and other waste correctly and safely
- handle cleaning agents safely and apply appropriate cleaning techniques
- label, identify, transport and store specimens correctly
- provide effective support to the veterinarian during procedures
- recognise, respond to and assist with emergencies
- use personal protective clothing correctly
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; implement sequenced written instructions; and record samples for testing accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the organisation, including negotiating and questioning techniques, active listening, acknowledging and responding to a range of views and asking for clarification from the veterinarian

**REQUIRED SKILLS AND KNOWLEDGE**

- numeracy skills required to prepare samples correctly
- problem-solving skills to use available resources efficiently
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- work as part of a team and in close working arrangements with the supervising veterinarian.

**Required knowledge**

- animal anatomy and physiology related to clinic pathology procedures
- biological sample collection methods and procedures, appropriate biological sampling sites and relevant industry laboratory techniques and procedures
- clinic policies and procedures, including OHS requirements
- normal ranges for a range of pathology procedures
- pathological procedures and equipment in line with job responsibility level
- range of pathology procedures and the requirements each procedure has for sample preparation, handling and transport
- quality assurance pathology procedures.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare equipment, slides and patients for examination
- take a range of samples for testing
- perform basic laboratory tests and record results
- provide support for post-mortem examinations
- communicate effectively with the veterinarian
- maintain accurate records.

<b>EVIDENCE GUIDE</b>	
	<p>The skills and knowledge required to perform clinic pathology procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be largely practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,</p>

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Pathology equipment*** may include:

- biopsy punch
- in-house diagnostic equipment
- microscopes
- needles
- refractometer
- slides
- syringe
- tissue forceps, scalpels, knives and scales.

***OHS*** risks when working with animals may include:

- animal bites, kicks, scratches and crush injuries
- biological hazardous waste and sharps disposal
- handling of chemicals and medicines
- gas leakage
- inhalation of aerosol particles
- intraocular contamination
- manual handling, including carrying, lifting and shifting
- needle pricks and cuts from other sharps
- release of infective agents (animal and human)
- slippery or uneven work surfaces
- zoonoses.

***Samples*** taken may include:

- blood
- faeces
- gram stain smear
- hair samples
- milk
- saliva

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• semen</li> <li>• skin scrapings</li> <li>• tissue (skin and scale)</li> <li>• urine</li> <li>• vomitus</li> <li>• wound material.</li> </ul>
<i>Laboratory tests</i> may include:	<ul style="list-style-type: none"> <li>• blood tests: <ul style="list-style-type: none"> <li>• activated clotting time</li> <li>• biochemistry</li> <li>• blood gases</li> <li>• cross-match</li> <li>• differential cell count</li> <li>• haematocrit</li> <li>• haematology</li> <li>• pH</li> <li>• platelet numbers</li> <li>• serum electrolytes and chemistries</li> <li>• total serum protein</li> <li>• urea nitrogen</li> <li>• white cell count</li> </ul> </li> <li>• microscopic examination of samples</li> <li>• parasite counts</li> <li>• urinalysis and cytological evaluation of urine and body cavity fluids.</li> </ul>
<i>Pathology tests</i> may include:	<ul style="list-style-type: none"> <li>• tests for antigens and antibodies, and internal or external parasites.</li> </ul>
<i>Equipment</i> used during a post-mortem may include:	<ul style="list-style-type: none"> <li>• cleaning equipment trolleys</li> <li>• knives and needles</li> <li>• necropsy saw</li> <li>• scales</li> <li>• specimen containers</li> <li>• surgical instruments.</li> </ul>
<i>Samples</i> may include:	<ul style="list-style-type: none"> <li>• blood or faecal samples</li> <li>• stained or unstained slides for microscopic examination</li> <li>• tissue stored in formaldehyde.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET404A Perform clinic office procedures

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of maintaining veterinary supplies, controlling stock, maintaining clinic accounts and preparing and processing clinic correspondence.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Maintain veterinary supplies	1.1. Clinic veterinary supplies are managed in accordance with <i>clinic protocols</i> and <i>occupational health and safety (OHS)</i> requirements. 1.2. Clinic stock-pricing policy is followed. 1.3. <i>Stocktaking</i> procedures are implemented in accordance with inventories provided. 1.4. Veterinary medicines are documented, <i>stored</i> and secured as required by legislative requirements and <i>clinic policy</i> .
2. Maintain clinic accounts	2.1. <i>Accounts</i> are prepared and issued in accordance with clinic policy. 2.2. Basic monetary records are maintained in accordance with established industry business practices and clinic policy.



ELEMENT	PERFORMANCE CRITERIA
	2.3. Daily takings are recorded and <i>banking processes</i> are completed in accordance with clinic policy. 2.4. Payment of customer accounts is received and recorded in accordance with clinic policies.
3. Process and prepare correspondence	3.1. Clinic <i>correspondence</i> to animal owners is completed. 3.2. Correspondence is written in accordance with clinic policy. 3.3. Correspondence is processed and mailed in accordance with clinic policy. 3.4. Correspondence is filed and stored in accordance with clinic policy.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- accurately maintain veterinary medicine inventories
- file and store clinical records
- effectively use computer software applicable in the clinic, including word processing, accounting and database patient records
- literacy skills to read, select and implement policies and procedures, including OHS, veterinary supplies and client account maintenance; and follow clinic correspondence protocols
- oral communication skills/language required to fulfil the job role as specified by the organisation, including negotiating and questioning techniques, active listening, asking for clarification from the veterinarian, and acknowledging and responding to a range of views
- numeracy skills required to prepare accounts and complete banking processes
- interpersonal skills to work with others, have empathy with clients and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and resolve customer enquiries in respect to accounts and correspondence
- work as part of a team and in close working arrangements with the supervising veterinarian.

#### Required knowledge

**REQUIRED SKILLS AND KNOWLEDGE**

- daily banking and reconciliation processes and financial activities
- clinic policies and procedures particularly in respect to the administration of the clinic, including clinic accounts and correspondence
- ordering, storing, prescribing and dispensing of a wide range of pharmaceuticals and the requirements of drug scheduling legislation
- principles behind and the importance of drug inventories in the clinic
- standards, guidelines and approaches to environmental sustainability relevant to the animal care industry
- safe work practices.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- maintain clinic stock control, including veterinary medicines and supplies
- maintain accurate records
- comply with clinic security measures for the storage of veterinary medicines
- process clinic correspondence, client accounts and payments and daily takings
- communicate effectively with the veterinarian and clients.

The skills and knowledge required to perform clinic office procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for**

Assessment of this unit is to be practical in nature and

<b>EVIDENCE GUIDE</b>	
<b>assessment</b>	<p>will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to the appropriate information, equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><i>Clinic protocols</i> may include:</p>	<ul style="list-style-type: none"> <li>• sales and security</li> <li>• procedures for ordering supplies</li> <li>• veterinary chemical storage and handling</li> <li>• daily banking, reconciliation and financials processes.</li> </ul>
<p><i>OHS</i> requirements may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• monitoring and recording of clinic workplace hazards</li> <li>• handling of chemicals and medicines</li> <li>• manual handling, including carrying, lifting and shifting.</li> </ul>
<p><i>Stocktaking</i> may require:</p>	<ul style="list-style-type: none"> <li>• maintaining adequate veterinary supplies which may include:               <ul style="list-style-type: none"> <li>• consumables</li> <li>• disposables</li> <li>• medicines</li> <li>• supplies held in veterinary vehicles.</li> </ul> </li> </ul>
<p>Considerations when <i>storing</i> veterinary medicines will include:</p>	<ul style="list-style-type: none"> <li>• expiry dates and special storage requirements, including light and temperature</li> <li>• relevant poisons schedules.</li> </ul>
<p><i>Clinic policy</i> may include:</p>	<ul style="list-style-type: none"> <li>• animal care and welfare procedures</li> <li>• business plan</li> <li>• debt collection</li> <li>• environmental sustainability practices</li> <li>• infection control procedures</li> <li>• OHS manual and safe work practices</li> <li>• security measures.</li> </ul>
<p>Maintaining clinic <i>accounts</i> may include:</p>	<ul style="list-style-type: none"> <li>• applicable credit cards, EFTPOS, cheques and staged payment management</li> <li>• maintenance of daily financial records, including computerised and/or manual.</li> </ul>

<b>RANGE STATEMENT</b>	
<i>Banking processes</i> may include:	<ul style="list-style-type: none"> <li>• completion of deposit slips and electronic banking</li> <li>• credit care and bank account reconciliations</li> <li>• till/register balancing.</li> </ul>
<i>Correspondence</i> may include:	<ul style="list-style-type: none"> <li>• brochures and bulletins</li> <li>• letters, emails and memos</li> <li>• newsletters</li> <li>• regulatory information and drug schedules</li> <li>• treatment reminders.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## ACMVET405A Carry out surgical nursing routines

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing the surgical environment and providing total support for the surgeon. The unit describes the skills and knowledge required to prepare for, and provide support during and after, routine and non-routine surgical procedures, including monitoring patients while they are under anaesthesia.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for <i>surgical procedures</i>	1.1.Consent forms are completed in cooperation with owners and <i>pre-operative care advice</i> is provided in consultation with the veterinarian 1.2.Surgery equipment suitable for the species is selected and prepared ready for the surgeon in accordance with <i>occupational health and safety (OHS)</i> and clinic policies and procedures. 1.3. <i>Surgical packs</i> are sourced for scheduled procedures. 1.4. <i>Pre-operative processes</i> are carried out in

ELEMENT	PERFORMANCE CRITERIA
	<p>accordance with required procedures and industry standards.</p> <p>1.5. Safe work practices are adopted and practised as an integral part of the clinic's theatre procedures.</p>
2. Provide support for surgical routines	<p>2.1. <b>Animals are prepared</b> for anaesthesia and the surgical procedure in accordance with clinic policies and procedures.</p> <p>2.2. <b>Analgesics</b> are administered to patients as directed by the veterinarian and in accordance with legislative requirements.</p> <p>2.3. Animals are held, restrained or positioned during the operation and administration of anaesthesia as instructed.</p> <p>2.4. <b>Sterile</b> and/or non-sterile assistance is provided to the veterinarian as instructed.</p> <p>2.5. <b>Routines</b> are carried out and theatre equipment is provided to the veterinarian as instructed.</p>
3. Monitor patients and anaesthesia	<p>3.1. <b>Anaesthesia</b> induction and maintenance is continually monitored under veterinary supervision.</p> <p>3.2. Endotracheal intubation is completed in accordance with clinic policy.</p> <p>3.3. <b>Pain and vital signs</b> are monitored and recorded as instructed from premedication to anaesthesia through to recovery.</p> <p>3.4. Anaesthetic depth is assessed and response is initiated in accordance with clinic policies and procedures.</p> <p>3.5. <b>Emergency procedures</b> are followed in accordance with clinic policy.</p> <p>3.6. <b>Post-operative anaesthesia procedures</b> are completed in accordance with clinic policy.</p>
4. Perform post-operative procedures	<p>4.1. Wound or surgical site is monitored post-operatively for signs of <b>abnormality</b>.</p> <p>4.2. Defined <b>post-operative patient management procedures</b> are carried out in accordance with the veterinarian's instructions.</p> <p>4.3. Post-operative advice is provided to the animal owner in accordance with the veterinarian's instructions.</p>



## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- assist the veterinarian safely and effectively as directed
- clean and sterilise surgical equipment as required
- employ keen observation skills
- follow OHS and clinic policies and procedures
- handle animals safely and ensure their health and welfare are maintained in accordance with organisational and legislative requirements
- recognise, respond to and assist with emergencies
- use, record, store and dispose of chemicals and medicines in accordance with relevant state or territory legislation
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills required to prepare veterinary medicines
- problem-solving skills to use available resources, prioritise tasks and select, prepare and clean/sterilise instruments and equipment as directed
- work as part of a team and in close working arrangements with the supervising veterinarian.

#### Required knowledge

- animal anatomy and physiology related to surgical nursing routines
- anaesthetic agents, including injectable and gaseous compounds and the planes and stages of anaesthesia
- anaesthetic monitoring techniques
- aseptic techniques, including general theatre etiquette, dress rules and restricted areas
- dangers related to exposure to anaesthetic agents
- equipment in both the theatre and preparation areas, including clippers, vacuum cleaner, specific surgical equipment and ear tattoo instruments
- legislative requirements and health regulations for the storage, use and disposal of chemicals and biological debris from veterinary procedures

## REQUIRED SKILLS AND KNOWLEDGE

- range of common and non-routine surgical instruments
- range of anaesthetic equipment, including vaporisers, cycle systems, tubing, re-breathing systems and scavenger systems
- relevant state or territory legislative requirements for animal welfare
- resuscitation techniques
- skin antiseptics used and their actions
- sterilisation techniques, including working knowledge of the operation of autoclaves and an awareness of alternative sterilisation techniques, including gamma irradiation, ethylene oxide and chemical sterilisation and their associated health hazards
- various surgical procedures and the appropriate equipment
- Veterinary Practitioner Acts and Regulations.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare surgical instruments and equipment, including surgical packs, in an aseptic environment ready for surgery
- carry out preoperative processes
- prepare animals for anaesthesia and surgical procedures and administer analgesics as directed by the veterinarian
- handle and restrain animals in a safe and ethical manner
- provide effective sterile and/or non-sterile support to the veterinarian during surgical procedures
- monitor patients' vital signs and anaesthesia during surgery
- provide post-operative care for animals and

<b>EVIDENCE GUIDE</b>	
	<p>post-operative advice for clients</p> <ul style="list-style-type: none"> <li>• communicate effectively with the veterinarian and clients.</li> </ul> <p>The skills and knowledge required to carry out surgical nursing routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary nursing workplace with access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women,</p>

**EVIDENCE GUIDE**

	people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Surgical procedures</i> may include:	<ul style="list-style-type: none"> <li>procedures for both small and large animals, including orthopaedic, ophthalmic and soft tissue</li> <li>defined surgical procedures, including diathermy and cryosurgery.</li> </ul>
<i>Pre-operative care advice</i> may include:	<ul style="list-style-type: none"> <li>fasting and limited fluid intake.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>animal bites, kicks, scratches and crush injuries</li> <li>biological hazardous waste and sharps disposal</li> <li>handling of chemicals and medicines</li> <li>gas leakage</li> <li>inhalation of aerosol particles</li> <li>intraocular contamination</li> <li>manual handling, including carrying, lifting and shifting</li> <li>needle pricks and cuts from other sharps</li> <li>release of infective agents (animal and human)</li> <li>slippery or uneven work surfaces</li> <li>zoonoses.</li> </ul>
Sourcing <i>surgical packs</i> may include:	<ul style="list-style-type: none"> <li>identifying which packs are required for which procedures</li> <li>grouping packs for each patient and adding extra requirements, such as: <ul style="list-style-type: none"> <li>bandaging equipment</li> <li>scalpel blades</li> <li>suture materials.</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
<i>Pre-operative processes</i> may include but are not limited to:	<ul style="list-style-type: none"> <li>• weighing patients</li> <li>• noting patient's previous experience with general anaesthetic</li> <li>• accessing blankets, protective gloves and anaesthetic boxes</li> <li>• aseptic preparation of operating areas and injection sites</li> <li>• selecting appropriate endotracheal tubes</li> <li>• preparing correct quantities of anaesthetic agents under veterinary supervision</li> <li>• administering necessary premedication, medication and analgesia under veterinary supervision.</li> </ul>
<i>Animal preparation</i> may include:	<ul style="list-style-type: none"> <li>• applying restraining devices: <ul style="list-style-type: none"> <li>• muzzles, rearing bits, head collars, halters or hobbles</li> </ul> </li> <li>• clipping, shaving and pre-surgical skin preparation routines</li> <li>• further preparation under veterinary supervision may extend to: <ul style="list-style-type: none"> <li>• administration of necessary premedication, intubation and the insertion of intravenous or urinary catheters</li> <li>• preparation of equipment and materials for intravenous infusions.</li> </ul> </li> </ul>
Use and types of <i>analgesics</i> may include:	<ul style="list-style-type: none"> <li>• administration of analgesics may be used for the provision of: <ul style="list-style-type: none"> <li>• pre-emptive analgesia</li> <li>• inter-operative analgesia</li> <li>• post-operative analgesia</li> </ul> </li> <li>• analgesia types administered by the veterinarian or under veterinary supervision: <ul style="list-style-type: none"> <li>• non-steroidal anti-inflammatory</li> <li>• narcotic and other analgesics.</li> </ul> </li> </ul>
<i>Sterile</i> assistance may include:	<ul style="list-style-type: none"> <li>• nurse may be required to scrub-up, glove, cap and gown in order to provide sterile equipment in a sterile field.</li> </ul>
<i>Routines</i> may include:	<ul style="list-style-type: none"> <li>• adjustment of lights, equipment and the patient as directed by the surgeon</li> <li>• presentation, alignment and exposure of the surgical site as directed by the surgeon</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• presentation of sterile packs, individual instruments, equipment and suturing materials</li> <li>• receiving, preparation and dispatch of pathological samples under veterinary supervision.</li> </ul>
Types of <i>anaesthesia</i> may include:	<ul style="list-style-type: none"> <li>• gaseous and injectable preparations</li> <li>• intermittent positive pressure ventilations.</li> </ul>
<i>Pain and vital signs</i> monitoring and recording may include:	<ul style="list-style-type: none"> <li>• audible, visual or measured signs of pain: <ul style="list-style-type: none"> <li>• arching back</li> <li>• behavioural changes</li> <li>• biting and kicking</li> <li>• displacement of bones</li> <li>• elevated temperature</li> <li>• increased respiration</li> <li>• increased vocalisation</li> <li>• withdrawal of affected limbs</li> <li>• straining</li> <li>• trembling and changes in normal physiology</li> </ul> </li> <li>• vital signs and reflexes monitored under anaesthesia: <ul style="list-style-type: none"> <li>• blood pressure</li> <li>• pulse rate and quality</li> <li>• respiratory rate and effort</li> <li>• rectal temperature</li> <li>• pulse oximetry and blood gases</li> <li>• anaesthesia depth</li> <li>• capillary refill time</li> <li>• palpebral reflex</li> <li>• heart rate</li> <li>• mucous membrane colour</li> <li>• pedal withdrawal reflex.</li> </ul> </li> </ul>
<i>Emergency procedures</i> related to anaesthesia may be required for:	<ul style="list-style-type: none"> <li>• anaesthetic emergencies</li> <li>• haemorrhage</li> <li>• hypothermia or hyperthermia</li> <li>• respiratory distress</li> <li>• shock.</li> </ul>
<i>Post-operative anaesthesia</i>	<ul style="list-style-type: none"> <li>• continued monitoring of vital signs</li> </ul>

<b>RANGE STATEMENT</b>	
<i>procedures</i> may include:	<ul style="list-style-type: none"> <li>• extubation</li> <li>• monitoring wounds, bandages and surgical sites for any abnormalities</li> <li>• positioning of patient recumbency in consideration of recovery phase and surgical site and adjustment of intravenous fluid therapy rates as directed by the surgeon.</li> </ul>
<i>Abnormalities</i> may include:	<ul style="list-style-type: none"> <li>• post-operative abnormalities in wounds and surgical sites: <ul style="list-style-type: none"> <li>• haemorrhage or other exudation</li> <li>• swelling and self-trauma</li> </ul> </li> <li>• other abnormalities: <ul style="list-style-type: none"> <li>• cold extremities</li> <li>• delayed recovery</li> <li>• increased heart rate</li> <li>• increased respiratory rate or abdominal distension</li> <li>• low body temperature</li> <li>• pale mucous membranes.</li> </ul> </li> </ul>
<i>Post-operative patient management procedures</i> may include:	<ul style="list-style-type: none"> <li>• care and continued monitoring of vital signs and observation of abnormalities prior to an animal's release</li> <li>• advice to the owner, in line with veterinarian's instructions, regarding administering medicine, general care and follow-up treatment and/or follow-up visits.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		



## ACMVET406A Nurse animals

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing high quality nursing care for all patients (animals) treated or housed at the clinic. It includes providing advice to clients (owners), monitoring animals and providing animal first aid as required.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify patients and monitor clinical signs	<p>1.1. Patients are <b><i>identified</i></b> according to <b><i>features</i></b> and fixed identification.</p> <p>1.2. <b><i>Animal first aid</i></b> is applied in accordance with clinic policy and veterinary advice if required.</p> <p>1.3. <b><i>Clinical signs</i></b> are documented through observation and owner interview and are communicated to the veterinarian.</p> <p>1.4. <b><i>Audible, visual or measurable signs of pain</i></b> are identified, recorded and used to assist in the identification of a need for analgesics.</p> <p>1.5. <b><i>Behavioural changes</i></b> indicating pain are identified and reported to the veterinarian.</p> <p>1.6. Patient needs are established in consultation with the veterinarian.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Communicate with clients concerning hospitalised patients	2.1. Clients are counselled and informed of patients' progress and condition at regular intervals. 2.2. Client complaints are responded to and grief support is carried out in accordance with clinic policy. 2.3. Patient records are checked to ensure instructed routines are communicated to client.
3. Provide animal care in pain situations	3.1. An empathetic and caring approach is utilised in the husbandry of animals in pain. 3.2. Compassionate and safe handling techniques are employed in accordance with <i>OHS</i> requirements. 3.3. Industry-recognised <i>pain management techniques</i> are used to minimise patient trauma.
4. Care for animals	4.1. Animals are safely returned to owner or housing after treatment. 4.2. Nursing intervention is provided for individual animals in accordance with clinic policy. 4.3. <i>Prescribed routines</i> are implemented and treatments are recorded. 4.4. Patient observations are recorded in accordance with clinic policy.
5. Care for hospitalised animals	5.1. Basic animal welfare requirements are provided in accordance with clinic policies. 5.2. <i>Environment</i> specifically required for the individual animal is maintained in accordance with the veterinarian's instruction. 5.3. Patients' bodily functions are monitored and facilitated according to instructions. 5.4. Regular <i>monitoring</i> of patients is carried out and recorded in accordance with clinic policy. 5.5. <i>Industry-recognised animal psychology procedures</i> are carried out in conjunction with patient monitoring.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

## REQUIRED SKILLS AND KNOWLEDGE

### Required skills

- employ keen observation skills to recognise signs or behavioural change indicators in patients
- recognise, respond to and assist with emergencies
- undertake animal first aid procedures
- use, and record the use of, chemicals and medicines in accordance with relevant state or territory legislation
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills required to weigh and measure animals, check drug dosages and record patient information
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources, prioritise tasks and use appropriate pain management techniques
- work effectively in a team situation in the clinic, gently and carefully handle animals in pain, act promptly and effectively in response to the veterinarian's instructions and recognise and appreciate pain in animals.

### Required knowledge

- animal behaviour characteristics and traits
- animal first aid procedures and techniques
- animal pain management procedures and techniques
- animal physiology and anatomy, applied pharmacology and the range of analgesics, including appropriate antagonists, related to nursing animals
- relevant national, state or territory legislative requirements for animal welfare, transportation of animals, animal management and veterinary practitioners Acts that underpin routine animal health advice
- requirements for safe and suitable housing and appropriate materials for its construction
- veterinary chemicals, the relevant poisons schedule and the legislative requirements relevant to their use.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify patients and determine patient histories</li> <li>• provide animal first aid as required</li> <li>• observe patients and maintain accurate records for clinical signs, pain and behavioural changes</li> <li>• meet patients' needs whilst they are treated or housed at clinic</li> <li>• inform clients of patients' progress and counsel clients accordingly</li> <li>• communicate effectively with the veterinarian and clients.</li> </ul> <p>The skills and knowledge required to nurse animals must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be largely practical in nature and will be most appropriately assessed in a veterinary nursing workplace with access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills</p>

<b>EVIDENCE GUIDE</b>	
	<p>assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Animal (patient) <i>identification</i> and <i>features</i> may include:</p>	<ul style="list-style-type: none"> <li>• coat or skin colours and texture, markings and patterns, permanent scars, toe nail colour and eye colour</li> <li>• height, age and sex</li> <li>• microchip, ear tags, tattoos and markings, and leg bands.</li> </ul>
<p><i>Animal first aid</i> may be required</p>	<ul style="list-style-type: none"> <li>• haemorrhage</li> <li>• fractures and dislocations</li> </ul>

<b>RANGE STATEMENT</b>	
for:	<ul style="list-style-type: none"> <li>• injuries to and failing of organs and systems</li> <li>• respiratory distress</li> <li>• toxicity</li> <li>• wounds.</li> </ul>
<i>Clinical signs</i> that may be observed may include:	<ul style="list-style-type: none"> <li>• blood pressure</li> <li>• pulse rate and quality</li> <li>• respiratory rate and effort</li> <li>• rectal temperature</li> <li>• pulse oximetry and blood gases</li> <li>• anaesthesia depth</li> <li>• capillary refill time</li> <li>• palpebral reflex</li> <li>• heart rate</li> <li>• mucous membrane colour</li> <li>• pedal withdrawal reflex.</li> </ul>
<i>Audible, visible or measurable signs of pain</i> , including <i>behavioural changes</i> may include:	<ul style="list-style-type: none"> <li>• biting, kicking and scratching</li> <li>• blood pressure</li> <li>• displacement of bones</li> <li>• elevated temperature</li> <li>• increased heart rate</li> <li>• increased respiration</li> <li>• increased vocalisation</li> <li>• pale mucous membranes</li> <li>• straining or arching of the back,</li> <li>• trembling and changes in normal physiology</li> <li>• withdrawal of affected limb.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Pain management techniques</i>	<ul style="list-style-type: none"> <li>• appropriate analgesics</li> <li>• comfortable bedding</li> </ul>

<b>RANGE STATEMENT</b>	
may include:	<ul style="list-style-type: none"> <li>• heat source</li> <li>• limb elevation using restraints or cradles</li> <li>• maintenance of body temperature and patient airway.</li> </ul>
<i>Prescribed routines</i> may include:	<ul style="list-style-type: none"> <li>• bandaging and wound management</li> <li>• bathing, grooming and nail clipping or beak trimming</li> <li>• checking body weights to gauge hospitalisation success or stress</li> <li>• exercising and providing nutritional requirements</li> <li>• maintaining urinary and intravenous catheters</li> <li>• monitoring basic drug dosages</li> <li>• neonatal nursing</li> <li>• oral and injectable administration of medications</li> <li>• parasitic control treatments.</li> </ul>
<i>Appropriate environment</i> may include:	<ul style="list-style-type: none"> <li>• elements, such as: <ul style="list-style-type: none"> <li>• atmosphere: <ul style="list-style-type: none"> <li>• light, sound, suitable bedding and warmth</li> </ul> </li> <li>• access to food and water, as appropriate</li> <li>• allowing animals to facilitate bodily functions with non-intervention.</li> </ul> </li> </ul>
<i>Monitoring patients</i> may include:	<ul style="list-style-type: none"> <li>• observing and recording: <ul style="list-style-type: none"> <li>• pulse, heart rate and respiration</li> <li>• temperature</li> <li>• capillary refill time</li> <li>• palpebral reflex</li> <li>• demeanour</li> <li>• urinary and faecal ability</li> <li>• output and volume</li> <li>• fluid and food intake ability and volume</li> <li>• observation and maintenance of intravenous fluid lines</li> <li>• oxygen therapy</li> <li>• in-dwelling urinary and intravenous catheters</li> </ul> </li> <li>• all changes must be reported to the veterinarian.</li> </ul>



**RANGE STATEMENT**

*Industry-recognised animal psychological procedures* may include:

- mental stimulation as required
- provision of comfort (e.g. touching, stroking, speaking, soothing and reassuring) and privacy (e.g. hiding places for wildlife and shy species), according to individual animal requirements

**Unit Sector(s)**

<b>Unit sector</b>	Veterinary nursing
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>	

## ACMVET407A Carry out medical nursing routines

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing the skills to implement medical nursing routines, including the preparation and handling of patients (animals) and equipment for specific routines.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for and assist with medical procedures	<p>1.1. Equipment, instruments and materials are prepared for the required <i>medical procedure</i>.</p> <p>1.2. <i>Patient preparation</i> is carried out and restraint is applied as instructed and according to <i>occupational health and safety (OHS)</i> requirements.</p> <p>1.3. Scheduled procedures are carried out as instructed.</p> <p>1.4. Patient is returned to housing or owner in accordance with clinic policy.</p> <p>1.5. Procedures are recorded in clinic records in accordance with clinic policy.</p>
2. Prepare for <i>specific clinic routines</i>	<p>2.1. <i>Equipment is prepared</i> and calibrated, if required, in accordance with manufacturers' instructions and clinic guidelines.</p> <p>2.2. Patient preparation is carried out and restraint is</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>applied as instructed and according to OHS requirements.</p> <p>2.3. <b>Outcomes</b> of medical procedures are processed in accordance with clinic procedures.</p> <p>2.4. Medical procedures are <b>recorded</b> as instructed by supervising veterinarian.</p> <p>2.5. Patient is cleaned as required and returned to housing or owner in accordance with clinic policy.</p> <p>2.6. Equipment is cleaned and stored in accordance with manufacturers' instructions and clinic guidelines.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply safe work procedures in the use of equipment for medical procedures
- assist the veterinarian safely, effectively and as directed
- clean, sterilise and store appropriate equipment as required
- ensure that equipment is regularly maintained and that the recommended handling procedures for endoscopic and laparoscopic probes, ultrasound transducers and electrocardiograms (ECGs) are carried out
- employ keen observation skills
- ensure fluid therapy requirements are undertaken and monitored
- prepare animals correctly for medical procedures
- recognise, respond to and assist with emergencies
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the owner, and acknowledging and responding to a range of views
- numeracy skills required to calibrate and operate equipment
- use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources, prioritise tasks and select,

**REQUIRED SKILLS AND KNOWLEDGE**

- prepare and clean or sterilise instruments and equipment as directed
- work closely with the supervising veterinarian and as part of a team.

**Required knowledge**

- animal anatomy and physiology related to medical nursing routines
- aseptic technique
- legislative requirements and health regulations for the storage, use and disposal of chemicals and biological debris from veterinary procedures
- relevant state or territory legislative requirements for animal welfare
- safe work procedures
- use, value and rationale of procedures, including endoscopic, electrocardiographic, laparoscopic and ultrasound procedures
- use and value of fluid therapy
- various medical procedures and the appropriate equipment
- Veterinary Practitioner Acts and Regulations.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- prepare equipment, instruments and materials and assist with medical procedures
- prepare and restrain patients for procedures
- prepare and calibrate equipment for specific clinic routines
- assist veterinarian with procedure outcomes, including fluid therapy and catheterisation
- care for patients during special procedures
- communicate effectively with the veterinarian and clients

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• clean and store equipment and maintain accurate records.</li> </ul> <p>The skills and knowledge required to carry out medical nursing routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary nursing workplace with access to the appropriate equipment and/or resources to enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English,

**EVIDENCE GUIDE**

youth and people from low socioeconomic backgrounds).

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b><i>Medical procedures</i></b> may include:	<ul style="list-style-type: none"> <li>• small animal procedures: <ul style="list-style-type: none"> <li>• cleaning ear pinna and ear canals</li> <li>• enemas</li> <li>• nail, beak or feather trimming</li> <li>• setting up, regulating and maintaining an intravenous drip for fluid therapy or blood transfusions</li> <li>• setting up and maintaining oxygen therapy</li> <li>• urinary catheterisation</li> </ul> </li> <li>• large animal procedures: <ul style="list-style-type: none"> <li>• administering general anaesthesia to horses</li> <li>• oral administration of electrolytes, pastes and drenches</li> <li>• providing hoof and leg care to horses</li> <li>• subcutaneous, intravenous or intramuscular injection</li> <li>• setting up, regulating and maintaining an intravenous drip for fluid therapy.</li> </ul> </li> </ul>
<b><i>Patient preparation</i></b> may include:	<ul style="list-style-type: none"> <li>• restraint</li> <li>• shaving and cleaning of target areas</li> <li>• application of an electro-conductive medium.</li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Specific clinic routines</i> may include:	<ul style="list-style-type: none"> <li>• aural lavage</li> <li>• catheterisation</li> <li>• ECG trace procedures</li> <li>• endoscopic and laparoscopic procedures</li> <li>• ultrasound and other common procedures.</li> </ul>
Types of <i>equipment</i> requiring <i>preparation</i> may include:	<ul style="list-style-type: none"> <li>• ECG</li> <li>• endoscope</li> <li>• laparoscope</li> <li>• ultrasound</li> <li>• videoscope.</li> </ul>
Medical procedure <i>outcomes</i> may include:	<ul style="list-style-type: none"> <li>• biopsies may be collected and labelled</li> <li>• details from endoscopic and laparoscopic procedures may be recorded</li> <li>• images may be reproduced in: <ul style="list-style-type: none"> <li>• ECG trace</li> <li>• photographic form</li> <li>• printed paper format</li> <li>• video or digital format.</li> </ul> </li> </ul>
Outcomes of medical procedures may be <i>recorded</i> and stored:	<ul style="list-style-type: none"> <li>• electronically or as hard copy.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMVET408A Coordinate and perform theatre routines

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of preparing, cleaning and maintaining theatre and equipment as well as preparing personnel for the performance of surgical procedures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare surgery schedules	<p>1.1. <b><i>Surgery schedules</i></b> are prepared and prioritised in consultation with the veterinarian and theatre nurse.</p> <p>1.2. Accurate patient histories are collated and prepared in accordance with clinic policy.</p> <p>1.3. Surgery programs are facilitated in cooperation with the supervising veterinarian.</p>
2. Implement surgery preparations	<p>2.1. <b><i>Surgical packs</i></b> are prepared for scheduled procedures as instructed.</p> <p>2.2. Routine surgical site preparation procedures are coordinated in accordance with the veterinarian's instructions <b><i>occupational health and safety (OHS)</i></b> requirements.</p> <p>2.3. <b><i>Staff preparation routines</i></b> are carried out in accordance with clinic policy.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. Anaesthetic equipment is checked for correct operation in accordance with manufacturers' specifications.</p> <p>2.5. Veterinarian, theatre personnel and self are <i>appropriately dressed</i> in accordance with clinic policy.</p>
<p>3. Clean, maintain and store theatre <i>instruments, equipment and supplies</i></p>	<p>3.1. <i>Theatre debris and disposable equipment</i> are safely disposed of in accordance with legislative requirements.</p> <p>3.2. Instruments are cleaned and sterilised in accordance with clinic policies and procedures.</p> <p>3.3. Instruments are grouped according to type and usage and stored after use.</p> <p>3.4. Equipment and supplies are maintained in accordance with clinic policy.</p> <p>3.5. Equipment maintenance procedures are implemented to ensure machines are functional and operational.</p> <p>3.6. Gowns and drapes are sterilised in accordance with clinic policies and procedures.</p>
<p>4. Carry out post-operative theatre routines.</p>	<p>4.1. Theatre cleaning personnel are organised in accordance with clinic policy.</p> <p>4.2. <i>Theatre and preparation room supplies</i> are verified in accordance with clinic policy.</p> <p>4.3. Theatre is restored to a fully stocked condition in accordance with clinic policy.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- assist the veterinarian safely and effectively as directed and work as part of a team
- clean and sterilise surgical equipment as required
- complete post-operative theatre procedures
- recognise, respond to and assist with emergencies
- supervise the preparation of surgery schedules, including the preparation of the surgical environment and relevant staff
- use, and record the use of, chemicals and medicines in accordance with relevant

## REQUIRED SKILLS AND KNOWLEDGE

state or territory legislation

- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the owner, and acknowledging and responding to a range of views
- numeracy skills required to operate equipment
- problem-solving skills to prioritise tasks and coordinate theatre routines.

### Required knowledge

- animal anatomy and physiology related to medical and surgical nursing routines
- aseptic technique
- clinic policies and procedures, including OHS
- legislative requirements and health regulations for the storage, use and disposal of chemicals and biological debris from veterinary procedures
- possible requirements of the surgeon during operations
- range of routine surgical instruments and equipment used in preparation and theatre areas
- relevant state or territory legislative requirements for animal welfare
- safe work practices
- sterilisation techniques, including the operation of autoclaves and an awareness of alternative sterilisation techniques, including gamma irradiation, ethylene oxide and chemical sterilisation and their associated health hazards
- Veterinary Practitioner Acts and Regulations.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare surgery and organise surgery schedules</li> <li>• prepare surgical packs and routine surgical sites</li> <li>• prepare and gown theatre personnel, including self</li> <li>• maintain equipment, instruments, materials and supplies</li> <li>• clean, maintain and store theatre instruments, equipment, materials and supplies</li> <li>• complete post-operative theatre routines</li> <li>• communicate effectively with the veterinarian and follow instructions.</li> </ul> <p>The skills and knowledge required to coordinate and perform theatre routines must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary nursing workplace with access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><i>Surgery schedule</i> considerations may include:</p>	<ul style="list-style-type: none"> <li>• sterile and non-sterile</li> <li>• body cavity invasive or superficial</li> <li>• orthopaedic</li> <li>• orthodontic</li> <li>• soft tissue</li> <li>• presence of infection</li> <li>• parturition</li> <li>• species of animal and the arrival of emergencies.</li> </ul>
<p>Preparation of <i>surgical packs</i> may require:</p>	<ul style="list-style-type: none"> <li>• procedures that may include: <ul style="list-style-type: none"> <li>• elective surgery</li> <li>• trauma repair</li> <li>• orthopaedic surgery</li> <li>• reconstructive surgery</li> <li>• tumour removal</li> </ul> </li> <li>• preparation may include:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>identifying which packs are required for which procedures, grouping them for each patient and adding extra requirements, such as scalpel blades and suture materials.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>animal bites, kicks, scratches and crush injuries</li> <li>biological hazardous waste and sharps disposal</li> <li>handling of chemicals and medicines</li> <li>gas leakage</li> <li>inhalation of aerosol particles</li> <li>intraocular contamination</li> <li>manual handling, including carrying, lifting and shifting</li> <li>needle pricks and cuts from other sharps</li> <li>release of infective agents (animal and human)</li> <li>slippery or uneven work surfaces</li> <li>zoonoses.</li> </ul>
<i>Staff preparation routines</i> may include:	<ul style="list-style-type: none"> <li>task allocations and timetabling</li> <li>the exposure of junior staff to the range of surgical procedures carried out in the clinic.</li> </ul>
<i>Appropriate dressing</i> may include:	<ul style="list-style-type: none"> <li>surgical gowns, caps, masks, boots and gloves</li> <li>optical aids</li> <li>theatre clothing.</li> </ul>
<i>Instruments, equipment and supplies</i> may include:	<ul style="list-style-type: none"> <li>instruments: <ul style="list-style-type: none"> <li>air-powered and electrical powered equipment</li> <li>bone chucks</li> <li>bone plates and screws</li> <li>clamps</li> <li>forceps</li> <li>needle holders</li> <li>retractors</li> <li>scalpels</li> <li>scissors</li> <li>suture materials</li> </ul> </li> <li>anaesthetic equipment and supplies: <ul style="list-style-type: none"> <li>anaesthetic machine</li> <li>anaesthetic trolleys</li> <li>filters</li> <li>gas cylinders</li> </ul> </li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• incubators</li> <li>• masks</li> <li>• re-breathing bags</li> <li>• scavenging system</li> <li>• soda lime and canisters</li> <li>• tubes</li> <li>• vaporisers</li> <li>• equipment that may be required for: <ul style="list-style-type: none"> <li>• anaesthetic monitoring</li> <li>• cryosurgery</li> <li>• diathermy</li> <li>• suction</li> </ul> </li> <li>• supplies: <ul style="list-style-type: none"> <li>• catheters</li> <li>• drains</li> <li>• laparotomy sponges</li> <li>• needles and sutures</li> <li>• prostheses</li> <li>• swabs</li> <li>• syringes.</li> </ul> </li> </ul>
<i>Theatre debris and disposable equipment</i> may include:	<ul style="list-style-type: none"> <li>• contaminated swabs</li> <li>• excised tissue</li> <li>• needles</li> <li>• sharps</li> <li>• syringes.</li> </ul>
<i>Theatre and preparation supplies</i> may include:	<ul style="list-style-type: none"> <li>• anaesthetic supplies</li> <li>• bone pins and other orthopaedic equipment</li> <li>• consumables and disposables</li> <li>• emergency drugs</li> <li>• intravenous fluids</li> <li>• sterile scrubbing brushes</li> <li>• surgical cloves</li> <li>• suturing material</li> <li>• theatre caps.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET409A Provide specific animal care advice

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of providing advice to clients (owners) about animal care, nutrition, behaviour and products. All advice must be provided in a competent manner and in accordance with clinic policies and procedures.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Provide specific <i>animal health advice</i>	1.1.Evaluation of patient's needs is completed to provide the basis for advice provision. 1.2.Primary care advice is provided to the client as required, noting relevant <i>occupational health and safety (OHS)</i> requirements.
2. Offer <i>animal care product advice</i>	2.1.Background information on the range of <i>animal care products</i> stocked by the clinic is prepared and documented as required. 2.2.Client requirements are established through discussion and evaluation. 2.3.Specific product advice is provided to clients in accordance with established procedures.
3. Advise on <i>animal nutritional</i>	3.1.Relevant data on patient and patient history are

ELEMENT	PERFORMANCE CRITERIA
<i>requirements</i>	<p>collected in accordance with established protocols.</p> <p>3.2. Basic advice is provided to the owner on the nutritional needs of the animal.</p> <p>3.3. Details of advice and actions are provided and recorded in clinic records and patient history.</p>
4. Provide animal behaviour advice	<p>4.1. Types of normal and <i>inappropriate animal behaviour</i> are explained and discussed with the owner.</p> <p>4.2. Basic advice is provided on techniques to modify inappropriate behaviour.</p> <p>4.3. Details of advice and strategies are recorded in the patient's history.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply animal behaviour modification techniques
- interpret the value of home-prepared rations versus commercial formulae
- provide advice on animal feeding for all species and conditions applicable in the clinic
- read and understand animal food labels
- read and understand ration definitions (e.g. 'complete' and 'balanced') and relevant regulations
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the owner, and acknowledging and responding to a range of views
- numeracy skills required to measure rations and doses
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources, prioritise tasks and utilise patient information to provide advice on animal care.

## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- animal husbandry requirements
- awareness of the components of nutrient measurement, including calories, digestibility and biological value
- causes, control and prevention of diseases (e.g. cardiovascular)
- clinical pathology tests associated with disease diagnosis (e.g. glucose curve)
- clinic policy and procedures related to providing advice
- components of animal digestive systems and feeding behaviours, including oral or dental factors, gastrointestinal tract, liver, pancreas, kidneys, hormones, feeding biology and palatability
- differing nutritional requirements of differing species
- disease processes (e.g. diabetes and pancreatitis)
- energy requirements of animals for:
  - clinical nutrition areas
  - disease
  - environmental interactions
  - gestation and lactation
  - life stage (e.g. growth, geriatrics, puppy or kitten feeding)
  - maintenance
  - obesity control
  - surgical rehabilitation
  - working and performance
- elements of animal nutrition, including water, protein, fat, fibre, carbohydrates, minerals, vitamins and energy
- factors influencing animal behaviour
- nutrition process, including home-prepared rations and commercial formulae.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy

<b>EVIDENCE GUIDE</b>	
<b>competency in this unit</b>	<p>all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• determine patient details, needs and requirements from interview and clinic records</li> <li>• communicate effectively with clients and provide advice on animals' health, nutrition and behaviour and on animal care products in accordance with clinic policy and procedures and in a competent manner</li> <li>• maintain accurate patient records.</li> </ul> <p>The skills and knowledge required to provide specific animal care advice must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Animal health advice</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• animal husbandry:             <ul style="list-style-type: none"> <li>• behaviour</li> <li>• common ailments</li> <li>• housing</li> <li>• local law requirements</li> <li>• nutrition</li> <li>• potential health challenges</li> <li>• responsible pet ownership</li> <li>• routine elective surgery</li> </ul> </li> <li>• breeding issues:             <ul style="list-style-type: none"> <li>• artificial insemination</li> <li>• desexing</li> <li>• care of newborn and orphan animals</li> <li>• oestrus cycle</li> <li>• whelping</li> </ul> </li> <li>• control of external and internal parasites</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• disease processes</li> <li>• fees for standard procedures</li> <li>• first aid advice regarding the emergency treatment of animals</li> <li>• optimum health parameters</li> <li>• poisons information</li> <li>• post-operative hygiene, bandage, splint and cast care</li> <li>• potential hazards of the use of restricted agents</li> <li>• pre- and post-operative information</li> <li>• training and socialisation</li> <li>• turnaround times for procedures required</li> <li>• vaccination schedules, including heartworm preventative systems.</li> </ul>
<i>OHS</i> risks when dealing with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste</li> <li>• handling of chemicals and medicines</li> <li>• inhalation of aerosol particles</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven surfaces</li> <li>• zoonoses.</li> </ul>
<i>Animal care product advice</i> may include:	<ul style="list-style-type: none"> <li>• health maintenance and disease preventative programs</li> <li>• internal and external parasite control regimes</li> <li>• non-restricted preparations</li> <li>• selection and use of pet accessories</li> <li>• use of grooming equipment and topical applications</li> <li>• vaccination regimes.</li> </ul>
<i>Animal care products</i> may include:	<ul style="list-style-type: none"> <li>• bedding</li> <li>• enrichment tools and toys</li> <li>• grooming aids</li> <li>• handling tools</li> <li>• housing</li> <li>• restraints.</li> </ul>
<i>Animal nutritional requirements</i> advice may include:	<ul style="list-style-type: none"> <li>• information on: <ul style="list-style-type: none"> <li>• additives</li> <li>• adverse reactions</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• animal maintenance</li> <li>• environmental interaction factors</li> <li>• feeding regimes</li> <li>• feeding levels</li> <li>• ingredient types</li> <li>• lactation and gestation</li> <li>• livestock forage</li> <li>• prescriptive requirements and drug interactions</li> <li>• supplements and commercial foods</li> <li>• surgical rehabilitation</li> <li>• treats</li> <li>• use of home-prepared rations</li> <li>• information on prescribed diets: <ul style="list-style-type: none"> <li>• diets necessary with disease</li> <li>• vegetarian diets</li> <li>• obesity and weight reduction diets</li> <li>• life stage diets (young, active or old)</li> </ul> </li> <li>• clinical nutritional advice: <ul style="list-style-type: none"> <li>• feeding regimes for: <ul style="list-style-type: none"> <li>• anorexia</li> <li>• cardiovascular disease</li> <li>• diabetes mellitus</li> <li>• gastrointestinal tract disorders</li> <li>• hospital feeding</li> <li>• intensive care</li> <li>• malnutrition</li> <li>• neoplasia</li> <li>• obesity</li> <li>• oral health</li> <li>• pancreatitis</li> <li>• senior and puppy diets</li> <li>• urinary system disease</li> <li>• urolithiasis.</li> </ul> </li> </ul> </li> </ul>
<p><b><i>Inappropriate animal behaviour</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• aggression</li> <li>• anxiety</li> <li>• barking</li> <li>• destructive behaviour</li> </ul>

**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• digging holes</li> <li>• feather picking (birds)</li> <li>• phobias</li> <li>• vocalisation</li> <li>• wind sucking.</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Veterinary nursing
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## ACMVET410A Carry out veterinary dental nursing procedures

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the processes of performing a dental prophylaxis and assisting with simple extractions.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice. Dental prophylaxis involves the oral examination in the conscious and anaesthetised patient, sub- and supra-gingival tooth scaling and polishing and the subsequent development of a homecare plan. Veterinary dental nursing procedures are most often carried out on dogs, cats and horses. All procedures are carried out in conjunction with, and as an assistant to, the veterinary surgeon and in accordance with occupational health and safety (OHS) requirements.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Perform oral examination	1.1. Extra and intraoral examination of the conscious patient is performed. 1.2. Patient is restrained and positioned for the subsequent examination and anaesthetic induction. 1.3. Anaesthesia is monitored and the patient is supported. 1.4. Extra and intraoral examination of the patient is

ELEMENT	PERFORMANCE CRITERIA
	<p>conducted under anaesthesia.</p> <p>1.5. <b>Findings</b> identified during examinations are recorded and reported to the surgeon.</p>
2. Complete dental chart	<p>2.1. Patient details and current home dental care are recorded.</p> <p>2.2. Recognised <b>encoded system</b> is used under the direction of the surgeon.</p> <p>2.3. Pre-treatment pathology and graphic treatment plan are recorded as directed by the surgeon.</p> <p>2.4. Post-treatment dentition is recorded as directed by the surgeon.</p>
3. Perform <b>dental prophylaxis</b> under veterinary supervision	<p>3.1. Routines are carried out and theatre equipment is provided to the veterinarian as instructed.</p> <p>3.2. <b>Personal protective equipment</b> is fitted and worn in accordance with clinic policy.</p> <p>3.3. Teeth are <b>cleaned and polished</b> using techniques and <b>equipment</b> in accordance with Australian Veterinary Association (AVA) Dental Policy and Guidelines.</p> <p>3.4. Dental instruments and equipment are cleaned, maintained and stored according to manufacturer's specifications and clinic policies and procedures.</p> <p>3.5. Post-operative patient management programs are completed in accordance with the veterinarian's instructions.</p>
4. Assist in the performance of a simple extraction under veterinary supervision	<p>4.1. Routines are carried out and theatre equipment is provided to the veterinarian as instructed.</p> <p>4.2. Personal protective equipment is fitted and worn in accordance with clinic policy.</p> <p>4.3. Assistance is provided for <b>simple extractions</b> using <b>techniques and equipment</b> in accordance with clinic policy.</p> <p>4.4. Dental instruments and equipment are cleaned and stored in accordance with clinic policies and procedures.</p> <p>4.5. <b>Post-operative patient management programs</b> are completed in accordance with the veterinarian's instructions.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- observe accurately and report concisely on animal condition and health
- provide advice to owners
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- literacy skills to read, select and implement policies and procedures, including OHS, equipment maintenance and presentation, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- oral communication skills language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from the owner, and acknowledging and responding to a range of views
- numeracy skills required to complete charts, calculate dosages and monitor anaesthesia
- problem-solving skills to use available resources and prioritise tasks
- use recognised dental encoded system (e.g. modified triadan number system and symbols)
- work closely with the supervising surgeon and as part of a team.

#### Required knowledge

- anatomy of oral cavity, including teeth, bone, gums and related basic embryology
- AVA Dental Policy and Guidelines
- good knowledge and understanding of homecare advice to reduce dental and gingival disease, including dietary recommendations, appropriate oral-care products and procedures available and the principles and practice of daily brushing
- instruments and equipment required to perform a dental prophylaxis under general anaesthetic
- instruments and equipment required for simple teeth extractions
- maintenance of serviceability of instruments and equipment where required in sharp and/or lubricated condition
- OHS and animal welfare legislative requirements and codes of practice
- personal protective equipment required
- techniques for performing dental prophylaxis and assisting with simple extractions
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials, packing and autoclave surgical and dental equipment.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• implement clinic policies and procedures, including OHS</li> <li>• handle and restrain a range of patients (animals)</li> <li>• communicate effectively with the veterinarian and clients</li> <li>• observe, record and report on animals' condition and health</li> <li>• perform extra and intraoral examinations on conscious and anaesthetised patients</li> <li>• carry out techniques for dental prophylaxis, i.e. examining, charting, scaling (cleaning and polishing) and assisting with simple extractions</li> <li>• complete post-operative patient management programs in accordance with veterinarian's instructions.</li> </ul> <p>The skills and knowledge required to carry out veterinary dental nursing procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice with access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than two occasions over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment</p>



<b>EVIDENCE GUIDE</b>	
	<p>activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>OHS</i></b> risks associated with veterinary nursing practice include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks or scratches</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling and shift loading</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<i>Findings</i> that may be observed during examinations may include:	<ul style="list-style-type: none"> <li>• acquired</li> <li>• developmental</li> <li>• inflammatory</li> <li>• metabolic</li> <li>• nutritional</li> <li>• tumours.</li> </ul>
<i>Encoded system</i> is used to:	<ul style="list-style-type: none"> <li>• record the presence and condition of individual teeth and the condition of the gums and oral cavity (e.g. modified triadan number system and symbols).</li> </ul>
<i>Dental prophylaxis</i> involves:	<ul style="list-style-type: none"> <li>• the oral examination in the conscious and anaesthetised patient</li> <li>• sub- and supra-gingival tooth scaling and polishing</li> <li>• development of a home care plan.</li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• eyewear</li> <li>• gloves</li> <li>• gowns</li> <li>• masks.</li> </ul>
<i>Cleaning and polishing</i> involves:	<ul style="list-style-type: none"> <li>• removing calculus</li> <li>• supra-gingival and sub-gingival scaling</li> <li>• teeth polishing.</li> </ul>
<i>Equipment</i> used for cleaning and polishing may include:	<ul style="list-style-type: none"> <li>• dental machine (veterinary nurse may or may not use all components, but must be able to set up for veterinary use) which usually includes: <ul style="list-style-type: none"> <li>• air compressor</li> <li>• air flush</li> <li>• ultrasonic scaler</li> <li>• water flush</li> </ul> </li> <li>• hand-held instruments: <ul style="list-style-type: none"> <li>• scalers, curettes and dental forceps</li> <li>• ultrasonic scaler</li> <li>• rubber polishing cups and polish</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• paste and toothbrush.</li> </ul>
<i>Simple extraction</i> refers to:	<ul style="list-style-type: none"> <li>• non-surgical removal of broken or diseased single rooted teeth.</li> </ul>
<i>Techniques and equipment</i> used for simple extractions include:	<ul style="list-style-type: none"> <li>• manual extraction using dental elevator and dental extraction forceps.</li> </ul>
<i>Post-operative patient management programs</i> may include:	<ul style="list-style-type: none"> <li>• discharge instructions</li> <li>• oral hygiene advice</li> <li>• short and long-term home care programs for preventative dental health and medications.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	

## ACMVET411A Prepare, deliver and review animal care education programs

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of actively participating in the preparation and review of animal care education programs and their implementation within the community at large.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Communicate with local community groups	<p>1.1.Suitable target groups and group leaders are identified and their interest in educational programs established.</p> <p>1.2.Meetings with principal <b><i>community groups</i></b> are organised and conducted.</p> <p>1.3.Reciprocal benefits and objectives are determined and recorded.</p> <p>1.4.Action plans are developed and meetings are scheduled.</p>
2. Prepare animal care education material	<p>2.1.Information on existing community <b><i>animal care education programs</i></b> is obtained and relevancy is assessed in consultation with the target group.</p> <p>2.2.Communication methods and materials for delivery, including relevant <b><i>occupational health and safety</i></b></p>

ELEMENT	PERFORMANCE CRITERIA
	<p>(OHS) requirements, are designed.</p> <p>2.3. Associated industry groups are contacted and the provision of resources is discussed.</p> <p>2.4. Materials for program delivery are prepared in consultation with the relevant parties.</p>
3. Deliver and review animal care education programs	<p>3.1. Animal care <i>education programs</i> are provided to community groups in accordance with developed schedules.</p> <p>3.2. Animal care outcomes achieved through the delivery of relevant education programs are reviewed and delivery policies are adjusted as required.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- critically evaluate and report on animal care education programs
- relate to and communicate with the full range of community partners
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- written skills to prepare animal care education programs
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from community members, and acknowledging and responding to a range of views
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and present animal care information in a format appropriate to an audience.

#### Required knowledge

- animal care needs
- animal nutrition and health

**REQUIRED SKILLS AND KNOWLEDGE**

- existing animal education programs
- instructional design principles
- local demographics
- teaching strategies.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- establish community needs and interest in educational programs
- develop an action plan and meeting schedule
- gather information and develop materials for the program
- develop, deliver and evaluate relevant programs within the local community
- communicate effectively with clients and employers.

The skills and knowledge required to prepare, deliver and review animal care education programs must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

**Context of and specific resources for assessment**

Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.

There must be access in either situation to the

<b>EVIDENCE GUIDE</b>	
	appropriate equipment and/or resources to enable one to demonstrate competence.
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation eg. education program materials</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work



<b>RANGE STATEMENT</b>	
situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Community groups</i> may include:	<ul style="list-style-type: none"> <li>• facilities for the elderly</li> <li>• dog obedience groups or clubs</li> <li>• dog and cat breed support groups</li> <li>• local government authorities</li> <li>• production animal support groups</li> <li>• schools.</li> </ul>
Existing <i>animal care education programs</i> may include:	<ul style="list-style-type: none"> <li>• Cats in Schools</li> <li>• Dogs 'n' Kids</li> <li>• Pets and People Education Program (PetPEP)</li> <li>• Safe Pets Out There (SPOT).</li> </ul>
<i>OHS</i> risks associated with dealing with animals include:	<ul style="list-style-type: none"> <li>• animal bites, kicks or scratches</li> <li>• manual handling and shift loading</li> <li>• release of infective agents (animal and human)</li> <li>• zoonoses.</li> </ul>
<i>Education programs</i> may include:	<ul style="list-style-type: none"> <li>• activity sheets</li> <li>• brochures</li> <li>• endorsed pet care products</li> <li>• overhead slides</li> <li>• videos</li> <li>• written notes.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET412A Coordinate clinic promotional activities

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of managing the promotion of the clinic within the community through contact with individuals and mass media activities.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Establish, market and implement promotional strategies	<p>1.1. <b>Research</b> is conducted to identify the target market.</p> <p>1.2. <b>Communication strategies</b> to promote clinic services to clients are established in consultation with other clinic personnel and in line with the clinic's business plan.</p> <p>1.3. <b>Promotional material</b> is prepared in consultation with other clinic personnel and in accordance with clinic and occupational health and safety (OHS) policies.</p> <p>1.4. Budgets are prepared and negotiations are completed with <b>external agents and services</b>.</p> <p>1.5. Relevant clinic personnel are <b>trained</b> and utilised to fulfil promotional goals.</p> <p>1.6. Promotional materials are prepared as identified and</p>

ELEMENT	PERFORMANCE CRITERIA
	their impact monitored.
2. Promote clinic	2.1.Clinic public access times are determined in consultation with other clinic personnel and clinic policy. 2.2.Advertising routines are performed in accordance with clinic policy and budgets. 2.3.Clinic involvement with the community and <i>associated groups</i> and the level of involvement are determined in consultation with the relevant parties. 2.4.Clinic personnel are notified of their respective roles and details are recorded. 2.5.Measured outcomes are <i>monitored and evaluated</i> . 2.6.Policy adjustments are made as a result of measured outcomes.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply effective marketing skills to promotional activities
- communicate effectively with the full range of community groups
- establish effective teamwork processes within the clinic
- research and analyse data for promotional purposes
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- writing skills to prepare and review promotional materials, write reports and plan projects
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from community members, and acknowledging and responding to a range of views
- problem-solving skills to use available resources and present promotional material in a cost-effective and interesting manner.

## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- active community groups associated with animal care
- animal health industry participants
- animal population in the local community
- clinic policies and procedures
- local animal health issues
- local demographics
- marketing practices
- relevant legislative and industry codes of practice and policies
- suitable promotional strategies for veterinary clinics
- the clinic network.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- identify the target market
- establish communication strategies and prepare promotional materials
- use and regularly evaluate promotional and marketing materials to maximise community awareness of the clinic
- work as a member of the clinic team to achieve outcomes
- plan clinic resources
- communicate effectively with clients and employers.

The skills and knowledge required to coordinate clinic

<b>EVIDENCE GUIDE</b>	
	<p>promotional activities must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access in either situation to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation (e.g. promotional materials)</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Research</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• communication with past, present and potential clients and other clinics</li> <li>• community groups</li> <li>• computer analysis</li> <li>• current market research publications:             <ul style="list-style-type: none"> <li>• Australian Bureau of Statistics (ABS)</li> <li>• books and magazines</li> <li>• industry reports</li> </ul> </li> <li>• demographic analysis</li> <li>• focus groups</li> <li>• surveys.</li> </ul>
<p><b><i>Communication strategies</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• individual or a combination of:             <ul style="list-style-type: none"> <li>• audio</li> <li>• electronic</li> <li>• verbal</li> <li>• visual</li> <li>• written.</li> </ul> </li> </ul>
<p><b><i>Promotional materials</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• audio telephone tapes</li> <li>• brochures</li> <li>• business cards</li> <li>• client handouts</li> <li>• client seminars</li> <li>• evening or individual client tours</li> <li>• newsletters</li> <li>• open days</li> <li>• refrigerator magnets</li> <li>• web pages.</li> </ul>
<p><b><i>External agents and services</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• graphic artists</li> <li>• pharmaceutical companies</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• printers</li> <li>• marketing consultants and advisers</li> <li>• veterinary product suppliers.</li> </ul>
<i>Training</i> of staff may include:	<ul style="list-style-type: none"> <li>• commercial training</li> <li>• group clinic training</li> <li>• individual training.</li> </ul>
<i>Associated groups</i> may include:	<ul style="list-style-type: none"> <li>• agricultural societies</li> <li>• animal breed groups</li> <li>• community groups</li> <li>• dog obedience clubs</li> <li>• local businesses</li> <li>• pharmaceutical distributors</li> <li>• product distributors</li> <li>• racing clubs</li> <li>• veterinary distributors.</li> </ul>
<i>Monitoring and evaluation</i> may include:	<ul style="list-style-type: none"> <li>• Australian Veterinary Association (AVA) and the Veterinary Nurses Council of Australia policies and codes of practice</li> <li>• budget comparison per activity or promotion</li> <li>• client response methods (e.g. surveys and direct feedback)</li> <li>• data retrieval</li> <li>• product turnover and annual budget turnover</li> <li>• staff feedback.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET413A Develop and implement specific clinic policies

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of developing and implementing specific clinic policies and communicating them to clinic personnel to ensure the sound management of the business.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. <b><i>Prepare, develop</i></b> and implement clinic policies	1.1. Legislative and other reference materials are collated from all sources, including external advisers. 1.2. Directions, concerns and recommendations of clinic personnel are collected and recorded. 1.3. Policy material is prepared and written to suit clinic needs. 1.4. Draft <b><i>policies</i></b> are circulated for comment by staff and for management approval. 1.5. Systems and structures for policy implementation in the clinic are organised in consultation with staff members and/or specialist advisers.
2. <b><i>Communicate</i></b> clinic policies to all	2.1. Developed clinic policies are distributed to all staff as required.

ELEMENT	PERFORMANCE CRITERIA
personnel	<p>2.2. Training programs in the use of, and adherence to, clinic policies are initiated and facilitated with all clinic staff.</p> <p>2.3. Regular reviews are conducted to monitor staff adherence to clinic policies and measure training outcomes.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- participate in group training or marketing activities
- prepare high quality reports and documents
- provide effective management input to the clinic
- literacy skills to interpret information, and policies and procedures; select and apply the procedures to perform a range of tasks; and implement sequenced written instructions
- writing skills to prepare and review clinic policies
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from staff, and acknowledging and responding to a range of views
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to communicate clinic policies and procedures to staff in an effective manner.

#### Required knowledge

- communication methods
- human resource management related to policy development and staff training
- policy development and review
- relevant legislation, regulations and codes of practice
- security requirements and systems
- the clinic network.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare and develop clinic policies in consultation with veterinary staff</li> <li>• establish and document security issues</li> <li>• implement policies within the clinic</li> <li>• identify and utilise communication processes in optimising clinic performance</li> <li>• train, monitor and review staff use of, and adherence to, clinic policies.</li> </ul> <p>The skills and knowledge required to develop and implement specific clinic policies must be transferable to a range of work environments and contexts.</p>
<b>Context of and specific resources for assessment</b>	<p>Assessment for this unit is to be practical in nature and will be most appropriately assessed in a veterinary practice or in a situation that reproduces normal work conditions.</p> <p>There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances, patients, cases and responsibilities and over a number of assessment activities.</p> <p>The assessment strategy must include practical skills</p>

<b>EVIDENCE GUIDE</b>	
	<p>assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• third-party evidence</li> <li>• workplace documentation e.g. policy materials</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Considerations when <b><i>preparing and developing</i></b> clinic policies may include:</p>	<ul style="list-style-type: none"> <li>• Australian Veterinary Association (AVA) and the Veterinary Nurses Council of Australia policies, guidelines and codes of practice</li> <li>• organisational occupational health and safety (OHS) risk management programs</li> <li>• relevant OHS hazard identification, risk assessment and control measures</li> <li>• the handling and disposal of biological wastes</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>the handling, use, storage, transport and disposal of chemicals.</li> </ul>
<p><i>Policies</i> that may be relevant include:</p>	<ul style="list-style-type: none"> <li>professional services</li> <li>business and marketing plans</li> <li>human resource management: <ul style="list-style-type: none"> <li>professional development</li> <li>recruitment, selection and induction procedures</li> <li>staff performance management (e.g. appraisals)</li> </ul> </li> <li>nursing care</li> <li>office procedures</li> <li>OHS</li> <li>professional development</li> <li>security: <ul style="list-style-type: none"> <li>client and patient</li> <li>personnel</li> <li>premises.</li> </ul> </li> </ul>
<p>Clinic policies may be <i>communicated</i> through:</p>	<ul style="list-style-type: none"> <li>meetings</li> <li>training sessions</li> <li>hard and soft copies of policies made available and/or displayed in clinic.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET501A Manage nursing requirements for specialised surgical procedures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of conducting admissions for specialised surgical procedures, preparing the theatre environment, performing specific pre-operative procedures, monitoring anaesthesia, providing intra-operative support to surgeons and managing equipment cleaning and maintenance.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is specifically designed for nurses who work in a veterinary clinic or hospital where registered specialists perform specialised surgical procedures. Managing nursing requirements for specialised surgical procedures requires access to a veterinary clinic or hospital where specialised surgical procedures are performed; veterinary surgeons that perform specialised surgical procedures; patients and clients requiring specialised surgical procedures; and the equipment, instruments and resources required to perform specialised surgical procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to</p>
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	exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Conduct admission process for <i>specialised surgical procedures</i>	1.1.Appointment is made and <i>pre-operative instructions</i> and <i>hospital routines information</i> are provided to the client (owner). 1.2. <i>Patient histories and client details</i> are compiled in

ELEMENT	PERFORMANCE CRITERIA
	<p>accordance with surgeon's requirements.</p> <p>1.3. Referrals and associated documentation are coordinated as required.</p> <p>1.4. <b>Patient samples</b> are obtained in accordance with <b>occupational health and safety (OHS)</b> requirements and are submitted for analytical tests as required.</p> <p>1.5. Pathological and diagnostic aid results are assimilated with patient's history.</p>
2. Prepare the theatre environment	<p>2.1. Theatre is prepared in accordance with OHS requirements to achieve aseptic conditions prior to and during surgery.</p> <p>2.2. <b>Specialised materials and equipment</b> are accessed, checked and prepared for use.</p> <p>2.3. <b>Personal preparation</b> and gloving and gowning of theatre attire by other personnel are supervised as required.</p>
3. Perform specific pre-operative procedures	<p>3.1. <b>Pre-surgical evaluation</b> is performed and observations are reported.</p> <p>3.2. Patient is <b>stabilised</b> and an individual fluid therapy plan is designed in consultation with the surgeon.</p> <p>3.3. Patient is <b>prepared</b> for surgery and positioned on the operating table in accordance with the requirements of the procedure and surgeon.</p>
4. Monitor anaesthesia	<p>4.1. <b>Specific anaesthetic procedures</b> are applied under the supervision of the surgeon.</p> <p>4.2. <b>Specific artificial respiration systems</b> are applied under the supervision of the surgeon.</p> <p>4.3. Specific intra-operative medication is applied as instructed by the surgeon.</p>
5. Provide <b>intra-operative support</b> to surgeon	<p>5.1. Support is provided for the surgeon's personal preparation for theatre if directed.</p> <p>5.2. Progress of surgery and <b>surgeon's requirements</b> are anticipated and requirements are met in a timely manner.</p> <p>5.3. Instruments, materials and equipment are handed to the surgeon in accordance with defined clinic policies.</p> <p>5.4. <b>Specific surgical operating support</b> is provided as required.</p> <p>5.5. <b>Specialised bandages</b> or splints are applied and medication is administered as instructed by the</p>

ELEMENT	PERFORMANCE CRITERIA
	surgeon.
6. Manage equipment <i>cleaning and maintenance</i>	<p>6.1. Theatre equipment, drapery and specialised surgical equipment are cleaned and maintained in accordance with clinic policies and OHS requirements.</p> <p>6.2. Instruments and specialised surgical equipment are packed and stored in an appropriate environment and atmosphere.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply and monitor anaesthesia, fluid therapy and radiographic and imaging routines relating to specialised surgical routines
- complete relevant work-related documentation
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- identify appropriate specialised surgical equipment and instruments
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe accurately and report animal condition and vital signs
- recognise, respond to and assist with emergencies
- undertake routine equipment maintenance schedules in accordance with manufacturers' requirements
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills to monitor surgical equipment and patients' vital signs and to measure dosages
- problem-solving skills to use available resources, prioritise tasks and anticipate surgeons' requirements

## REQUIRED SKILLS AND KNOWLEDGE

- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- working as part of and coordinating a team
- working with others to achieve optimum aseptic conditions.

### Required knowledge

- anaesthetic routines and anaesthetics, including gaseous and injectables
- animal anatomy and physiology related to specialised surgical procedures
- AS/NZ 4187:2003 Cleaning, disinfecting and sterilising re-useable medical and surgical instruments and equipment and maintenance of associated environments in health care facilities
- equipment and instrument requirements for surgery and their use
- fluid therapy and radiographic and imaging routines relating to specialised surgical routines
- interpretation of results and surgical approaches
- intra-operative drugs
- non-routine surgical procedures
- pain management techniques
- principles of animal welfare and ethics
- recognition of emergencies
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practices
- specialised surgical procedures, including thoracotomy, enterotomy, gastrotomy, cystotomy, spinal surgery, orthopaedic surgery and ophthalmic surgery
- theatre routines
- use and recording of chemicals and medicines in the clinic according to relevant legislative requirements
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• admit animals for specialised surgical procedures completing all appropriate documentation</li> <li>• prepare animals and theatres for specific surgical procedures</li> <li>• organise self and clinic personnel in preparing necessary equipment and material for specialised routines</li> <li>• identify and safely use appropriate equipment, instruments and materials for specialised surgical procedures</li> <li>• monitor anaesthesia throughout surgery and provide specific support to surgeons as required</li> <li>• observe and report accurately on animals' condition and vital signs</li> <li>• recognise, respond to and assist with emergencies</li> <li>• manage theatre requirements and the cleaning and maintenance requirements of specialised surgical equipment.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be assessed in a clinic or hospital where registered specialists are performing specialised surgical procedures.</p> <p>There must be access to the appropriate surgical equipment and/or resources relevant to the specialised surgical procedures taking place in the clinic to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated by managing nursing requirements and carrying out post-operative nursing routines for an extensive range of specialised surgical procedures on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills</p>

<b>EVIDENCE GUIDE</b>	
	<p>assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Specialised surgical procedures</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• cystotomy</li> <li>• enterotomy</li> <li>• gastrotomy</li> <li>• orthopaedic surgery</li> <li>• ophthalmic surgery</li> <li>• spinal surgery</li> <li>• thoracotomy.</li> </ul>



<b>RANGE STATEMENT</b>	
<i>Pre-operative instructions</i> may be given in regard to:	<ul style="list-style-type: none"> <li>• control of exercise</li> <li>• fasting</li> <li>• medication</li> <li>• restricted fluid intake.</li> </ul>
<i>Hospital routines information</i> may include:	<ul style="list-style-type: none"> <li>• patient progress</li> <li>• patient visiting arrangements</li> <li>• referral to specialised advice.</li> </ul>
<i>Patient histories and client details</i> may include:	<ul style="list-style-type: none"> <li>• patient histories may be maintained manually or electronically</li> <li>• patient histories: <ul style="list-style-type: none"> <li>• referral and associated documentation</li> <li>• pathological and diagnostic results</li> </ul> </li> <li>• client details: <ul style="list-style-type: none"> <li>• owner's name and address</li> <li>• emergency contact</li> <li>• payment details.</li> </ul> </li> </ul>
<i>Patient samples</i> may include:	<ul style="list-style-type: none"> <li>• blood obtained by venipuncture</li> <li>• faeces collected by direct rectal examination and free catch</li> <li>• hair pluckings</li> <li>• other exudates</li> <li>• skin scrapings</li> <li>• tape preparations</li> <li>• urine collected by free catch</li> <li>• urinary catheterisation under veterinary supervision.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Specialised materials and</i>	<ul style="list-style-type: none"> <li>• anaesthetic equipment</li> </ul>

<b>RANGE STATEMENT</b>	
<i>equipment</i> may include:	<ul style="list-style-type: none"> <li>• blood pressure monitoring equipment</li> <li>• capnographs</li> <li>• catheters</li> <li>• drains</li> <li>• electrocardiogram (ECG)</li> <li>• electrosurgical units</li> <li>• endoscopes</li> <li>• fibroscopes</li> <li>• heated operating tables</li> <li>• laryngoscopes</li> <li>• laparoscopes</li> <li>• oesophageal stethoscopes</li> <li>• orthopaedic equipment: <ul style="list-style-type: none"> <li>• drills and saws</li> </ul> </li> <li>• ophthalmic equipment</li> <li>• pulse oximeters</li> <li>• scavenger</li> <li>• suction pumps</li> <li>• ventilators.</li> </ul>
<i>Personal preparation</i> and preparation of other personnel for the theatre environment will include:	<ul style="list-style-type: none"> <li>• anti-static footwear or shoe covers</li> <li>• demonstrating open and closed gloving techniques</li> <li>• donning specialised theatre scrub suits</li> <li>• gowning using cloth or disposable gowns</li> <li>• scrubbing up aseptically</li> <li>• surgical caps and masks.</li> </ul>
<i>Pre-surgical evaluation</i> may include:	<ul style="list-style-type: none"> <li>• assessment of temperament</li> <li>• capillary refill time</li> <li>• evaluation of pain prior to sedation and anaesthetic choice under supervision of a surgeon</li> <li>• fluid therapy plan under supervision of a surgeon</li> <li>• heart rate</li> <li>• mucous membrane colour</li> <li>• pulse rate and quality</li> <li>• rectal temperature</li> <li>• respiratory rate and effort.</li> </ul>
Actions when <i>stabilising</i> patients may include:	<ul style="list-style-type: none"> <li>• administration of fluid therapy</li> <li>• application of restraints</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• calming actions and words</li> <li>• clearing the airway as required</li> <li>• connection to artificial respiration</li> <li>• intubation</li> <li>• monitoring vital signs</li> <li>• preoperative medications and premedications</li> <li>• placement of an intravenous catheter</li> <li>• provision of supportive padding.</li> </ul>
<i>Preparing</i> patients for specialised surgical procedures may include:	<ul style="list-style-type: none"> <li>• administration of an enema</li> <li>• applying splints</li> <li>• clipping</li> <li>• fitting of surgical drapes</li> <li>• limb support</li> <li>• scrubbing of surgical area using an aseptic technique</li> <li>• taping</li> <li>• vacuuming.</li> </ul>
<i>Specific anaesthetic procedures</i> may include:	<ul style="list-style-type: none"> <li>• administration of anaesthetic agents and patient monitoring</li> <li>• intra-operative drugs</li> <li>• intravenous or intraosseous fluid therapy</li> <li>• maintaining arterial catheters</li> <li>• maintaining peripheral or central intravenous catheters</li> <li>• pain management.</li> </ul>
<i>Specific artificial respiration systems</i> may include:	<ul style="list-style-type: none"> <li>• constant monitoring of vital signs</li> <li>• monitoring and recording of anaesthesia levels</li> <li>• administration of oxygen into recovery and may include mechanical or manual artificial ventilation, such as intermittent positive pressure ventilation.</li> </ul>
<i>Intra-operative support</i> to surgeon may include:	<ul style="list-style-type: none"> <li>• anaesthesia support</li> <li>• maintenance of an aseptic surgical environment.</li> </ul>
Anticipating <i>surgeon's requirement</i> may include:	<ul style="list-style-type: none"> <li>• animal restraint</li> <li>• cleaning up</li> <li>• haemostasis</li> <li>• notifying changes in vital signs or level of anaesthesia</li> <li>• providing instruments and tray maintenance</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• selecting and providing suture material</li> <li>• wet and dry swabbing.</li> </ul>
<i>Specific surgical operating support</i> may include:	<ul style="list-style-type: none"> <li>• instrument holding, passage, cleansing and assembly</li> <li>• instrument tray maintenance</li> <li>• limb positioning, as appropriate</li> <li>• organ packing</li> <li>• positioning of suction apparatus</li> <li>• retraction, as appropriate</li> <li>• suture selection and cutting</li> <li>• swab counting.</li> </ul>
<i>Specialised bandages</i> may include:	<ul style="list-style-type: none"> <li>• abdominal bandages</li> <li>• Ehmer slings</li> <li>• foot bandages</li> <li>• head or ear bandages</li> <li>• Robert Jones</li> <li>• thoracic bandages.</li> </ul>
<i>Maintenance</i> may include:	<ul style="list-style-type: none"> <li>• specialised equipment: <ul style="list-style-type: none"> <li>• calibration checks</li> <li>• checks of scavenger</li> <li>• checks of heating and cooling systems</li> <li>• disassembly and reassembly</li> <li>• light globe tests</li> <li>• lubrication</li> <li>• parts sharpening</li> <li>• performance testing</li> </ul> </li> <li>• general maintenance: <ul style="list-style-type: none"> <li>• identification of damaged and ineffective equipment or parts that are replaced or set aside for repair</li> <li>• lubrication of hydraulic lifts, tracks and wheels to ensure smooth operation and optimum performance.</li> </ul> </li> </ul>
<i>Cleaning</i> may require:	<ul style="list-style-type: none"> <li>• appropriate antibacterial or virucide agents</li> <li>• specific cleaning tools</li> <li>• use of chemical agents.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET502A Carry out post-operative nursing routines

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of maintaining patient (animal) fluid therapy and nutritional requirements, monitoring wounds or surgical sites post-operatively, monitoring patients including recumbent patients post-operatively, and discharging patients that have undergone specialised surgical procedures into the care of clients (owners).</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is specifically designed for nurses who work in a veterinary clinic or hospital where registered specialists perform specialised surgical procedures. Carrying out post-operative nursing routines requires access to a veterinary clinic or hospital where specialised surgical procedures are performed; veterinary surgeons that perform specialised surgical procedures; patients and clients requiring specialised surgical procedures; and the equipment, instruments and resources required to perform specialised surgical procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to</p>
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	exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain patient fluid requirements	<p>1.1. <b><i>Intravenous catheters</i></b> are placed and <b><i>maintained</i></b> in accordance with clinic policies.</p> <p>1.2. Patient <b><i>fluid output</i></b> is monitored in accordance with <b><i>occupational health and safety (OHS)</i></b> and clinic</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>policies and procedures.</p> <p>1.3. <b><i>Intravenous fluid therapy is maintained</i></b> in accordance with clinic policies.</p>
2. Maintain patient nutritional requirements	<p>2.1. <b><i>Specific nutritional requirements</i></b> are met according to individual patient needs.</p> <p>2.2. <b><i>Energy requirements</i></b> are calculated according to individual patient needs.</p> <p>2.3. <b><i>Assisted feeding</i></b> procedures are carried out in accordance with clinic policies.</p>
3. Monitor wound or surgical site post-operatively	<p>3.1. Dressings and bandages are managed post-operatively in accordance with clinic policies.</p> <p>3.2. <b><i>Indwelling surgical drains</i></b> are managed in accordance with clinic policies.</p> <p>3.3. Open wounds are managed post-operatively in accordance with clinic policies.</p>
4. Monitor recumbent patients post-operatively	<p>4.1. <b><i>Housing and bedding</i></b> are selected in accordance with specific patient needs.</p> <p>4.2. Specific nursing techniques are used to prevent and treat <b><i>complications associated with recumbent patients</i></b>.</p> <p>4.3. Positioning aids and techniques are used in accordance with surgical procedure, disease process and individual patient needs.</p>
5. Monitor patients post-operatively	<p>5.1. <b><i>Vital signs and observations</i></b> are recorded and abnormalities are reported to the surgeon.</p> <p>5.2. Patient care plans are prepared and implemented in consultation with the surgeon.</p> <p>5.3. Recognised <b><i>physical therapy techniques</i></b> are applied according to patient needs.</p>
6. Discharge patients into the care of clients	<p>6.1. Specific <b><i>home-nursing requirements</i></b> are communicated to clients in accordance with surgeons' instructions.</p> <p>6.2. Instructions on patients' physiotherapy and exercise are communicated to clients as required in accordance with veterinarians' instructions.</p> <p>6.3. Follow up appointments are organised as required.</p>



## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- calculate patient nutritional requirements
- complete relevant work-related documentation
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- observe accurately and report animal condition and vital signs
- recognise, respond to and assist with emergencies
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills to monitor patients' vital signs and surgical equipment
- problem-solving skills to use available resources, prioritise tasks and anticipate surgeon and patient requirements
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

#### Required knowledge

- anaesthesia, fluid therapy and radiographic and imaging routines relating to specialised surgical routines
- animal anatomy and physiology related to post-operative nursing routines
- fluid therapy
- nutritional requirements after specialised surgical procedures
- pain management techniques
- principles of animal welfare and ethics
- recognition of emergencies
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances

**REQUIRED SKILLS AND KNOWLEDGE**

- safe work practices
- specialised surgical procedures, including thoracotomy, enterotomy, gastrotomy, cystotomy, spinal surgery, orthopaedic surgery and ophthalmic surgery
- therapy strategies for recovering patients
- use and recording of chemicals and medicines in the clinic according to relevant legislative requirements
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- apply an advanced working knowledge of animal anatomy and physiology whilst managing wounds or surgical sites post-surgery
- communicate effectively with the surgeon on all aspects of patient care
- provide clear and concise directions to clinic personnel
- maintain patient fluid and nutritional requirements post-surgery in accordance with patient care plans
- nurse animals with care and empathy and in accordance with individual patient requirements
- implement a physical therapy program for recovering patients
- observe and report on animals' condition and vital signs in an accurate manner
- record and complete patient records accurately
- recognise, respond to and assist with emergencies
- communicate with clients on patients' progress and

<b>EVIDENCE GUIDE</b>	
	home-nursing requirements.
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be assessed in a clinic or hospital where registered specialists are performing specialised surgical procedures.</p> <p>There must be access to the appropriate equipment and/or resources relevant to the specialised surgical procedure taking place in the clinic and the postoperative nursing requirements to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated by carrying out postoperative nursing routines for an extensive range of patients recovering from specialised surgical procedures on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Specialised surgical procedures</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• cystotomy</li> <li>• enterotomy</li> <li>• gastrotomy</li> <li>• orthopaedic surgery</li> <li>• ophthalmic surgery</li> <li>• spinal surgery</li> <li>• thoracotomy.</li> </ul>
<p><b><i>Maintenance of intravenous catheter</i></b> sites may include:</p>	<ul style="list-style-type: none"> <li>• changing dressings</li> <li>• flushing wounds with heparinised saline</li> <li>• maintaining catheter asepsis</li> <li>• monitoring the insertion site of a peripheral or central catheter for signs of:             <ul style="list-style-type: none"> <li>• cellulitis</li> <li>• discharge</li> <li>• phlebitis</li> <li>• thrombosis.</li> </ul> </li> </ul>
<p>Patient <b><i>fluid output</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• faeces</li> <li>• fluid from thoracic, abdominal or wound drainage</li> <li>• saliva</li> <li>• urine</li> <li>• vomitus.</li> </ul>
<p><b><i>OHS</i></b> risks when working with animals may include:</p>	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
Equipment to <i>maintain intravenous fluid therapy</i> may include:	<ul style="list-style-type: none"> <li>• drip rate flow regulators</li> <li>• fluid administration sets and extension tubing</li> <li>• fluid pumps</li> <li>• syringe drivers.</li> </ul>
<i>Specific nutritional requirements</i> may include:	<ul style="list-style-type: none"> <li>• diets for: <ul style="list-style-type: none"> <li>• growth</li> <li>• hepatic, renal, pancreatic or cardiac disease</li> <li>• intestinal or urinary tract disorders</li> <li>• weight loss</li> <li>• optimum healing.</li> </ul> </li> </ul>
Calculating <i>energy requirements</i> may include:	<ul style="list-style-type: none"> <li>• multiplying the basal energy requirement by the illness factor taking into account the calorific content of the food.</li> </ul>
<i>Assisted feeding</i> may include:	<ul style="list-style-type: none"> <li>• hand feeding</li> <li>• preparation of suitable diets</li> <li>• tube feeding.</li> </ul>
<i>Indwelling surgical drain</i> may include:	<ul style="list-style-type: none"> <li>• abdominal</li> <li>• intrathoracic</li> <li>• wound.</li> </ul>
<i>Housing and bedding</i> may include:	<ul style="list-style-type: none"> <li>• housing: <ul style="list-style-type: none"> <li>• cots</li> <li>• heated kennels</li> <li>• incubators</li> <li>• kennels</li> <li>• runs</li> </ul> </li> <li>• bedding: <ul style="list-style-type: none"> <li>• blankets</li> <li>• dry bedding</li> <li>• heated waterbeds</li> <li>• padded beds</li> <li>• towels.</li> </ul> </li> </ul>
<i>Complications associated with recumbent patients</i> may include:	<ul style="list-style-type: none"> <li>• decubitus ulcers</li> <li>• depression</li> <li>• hypostatic pneumonia</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• urine and faecal scalding.</li> </ul>
<i>Vital signs and observations</i> may include:	<ul style="list-style-type: none"> <li>• assessment of temperament</li> <li>• capillary refill time</li> <li>• evaluation of pain</li> <li>• fluid and food intake</li> <li>• heart rate</li> <li>• mucous membrane colour</li> <li>• pulse rate and quality</li> <li>• rectal temperature</li> <li>• respiratory rate and effort</li> <li>• urine, faecal and fluid output.</li> </ul>
<i>Physical therapy techniques</i> may include:	<ul style="list-style-type: none"> <li>• active assisted exercise: <ul style="list-style-type: none"> <li>• assisted standing</li> <li>• assisted walking</li> <li>• hydrotherapy</li> </ul> </li> <li>• massage: <ul style="list-style-type: none"> <li>• effleurage (stroking)</li> <li>• petrissage (squeezing)</li> <li>• friction (circular movements)</li> <li>• the application of warm and cold compresses to the affected area</li> </ul> </li> <li>• passive exercise therapy: <ul style="list-style-type: none"> <li>• manipulation and movement of joints and limbs by the nurse through a range of motions.</li> </ul> </li> </ul>
<i>Home-nursing advice</i> may include:	<ul style="list-style-type: none"> <li>• specialised surgical operations may have life-threatening consequences even during the home recovery period</li> <li>• client advice on discharge: <ul style="list-style-type: none"> <li>• specific home-nursing requirements detailed by the surgeon</li> <li>• administration of prescribed medications</li> <li>• bladder and bowel movements</li> <li>• management of surgical wounds and drains</li> <li>• cast management</li> <li>• diet and/or exercise and physiotherapy.</li> </ul> </li> <li>• advice and contact numbers for potential emergency situations and follow-up appointments.</li> </ul>

### Unit Sector(s)

Unit sector	Veterinary nursing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## ACMVET503A Produce veterinary dental oral cavity radiographs

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing and monitoring patients during radiographic procedures, preparing radiographic equipment, developing radiographs, and recording and storing radiographic results for advanced veterinary dental surgery cases.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is specifically designed for nurses who work in a veterinary clinic or hospital, or a specialist or referral veterinary dental clinic/hospital where registered veterinary dental specialists perform advanced veterinary dentistry procedures. Producing veterinary dental oral cavity radiographs requires access to a veterinary clinic/hospital that performs advanced veterinary dentistry, or a specialist or referral veterinary dental clinic/hospital; veterinarians who perform advanced and specialist dental procedures; patients and clients requiring veterinary dental oral cavity radiographs and specialised dental procedures; and the equipment, instruments and resources required to perform all seven veterinary dentistry disciplines.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management</p>
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	Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare and monitor patient during radiographic	1.1. Specific sedation and/or anaesthetic procedures are applied as directed by the veterinarian and in accordance with <i>occupational health and safety</i>

ELEMENT	PERFORMANCE CRITERIA
procedure	<p>(OHS) requirements.</p> <p>1.2. Appropriate technique is determined in consultation with the veterinarian.</p> <p>1.3. Patient is <i>positioned</i> and <i>film</i>/cassette is positioned as required to suit patient needs.</p> <p>1.4. Patient anaesthetic recovery is monitored and observations are recorded.</p>
2. Prepare <i>radiographic equipment</i>	<p>2.1. Manual processor, automatic processor or chair side darkroom is prepared in accordance with the manufacturers' instructions and clinic policies.</p> <p>2.2. Pre-packed dental films/cassettes are made ready.</p> <p>2.3. Radiographic machine is positioned and set for required procedure as instructed by the veterinarian.</p> <p>2.4. <i>Personal protective equipment</i> is prepared and fitted to all staff in accordance with OHS requirements.</p>
3. Develop radiographs	<p>3.1. Exposed film is developed and displayed for examination by the veterinarian.</p> <p>3.2. Film debris and waste chemicals are disposed of in accordance with clinic policies and legislative requirements.</p>
4. Record and store radiographic results	<p>4.1. Film and radiographic results are recorded and stored in line with clinic policies and legislative requirements.</p> <p>4.2. Films are stored in a cool, dry place away from ionising radiation and light.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- complete relevant work-related documentation
- comply with relevant state or territory radiation safety act and regulations with regard to licensing, personal monitoring and recordkeeping
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain the highest standards of hygiene and infection control at all times to

## REQUIRED SKILLS AND KNOWLEDGE

- reduce the risk of infection and cross-infection
- observe accurately and report on animals' condition and health
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills to monitor anaesthetised patients
- problem-solving skills to use available resources, prioritise tasks and produce high quality radiographs
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- working as a member of a team and working closely with the supervising veterinarian.

### Required knowledge

- appropriate placement techniques (e.g. bisecting angle or parallel)
- clinic recording systems and legislative requirements
- positioning of animals for dental radiography
- principles of animal welfare and ethics
- radiographic print development procedures
- radiography and other imaging equipment
- recognition of emergencies
- relevant state or territory legislation and regulations relating to radiation safety, the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practices in the use of radiography and other imaging equipment
- sedation for dental procedures
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

<b>EVIDENCE GUIDE</b>	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• provide caring and capable support to veterinarians and patients during dental radiography procedures in all disciplines of veterinary dentistry</li> <li>• prepare patients and equipment for the required procedures</li> <li>• process and develop high quality standard radiographs</li> <li>• monitor vital signs of patients accurately through induction, during procedure and through recovery</li> <li>• recognise, respond to and assist with emergencies</li> <li>• handle a range of patients occurring in the clinic</li> <li>• communicate effectively with owners and the veterinarian providing advice.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be assessed in a clinic or hospital, a specialist veterinary dental clinic or hospital, or a referral veterinary dental clinic or hospital where registered veterinary dental specialists perform advanced veterinary dentistry.</p> <p>There must be access to the appropriate dental equipment, resources and documentation to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated by producing an extensive range of veterinary dental oral radiographs on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
The seven veterinary dentistry disciplines are:	<ul style="list-style-type: none"> <li>• periodontics</li> <li>• endodontics</li> <li>• restorative dentistry</li> <li>• oral surgery</li> <li>• prosthodontics</li> <li>• orthodontics</li> <li>• exotic animal dentistry.</li> </ul>
<b>OHS</b> risks when working with	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> </ul>

<b>RANGE STATEMENT</b>	
animals may include:	<ul style="list-style-type: none"> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
Type of <i>positioning</i> may include:	<ul style="list-style-type: none"> <li>• intraoral</li> <li>• extraoral.</li> </ul>
Type of <i>film</i> may include:	<ul style="list-style-type: none"> <li>• screen and non-screen (e.g. dental) film.</li> </ul>
Preparing <i>radiographic equipment</i> may include:	<ul style="list-style-type: none"> <li>• preparation of: <ul style="list-style-type: none"> <li>• automatic processor and film</li> <li>• chair side darkroom</li> <li>• radiography machine</li> <li>• room</li> <li>• screens.</li> </ul> </li> </ul>
<i>Personal protective equipment</i> may include:	<ul style="list-style-type: none"> <li>• safety equipment: <ul style="list-style-type: none"> <li>• glasses</li> <li>• lead aprons</li> <li>• lead gloves</li> <li>• lead thyroid collars</li> <li>• masks.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET504A Provide veterinary dental nursing support for advanced veterinary dental surgery

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers the process of providing veterinary dental nursing support for advanced veterinary dental surgery.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit is specifically designed for nurses who work in a veterinary clinic or hospital, or a specialist or referral veterinary dental clinic/hospital where registered veterinary dental specialists perform advanced veterinary dentistry procedures. Providing veterinary dental nursing support for advanced veterinary dental surgery requires access to a veterinary clinic/hospital that performs advanced veterinary dentistry, or a specialist or referral veterinary dental clinic/hospital; veterinarians who perform advanced and specialist dental procedures; patients and clients requiring veterinary dental oral cavity radiographs and specialised dental procedures; and the equipment, instruments and resources required to perform all seven veterinary dentistry disciplines.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and</p>
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	discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Prerequisite units		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Carry out admission procedures	<p>1.1. <b><i>Patient dental history</i></b> is compiled in accordance with <b><i>occupational health and safety (OHS)</i></b> and veterinarian requirements.</p> <p>1.2. Referral and associated documentation are coordinated as requested by the veterinarian.</p>

ELEMENT	PERFORMANCE CRITERIA
	1.3. Dental pathology and diagnostic aid results are collated in accordance with patient needs.
2. Prepare theatre and personnel for dental surgery	<p>2.1. <b>Theatre furniture and equipment</b> are prepared for specific dental surgery in accordance with OHS and clinic requirements.</p> <p>2.2. Patient radiographs for the scheduled procedure are displayed.</p> <p>2.3. Dental equipment and sterile dental packs are accessed and checked.</p> <p>2.4. <b>Gloving and gowning</b> procedures are completed in accordance with clinic policies.</p>
3. Prepare patient for dental surgery	<p>3.1. Specific anaesthetic procedures are applied under veterinarian supervision.</p> <p>3.2. Administration of <b>pre-operative medications</b> is performed under veterinarian supervision.</p> <p>3.3. Patient is suitably positioned on the operating table and restraints are applied.</p> <p>3.4. Endotracheal tube is examined to ensure it is functioning and pharyngeal pack is applied.</p>
4. Prepare specific materials and anticipate veterinarians' requirements	<p>4.1. <b>Specific dental materials</b> appropriate for the <b>scheduled procedures</b> are prepared.</p> <p>4.2. Progress of surgery and veterinarian's requirements are anticipated and responded to positively.</p> <p>4.3. Dental instruments, equipment and materials are handed to the veterinarian as requested.</p> <p>4.4. Specific dental surgical support is provided as directed by the veterinarian.</p> <p>4.5. Record of procedure is taken and maintained in accordance with clinic policies and procedures.</p> <p>4.6. Clinical and other hazardous waste is disposed of safely in accordance with OHS and local government requirements.</p>
5. Clean, store and maintain dental instruments and equipment	<p>5.1. Packed dental instruments and equipment are cleaned or sterilised in accordance with manufacturers' specifications and clinic policies.</p> <p>5.2. Packed sterilised and non-sterilised dental instruments and equipment are stored in an appropriate environment and atmosphere.</p> <p>5.3. Damaged and ineffective dental surgery instruments, equipment and their attachments are identified in cooperation with other clinic staff and</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>replaced or set aside for repair and/or maintenance.</p> <p>5.4. <i>Maintenance routines</i> for dental instruments and equipment are completed as directed by the veterinarian and in accordance with clinic policies and OHS requirements.</p>
<p>6. Communicate with client and discharge patient</p>	<p>6.1. Patient progress is regularly reported to client in accordance with veterinarian's instructions.</p> <p>6.2. <i>Specific home-nursing</i> requirements are communicated to client in accordance with veterinarian's instructions.</p> <p>6.3. Instructions on the administration of prescribed medications are detailed to the client.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communicate effectively with owners and veterinarians providing advice
- complete relevant work-related documentation
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- identify and carry out a range of maintenance routines on dental equipment and instruments
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor patient vital signs
- observe accurately and report on animal condition and health
- recognise, respond to and assist with emergencies
- record dental nomenclature and details
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening,

## REQUIRED SKILLS AND KNOWLEDGE

asking for clarification from veterinarian, and acknowledging and responding to a range of views

- numeracy skills to calculate pre-operative and postoperative medications
- problem-solving skills to use available resources and anticipate veterinarians' requirements
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work closely with the supervising veterinarian and as part of a theatre team.

### Required knowledge

- animal anatomy and physiology
- animal dental health
- cleaning and hygiene procedures in dental surgery
- dental procedures and requirements for periodontics, endodontics, restorative dentistry, oral surgery, prosthodontics, orthodontics and exotic animal dentistry
- equipment sterilisation and calibration procedures and techniques
- industry-standard gloving and gowning procedures
- instrument sharpening techniques
- principles of animal welfare and ethics
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practices
- surgical dental procedures and terminology
- prophylactic strategies used in dental care
- veterinary dental instruments and equipment and their uses
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and

The evidence required to demonstrate competence in this

<b>EVIDENCE GUIDE</b>	
<p><b>evidence required to demonstrate competency in this unit</b></p>	<p>unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• assist the veterinarian and work as an effective team member during all procedures including periodontics, endodontics, restorative dentistry, oral surgery, prosthodontics, orthodontics and exotic animal dentistry</li> <li>• prepare the theatre, patients, personnel and all relevant materials and equipment for dental surgery</li> <li>• record accurately anaesthetic levels and dental nomenclature and details</li> <li>• clean, maintain and store dental instruments and equipment in accordance with manufacturers' specifications</li> <li>• communicate effectively with clients prior to surgery and post-operatively in respect to specific home-nursing requirements.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and must be assessed in a clinic or hospital, a specialist veterinary dental clinic or hospital, or a referral veterinary dental clinic or hospital where registered veterinary dental specialists perform advanced veterinary dentistry.</p> <p>There must be access to the appropriate dental equipment, resources and documentation to enable one to demonstrate competence.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated by providing veterinary dental nursing support for an extensive range of advanced veterinary dental surgery cases on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Patient dental history</i></b> may include:	<ul style="list-style-type: none"> <li>• diagnostic test results</li> <li>• pathological test results</li> <li>• previous referrals.</li> </ul>
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Theatre furniture and equipment</i> may include:	<ul style="list-style-type: none"> <li>• air-driven dental base, including high and low speed hand pieces</li> <li>• amalgamator saws, pumps and elevators</li> <li>• anaesthetic machine</li> <li>• chisels and curettes</li> <li>• curing lights</li> <li>• endodontic files</li> <li>• endotracheal tubes and cuffs</li> <li>• forceps</li> <li>• operating table</li> <li>• pharyngeal packs</li> <li>• radiograph displays</li> <li>• sterile dental packs</li> <li>• suction equipment</li> <li>• surgical instrument trays and trolleys</li> <li>• ultrasonic and sonic dental scalers.</li> </ul>
<i>Gloving and gowning</i> may include:	<ul style="list-style-type: none"> <li>• personal hygiene and scrubbing</li> <li>• fitting of:                             <ul style="list-style-type: none"> <li>• boots</li> <li>• gloves</li> <li>• goggles</li> <li>• gowns</li> <li>• masks.</li> </ul> </li> </ul>
<i>Pre-operative medications</i> may include:	<ul style="list-style-type: none"> <li>• analgesics</li> <li>• antibiotics.</li> </ul>
<i>Specific dental materials</i> may include:	<ul style="list-style-type: none"> <li>• pins</li> <li>• plates</li> <li>• prothesis</li> <li>• restorative materials</li> <li>• screws</li> <li>• sutures</li> <li>• wire.</li> </ul>
<i>Scheduled procedures</i> may include:	<ul style="list-style-type: none"> <li>• periodontics</li> <li>• endodontics</li> <li>• restorative dentistry</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• oral surgery</li> <li>• prosthodontics</li> <li>• orthodontics</li> <li>• exotic animal dentistry.</li> </ul>
<i>Maintenance routines</i> for instruments and equipment may include:	<ul style="list-style-type: none"> <li>• calibration</li> <li>• cleaning</li> <li>• disassembly</li> <li>• drying</li> <li>• packing and oiling</li> <li>• reassembly</li> <li>• re-stocking</li> <li>• sharpening.</li> </ul>
<i>Specific home-nursing</i> advice may include:	<ul style="list-style-type: none"> <li>• advice on dispensed medications</li> <li>• dietary requirements</li> <li>• continued prophylaxis at home</li> <li>• gum and dental hygiene</li> <li>• postoperative expectations</li> <li>• use of bones and toys.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	





## ACMVET505A Prepare for emergency response

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of setting up the environment for specific cases and emergencies and preparing an emergency station and personnel for response to emergency and critical care situations. It includes assisting in establishing protocols that guide physical and mental preparedness training, team-response training and performance efficiency.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is specifically designed for nurses who work in a veterinary hospital or emergency/specialist veterinary clinic where an extensive range of emergency and critical care procedures are performed. Preparing for emergency response requires access to a veterinary hospital or emergency/specialist veterinary clinic where emergency and specialised critical care procedures are performed; veterinarians who perform emergency and specialised critical care procedures; patients and clients requiring emergency and specialised critical care surgery, nursing and discharge; and the equipment, instruments and resources required to perform emergency and specialised critical care procedures.</p> <p>In addition to legal and ethical responsibilities, all units of</p>
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	competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Prerequisite units		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for <i>emergency response</i>	1.1. <i>Equipment</i> , personnel and the environment for specific emergency scenarios are prepared and tested

ELEMENT	PERFORMANCE CRITERIA
	<p>for viability and performance.</p> <p>1.2. Critical care team is provided with clear policies and procedures for emergencies.</p> <p>1.3. Practice drills for the critical care team are provided for all clinic staff.</p> <p>1.4. In-house <i>training sessions</i> are prepared and delivered using clinic policies and procedures.</p> <p>1.5. State of preparedness is maintained for emergency response.</p>
2. Assist with the preparation of emergency and critical care protocols	<p>2.1. Assessment of systems is conducted, including <i>occupational health and safety (OHS)</i> requirements, and a performance appraisal is recorded.</p> <p>2.2. Improved response procedures are developed in consultation with the supervising veterinarian.</p> <p>2.3. Clinic policies and procedures for the treatment of emergencies are developed in consultation with the supervising veterinarian.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply and monitor anaesthesia, fluid therapy and radiographic and imaging routines relating to emergency and critical care routines
- coordinate a team in an emergency environment
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain the highest standard of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- respond to emergency situations that may result from specific clinical conditions
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a

## REQUIRED SKILLS AND KNOWLEDGE

range of views

- numeracy skills to test emergency equipment
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and calculate adequate supplies within emergency station
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- use written skills to prepare emergency and critical care protocols.

### Required knowledge

- animal physiology and anatomy
- critical care procedures
- drugs and their administration
- emergency situations that may result from specific clinical conditions
- equipment and resources required in an emergency station
- fluid therapy
- radiographic and imaging routines
- principles of animal welfare and ethics
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- resuscitation procedures and practices
- safe work practices
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria,

<b>EVIDENCE GUIDE</b>	
	<p>required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• organise self, clinic personnel and necessary resources for the emergency work environment</li> <li>• instruct clinic personnel in mental and physical preparedness for emergencies</li> <li>• develop practical and efficient work protocols in consultation with supervising veterinarian and others.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be assessed in a veterinary hospital or specialist veterinary clinic where an extensive range of emergency and specialised critical care procedures are performed.</p> <p>There must be access to the appropriate emergency and specialised critical care equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated by preparing for an extensive range of emergency responses on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of</p>

**EVIDENCE GUIDE**

	particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Emergency and critical care procedures*** may include:

- medical emergencies
- trauma:
  - abdominal
  - chest
  - head and respiratory
  - road traffic accident
- surgical (thoracic and abdominal)
- haematological (disseminated intravascular coagulopathy) resulting in blood transfusions
- septic (systemic inflammatory response syndrome) relating to:
  - organ dysfunction
  - toxin recognition
  - management of topical and ingested toxins
- advanced critical care and intensive care monitoring (post-surgical).

***Equipment*** and resources required for an emergency response may include:

- antidotes
- blood components
- CPR equipment
- fluids
- mobile crash trolleys
- monitors
- respiratory resuscitation equipment
- restraints (physical and chemical)

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• wall charts.</li> </ul>
<i>Training sessions</i> may include:	<ul style="list-style-type: none"> <li>• drill sessions</li> <li>• role instructions</li> <li>• simulated emergency situations</li> <li>• team building activities</li> <li>• triage protocols.</li> </ul>
<i>OHS</i> safe work practices include:	<ul style="list-style-type: none"> <li>• applying appropriate manual handling techniques when packaging and handling loads, including animals and equipment</li> <li>• hazard identification and risk minimisation: <ul style="list-style-type: none"> <li>• handling, use, storage, transport and disposal of chemicals</li> <li>• handling and disposal of biological wastes</li> </ul> </li> <li>• following personal and workplace hygiene procedures</li> <li>• using infection control procedures to minimise risks associated with: <ul style="list-style-type: none"> <li>• zoonoses</li> <li>• release of infective agents (both animal and human)</li> <li>• blood or chemical spillage</li> <li>• gas leakages</li> </ul> </li> <li>• using machinery and equipment in accordance with manufacturers' instructions</li> <li>• using personal protective equipment: <ul style="list-style-type: none"> <li>• animal handling gauntlets</li> <li>• boots</li> <li>• caps and gowns</li> <li>• goggles</li> <li>• protective masks</li> <li>• safety gloves</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## ACMVET506A Perform emergency procedures to sustain life

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of responding with urgency to perform pre-hospital evaluations, apply and maintain first aid to sustain life, and carry out triage procedures for emergency and specialised critical care cases.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is specifically designed for nurses who work in a veterinary hospital or emergency/specialist veterinary clinic where an extensive range of emergency and critical care procedures are performed. Performing emergency procedures to sustain life requires access to a veterinary hospital or emergency / specialist veterinary clinic where emergency and specialised critical care procedures are performed; veterinarians who perform emergency and specialised critical care procedures; patients and clients requiring emergency and specialised critical care surgery, nursing and discharge; and the equipment, instruments and resources required to perform emergency and specialised critical care procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be</p>
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	handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Perform pre-hospital evaluation	1.1.Immediate patient history is established with client. 1.2. <i>Emergency first aid advice</i> for the patient is communicated clearly to the client.

ELEMENT	PERFORMANCE CRITERIA
	1.3. <i>Transportation advice</i> and the clinic location are communicated clearly to the client.
2. Apply and maintain <i>first aid to sustain life</i>	2.1. Emergency procedures are applied as required in accordance with patient needs and <i>occupational health and safety (OHS)</i> requirements. 2.2. Relevant <i>procedures for haemorrhage control</i> are applied according to patient needs.
3. Perform initial evaluation	3.1. <i>Patient evaluation</i> is conducted initially from a distance. 3.2. Patient evaluation is conducted on approach from a rostral direction.
4. Carry out <i>triage procedures</i> and stabilise patient under veterinarian direction	4.1. Parameters of triage are evaluated in accordance with relevant clinic policies. 4.2. <i>Specific emergency and critical care nursing assistance</i> is provided as directed by the veterinarian.
5. Complete history and secondary survey	5.1. Detailed patient history is confirmed with client records. 5.2. Patient status is re-evaluated on admission in consultation with the veterinarian.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- apply and monitor anaesthesia, fluid therapy and radiographic and imaging routines relating to emergency and critical care routines
- complete relevant work-related documentation
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain the highest standard of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- nurse critically ill patients
- provide caring grief support
- recognise, respond to and assist with emergencies
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient

## REQUIRED SKILLS AND KNOWLEDGE

admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly

- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills to monitor patients' vital signs and fluid therapy and to calculate dosages
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and evaluate patient needs
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as a member of a team and work closely with the supervising veterinarian.

## Required knowledge

- anaesthesia and anaesthetic agents
- animal first aid techniques
- animal physiology and anatomy
- critical care procedures
- client counselling techniques, including grief counselling
- common symptoms of poisoning and clinical disease
- drugs and their administration
- emergency situations that may result from specific clinical conditions
- fluid therapy
- handling techniques for trauma patients
- principles of animal welfare and ethics
- radiographic and imaging routines
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practice
- the relative urgency of common disease versus trauma incidents
- triage procedures
- workplace hygiene standards, disinfectants and sterilisation, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• handle a range of emergency patients competently over a period of time</li> <li>• identify and perform triage accurately to prioritise patients</li> <li>• observe accurately and report concisely on animal condition and health to the veterinarian</li> <li>• work under pressure</li> <li>• provide clear and concise directions to personnel and clear and concise advice to clients</li> <li>• apply industry-standard first aid procedures to sustain life.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment of this unit is to be practical in nature and must be assessed in a veterinary hospital or specialist veterinary clinic where an extensive range of emergency and specialised critical care procedures are performed.</p> <p>There must be access to the appropriate emergency and specialised critical care equipment and/or resources to enable one to demonstrate competence.</p>
<b>Method of assessment</b>	<p>To ensure consistency in one's performance, competency should be demonstrated by performing emergency procedures to sustain life for an extensive range of emergency care cases on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>knowledge</p> <ul style="list-style-type: none"> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Emergency and critical care procedures</i></b> include:</p>	<ul style="list-style-type: none"> <li>• medical emergencies</li> <li>• trauma: <ul style="list-style-type: none"> <li>• abdominal</li> <li>• chest</li> <li>• head and respiratory</li> <li>• road traffic accident</li> </ul> </li> <li>• surgical (thoracic and abdominal)</li> <li>• haematological (disseminated intravascular coagulopathy) resulting in blood transfusions</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• septic (systemic inflammatory response syndrome) relating to:               <ul style="list-style-type: none"> <li>• organ dysfunction</li> <li>• toxin recognition</li> <li>• management of topical and ingested toxins</li> </ul> </li> <li>• advanced critical care and intensive care monitoring (post-surgical).</li> </ul>
<i>Emergency first aid advice</i> may relate to:	<ul style="list-style-type: none"> <li>• applying direct digital pressure or pressure bandages</li> <li>• clearing airway</li> <li>• giving fluids for caustic ingestion</li> <li>• identifying poison evidence:               <ul style="list-style-type: none"> <li>• snakes, toads, ticks, rat bait, snail bait, flea collars and organophosphate pesticides</li> </ul> </li> <li>• leaving penetrating foreign bodies</li> <li>• performing mouth to nose resuscitation and chest compressions</li> <li>• responding to:               <ul style="list-style-type: none"> <li>• hyperthermia and hypothermia</li> <li>• gastric dilation volvulus and torsion</li> <li>• burns and scalds</li> <li>• dystocia and convulsions.</li> </ul> </li> <li>• supporting fractures.</li> </ul>
<i>Transportation advice</i> may relate to:	<ul style="list-style-type: none"> <li>• immobilisation of limbs and of patient</li> <li>• suppression of haemorrhage</li> <li>• ocular support (maintenance of hydration)</li> <li>• strategies to avoid bites and scratches.</li> </ul>
<i>First aid to sustain life</i> may include:	<ul style="list-style-type: none"> <li>• respiratory resuscitation procedures and CPR.</li> </ul>
<i>OHS</i> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches, crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<i>Procedures for haemorrhage control</i> may include:	<ul style="list-style-type: none"> <li>• the use of digital pressure and pressure bandages.</li> </ul>
<i>Patient evaluation</i> will include:	<ul style="list-style-type: none"> <li>• airway and breathing status</li> <li>• bleeding</li> <li>• capillary refill time</li> <li>• cardiovascular function</li> <li>• heart rate</li> <li>• hydration status</li> <li>• level of consciousness</li> <li>• mucous membrane colour</li> <li>• pulses</li> <li>• pupillary light reflex</li> <li>• temperature.</li> </ul>
The purpose of <i>triage procedures</i> is to:	<ul style="list-style-type: none"> <li>• establish the condition of each patient and the priority of attention and treatment.</li> </ul>
<i>Specific emergency and critical care nursing</i> may include:	<ul style="list-style-type: none"> <li>• assistance with: <ul style="list-style-type: none"> <li>• defibrillation</li> <li>• open-chest cardiac massage</li> <li>• tracheostomy procedure.</li> </ul> </li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## ACMVET507A Provide nursing support for critical care surgery

### Modification History

Not applicable.

### Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency covers the process of preparing for critical care surgery and supporting the veterinarian during critical care surgery.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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### Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit is specifically designed for nurses who work in a veterinary hospital or emergency/specialist veterinary clinic where an extensive range of emergency and critical care procedures are performed. Providing nursing support for critical care surgery requires access to a veterinary hospital or emergency/specialist veterinary clinic where emergency and specialised critical care procedures are performed; veterinarians who perform emergency and specialised critical care procedures; patients and clients requiring emergency and specialised critical care surgery, nursing and discharge; and the equipment, instruments and resources required to perform emergency and specialised critical care procedures.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and</p>
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	discomfort is minimised.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Prerequisite units	

## Employability Skills Information

Employability skills	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for <i>critical care surgical</i> patient	<p>1.1. Patient's <i>special requirements</i> are identified and made available for surgery.</p> <p>1.2. Surgical and monitoring equipment is prepared in accordance with <i>occupational health and safety (OHS)</i> and clinic policies and procedures.</p>

ELEMENT	PERFORMANCE CRITERIA
2. Monitor patient from induction to recovery	<p>2.1. Assistance for induction is provided to veterinarian.</p> <p>2.2. Anaesthetic is continuously monitored and data is recorded.</p> <p>2.3. <b>Vital signs are monitored</b> constantly from induction to recovery and abnormal signs are responded to in accordance with clinic policies.</p> <p>2.4. <b>Analgesia</b> is administered and response is monitored under veterinarian supervision.</p> <p>2.5. Specific <b>emergency procedures</b> are applied as directed by the veterinarian.</p> <p>2.6. Specific <b>surgical operating support</b> is provided in response to the veterinarian's requirements.</p>
3. Collect blood and administer blood and blood products	<p>3.1. Blood type is identified, sourced and /or collected, and stored in accordance with clinic policies.</p> <p>3.2. Blood and/or blood products are prepared and administered in accordance with clinic policies.</p> <p>3.3. Adverse reactions to transfusions are recognised and treated in accordance with the veterinarian's advice.</p>
4. Provide <b>critical care nursing</b>	<p>4.1. Patient short-term positioning, environment, medication, nutrition and nursing care are determined in consultation with the veterinarian.</p> <p>4.2. <b>Patient care plan</b>, including all relevant aspects of treatment and care, is developed in conjunction with the veterinarian.</p> <p>4.3. Intensive nursing care is provided and the patient is monitored in accordance with the patient plan, clinic policies and OHS requirements.</p> <p>4.4. Veterinarian is regularly consulted on the patient's progress.</p>
5. Discharge patient	<p>5.1. <b>Transportation procedures</b> are implemented for the critical care patient in accordance with clinic policies and OHS requirements.</p> <p>5.2. Patient is prepared for transport within the clinic and for external transport.</p> <p>5.3. Instructions are provided to the client regarding the <b>patient's care requirements</b> in the home environment.</p> <p>5.4. History, records and veterinarian's report are collated and presented to the client.</p> <p>5.5. Client is instructed on the delivery of <b>referral documentation</b> to their regular practitioner.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- accurately monitor, record and recognise abnormal vital signs
- demonstrate empathy with animals
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- maintain accurate records
- maintain the highest standard of hygiene and infection control at all times to reduce the risk of infection and cross infection
- maximise patient care when preparing for and during transport
- monitor, clean and sterilise surgical equipment as required
- record chemicals and medicines in the clinic according to prescribed legislative requirements
- literacy skills to read, select and implement policies and procedures, including OHS, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written and oral instructions; and record patient details accurately and legibly
- interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- oral communication skills/language required to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from veterinarian, and acknowledging and responding to a range of views
- numeracy skills to monitor patients' vital signs and fluid therapy and to calculate dosages
- problem-solving skills to use available resources and anticipate veterinarians' requirements
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as a member of a team and work closely with the supervising veterinarian.

#### Required knowledge

- after care requirements including medication, wound management, nutrition, exercise and environment
- anaesthetic agents, planes and stages of anaesthesia and anaesthesia equipment
- animal anatomy and physiology
- best-practice psychological procedures for animal care

## REQUIRED SKILLS AND KNOWLEDGE

- blood, blood types and blood product transfusions
- clinical signs of shock
- commonly used anaesthetics, including injectable and gaseous compounds
- critical care anaesthetic and surgery procedures
- critical care and intensive nursing routines
- dangers related to exposure to anaesthetic agents
- emergency situations that may result from specific clinical conditions
- emergency procedures
- fluid therapy
- principles of animal welfare and ethics
- radiographic and imaging routines
- range of instruments required in both the theatre and preparation areas
- relevant state or territory legislation and regulations relating to the practice of veterinary science, OHS and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- safe work practices
- standard physiotherapy treatments for animals
- sterilisation techniques, including a good working knowledge of the operation of autoclaves and an awareness of alternative sterilisation techniques including gamma irradiation, ethylene oxide and chemical sterilisation and their associated health hazards
- symptoms of common poisoning and clinical disease
- the maintenance of adequate housing and nutrition
- the relative urgency of common disease versus trauma incidents
- the requirements for referral documentation
- transportation procedures
- where and how to access relevant patient records
- workplace hygiene standard, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

<b>EVIDENCE GUIDE</b>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare animals correctly for critical care surgery</li> <li>• monitor animals' vital signs during anaesthesia through to recovery</li> <li>• recognise abnormal vital signs</li> <li>• recognise, respond to and assist with emergencies</li> <li>• demonstrate empathy with animals</li> <li>• administer blood and blood products</li> <li>• work in a team and closely with the supervising veterinarian</li> <li>• communicate patient needs clearly to clients and transporting agents</li> <li>• record and retrieve patient histories effectively in cases of client referral</li> <li>• provide comprehensive nursing support for critically ill patients.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment of this unit is to be practical in nature and must be assessed in a veterinary hospital or specialist veterinary clinic where an extensive range of emergency and specialised critical care procedures are performed.</p> <p>There must be access to the appropriate emergency and specialised critical care equipment and/or resources to enable one to demonstrate competence.</p>
<p><b>Method of assessment</b></p>	<p>To ensure consistency in one's performance, competency should be demonstrated by providing nursing support for critical care surgery for an extensive range of emergency and specialised critical care cases on a regular basis over a period of time.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of candidate's required knowledge</li> <li>• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• simulation exercises that reproduce normal work conditions</li> <li>• case study analysis</li> <li>• third-party evidence</li> <li>• workplace documentation</li> <li>• portfolio.</li> </ul> <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
<b>Guidance information for assessment</b>	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Critical care surgical</i></b> procedures patients may be presented for include:</p>	<ul style="list-style-type: none"> <li>• evisceration</li> <li>• exploratory laparotomy</li> <li>• eye prolapse</li> <li>• gastric dilation volvulus</li> <li>• thoracotomy</li> <li>• wounds involving penetrating foreign bodies</li> <li>• drastic and/or life-threatening wounds.</li> </ul>
<p><b><i>Special requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• administration of blood and blood products</li> <li>• intermittent positive pressure ventilation during open chest procedures</li> <li>• specific induction and maintenance drugs.</li> </ul>

<b>RANGE STATEMENT</b>	
<b><i>OHS</i></b> risks when working with animals may include:	<ul style="list-style-type: none"> <li>• animal bites, kicks, scratches and crush injuries</li> <li>• biological hazardous waste and sharps disposal</li> <li>• handling of chemicals and medicines</li> <li>• gas leakage</li> <li>• inhalation of aerosol particles</li> <li>• intraocular contamination</li> <li>• manual handling, including carrying, lifting and shifting</li> <li>• needle pricks and cuts from other sharps</li> <li>• release of infective agents (animal and human)</li> <li>• slippery or uneven work surfaces</li> <li>• zoonoses.</li> </ul>
<b><i>Monitoring vital signs</i></b> and instruments used may include:	<ul style="list-style-type: none"> <li>• vital signs: <ul style="list-style-type: none"> <li>• blood gas analysis</li> <li>• capillary response time</li> <li>• central venous pressure</li> <li>• chest auscultation</li> <li>• Doppler blood pressure</li> <li>• femoral pulse</li> <li>• heart rate</li> <li>• mucous membrane colour</li> <li>• pulse and stimulation response</li> <li>• pupillary light reflex</li> <li>• renal function</li> <li>• respiration</li> <li>• thermo-regulation</li> </ul> </li> <li>• instruments for monitoring vital signs may include: <ul style="list-style-type: none"> <li>• capnographs</li> <li>• ECG</li> <li>• oesophageal stethoscopes</li> <li>• pulse oximeters.</li> </ul> </li> </ul>
<b><i>Analgesia</i></b> may include:	<ul style="list-style-type: none"> <li>• provision of: <ul style="list-style-type: none"> <li>• pre-emptive analgesia</li> <li>• intra-operative analgesia</li> <li>• post-operative analgesia</li> </ul> </li> <li>• analgesics administered by the veterinarian or under veterinary supervision: <ul style="list-style-type: none"> <li>• non-steroidal anti-inflammatory</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• narcotics</li> <li>• other analgesics and opiate antagonists.</li> </ul>
<i>Emergency procedures</i> may include:	<ul style="list-style-type: none"> <li>• emergency anaesthetic procedures: <ul style="list-style-type: none"> <li>• artificial and assisted respiration</li> <li>• administration of life support techniques and medicines</li> </ul> </li> <li>• other emergency procedures: <ul style="list-style-type: none"> <li>• response to anaesthetic recovery/shock complications with particular attention to transport to recovery ward</li> <li>• positioning of patient</li> <li>• revision of fluid therapy plan</li> <li>• supervision of anaesthetic monitoring equipment.</li> </ul> </li> </ul>
Types of <i>surgical operating support</i> may include:	<ul style="list-style-type: none"> <li>• maintaining: <ul style="list-style-type: none"> <li>• arterial lines</li> <li>• central lines</li> <li>• jugular catheters</li> <li>• peripheral intravenous catheters</li> <li>• urinary catheters</li> <li>• central feeding apparatus and endotracheal tubes</li> <li>• tracheostomy tubes</li> <li>• thoracic or other drains.</li> </ul> </li> </ul>
<i>Critical care nursing</i> may include:	<ul style="list-style-type: none"> <li>• monitoring of vital signs and recognition of abnormal vital signs</li> <li>• placement and care of catheters, chest and other drains and tracheostomy tubes</li> <li>• fluid therapy</li> <li>• oxygen therapy</li> <li>• monitoring urinary output.</li> </ul>
<i>Patient care plan</i> may include consideration of:	<ul style="list-style-type: none"> <li>• environmental conditions</li> <li>• equipment</li> <li>• housing</li> <li>• need for analgesia and medication</li> <li>• nutrition</li> <li>• physiotherapy</li> <li>• psychological factors.</li> </ul>
<i>Transportation procedures</i> may	<ul style="list-style-type: none"> <li>• blanket stretcher</li> </ul>

<b>RANGE STATEMENT</b>	
include:	<ul style="list-style-type: none"> <li>• feed and water</li> <li>• intravenous fluid line maintenance</li> <li>• limb support</li> <li>• respiration monitoring</li> <li>• trolley and restraint</li> <li>• wound management.</li> </ul>
<i>Patient care requirements</i> may include:	<ul style="list-style-type: none"> <li>• monitoring the animal prior to release</li> <li>• advising the owner in line with veterinarian's instructions about: <ul style="list-style-type: none"> <li>• administering medicine and the general care of the animal</li> <li>• follow up treatment or visits</li> <li>• anticipated physical and psychological behaviour</li> <li>• bedding</li> <li>• cast care</li> <li>• consultation with regular practitioner</li> <li>• exercise</li> <li>• nutrition</li> <li>• wound and dressing management.</li> </ul> </li> </ul>
<i>Referral documents</i> may include:	<ul style="list-style-type: none"> <li>• blood chemistry, haematology and other tests</li> <li>• clinic pathological results</li> <li>• diagnostic reports</li> <li>• radiographs.</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Veterinary nursing
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## BSBFLM309C Support continuous improvement systems and processes

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit specifies the outcomes required to support the organisation's continuous improvement systems and processes. Particular emphasis is on actively encouraging the team to participate in the process, on monitoring and reporting on specified outcomes and on supporting opportunities for further improvements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit replaces BSBFLM309A Support continuous improvement systems and processes.</p> <p>Frontline managers have an active role in supporting continuous improvement processes in achieving the organisation's objectives. Their position, closely associated with the creation and delivery of products and services, means that they have an important responsibility in influencing the ongoing development of the organisation.</p> <p>At this level, work will normally be carried out within known routines, methods and procedures, and may also involve a number of complex or non-routine activities that require some discretion and judgement.</p> <p>Consider co-assessment with BSBFLM305C Support operational plan, BSBFLM312C Contribute to team effectiveness, BSBCUS301A Deliver and monitor a service to customers, BSBCMN311B Maintain workplace safety, and BSBFLM311C Support a workplace learning</p>
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	environment.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Prerequisite units		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Contribute to continuous improvement systems and processes	<p>1.1. Actively encourage and support team members to participate in decision making processes and to assume responsibility and exercise initiative</p> <p>1.2. <i>Communicate</i> the organisation's <i>continuous improvement processes</i> to individuals and teams</p>

ELEMENT	PERFORMANCE CRITERIA
	1.3. Effectively utilise <i>mentoring and coaching</i> to ensure that individuals/teams are able to support the organisation's continuous improvement processes
2. Monitor and report on specified outcomes	2.1. Utilise the organisation's <i>systems</i> and <i>technology</i> to monitor team progress and to identify ways in which planning and operations could be improved 2.2. Apply continuous improvement techniques and processes to improve <i>customer service</i>
3. Support opportunities for further improvement	3.1. Communicate <i>agreed recommendations</i> for improvements in achieving the business plan to team members 3.2. Document and use work performance to identify opportunities for further improvement 3.3. Maintain records, reports and recommendations for improvement within the organisation's systems and processes

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- functional literacy skills to access and use workplace information
- research, analysis, interpretation and reporting skills
- monitoring and evaluation skills
- communication skills to:
  - gain the commitment of individuals and teams to continuous improvement
  - deal with people openly and fairly
  - use consultation skills effectively
- skills to consolidate opportunities for improvement
- coaching and mentoring skills to provide support to colleagues

#### Required knowledge

- legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination



**REQUIRED SKILLS AND KNOWLEDGE**

- principles and techniques of:
  - continuous improvement systems and processes
  - benchmarking
  - best practice
- benefits of continuous improvement
- quality approaches which the organisation may implement
- methods that can be used in continuous improvement
- barriers to continuous improvement
- recording, reporting and recommendation processes to facilitate continuous improvement applied within the organisation

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- examples of actions taken by the candidate to support continuous improvement including:
- use of work performance to identify improvement
- adjusted plans to reflect changes
- effective communication to all stakeholders
- use of technology to monitor operational progress
- application of suitable recordkeeping processes.

**Context of and specific resources for assessment**

Assessment must ensure:

- access by the learner and trainer to appropriate documentation and resources normally used in the workplace
- that this unit is assessed in the workplace or in a closely simulated work environment.

**Method of assessment**

A range of assessment methods should be used to assess skills and knowledge. The following examples are appropriate for this unit:

- Direct questioning combined with review of

**EVIDENCE GUIDE**

	<p>portfolios of evidence and third party workplace reports of on-the-job performance by the candidate</p> <ul style="list-style-type: none"> <li>• Review of records supporting the organisation's continuous improvement systems and processes, such as: <ul style="list-style-type: none"> <li>• contributions to organisational policies and procedures</li> <li>• contributions to procedures and policies for dealing with continuous improvement processes, and related codes of conduct</li> <li>• actions taken to address information collection, retrieval and use in the workplace</li> <li>• actions taken to address issues and problems within work team</li> <li>• actions taken to address methods of reporting information</li> <li>• learning and development plans for team members</li> <li>• materials developed for coaching, mentoring and training</li> <li>• induction programs developed and/or delivered</li> <li>• actions taken to address internal and external information management issues</li> <li>• reviews of people management</li> <li>• advice and input into management decisions related to continuous improvement</li> <li>• records of people management lessons learned.</li> </ul> </li> </ul>
<p><b>Guidance information for assessment</b></p>	<p>This unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team, and as part of a holistic assessment activity.</p>

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work

<b>RANGE STATEMENT</b>	
situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Legislation, codes and national standards relevant to the workplace may include:	<ul style="list-style-type: none"> <li>• award and enterprise agreements and relevant industrial instruments</li> <li>• relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety (OHS) and environmental issues, equal opportunity, industrial relations and anti-discrimination</li> <li>• relevant industry codes of practice.</li> </ul>
<i>OHS considerations</i> may include:	<ul style="list-style-type: none"> <li>• provision of information about OHS legislative requirements and guidelines, and the organisation's OHS policies, procedures and programs</li> <li>• participation in the regular update of OHS systems and procedures</li> <li>• implementation of the continuous improvement processes of the OHS management system</li> <li>• changes to work practices, procedures and the working environment which impact on OHS</li> <li>• organisation's responsibilities to customers and suppliers.</li> </ul>
Methods used to <i>communicate</i> with individuals and team may include:	<ul style="list-style-type: none"> <li>• verbal, written or electronic communications</li> <li>• on-the-job mentoring and coaching.</li> </ul>
<i>Continuous improvement processes</i> may include:	<ul style="list-style-type: none"> <li>• policies and procedures which allow an organisation to systematically review and improve the quality of its products, services and procedures</li> <li>• cyclical audits and reviews of workplace, team and individual performance</li> <li>• seeking and considering feedback from a range of stakeholders</li> <li>• modifications and improvements to systems, processes, services and products</li> <li>• evaluations and monitoring of effectiveness.</li> </ul>
<i>Mentoring and coaching</i> may refer to:	<ul style="list-style-type: none"> <li>• teaching another member of the team, usually focusing on a specific work task or skill</li> <li>• providing feedback, support and encouragement on a range of matters</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• providing assistance with problem solving.</li> </ul>
<i>Systems</i> may include:	<ul style="list-style-type: none"> <li>• organisation policies and procedures</li> <li>• web based communication devices</li> <li>• attendance at forums, meetings</li> <li>• newsletters and reports.</li> </ul>
<i>Technology</i> may include:	<ul style="list-style-type: none"> <li>• computerised systems and software such as databases, project management and word-processing</li> <li>• telecommunications devices</li> <li>• any other technology used to carry out work roles and responsibilities.</li> </ul>
<i>Customer service</i> may be:	<ul style="list-style-type: none"> <li>• internal or external, to existing or new clients</li> <li>• identifying needs and priorities in delivering a service to customers</li> <li>• understanding of different levels of customer satisfaction.</li> </ul>
<i>Agreed recommendations</i> may be:	<ul style="list-style-type: none"> <li>• identified improvements arising from the continuous improvement process</li> <li>• determined in accordance with organisational policies and procedures</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	
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### Competency field

<b>Competency field</b>	Management and leadership - Frontline Management
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### Co-requisite units

<b>Co-requisite units</b>	

<b>Co-requisite units</b>		

## BSBFLM312B Contribute to team effectiveness

### Modification History

Not Applicable

### Unit Descriptor

This specifies the outcomes required to by frontline managers to contribute to the effectiveness of the work team. It involves planning with the team to meet expected outcomes, developing team cohesion, participating in and facilitating the work team, and communicating with the management of the organisation.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

### Application of the Unit

Frontline managers have a key role in developing efficient and effective work teams within the context of the organisation. They play a prominent part in motivating, mentoring, coaching and developing team cohesion by providing leadership for the team and forming the bridge between the management of the organisation and the team members.

At this level, work will normally be carried out within known routines, methods and procedures, and may also involve a number of complex or non routine activities that require some discretion and judgement.

### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

Not Applicable

### Employability Skills Information

This unit contains employability skills.

### Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the
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	required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Contribute to team outcomes	<p>1.1. Consult team members to identify <i>team purpose, roles, responsibilities, goals, plans and objectives</i></p> <p>1.2. Support team members to meet expected outcomes</p>
2. Support team cohesion	<p>2.1. Encourage team members to participate in the planning, decision making and operational aspects of the work team to their level of responsibility</p> <p>2.2. Encourage team members to take responsibility for their own work and to assist each other in undertaking required roles and responsibilities</p> <p>2.3. Provide <i>feedback</i> to team members to encourage, value and reward team members' efforts and contributions</p> <p>2.4. Identify and address issues, concerns and problems identified by team members to <i>relevant persons</i> as required</p>
3. Participate in work team	<p>3.1. Actively encourage and support team members to participate in team activities and communication processes and to take <i>responsibility for their actions</i></p> <p>3.2. Support the team to identify and resolve problems which impede its performance</p> <p>3.3. Utilise own contribution to work team to serve as a role model for others and enhance the organisation's image within the work team, the organisation and with clients/customers</p>
4. Communicate with management	<p>4.1. Maintain open <i>communication</i> with <i>line manager/management</i> at all times</p> <p>4.2. Communicate information from line manager/management to the team</p>

	4.3. Communicate <i>unresolved issues</i> to line manager/management and follow-up to ensure action is taken in response to these matters
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## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

#### Required skills

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- communication skills, including listening
- basic training skills, including mentoring and coaching
- planning and organising skills
- problem solving skills
- attributes:
  - empathic
  - communicative
  - self aware
  - supportive
  - trusting
  - open
  - flexible
  - accommodating
  - initiating
  - loyal
  - fair
  - adaptable

### Required knowledge

#### Required knowledge

- relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
- organisational policies and procedures
- organisational goals, objectives and plans at both tactical and strategic levels
- organisational structure including organisational chart



- learning and development options available within and through organisation
- a general understanding of the principles and techniques of:
  - group dynamics and processes
  - motivation
  - planning
  - negotiation
- individual behaviour and difference

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>• managed communication consultations processes in relation to:</li> <li>• team cohesion</li> <li>• performance plan</li> <li>• induction process for new team members</li> <li>• performance management system implementation</li> <li>• handling problems</li> <li>• management advice in relation to human resource management of the work team</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>• that this unit can be assessed in the workplace or in a closely simulated work environment</li> <li>• access by the learner and trainer to appropriate documentation and resources normally used in the workplace</li> <li>• where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment</li> <li>• that examples of actions taken by candidate to contribute to team effectiveness are provided</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess skills and knowledge. The following</p>

	<p>examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>• Direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate</li> <li>• Records produced from working in a team, such as: <ul style="list-style-type: none"> <li>• reports</li> <li>• minutes or records of meetings</li> <li>• work journals or diaries</li> <li>• learning and development plans developed with team members</li> <li>• records of actions taken to address issues raised by team members</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

## Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Legislation, codes and national standards relevant to the workplace may include:</p>	<ul style="list-style-type: none"> <li>• award and enterprise agreements and relevant industrial instruments</li> <li>• relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety (OHS) and environmental issues, equal opportunity, industrial relations and anti-discrimination</li> <li>• relevant industry codes of practice</li> </ul>
<p>OHS considerations may include:</p>	<ul style="list-style-type: none"> <li>• provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs</li> <li>• training of all employees in health and safety procedures</li> </ul>

	<ul style="list-style-type: none"> <li>• participation in the regular update of OHS systems and procedures</li> <li>• changes to work practices, procedures and the working environment which impact on OHS</li> </ul>
<b><i>Team purpose, roles, responsibilities, goals, plans and objectives</i></b> may include:	<ul style="list-style-type: none"> <li>• goals for individuals and the work team</li> <li>• expected outcomes and outputs</li> <li>• individual and team performance plans and Key Performance Indicators (KPIs)</li> <li>• action plans, business plans and operational plans linked to strategic plans</li> <li>• OHS responsibilities</li> </ul>
<b><i>Feedback</i></b> may refer to:	<ul style="list-style-type: none"> <li>• communication of ideas and thoughts which focus on specific tasks, outcomes, decisions, issues or behaviours</li> <li>• formal/informal gatherings between team members where there is discussion on work-related matters</li> </ul>
<b><i>Relevant persons</i></b> may include:	<ul style="list-style-type: none"> <li>• frontline manager's direct superior or other management representatives</li> <li>• colleagues</li> <li>• designated personnel e.g. safety officer</li> </ul>
<b><i>Responsibility for their actions</i></b> may involve:	<ul style="list-style-type: none"> <li>• individuals and teams</li> <li>• individual and joint actions</li> </ul>
<b><i>Communication</i></b> may include:	<ul style="list-style-type: none"> <li>• verbal, written or electronic communication</li> <li>• face-to-face</li> <li>• formal/informal interaction</li> </ul>
<b><i>Line manager/management</i></b> may refer to:	<ul style="list-style-type: none"> <li>• frontline manager's direct superior or other management representatives</li> </ul>
<b><i>Unresolved issues</i></b> may include:	<ul style="list-style-type: none"> <li>• issues, concerns and tensions</li> <li>• problems related to work roles and responsibilities</li> <li>• grievances and complaints</li> <li>• any matters affecting workplace relationships and team cohesion</li> </ul>

## Unit Sector(s)

Management and Leadership - Frontline Management services

## BSBINM301A Organise workplace information

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to gather, organise and apply workplace information in the context of an organisation's work processes and knowledge management systems.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to individuals who are skilled operators and apply a broad range of competencies in various work contexts. They may exercise discretion and judgement using appropriate theoretical knowledge of information management to provide technical advice and support to a team.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Collect and assess information	<p>1.1. Access product and service <i>information</i> in accordance with <i>organisational requirements</i></p> <p>1.2. Ensure <i>methods of collecting information</i> are reliable and make efficient use of available time and resources</p> <p>1.3. Assess information for clarity, accuracy, currency and relevance to intended tasks</p> <p>1.4. Use <i>interpersonal skills</i> to access relevant information from teams and individuals</p>
2. Organise information	<p>2.1. Organise information in a <i>format</i> suitable for analysis, interpretation and dissemination in accordance with organisational requirements</p> <p>2.2. Use appropriate <i>technology/systems</i> to maintain information in accordance with organisational requirements</p> <p>2.3. Collate information and materials, and communicate to relevant <i>designated persons</i></p> <p>2.4. Identify difficulties organising and accessing information and solve collaboratively with individuals and team members</p> <p>2.5. Update and store information in accordance with organisational requirements and systems</p>
3. Review information	3.1. Actively seek <i>feedback</i> on clarity, accuracy and

ELEMENT	PERFORMANCE CRITERIA
needs	<p>sufficiency of information to ensure relevance of information and system</p> <p>3.2. Review the contribution of information to decision making and implement appropriate modifications to collection processes</p> <p>3.3. Identify future information needs and incorporate in modifications to collection processes</p> <p>3.4. Document future information needs and incorporate in modifications to reporting processes</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- analytical skills to classify and report information
- literacy skills to read and understand a variety of texts; and to write, edit and proofread documents to ensure clarity of meaning, accuracy and consistency of information
- problem-solving skills to deal with information which is contradictory, ambiguous, inconsistent or inadequate
- technology skills to display information in a format suitable to the target audience.

#### Required knowledge

- key provisions of relevant legislation from all forms of government that may affect aspects of business operations, such as:
  - anti-discrimination legislation
  - ethical principles
  - codes of practice
  - privacy laws
  - occupational health and safety (OHS)
- methods for checking validity of information and its sources
- organisational recordkeeping/filing systems, security procedures and safe recording practices
- policies and procedures relating to distribution of workplace information, and legal and ethical obligations.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>• providing accurate information for defined purposes</li> <li>• systematic maintenance and handling of data and documents</li> <li>• using business technology to manage information</li> <li>• knowledge of relevant legislation.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>• access to an actual workplace or simulated environment</li> <li>• access to office equipment and resources</li> <li>• examples of information documents found in the workplace.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>• direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate</li> <li>• analysis of responses to case studies and scenarios</li> <li>• demonstration of techniques</li> <li>• oral or written questioning to assess knowledge of organisational recordkeeping/filing systems</li> <li>• analysis of how information and materials were communicated to relevant people</li> <li>• review of documentation outlining future information needs.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• BSBWRT301A Write simple documents</li> <li>• general administration units</li> <li>• other information management units.</li> </ul>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Information</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• computer databases (e.g. library catalogue, customer records)</li> <li>• computer files (e.g. letters, memos and other documents)</li> <li>• correspondence (e.g. faxes, memos, letters, email)</li> <li>• financial figures</li> <li>• forms (e.g. insurance forms, membership forms)</li> <li>• invoices (e.g. from suppliers, to debtors)</li> <li>• personnel records (e.g. personal details, salary rates)</li> <li>• production targets</li> <li>• sales records (e.g. monthly forecasts, targets achieved)</li> </ul>
<p><b><i>Organisational requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• code of conduct/code of ethics</li> <li>• information protocols</li> <li>• legal and organisational policies, guidelines and requirements</li> <li>• management and accountability channels</li> <li>• OHS policies, procedures and programs</li> <li>• procedures for updating records</li> <li>• quality assurance and/or procedures manuals</li> <li>• security and confidentiality requirements</li> </ul>
<p><b><i>Methods of collecting information</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• checking research provided by others</li> <li>• checking written material including referrals and client files</li> <li>• classification tools</li> <li>• individual research</li> <li>• information from other organisations</li> <li>• interviews with colleagues/customers</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• observation and listening</li> <li>• previous file records</li> <li>• questioning (in person or indirect)</li> <li>• recruitment applications and other forms</li> </ul>
<i>Interpersonal skills</i> may include:	<ul style="list-style-type: none"> <li>• consultation methods, techniques and protocols</li> <li>• networking</li> <li>• seeking feedback from group members to confirm understanding</li> <li>• summarising and paraphrasing</li> <li>• using appropriate body language</li> </ul>
<i>Format</i> may include:	<ul style="list-style-type: none"> <li>• adding headers and footers</li> <li>• incorporating graphics and pictures</li> <li>• inserting symbols</li> <li>• using legends</li> <li>• using a particular software application</li> <li>• using tables and charts</li> </ul>
<i>Technology</i> may include:	<ul style="list-style-type: none"> <li>• answering machine</li> <li>• computer</li> <li>• email</li> <li>• fax machine</li> <li>• internet/extranet/intranet</li> <li>• photocopier</li> <li>• shredder</li> <li>• telephone</li> </ul>
<i>Systems</i> may include:	<ul style="list-style-type: none"> <li>• information management systems</li> <li>• knowledge management systems</li> <li>• record management systems</li> </ul>
<i>Designated persons</i> may include:	<ul style="list-style-type: none"> <li>• clients</li> <li>• colleagues</li> <li>• committee</li> <li>• external agencies</li> <li>• line management</li> <li>• statutory bodies</li> <li>• supervisor</li> </ul>
<i>Feedback</i> may include:	<ul style="list-style-type: none"> <li>• audit documentation and reports</li> <li>• comments from clients and colleagues</li> <li>• customer satisfaction questionnaires</li> <li>• quality assurance data</li> <li>• returned goods</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	
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### Competency field

<b>Competency field</b>	Knowledge Management - Information Management
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### Co-requisite units

<b>Co-requisite units</b>		

## BSBRES401A Analyse and present research information

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to gather, organise and present workplace information using available systems.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to individuals who are required to apply their broad knowledge of the work environment to analysis and research tasks. They may have responsibility to provide guidance or to delegate aspects of these tasks to others.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Gather and organise information	<p>1.1. Gather and organise <b><i>information</i></b> in a format suitable for analysis, interpretation and dissemination in accordance with <b><i>organisational requirements</i></b></p> <p>1.2. Access information held by the organisation ensuring accuracy and relevance in line with established organisational requirements</p> <p>1.3. Ensure that <b><i>methods of collecting information</i></b> are reliable and make efficient use of resources in accordance with organisational requirements</p> <p>1.4. Identify research requirements for combining online research with non-electronic sources of information</p> <p>1.5. Use <b><i>business technology</i></b> to access, organise and monitor information in accordance with organisational requirements</p> <p>1.6. Update, modify, maintain and store information, in accordance with organisational requirements</p>
2. Research and analyse information	<p>2.1. Clearly define <b><i>objectives of research</i></b> ensuring consistency with organisational requirements</p> <p>2.2. Ensure that data and <b><i>research strategies</i></b> used are valid and relevant to the requirements of the research and make efficient use of available resources</p> <p>2.3. Identify <b><i>key words and phrases</i></b> for use as part of any online search strategy, including the use of <b><i>Boolean operators</i></b> and other search tools</p>

ELEMENT	PERFORMANCE CRITERIA
	2.4. Use reliable <i>methods of data analysis</i> that are suitable to research purposes 2.5. Ensure that assumptions and conclusions used in analyses are clear, justified, supported by evidence and consistent with research and <i>business objectives</i>
3. Present information	3.1. Present recommendations and issues in an appropriate format, style and structure using suitable business technology 3.2. Structure and format reports in a clear manner that conforms to organisational requirements 3.3. Report and distribute research findings in accordance with organisational requirements 3.4. Obtain <i>feedback</i> and comments on suitability and sufficiency of findings in accordance with organisational requirements

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- literacy skills to read, write and understand a variety of texts; and to edit and proofread documents to ensure clarity of meaning, accuracy and consistency of information
- problem-solving skills to deal with information which is contradictory, ambiguous, inconsistent or inadequate
- technology skills to select and use technology appropriate to a task
- research skills to identify and access information.

#### Required knowledge

- key provisions of relevant legislation from all levels of government that may affect aspects of business operations, such as:
  - anti-discrimination legislation
  - ethical principles
  - codes of practice
  - privacy laws
  - occupational health and safety (OHS)
- organisational record keeping/filing systems, security procedures and safe

**REQUIRED SKILLS AND KNOWLEDGE**

recording practices

- organisational policies and procedures relating to distribution of workplace information, and legal and ethical obligations
- research processes and strategies to identify new sources (online and print) of information and to use them most efficiently and effectively.

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- presenting information and data
- maintaining and handling data and documents systematically
- analysing and interpreting data to support organisational activities
- knowledge of research processes and strategies to identify new sources of information.

**Context of and specific resources for assessment**

Assessment must ensure:

- access to an actual workplace or simulated environment
- access to office equipment and resources
- examples of research tasks and resources.

**Method of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate
- analysis of responses to case studies and scenarios
- demonstration of techniques
- observation of presentations
- review of documentation outlining recommendations and issues

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• review of reports outlining research findings.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• general administration units</li> <li>• IT use units</li> <li>• Governance units</li> </ul>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Information</i></b> may include:	<ul style="list-style-type: none"> <li>• demographic data</li> <li>• service delivery records</li> <li>• computer databases (library catalogue, customer records, subscription database, internet)</li> <li>• computer files (letters, memos and other documents)</li> <li>• correspondence (faxes, memos, letters, email)</li> <li>• financial figures</li> <li>• forms (insurance forms, membership forms)</li> <li>• information on training needs</li> <li>• invoices (from suppliers, to debtors)</li> <li>• marketing reports/plans/budgets</li> <li>• personnel records (personal details, salary rates)</li> <li>• production targets</li> <li>• sales records (monthly forecasts, targets achieved)</li> </ul>
<b><i>Organisational requirements</i></b> may include:	<ul style="list-style-type: none"> <li>• anti-discrimination and related policy</li> <li>• business and performance plans</li> <li>• Code of Conduct/Code of Ethics</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• defined resource parameters</li> <li>• ethical standards</li> <li>• goals, objectives, plans, systems and processes</li> <li>• information protocols</li> <li>• legal and organisational policies, guidelines and requirements</li> <li>• management and accountability channels</li> <li>• OHS policies, procedures and programs</li> <li>• procedures for updating records</li> <li>• quality assurance and/or procedures manuals</li> <li>• security and confidentiality requirements</li> </ul>
<b>Methods of collecting information</b> may include:	<ul style="list-style-type: none"> <li>• checking research provided by others</li> <li>• checking written material including referrals and client files</li> <li>• individual research</li> <li>• information from other organisations</li> <li>• interviews with community members, colleagues/customers</li> <li>• observation and listening</li> <li>• previous file records</li> <li>• questioning (in person or indirect)</li> <li>• recruitment applications and other forms</li> </ul>
<b>Business technology</b> may include:	<ul style="list-style-type: none"> <li>• answering machine</li> <li>• computer</li> <li>• fax machine</li> <li>• photocopier</li> <li>• telephone</li> </ul>
<b>Objectives of research</b> may include:	<ul style="list-style-type: none"> <li>• comparative analysis</li> <li>• hypothesis testing</li> <li>• identification of trends</li> <li>• industry pricing policies</li> <li>• process mapping</li> <li>• situational diagnosis</li> </ul>
<b>Research strategies</b> may include:	<ul style="list-style-type: none"> <li>• data analysis</li> <li>• documentation reviews</li> <li>• focus groups</li> <li>• interviewing colleagues and clients</li> <li>• online searching</li> <li>• product sampling</li> <li>• subscription databases</li> </ul>



<b>RANGE STATEMENT</b>	
<b><i>Key words and phrases</i></b> may include:	<ul style="list-style-type: none"> <li>• American spellings when searching online</li> <li>• cultural or geographic terms</li> <li>• using different thesauri in different databases</li> </ul>
<b><i>Boolean operators</i></b> may include:	<ul style="list-style-type: none"> <li>• exclude - / NOT</li> <li>• include + / AND</li> <li>• or</li> <li>• phrase searching " "( )</li> <li>• variations, depending on the resource being used</li> </ul>
<b><i>Methods of data analysis</i></b> may include:	<ul style="list-style-type: none"> <li>• data sampling</li> <li>• feedback on results</li> <li>• peer review</li> <li>• review of previous research</li> <li>• statistical analysis</li> </ul>
<b><i>Business objectives</i></b> may include:	<ul style="list-style-type: none"> <li>• community capacity building</li> <li>• community development</li> <li>• service provision</li> <li>• business planning</li> <li>• financial performance</li> <li>• flexibility, responsiveness</li> <li>• interpersonal communication</li> <li>• marketing and customer service</li> <li>• organisational values and behaviours</li> <li>• people management</li> <li>• work procedures and quality assurance manuals</li> </ul>
<b><i>Feedback</i></b> may include:	<ul style="list-style-type: none"> <li>• audit documentation and reports</li> <li>• comments from community, board members, clients and colleagues</li> <li>• customer satisfaction questionnaires</li> <li>• quality assurance data</li> <li>• returned goods</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

Competency field	Knowledge Management - Research
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## Co-requisite units

Co-requisite units		

## BSBSMB403A Market the small business

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to develop and implement marketing strategies, and to monitor and improve market performance.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This work is undertaken by individuals who operate a small business.</p> <p>This unit is suitable for micro and small businesses or a department in a larger organisation.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Develop marketing strategies	<p>1.1. Analyse the business and its key products or services to determine the focus of marketing activities, in accordance with the objectives of the business plan</p> <p>1.2. Evaluate the customer base and target market for the small business as a basis for the <b><i>marketing objectives and strategies</i></b></p> <p>1.3. Determine marketing objectives and strategies that are ethically and culturally appropriate, in consultation with <b><i>relevant people</i></b> and in accordance with the business plan</p>
2. Determine a marketing mix for the business	<p>2.1. Balance product mix, volumes and pricing to optimise sales and profit</p> <p>2.2. Evaluate the costs and benefits of using different <b><i>distribution channels</i></b> and/or providing different <b><i>levels of customer service</i></b> and consider the results in determining the <b><i>marketing mix</i></b></p> <p>2.3. Determine promotional activities to suit the target market</p> <p>2.4. Consider customer needs and preferences in determining the marketing mix</p> <p>2.5. Determine the marketing mix according to market and business needs</p>
3. Implement marketing	<p>3.1. Brief persons involved in the marketing effort on their roles and responsibilities, to ensure the success</p>

ELEMENT	PERFORMANCE CRITERIA
strategies	of marketing strategies 3.2. Plan and implement <i>promotional activities</i> , in accordance with marketing objectives and budgetary requirements
4. Monitor and improve marketing performance	4.1. Monitor marketing activities and evaluate business performance according to the objectives and targets of the business plan 4.2. Analyse <i>performance gaps</i> and take corrective action or set new targets 4.3. Encourage all relevant people to propose ways to improve marketing performance 4.4. Seek and analyse <i>customer reaction</i> to all aspects of the marketing mix, using culturally appropriate processes, to improve targeting and outcomes 4.5. Conduct ongoing research of customer requirements to identify opportunities for change and improvement 4.6. Monitor and investigate changes in the market for new opportunities to aid business development

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communication skills to question, clarify and report
- literacy and numeracy skills to research information, to analyse data and to interpret market data.

#### Required knowledge

- industry market trends
- methods of analysing costs and benefits of marketing strategies
- methods of developing marketing objectives and marketing mix
- methods of monitoring customer satisfaction
- relevant market analysis and research
- relevant marketing concepts and methods.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>developing a marketing strategy and choosing a marketing mix for the small business that are culturally appropriate and that complement the business plan</li> <li>implementing and monitoring the marketing strategy/plan to optimise the chances of small business success</li> <li>knowledge of relevant marketing concepts and methods.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>access to relevant documentation</li> <li>candidate's individual circumstances and work in the context of running a small business, are the basis for assessment.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>portfolio of evidence including marketing strategy and monitoring of marketing performance</li> <li>oral or written questioning to assess knowledge of industry market trends</li> <li>review of analysis of performance gaps and corrective action taken or new targets set</li> <li>review of promotional activities implemented.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>BSBSMB404A Undertake small business planning.</li> </ul>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b><i>Marketing objectives and strategies</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• achieving lower costs of production and distribution than competitors</li> <li>• creating a very different product line or service so that the business becomes a class leader in the industry</li> <li>• distribution</li> <li>• pricing, presentation and display of products/services</li> <li>• product design and packaging</li> <li>• product range and mix</li> <li>• promotion and advertising</li> <li>• pursuing cost leadership and/or product differentiation within a specialist market segment</li> </ul>
<p><b><i>Relevant people</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• accountant or other specialist services</li> <li>• family members, work team members, sub-contractors, community members</li> <li>• franchise agency</li> <li>• financial backers, clients</li> <li>• owner/operator, partners, directors, shareholders</li> <li>• regulatory bodies</li> <li>• trade or industry associations</li> </ul>
<p><b><i>Distribution channels</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• dealer, re-seller, franchisee</li> <li>• distributor, delivery service, mail order, telesales</li> <li>• self-access, wholesale, retail</li> </ul>
<p><b><i>Levels of customer service</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• after sales service</li> <li>• one-on-one personal service</li> <li>• sales assistance for problems/queries only</li> </ul>
<p><b><i>Marketing mix</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• distribution</li> <li>• level of service</li> <li>• pricing</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• promotion</li> <li>• quality, range</li> <li>• safety features</li> <li>• technical features, design</li> </ul>
<i>Promotional activities</i> may include:	<ul style="list-style-type: none"> <li>• advertising in national, suburban or local newspapers</li> <li>• advertising on radio or television</li> <li>• canvassing</li> <li>• development of networks and strategic alliances</li> <li>• display posters</li> <li>• exhibitions, in-store promotions</li> <li>• involvement in community projects</li> <li>• mail drops</li> <li>• professional/industry journals</li> <li>• sponsorship</li> <li>• staff development programs to enhance customer service orientation</li> <li>• website</li> <li>• word of mouth, referral, testimonials</li> </ul>
<i>Performance gaps</i> may include:	<ul style="list-style-type: none"> <li>• over achievement of performance targets</li> <li>• under achievement of performance targets</li> </ul>
<i>Customer reaction</i> may be determined through:	<ul style="list-style-type: none"> <li>• customer meetings, focus groups</li> <li>• identification of new business opportunities</li> <li>• informal discussion</li> <li>• sales to contact ratio</li> <li>• survey/other feedback mechanisms</li> <li>• trend analysis</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

<b>Competency field</b>	Management and Leadership - Small and Micro Business
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## Co-requisite units

<b>Co-requisite units</b>	

## BSBSMB405A Monitor and manage small business operations

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to operate a small business and to implement a business plan. The strategies involve monitoring, managing and reviewing operational procedures.</p> <p>Specific legal requirements apply to the management of a small business.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This work is undertaken by individuals who operate a small business.</p> <p>The unit is suitable for existing micro and small businesses or a department in a larger organisation.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Develop OPERATIONAL STRATEGIES AND PROCEDURES	1.1. Develop an action plan to provide a clear and coherent direction, in accordance with the <b><i>business goals and objectives</i></b> 1.2. Identify <b><i>occupational health and safety (OHS) and environmental issues</i></b> and implement strategies to minimise risk factors 1.3. Develop a <b><i>quality system</i></b> for the business in line with industry standards, compliance requirements and cultural criteria 1.4. Develop performance measures and <b><i>operational targets</i></b> to conform with the business plan 1.5. Develop strategies for innovation, including the utilisation of existing, new or emerging technologies, where practicable, to optimise business performance
2. Implement operational strategies and procedures	2.1. Implement systems and key performance indicators/targets to monitor business performance and customer satisfaction 2.2. Implement systems to control stock, expenditure/cost, wastage/shrinkage and risks to health and safety in accordance with the business plan 2.3. Maintain staffing requirements, where applicable, within budget to maximise productivity

ELEMENT	PERFORMANCE CRITERIA
	<p>2.4. Carry out the provision of goods/services in accordance with established legal, ethical cultural and <i>technical standards</i></p> <p>2.5. Provide goods/services in accordance with time, cost and quality specifications, and customer requirements</p> <p>2.6. Apply quality procedures to address product/service and customer requirements</p>
3. Monitor business performance	<p>3.1. Regularly monitor/review the achievement of operational targets to ensure optimum business performance, in accordance with the business plan goals and objectives</p> <p>3.2. Review systems and structures, with a view to more effectively supporting business performance</p> <p>3.3. Investigate and analyse operating problems to establish causes and implement changes as required as part of the business quality system</p> <p>3.4. Amend operational policies and procedures to incorporate corrective action</p>
4. Review business operations	<p>4.1. Review and adjust business plan, as required, to maintain business viability, in accordance with business goals and objectives</p> <p>4.2. Clearly record proposed changes to aid future planning and evaluation</p> <p>4.3. Undertake ongoing research into new business opportunities and adjust business goals and objectives as new business opportunities arise</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- analytical skills to develop criteria and targets for the business plan
- communication skills to question, clarify and report
- literacy skills to interpret legal requirements, company policies and procedures
- numeracy skills to manage performance information and to control the finances
- technology skills to use relevant business equipment.

## REQUIRED SKILLS AND KNOWLEDGE

### Required knowledge

- methods for developing and maintaining networks
- methods for implementing operation and revenue control systems
- methods for monitoring performance and implementing improvements
- OHS responsibilities and procedures for managing hazards
- principles of risk management relevant to the business, including risk assessment
- quality system principles and methods
- relevant industry codes of practice
- relevant marketing, sales and financial concepts
- relevant performance measures
- role of innovation
- systems to manage staff, stock, expenditure, services and customer service
- technical or specialist skills relevant to the business operation.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- developing strategies and procedures to successfully manage the operation of the business
- making appropriate adjustments to the business operations as required
- knowledge of quality system principles and methods.

#### Context of and specific resources for assessment

Assessment must ensure:

- access to relevant documentation
- candidate's individual circumstances and work in the context of running a small business, are the basis for assessment.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• portfolio of evidence including operational strategies and procedures</li> <li>• oral or written questioning to assess knowledge of principles of risk management relevant to the business, including risk assessment</li> <li>• review of analysis of operating problems (establishing causes and implementing changes as required as part of the business quality system)</li> <li>• review of records proposing changes to the business operations.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• BSBSMB406A Manage small business finances</li> <li>• BSBSMB407A Manage a small team.</li> </ul>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Operational strategies and procedures</i></b> may be determined by:</p>	<ul style="list-style-type: none"> <li>• business premises (size, location, layout)</li> <li>• financial control systems and procedures</li> <li>• management and administrative systems and procedures</li> <li>• methods/techniques/technology</li> <li>• physical and natural resources</li> <li>• plant and equipment , including OHS requirements</li> <li>• premises, plant and equipment, which may be new or previously owned</li> <li>• purchase (sole or shared ownership) or leasing</li> <li>• raw materials</li> <li>• requirements, which may be one-off requirements or recurrent requirements (such as</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>equipment maintenance) specific to the nature of the business</p> <ul style="list-style-type: none"> <li>• technology</li> <li>• use of existing, new and emerging technologies including e-commerce</li> </ul>
<p><b><i>Business goals and objectives</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• customer needs/marketing projections</li> <li>• family or community benefits</li> <li>• financial projections</li> <li>• goals, objectives, plans, systems and processes</li> <li>• lifestyle issues</li> <li>• proposed size and scale of the business, market focus of the business</li> <li>• short-, medium- or long-term goals</li> <li>• social responsibility</li> </ul>
<p><b><i>Occupational health and safety and environmental issues</i></b> must include:</p>	<ul style="list-style-type: none"> <li>• controls, which may include instructions to workplace personnel concerning site hazards and controls, material safety data sheets, use of personal protective equipment, vehicle access, signs and barricades, traffic control, outside contractors</li> <li>• establishment and maintenance of procedures for assessing and controlling risks</li> <li>• establishment and maintenance of procedures for identifying risks to health and safety</li> <li>• waste and by-products</li> </ul>
<p><b><i>Quality system</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• manual or computer quality control systems</li> <li>• quality assurance/management approaches</li> <li>• random inspections and assessments of goods and services against predetermined standards</li> <li>• random inspections and assessments of processes against predetermined standards</li> <li>• random sampling and follow-up of customers</li> </ul>
<p><b><i>Operational targets</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• external targets, which may relate to market share and positioning and may involve exploring new markets, building national or international trade links</li> <li>• internal targets, which may relate to size, quality, quantity and diversity, wages to sales, sales to area/stock levels/stock turnover/average debtor payment periods and levels</li> <li>• staffing level and skills mix</li> <li>• targets, which may be short-, medium- or</li> </ul>

<b>RANGE STATEMENT</b>	
	long-term
<i>Technical standards</i> may include:	<ul style="list-style-type: none"> <li>current and generally agreed descriptions of what the product/service is, how it should be produced/delivered and the quality, safety, efficiency or other measures to determine the activity is done effectively</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	
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### Competency field

<b>Competency field</b>	Management and Leadership - Small and Micro Business
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### Co-requisite units

<b>Co-requisite units</b>		



## BSBSMB407A Manage a small team

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to plan for the management of and to manage staff. It involves industrial relations, staff selection, staff records, induction, training, team development and career planning to enhance business operations through retaining a competent, committed and motivated team in the workplace.</p> <p>Specific legal requirements apply to the management of a small business.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This work is undertaken by individuals who operate a small business.</p> <p>The unit is suitable for existing micro and small businesses or a department in a larger organisation.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

Employability skills	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Develop staffing plan	<p>1.1. Determine <i>staffing requirements</i> to allow the business to run effectively, in accordance with the business requirements as outlined in the business plan</p> <p>1.2. Identify and compare the existing skills/competencies of owner/s and staff with business requirements to identify any gaps</p> <p>1.3. Develop <i>policies and procedures</i> for owner/s and staff, in accordance with the business plan</p>
2. Recruit, induct, train and retain the team	<p>2.1. Develop job/position descriptions, competencies required and selection criteria to meet the needs of the business</p> <p>2.2. Judge information obtained from each candidate against specified selection criteria and decide selection in accordance with business needs and legal requirements</p> <p>2.3. Induct new staff members in accordance with the policies and procedures of the business</p> <p>2.4. Make team members aware of their responsibilities and performance requirements as soon as practicable and take opportunities to coach team members who</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>are unfamiliar with the procedures of the business</p> <p>2.5. Develop and implement a <b>staff development program and career paths</b> based on the requirements of business and staff competencies</p> <p>2.6. <b>Advertise staff vacancies</b> appropriately in accordance with staffing plan</p>
3. Comply with INDUSTRIAL RELATIONS obligations	<p>3.1. Clarify workplace rights and obligations of employers and employees, in accordance with <b>legal requirements and codes of practice</b></p> <p>3.2. Counsel staff, if required, in a positive and constructive manner and record outcomes accurately</p>
4. Maintain staff records	<p>4.1. Develop <b>staff records system</b> to provide timely and accurate information, in accordance with confidentiality, legal and taxation requirements</p> <p>4.2. Monitor and accurately maintain the system for recording and retrieving personnel and payroll information and seek specialist advice where required</p>
5. Manage staff	<p>5.1. Regularly review contribution and skills of self and other team members to ensure performance is in line with agreed <b>performance measures</b></p> <p>5.2. Monitor and adjust staffing requirements to respond to any changes in tasks and functions required by the business</p> <p>5.3. Support and encourage staff, and acknowledge and reward their contribution to the business</p> <p>5.4. Regularly provide opportunities for staff to discuss work related issues</p> <p>5.5. Develop <b>contingency plans</b> to cope with unexpected or extreme situations and take appropriate corrective action as required</p>
6. Review team performance	<p>6.1. Develop positive and constructive relationships with and between <b>team members</b></p> <p>6.2. Review and update team objectives in support of business goals on a regular basis in consultation with team members</p> <p>6.3. Identify strengths and weaknesses of team against current and expected work requirements</p> <p>6.4. Schedule time, on a regular basis, for team members to review work operations in order to maintain and improve operational efficiency</p> <p>6.5. Encourage team members to monitor their own</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>performance, suggest improvements and to identify professional development needs, in accordance with personal and business requirements</p> <p>6.6. Monitor and review staff turnover rate</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- analytical skills to identify workplace skill gaps
- coaching skills
- communication skills to relate to staff
- conflict resolution skills
- literacy skills to interpret legal requirements, to compile reports and to prepare a job/position description
- team building and motivation skills.

#### Required knowledge

- commonwealth, state/territory and local government legislative requirements relating to business operation, especially in regard to occupational health and safety (OHS) and environmental issues, equal employment opportunity (EEO), industrial relations and anti-discrimination
- OHS responsibilities and procedures for managing hazards
- relevant industry awards/enterprise agreements
- staff development and career planning
- staff counselling, grievance and disciplinary procedures
- unfair dismissal legislation and procedures.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<b>EVIDENCE GUIDE</b>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>managing a small team including staff selection, staff records, induction, training and development</li> <li>developing and maintaining team performance to enhance business operations</li> <li>knowledge of relevant legislative requirements affecting business operation.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>access to relevant documentation</li> <li>candidate's individual circumstances and work in the context of running a small business, are the basis for assessment.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>portfolio of evidence including staff policies and records, and contingency plans</li> <li>oral or written questioning to assess knowledge of staff recruitment procedures, staff development and review programs</li> <li>review of job/position descriptions and selection criteria developed</li> <li>review of documentation monitoring and reviewing staff turnover rate.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>BSBSMB405A Monitor and manage small business operations.</li> </ul>

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating

<b>RANGE STATEMENT</b>	
conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Staffing requirements</i> may include:	<ul style="list-style-type: none"> <li>• full-time, part-time, permanent, temporary or casual</li> <li>• number of staff</li> <li>• responsibilities, competencies required</li> <li>• self, other owners, family and/or friends</li> <li>• sub-contractors or external advisors/consultants</li> <li>• time commitment, performance expectations</li> </ul>
<i>Policies and procedures</i> must include:	<ul style="list-style-type: none"> <li>• complaint and grievance procedures</li> <li>• culturally appropriate entitlements e.g. funeral leave, national/religious days</li> <li>• culturally appropriate procedures e.g. how business will enact cultural requirements for relationships between owner/operator, employees and service providers</li> <li>• employment conditions, equal opportunity, anti-discrimination, cultural diversity</li> <li>• induction and training</li> <li>• OHS</li> <li>• recruitment and selection</li> <li>• performance measures</li> <li>• professional development</li> </ul>
<i>Staff development program and career paths</i> may include	<ul style="list-style-type: none"> <li>• attendance at courses</li> <li>• career planning</li> <li>• coaching</li> <li>• flexible learning</li> <li>• job rotation</li> <li>• mentoring</li> <li>• on-the-job training</li> <li>• professional development</li> <li>• staff exchanges</li> <li>• succession planning</li> </ul>
<i>Advertising staff vacancies</i> may include:	<ul style="list-style-type: none"> <li>• electronic (radio, television and internet)</li> <li>• noticeboards</li> <li>• print media</li> <li>• word-of-mouth</li> </ul>
<i>Industrial relations</i> may include:	<ul style="list-style-type: none"> <li>• awards and/or industrial agreements and</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>relevant industrial instruments</li> <li>counselling, dismissal procedures</li> </ul>
<i>Legal requirements and codes of practice</i> may include:	<ul style="list-style-type: none"> <li>award and enterprise agreements and relevant industrial instruments</li> <li>commonwealth, state/territory and local government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination</li> <li>relevant industry codes of practice</li> </ul>
<i>Staff records system</i> must include:	<ul style="list-style-type: none"> <li>disciplinary and grievance procedures</li> <li>employee records (including tax file number, remuneration, leave and training records)</li> <li>job/position descriptions</li> <li>OHS record</li> <li>records of taxation and superannuation payments made</li> </ul>
<i>Performance measures</i> may include:	<ul style="list-style-type: none"> <li>overall staff productivity</li> <li>percentage of chargeable hours/days per week</li> <li>performance of key people</li> <li>ratio of direct workers to those who support, supervise or manage them</li> <li>ratio of sales dollars per employee</li> <li>staff morale, work ethic, work satisfaction</li> </ul>
<i>Contingency plans</i> may include:	<ul style="list-style-type: none"> <li>accidents or emergencies</li> <li>environmental issues</li> <li>fluctuating workloads</li> <li>OHS</li> <li>unpredicted customer demand/busy periods</li> <li>unpredicted staff shortages</li> </ul>
<i>Team members</i> may include:	<ul style="list-style-type: none"> <li>employees, trainees/apprentices, sub-contractors or external advisers/consultants</li> <li>owner/s, partners, family members</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

Competency field	Management and Leadership - Small and Micro Business
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## Co-requisite units

Co-requisite units	



## BSBWOR402A Promote team effectiveness

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to promote teamwork. It involves developing team plans to meet expected outcomes, leading the work team, and proactively working with the management of the organisation.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>Frontline managers have an important leadership role in the development of efficient and effective work teams. They play a prominent part in team planning, supervising the performance of the team and developing team cohesion. They provide leadership for the team and bridge the gap between the management of the organisation and the team members. As such they must 'manage up' as well as manage their team/s.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan to achieve team outcomes	<p>1.1. Identify, establish and document <b><i>team purpose, roles, responsibilities, goals, plans and objectives</i></b> in <b><i>consultation</i></b> with team members</p> <p>1.2. Support team members in meeting expected outcomes</p>
2. Develop team cohesion	<p>2.1. Provide opportunities for input of team members into planning, decision making and operational aspects of work team</p> <p>2.2. Encourage and support team members to take <b><i>responsibility for own work</i></b> and to assist each other in undertaking required roles and responsibilities</p> <p>2.3. Provide <b><i>feedback</i></b> to team members to encourage, value and reward individual and team efforts and contributions</p> <p>2.4. Recognise and address issues, concerns and problems identified by team members or refer to <b><i>relevant persons</i></b> as required</p>

ELEMENT	PERFORMANCE CRITERIA
3. Participate in and facilitate work team	3.1. Actively encourage team members to participate in and take responsibility for team activities and communication processes 3.2. Give the team support to identify and resolve problems which impede its performance 3.3. Ensure own contribution to work team serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers
4. Liaise with management	4.1. Maintain open <i>communication</i> with <i>line manager/management</i> at all times 4.2. Communicate information from line manager/management to the team 4.3. Communicate unresolved issues, concerns and problems raised by the team/team members to line manager/management and ensure follow-up action is taken 4.4. Communicate unresolved issues, concerns and problems related to the team/team members raised by line managers/management to the team and ensure follow-up to action is taken

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- communication skills to:
  - boost team morale
  - deal with team conflict
  - deliver messages from management
  - facilitate discussion
  - mentor and coach
- leadership skills
- planning and organising skills.

#### Required knowledge

## REQUIRED SKILLS AND KNOWLEDGE

- organisational goals, objectives and plans
- organisational policy and procedures framework
- organisational structure, including organisational chart
- principles and techniques associated with:
  - delegation and work allocation
  - goal setting
  - group dynamics and processes
  - individual behaviour and difference
  - leadership
  - motivation
  - negotiation
  - planning.

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- teamwork plan with details of how it was generated and how it will be monitored so that team goals can be met
- techniques in communicating information, dealing with team conflict and resolving issues
- knowledge of organisational goals, objectives and plans.

#### Context of and specific resources for assessment

Assessment must ensure:

- access to appropriate documentation and resources normally used in the workplace.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- analysis of responses to case studies and scenarios

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate</li> <li>• observation of demonstrated techniques in working with team dynamics</li> <li>• observation of performance in role plays</li> <li>• oral or written questioning to assess knowledge of principles and techniques associated with group dynamics and processes</li> <li>• evaluation of opportunities provided for input of team members into planning, decision making and operational aspects of work team</li> <li>• review of feedback provided to team members</li> <li>• review of teamwork plan.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• other units from the Certificate IV in Frontline Management.</li> </ul>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b><i>Team purpose, roles, responsibilities, goals, plans and objectives</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• action plans, business plans and operational plans linked to strategic plans</li> <li>• expected outcomes and outputs</li> <li>• goals for individuals and the work team</li> <li>• individual and team performance plans and key performance indicators</li> <li>• occupational health and safety (OHS) responsibilities</li> </ul>
<p><b><i>Consultation</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• attending meetings, interviews, brainstorming sessions</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• using email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual effectiveness</li> <li>• using mechanisms to provide feedback to the work team in relation to consultation outcomes</li> </ul>
<b>Responsibility for own work</b> may involve:	<ul style="list-style-type: none"> <li>• individual and joint actions</li> <li>• individuals and teams</li> </ul>
<b>Feedback</b> may refer to:	<ul style="list-style-type: none"> <li>• formal/informal gatherings between team members where there is communication on work related matters</li> <li>• informal communication of ideas and thoughts on specific tasks, outcomes, decisions, issues or behaviours</li> </ul>
<b>Relevant persons</b> may include:	<ul style="list-style-type: none"> <li>• colleagues</li> <li>• direct superior or other management representatives</li> <li>• OHS committees and other people with specialist responsibilities</li> </ul>
<b>Communication</b> may include:	<ul style="list-style-type: none"> <li>• face-to-face</li> <li>• formal/informal interaction</li> <li>• verbal, written or electronic communication</li> </ul>
<b>Line manager/management</b> may refer to:	<ul style="list-style-type: none"> <li>• direct superior or other management representatives</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

<b>Competency field</b>	Management and Leadership - Management
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## Co-requisite units

Co-requisite units		

# **HLTFA301B Apply first aid**

## **Modification History**

## **Unit Descriptor**

This unit of competency describes the skills and knowledge required to provide first aid response, life support, management of casualty(s), the incident and other first aiders, until the arrival of medical or other assistance

## **Application of the Unit**

These skills and knowledge may be applied in a range of situations, including community and workplace settings

Training Package users should ensure implementation is consistent with any specific workplace and/or relevant legislative requirements in relation to first aid, including State/Territory requirements for currency

Application of these skills and knowledge should be contextualised as required to address specific industry, enterprise or workplace requirements and to address specific risks and hazards and associated injuries

A current Senior First Aid, Workplace Level 2 or Level 2 qualification may provide evidence of skills and knowledge required by this competency unit. However, as with all evidence of competence, evidence must be assessed against the requirements specified in the competency unit

## **Licensing/Regulatory Information**

## **Pre-Requisites**

## **Employability Skills Information**

The required outcomes described in this unit of competency contain applicable facets of Employability Skills

The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements

## **Elements and Performance Criteria Pre-Content**

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in *italics* are elaborated in the Range Statement.



## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 Assess the situation	<p>1.1 Identify assess and minimise <b>hazards</b> in the situation that may pose a risk of injury or illness to self and others</p> <p>1.2 Minimise immediate <b>risk</b> to self and casualty's health and safety by controlling any hazard in accordance with occupational health and safety requirements</p> <p>1.3 Assess casualty and identify injuries, illnesses and conditions</p>
2 Apply first aid procedures	<p>2.1 Calmly provide information to reassure casualty, adopting a communication style to match the casualty's level of consciousness</p> <p>2.2 Use available <b>resources and equipment</b> to make the casualty as comfortable as possible</p> <p>2.3 Respond to the casualty in a culturally aware, sensitive and respectful manner</p> <p>2.4 Determine and explain the nature of casualty's injury/condition and relevant first aid procedures to provide comfort</p> <p>2.5 Seek consent from casualty prior to applying first aid management</p> <p>2.6 Provide <b>first aid management</b> in accordance with <b>established first aid principles</b> and Australian Resuscitation Council (ARC) Guidelines and/or State/Territory regulations, legislation and policies and industry requirements</p> <p>2.7 Seek first aid assistance from others in a timely manner and as appropriate</p> <p>2.8 Correctly operate first aid equipment as required for first aid management according to manufacturer/supplier's instructions and local policies and/or procedures</p>

- 2.9 Use safe manual handling techniques as required
- 2.1 Monitor **casualty's condition** and respond in accordance with effective first aid principles and procedures
- 2.1 Finalise casualty management according to casualty's needs and first aid principles
- 3 Communicate details of the incident
  - 3.1 Request ambulance support and/or appropriate medical assistance according to relevant circumstances using relevant **communication media and equipment**
  - 3.2 Accurately convey assessment of casualty's condition and management activities to ambulance services /other emergency services/relieving personnel
  - 3.3 Prepare reports as appropriate in a timely manner, presenting all relevant facts according to established procedures
  - 3.4 Accurately record details of casualty's physical condition, changes in conditions, management and response to management in line with established procedures
  - 3.5 Maintain confidentiality of records and information in line with privacy principles and statutory and/or organisation policies
- 4 Evaluate own performance
  - 4.1 Seek feedback from **appropriate clinical expert**
  - 4.2 Recognise the possible psychological impacts on rescuers of involvement in critical incidents
  - 4.3 Participate in debriefing/evaluation as appropriate to improve future response and address individual needs

## Required Skills and Knowledge

This describes the essential skills and knowledge and their level required for this unit.

**Essential knowledge:**

ARC Guidelines relating to provision of first aid as outlined

Working knowledge of:

basic principles and concepts underlying the practice of first aid

procedures for dealing with major and minor injury and illness

priorities of management in first aid when dealing with life threatening conditions

basic occupational health and safety requirements in the provision of first aid

infection control principles and procedures, including use of standard precautions

chain of survival

first Aiders' skills and limitations

Understanding of the use of an Automated External Defibrillator (AED), including when to use and when not to

First aid management of:

abdominal injuries

allergic reactions

altered and loss of consciousness

bleeding

burns - thermal, chemical, friction, electrical

cardiac arrest

casualty with no signs of life

chest pain

choking/airway obstruction

injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations

envenomation - snake, spider, insect and marine bites

environmental impact such as hypothermia, hyperthermia, dehydration, heat stroke

fractures

medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions

near drowning

poisoning and toxic substances (including chemical contamination)  
respiratory distress  
seizures  
shock  
stroke  
substance misuse - common drugs and alcohol, including illicit drugs

Awareness of stress management techniques and available support

Social/legal issues:

duty of care  
need to be culturally aware, sensitive and respectful  
importance of debriefing  
confidentiality  
own skills and limitations

### **Essential skills:**

Ability to:

Conduct an initial casualty assessment

Plan an appropriate first aid response in line with established first aid principles, policies and procedures, ARC Guidelines and/or State/Territory regulations, legislation and policies and industry requirements and respond appropriately to contingencies in line with own skills

Demonstrate correct procedures for performing CPR using a manikin, including standard precautions (i.e. as per unit **HLTCPR201A Perform CPR**)

Apply first aid principles

Infection control, including use of standard precautions

Follow OH&S guidelines

Demonstrate:

safe manual handling

consideration of the welfare of the casualty

ability to call an ambulance

site management to prevent further injury

Provide assistance with self-medication as per subject's own medication regime and in line with State/Territory legislation, regulations and policies and any available

medical/pharmaceutical instructions

Administer medication in line with state/territory regulations, legislation and policies

Prepare a written incident report or provide information to enable preparation of an incident report

Communicate effectively and assertively in an incident

Make prompt and appropriate decisions relating to managing an incident in the workplace

Call an ambulance and/or medical assistance according to relevant circumstances and report casualty's condition

Use literacy and numeracy skills as required to read, interpret and apply guidelines and protocols

Evaluate own response and identify appropriate improvements where required

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package. The evidence guide supplements assessment requirements that apply to all units in this Training Package. Users of this evidence guide should first read the package's assessment guidelines.

### **Critical aspects of assessment:**

Assessment must include demonstrated evidence of specified Essential Knowledge and Essential Skills identified in this competency unit

Competence should be demonstrated working individually and, where appropriate, as part of a first aid team

Consistency of performance should be demonstrated over the required range of situations relevant to the workplace or community setting

Currency of first aid knowledge and skills is to be demonstrated in line with State/Territory regulations, legislation and policies, ARC and industry guidelines

**Context and resources required for assessment:**

Skills in performing first aid procedures are to be assessed through demonstration, with questioning to confirm essential knowledge

For assessment purposes, demonstration of skills in CPR procedures requires using a model of the human body (resuscitation manikin) in line with Australian Resuscitation Council Guidelines

**Access and equity considerations:**

All workers in the health industry should be aware of access and equity issues in relation to their own area of work

All workers should develop their ability to work in a culturally diverse environment

In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on health of Aboriginal and Torres Strait Islander people

Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on health of Aboriginal and/or Torres Strait Islander clients and communities

## Range Statement

### RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

**Contextualisation to address specific**

Focus on first aid management of specific

**requirements may include:**

types of injury

First aid provision under specific constraints or circumstances (e.g. in confined spaces, in maritime work environment or in work environment involving identified risks/hazards)

**Established first aid principles include:**

Preserve life

Prevent illness, injury and condition(s) becoming worse

Promote recovery

Protect the unconscious casualty

**Vital signs include:**

Consciousness

Breathing

Circulation

**A hazard is:**

A source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these

**Hazards may include:**

Physical hazards

Biological hazards

Chemical hazards

Hazards associated with manual handling

**Risks may include:**

Risks from equipment, machinery and substances

Risks from first aid equipment

Environmental risks

Exposure to blood and other body substances

Risk of further injury to the casualty

Risks associated with the proximity of other workers and bystanders

Risks from vehicles

**Casualty's condition is managed for:**

Abdominal injuries

Airway obstruction

Allergic reactions

Altered and loss of consciousness

Bleeding

Burns - thermal, chemical, friction, electrical

Chest pain/cardiac arrest

Injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations

Near drowning

Envenomation - snake, spider, insect and marine bites

Environmental conditions such as hypothermia, hyperthermia, dehydration, heat stroke

Fractures

Medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions

No signs of life

Poisoning and toxic substances (including chemical contamination)

Respiratory distress/arrest

Seizures

Shock

Stroke

Substance misuse - common drugs and alcohol, including illicit drugs.



**First aid management must take into account applicable aspects of:**

The setting in which first aid is provided, including:

- workplace policies and procedures
- industry/site specific regulations, codes etc.
- OHS requirements
- state and territory workplace health and safety legislative requirements
- location and nature of the incident
- situational risks associated with, for example, electrical and biological hazards, weather, motor vehicle accidents
- location of emergency services personnel.

The use and availability of first aid equipment and resources

- Infection control
- Legal and social responsibilities of first aider

**Resources and equipment are used appropriate to the risk to be met and may include:**

- AED
- First aid kit
- Auto-injector
- Puffer/inhaler
- Resuscitation mask or barrier
- Spacer device

**Communication media and equipment may include but are not limited to:**

- Telephones, including landline, mobile and satellite phones
- HF/VHF radio
- Flags
- Flares
- Two way radio
- Email
- Electronic equipment
- Hand signals

<b>Appropriate clinical expert may include:</b>	Supervisor/manager Ambulance officer/paramedic Other medical/health worker
<b>Documentation may include:</b>	Injury report forms Workplace documents as per organisation requirements
<b>Documentation may include recording:</b>	Time Location Description of injury First aid management Fluid intake/output, including fluid loss via: blood vomit faeces urine  Administration of medication including: time date person administering dose  Vital signs

## Unit Sector(s)

## LGAEHRR304B Operate council pound facilities

### Modification History

Not applicable.

### Unit Descriptor

**Unit Descriptor** This unit covers the general operation and maintenance of pound facilities.

### Application of the Unit

**Application of the Unit** This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of varying size and locations. Knowledge of the legislation and regulations within which councils must operate is essential. The role of councils, as the third tier of government, in managing the application of a broad range of by-laws and regulations must be appropriately reflected.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

**Prerequisite Unit/s**

### Employability Skills Information

**Employability Skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

1. **Ensure the security of pound premises**

1.1. Animal enclosures are secured according to council regulations and animal care legislation.

1.2. Access to pound premises is restricted to authorised personnel.

2. **Provide impounded animals with adequate care and attention**

2.1. Food and water supplies are adequate and suit requirements of animal species.

2.2. Condition of impounded animals is assessed regularly and appropriate medicinal treatment or supplements are provided.

2.3. Specialist veterinary attention is sought where warranted by the apparent condition of the animal.

3. **Maintain operational registers and records**

3.1. Registers and records are stored, updated and transferred in accordance with council and individual register requirements.

3.2. Registration fees are collected in accordance with council requirements and procedures.

4. **Undertake minor design of animal housing**

4.1. Animal housing is designed in accordance with council planning policies and procedures.

5. **Maintain pound structures, grounds and associated facilities**

5.1. Minor repairs are carried out in an effective and timely manner on sheds and fences.

5.2. Grounds are maintained according to council requirements.

5.3. Pound is cleaned and waste is disposed of in accordance with occupational health and safety (OHS) and council requirements.

Hidden text

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit

#### Required Skills

- minor maintenance of fences and sheds, in line with OHS and animal care standards
- record keeping.

#### Required Knowledge

- council structure and services
- irrigation
- watering
- drainage
- animal behaviour and handling techniques
- equipment
- food handling
- cleansing of holding areas
- yard operation
- veterinary and medicinal support.

Hidden text

## Evidence Guide

### EVIDENCE GUIDE

#### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated

#### Critical aspects of evidence to be considered

Animals are secured to prevent escape, in line with OHS and animal care legislation.

Care provided to animals is appropriate to council regulations and animal care legislation.

Registers and records are accurate and comprehensive, promoting identification of animals and assisting reporting.

## EVIDENCE GUIDE

	<p>Housing design and maintenance are adequate for animal care needs and volume.</p> <p>Waste disposal is in accordance with OHS and council requirements.</p>
<b>Context of assessment</b>	On the job or in a simulated work environment.
<b>Relationship to other units (prerequisite or co-requisite units)</b>	<p>Prerequisite units: nil.</p> <p>Co-requisite units: nil.</p>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies</li> <li>• written and/or oral questioning to assess knowledge and understanding</li> <li>• completion of workplace documentation</li> <li>• third-party reports from experienced practitioners</li> <li>• completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor.</li> </ul>
<b>Evidence required for demonstration of consistent performance</b>	Evidence will need to be gathered over time across a range of variables.
<b>Resource implications</b>	The learner and trainer should have access to appropriate documentation and resources normally used in the workplace.

## Range Statement

### RANGE STATEMENT

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

<b>Security may include:</b>	<ul style="list-style-type: none"> <li>• fences and gates of perimeter and pens</li> <li>• locks and catches</li> <li>• on-site presence of staff</li> <li>• provision of support to remote staff.</li> </ul>
<b>Care and attention may</b>	<ul style="list-style-type: none"> <li>• dietary needs of common and major animal species</li> </ul>

## RANGE STATEMENT

**include:**

**Registers and records may include:**

**Minor design may include:**

**Minor repairs may include:**

- shelter and shade needs
- adequate exercise space.
- daily bills and receipts
- care and attention
- brands
- advertising for unclaimed animals
- monthly reports
- procedure sheets
- applications for registration.
- common construction materials
- noise control
- size of pens and exercise yards
- isolation facilities
- veterinary requirements
- food storage and preparation
- shade area for stock
- holding areas
- waste disposal.
- woodwork
- metalwork
- painting
- fencing
- roof repairs
- drainage
- signage.

Hidden text

## Unit Sector(s)

**Unit Sector**

Regulatory Services Units

Hidden text

## Competency field

**Competency Field**

**co-requisite unit/s**

**Co-requisite Unit/s**



# LGAPLEM405C Provide assistance in carrying out building inspections

## Modification History

Not applicable.

## Unit Descriptor

### Unit Descriptor

This unit specifies the skills and knowledge required to carry out inspection of building works for compliance with building approval documentation, and to follow up inspections under the auspices of relevant authorities within council.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

## Application of the Unit

### Application of the Unit

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

### Prerequisite Unit/s

## Employability Skills Information

**Employability Skills** This unit contains employability skills.

### Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

### Elements and Performance Criteria

#### ELEMENT

#### PERFORMANCE CRITERIA

#### 1. Prepare for building inspections

- 1.1. Building documentation is reviewed to identify critical aspects of construction requiring inspection.
- 1.2. Team members and professionals in specialist areas are consulted as required for assistance in planning the building inspection.
- 1.3. Inspection documentation is prepared to ensure that all required observations are conducted and recorded.
- 1.4. Building inspection is requested, scheduled and confirmed according to council procedures.
- 1.5. Equipment required for the building inspection is gathered and checked.

#### 2. Inspect building works during progress and on completion

- 2.1. On-site works and structures are compared against approval documentation for compliance.
- 2.2. Consultation with site personnel is undertaken so that technical communications are clear and comprehensive and remedial action is understood.
- 2.3. Appropriate documentation is completed and forwarded to relevant departments in accordance with council requirements.

#### 3. Report and follow up building inspections

- 3.1. Inspection reports are prepared according to council requirements and forwarded to relevant authority for consideration.
- 3.2. Enforcement notices for non-compliance are issued in accordance with statutory requirements and council

## ELEMENT

## PERFORMANCE CRITERIA

procedures.

3.3. Inspection outcomes are accurately and promptly recorded on relevant council authority file.

3.4. Work rectified in accordance with non-compliance notification is inspected on request.

3.5. Final inspections are completed and, if appropriate, building certificates issued.

Hidden text

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit

#### Required Skills

- applying inspection techniques
- using inspection equipment
- reading and interpreting plans
- identifying non-compliance and defects
- undertaking field assessments of soil types
- performing bracing, fixing and other relevant calculations
- interpreting structural load-span tables
- verbal and written communication in a multicultural and diverse environment
- negotiation and conflict resolution
- preparing legal briefs
- writing reports
- analytical and interpretative information gathering.

#### Required Knowledge

- Building Code of Australia and relevant Australian standards
- principles of neighbourhood design
- relevant sections of Local Government Act and regulations
- relevant environmental legislation and practices
- council building and development policies, practices and codes
- structural engineering principles
- fire engineering principles
- relevant building and planning application requirements
- building construction practices

## REQUIRED SKILLS AND KNOWLEDGE

- properties of building materials
- topographical classification.

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## Evidence Guide

### EVIDENCE GUIDE

<b>Overview of assessment requirements</b>	A person who demonstrates competency in this unit will be able to perform the outcomes described in the elements to the required performance level detailed in the performance criteria. The unit's skill and knowledge requirements must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.
<b>Critical aspects of evidence to be considered</b>	The demonstrated ability to: <ul style="list-style-type: none"> <li>• gather information and consult with relevant professionals and team members to prepare for building inspections</li> <li>• undertake inspections in order to maintain quality and compliance of on-site works and structures</li> <li>• provide timely and efficient reporting to inform parties.</li> </ul>
<b>Context of assessment</b>	Competency is demonstrated by performance of all stated criteria, with particular attention to the critical aspects of evidence and the knowledge and skills elaborated in the Evidence Guide, and within the scope of the range statement.  Assessment must take account of the endorsed Assessment Guidelines in the Local Government Training Package.  Assessment of the performance requirements in this unit should be undertaken in an actual workplace or simulated environment.  Assessment should reinforce the integration of the key competencies for the particular AQF level.
<b>Method of assessment</b>	The following assessment methods are suggested: <ul style="list-style-type: none"> <li>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies</li> <li>• written and oral questioning to assess knowledge and understanding</li> </ul>

## EVIDENCE GUIDE

### Evidence required for demonstration of consistent performance

- completion of workplace documentation
- third-party reports from experienced practitioners
- completion of self-paced learning materials, including personal reflection and feedback from trainer, coach or supervisor.

Evidence should be collected over a set period of time that is sufficient to include dealings with an appropriate range and variety of situations.

### Resource implications

Access to a workplace or simulated case study that provides the following resources:

- relevant legislation
- examples of council policies and codes
- materials and information on building construction and properties of building materials
- real or simulated sites.

## Range Statement

### RANGE STATEMENT

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

### Documentation may include:

- soil report
- engineers' computations
- specifications title
- planning permit.

### Inspection may include:

- statutory
- follow-up
- final
- random
- council policy
- change of use
- stage
- sewerage
- drainage
- plumbing
- in response to complaint

## RANGE STATEMENT

**Relevant authorities may include:**

- illegal works
- mechanical
- ventilation
- fire services
- environmental controls
- hoarding and site access restrictions.
- building surveyor
- town planner
- council
- utilities and water authorities.

Hidden text

## Unit Sector(s)

**Unit Sector** Planning

Hidden text

## Competency field

**Competency Field**

## co-requisite unit/s

**Co-requisite Unit/s**

## MEM05004C Perform routine oxy acetylene welding

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers preparing materials and performing routine oxy acetylene welding.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies in a maintenance or manufacturing environment where the welding is not required to meet an Australian standard or equivalent. Fillet and butt welds would typically be performed on low carbon/mild steels.</p> <p>Where welding is required to meet Australian Standard 1554 General Purpose or equivalent codes, OHS regulations and/or licensing requirements, Unit MEM05022C (Perform advanced welding using oxy acetylene process) should be selected.</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 2</b></p>
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### Licensing/Regulatory Information

Refer to Application of the Unit

### Pre-Requisites

<b>Prerequisite units</b>	

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify weld requirements	1.1. Weld requirements are identified from job instructions. 1.2. Location of welds is identified in accordance with standard operating procedures and job specifications.
2. Prepare materials for welding	2.1. Materials are cleaned and prepared ready for welding.
3. Prepare equipment for welding	3.1. Welding equipment is set up correctly. 3.2. Settings and consumables are selected.
4. Perform routine welding using <i>oxy acetylene</i>	4.1. Safe welding practices are applied. 4.2. Materials are welded to job requirements. 4.3. Welds are cleaned in accordance with standard operating procedures.



## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- preparing materials
- setting up welding equipment
- welding with oxy acetylene fuel gas
- reading and interpreting routine information on written job instructions, specifications and standard operating procedures
- following oral instructions
- using measurement skills for joint preparation and routine oxy acetylene welding

#### Required knowledge

Look for evidence that confirms knowledge of:

- preparatory requirements
- materials and consumables properties and characteristics
- equipment and equipment settings
- fuel gas properties and applications
- post welding treatments
- weld characteristics
- any applicable industry standards, NOHSC guides, State/Territory regulatory codes of practice/standards
- safe work practices and procedures
- safe welding practices
- use and application of personal protective equipment for routine oxy acetylene welding

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

<b>EVIDENCE GUIDE</b>	
Guidelines for the Training Package.	
<b>Overview of assessment</b>	A person who demonstrates competency in this unit must be able to prepare materials and carry out routine oxy acetylene welding.
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with performing routine oxy acetylene welding or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
<b>Guidance information for assessment</b>	

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>Materials</b>	Mild and low carbon steel and cast iron
<b>Prepared</b>	Preheating, setting up jigs, fixtures, clamps, joint preparation
<b>Equipment</b>	Hoses, blowpipes, regulators
<b>Consumables</b>	Filler rods, fluxes
<b>Oxy acetylene</b>	The term 'oxy-acetylene' is used here to describe a range of fuel gases, including acetylene, LPG, hydrogen etc.
<b>Cleaned</b>	Fluxes

## Unit Sector(s)

<b>Unit sector</b>	
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## Co-requisite units

<b>Co-requisite units</b>	

## Competency field

<b>Competency field</b>	Fabrication
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## MEM05012C Perform routine manual metal arc welding

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers preparing the materials and carrying out routine manual metal arc welding (MMAW).
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies in a maintenance or manufacturing environment where the welding is not required to meet an Australian standard or equivalent. Fillet and butt welds would typically be performed on low carbon/mild steels.</p> <p>Where welding is required to AS 1554 General Purpose or equivalent codes, occupational health and safety regulations and/or licensing requirements, Unit MEM05015D (Weld using manual metal arc welding process) should be selected.</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 2</b></p>
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### Licensing/Regulatory Information

Refer to Application of the Unit

### Pre-Requisites

<b>Prerequisite units</b>	

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify weld requirements	1.1. Weld requirements are identified from job instructions. 1.2. Location of welds is identified in accordance with standard operating procedures and job specifications.
2. Prepare materials for welding	2.1. Materials are cleaned and prepared ready for welding.
3. Prepare equipment for welding	3.1. Welding equipment is set up correctly. 3.2. Correct electrodes are selected to suit application and settings.
4. Perform routine welding using MMAW	4.1. Safe welding practices are applied. 4.2. Materials are welded to job requirements. 4.3. Welds are cleaned in accordance with standard operating procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- preparing materials and electrodes
- setting up welding equipment
- welding with MMAW
- reading and interpreting routine information on written job instructions, specifications and standard operating procedures
- performing measurements for joint preparation and routine MMAW

#### Required knowledge

Look for evidence that confirms knowledge of:

- material and equipment preparation
- properties and characteristics of materials and consumables
- weld characteristics
- equipment set-up and settings
- MMAW processes and properties
- post-welding treatments
- safe welding practices
- use and application of personal protective equipment

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must be able to prepare materials and carry out routine manual metal arc welding (MMAW).

<b>EVIDENCE GUIDE</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, i.e. the candidate is not in productive work, then appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with performing routine manual metal arc welding or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning should not require language, literacy and numeracy skills beyond those required in this unit. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
<b>Guidance information for assessment</b>	

## Range Statement

**RANGE STATEMENT**



**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>Materials</b>	Low and mild carbon steel or similar
<b>Prepared</b>	Cleaning, setting up jigs, fixtures, clamps, joint preparation
<b>Welding equipment</b>	Welding leads, welding machines, electrode holder etc.
<b>Cleaned</b>	Slag and spatter, cleaning, using files and grinders

**Unit Sector(s)**

<b>Unit sector</b>	
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**Co-requisite units**

<b>Co-requisite units</b>	

**Competency field**

<b>Competency field</b>	Fabrication
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## MEM05050B Perform routine gas metal arc welding

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers preparing materials and routine gas metal arc welding (GMAW).
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies in a maintenance or manufacturing environment where the weld quality is not required to meet an Australian Standard or equivalent. Fillet and butt welds would typically be performed on low carbon/mild steels.</p> <p>Where welding is required to meet Australian Standard 1554 General Purpose or equivalent codes, occupational health and safety regulations and/or licensing requirements, Unit MEM05017D (Weld using gas metal arc welding process) should be selected.</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 2</b></p>
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### Licensing/Regulatory Information

Refer to Application of the Unit

### Pre-Requisites

<b>Prerequisite units</b>	

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify weld requirements	1.1. Weld requirements are identified from job instructions. 1.2. Locations of welds are identified in according to standard operating procedures and job specifications.
2. Prepare materials for welding	2.1. Materials are cleaned and prepared ready for welding.
3. Prepare equipment for welding	3.1. Welding equipment is set up correctly. 3.2. Settings and consumables are selected to suit application.
4. Perform routine welding using GMAW	4.1. Safe welding practices are applied. 4.2. Materials are welded to job requirements. 4.3. Welds are cleaned to standard operating procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- preparing materials
- setting up welding equipment
- welding with GMAW
- reading and interpreting routine information on written job instructions, specifications and standard operating procedures
- following oral instruction
- using measurement skills relating to joint preparation and routine GMAW

#### Required knowledge

Look for evidence that confirms knowledge of:

- different current and voltage settings, gas flow rates wire diameters, wire feed speed and other variables to suit typical situations.
- material and equipment preparation
- properties and characteristics of materials and consumables
- equipment and equipment settings
- fuel gas properties and applications
- post-welding treatments
- weld characteristics
- safe welding practices
- use and application of personal protective equipment for routine GMAW

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must

<b>EVIDENCE GUIDE</b>	
	be able to perform routine gas metal arc welding (GMAW).
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with preparing the materials and carrying out routine gas metal arc welding or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
<b>Guidance information for assessment</b>	

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>Materials</b>	Mild and low carbon steel
<b>Prepared</b>	Preheating, setting up jigs, fixtures, clamps, joint preparation
<b>Equipment</b>	Hoses, welding leads, gas shrouds, gas regulators, liners, contact tips
<b>Consumables</b>	Filler wire, shielding gas
<b>Cleaned</b>	Slag and spatter

## Unit Sector(s)

<b>Unit sector</b>	
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## Co-requisite units

<b>Co-requisite units</b>	

## Competency field

Competency field	Fabrication
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## MEM18001C Use hand tools

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers using a range of hand tools for a variety of general engineering applications.
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### Application of the Unit

<b>Application of the unit</b>	<p>Applications may include hand tools used for adjusting, dismantling, assembling and finishing of items or components, and the finishing, cutting, scraping of metallic and non-metallic material to size and shape. This includes simple tapping and threading and routine maintenance of hand tools.</p> <p>This unit should not be selected if the hand tool is dedicated to a single operation or machine and if only a machine specific/customised tool is used.</p> <p>When using hand held power tools or power tools used for hand held operations, refer to Unit MEM18002B (Use power tools/hand held operations).</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 2</b></p>
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### Licensing/Regulatory Information

Not Applicable



## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Use hand tools	<p>1.1. Hand tools are selected appropriate to the task requirements.</p> <p>1.2. Hand tools are used to produce desired outcomes to job specifications which may include finish, tension, size or shape.</p> <p>1.3. All safety requirements are adhered to before, during and after use.</p> <p>1.4. Unsafe or faulty tools are identified and marked for repair according to designated procedures before, during and after use.</p> <p>1.5. Routine maintenance of tools, including hand sharpening is undertaken according to standard</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>operational procedures, principles and techniques.</p> <p>1.6. Hand tools are stored safely in appropriate location according to standard operational procedures and manufacturers' recommendations.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- reading and following information on standard operating procedures
- following verbal instructions
- selecting hand tools appropriate to the task
- using hand tools safely
- identifying hand tool defects and marking for repair
- maintaining/sharpening hand tools using appropriate techniques
- storing hand tools in accordance with manufacturers'/standard operating procedures

#### Required knowledge

Look for evidence that confirms knowledge of:

- applications of different hand tools in a general engineering context
- common faults and/or defects in hand tools
- procedures for marking unsafe or faulty tools for repair
- routine maintenance requirements for a range of hand tools
- storage location and procedures for a range of hand tools
- hazards and control measures associated with using hand tools
- use and application of personal protective equipment
- safe work practices and procedures

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	<p>A person who demonstrates competency in this unit must be able to use hand tools for a range of general engineering applications.</p>
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.</p>
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with using hand tools or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	<p>Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.</p>
<b>Guidance information for assessment</b>	

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b>Hand tools</b>	Hacksaws, hammers, punches, screwdrivers, sockets, wrenches, scrapers, chisels, gouges, wood planes and files of all cross-sectional shapes and types
<b>Job specifications</b>	Finish, tension, size or shape etc.
<b>Routine maintenance</b>	Cleaning, lubricating, tightening, simple tool repairs, hand sharpening and adjustments using engineering principles, tools, equipment and procedures

## Unit Sector(s)

<b>Unit sector</b>	
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## Co-requisite units

<b>Co-requisite units</b>	

## Competency field

<b>Competency field</b>	Maintenance and diagnostics
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## MEM18002B Use power tools/hand held operations

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers using a range of hand held power tools and fixed power tools for hand held operations for a variety of general engineering applications.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to loosening and fastening items or components and shaping, finishing, cutting, grinding metallic and non-metallic materials and/or tool bits to size and shape.</p> <p>This unit should not be selected if the power tools used are dedicated to an operation or machine, e.g. nut-runner, air drill, power driver, etc.</p> <p>For using hand tools, see Unit MEM18001C (Use hand tools).</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 2</b></p>
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### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

<b>Prerequisite units</b>	
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<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Use power tools	<p>1.1. Power tools are selected appropriate to the task requirements.</p> <p>1.2. Power tools are used for a determined sequence of operations - which may include clamping, alignment and adjustment to produce desired outcomes - to job specifications which may include finish, size or shape.</p> <p>1.3. All safety requirements are adhered to before, during and after use.</p> <p>1.4. Unsafe or faulty tools are identified and marked for repair before, during and after use according to designated procedures.</p> <p>1.5. Operational maintenance of tools, including hand sharpening, is undertaken according to standard</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>workplace procedures, principles and techniques.</p> <p>1.6. Power tools are stored safely in appropriate location according to standard workshop procedures and manufacturers' recommendations.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- reading and following information on standard operating procedures
- following verbal instructions
- selecting power tools appropriate to the task
- using power tools safely
- using clamping/securing devices
- identifying power tool defects
- maintaining power tools using appropriate techniques
- sharpening tools/tool bits within the scope of this unit
- storing power tools according to manufacturers'/ standard operating procedures.

#### Required knowledge

Look for evidence that confirms knowledge of:

- application of different power tools
- clamping/securing methods
- adjustments/alignments to a range of power tools
- common faults and/or defects in power tools
- procedures for marking unsafe or faulty power tools for repair
- routine maintenance requirements of a range of power tools
- tool sharpening techniques for a range of power tools
- storage location and procedures of a range of power tools
- hazards/control measures associated with power tools
- use and application of personal protective equipment
- safe work practices and procedures



## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	<p>A person who demonstrates competency in this unit must be able to use power tools/hand held operations.</p>
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.</p>
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with using power tools/hand held operations or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	<p>Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning should not require language, literacy and numeracy skills beyond those required in this unit. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.</p>

**EVIDENCE GUIDE**

<b>Guidance information for assessment</b>	
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Power tools**

Electric or pneumatic/hydraulic drills, grinders, jigsaws, nibblers, cutting saws, sanders, planers, routers, pedestal drills and pedestal grinders

**Clamping**

Multigrips, vices, jigs and fixtures, clamps etc.

**Job specifications**

Finish, size or shape etc.

**Operational maintenance**

Hand sharpening, cleaning, lubricating, tightening  
Simple tool repairs and adjustments using engineering principles, tools, equipment and procedures to statutory and regulatory requirements

**Unit Sector(s)**

<b>Unit sector</b>	
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## Co-requisite units

Co-requisite units		

## Competency field

Competency field	Maintenance and diagnostics
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## MSL915002A Schedule laboratory work for a small team

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to schedule laboratory work for a small team to meet operational requirements. It covers the ability to identify resource requirements and then document, monitor and adjust schedules in response to operational variations and in consultation with relevant personnel.
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### Application of the Unit

<b>Application of the unit</b>	This unit of competency is applicable to technical officers and laboratory technicians who have responsibility for the work outputs of a small work team in all industry sectors.  Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Determine work requirements and laboratory resources	1.1. Determine and prioritise demand for laboratory services in work area for the planning period 1.2. Access and verify information on orders/service requests, stocks and delivery 1.3. Determine the personnel, material and equipment required to deliver services
2. Develop schedules in consultation with relevant personnel	2.1. Prepare schedules which meet the demand for services and balance the best use of available resources with skill development opportunities 2.2. Distribute work schedules to team or appropriate personnel and confirm contents with them
3. Monitor schedules	3.1. Monitor workflow and outputs against schedules and recognise any variations or potential disruptions 3.2. Identify possible causes for the variations and discuss possible adjustments with senior personnel
4. Adjust schedules in	4.1. Adjust schedules in response to operational variation

ELEMENT	PERFORMANCE CRITERIA
consultation with senior personnel	4.2. Maintain or renegotiate outputs in accordance with work requirements 4.3. Update documented schedules and distribute to appropriate personnel

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- scheduling the work activities of a small team to meet operational requirements
- determining required resources
- recognising non-standard behaviour in samples and equipment
- compensating for a variety of work environments (e.g. outdoors or night work)
- adjusting schedules and resource requirements efficiently in response to variations and disruptions
- communicating and documenting schedule variations in accordance with procedures
- recognising and using capabilities of team members
- communicating effectively with team members

#### Required knowledge

Required knowledge includes:

- sufficient knowledge of the enterprise's information systems, procedures and equipment to schedule the laboratory work for a small team to meet operational requirements
- enterprise business goals as a basis for decision making and actions
- basic planning strategies
- accurate scientific and technical terminology
- scientific and technical details underpinning the processes or techniques involved
- enterprise standard operating procedures (SOPs) for the processes or techniques involved
- production schedules and analysis times for product range
- operational factors that may affect the type of tasks scheduled
- resource requirements of the work to be scheduled
- hazards of operations, equipment and materials involved

**REQUIRED SKILLS AND KNOWLEDGE**

- enterprise procedures relating to occupational health and safety (OHS), access and equity, relevant sections of industrial awards and enterprise agreements
- quality requirements for the tasks scheduled
- relevant health, safety and environment requirements

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- schedule the work activities of a small team to meet operational requirements
- determine required resources accurately
- plan schedules that are efficient and satisfy operational requirements without compromising safety, quality, accuracy and ethics
- adhere to timelines whenever possible
- recognise non-standard behaviour in samples and equipment
- recognise potential disruptions to planned timetable
- compensate for a variety of work environments (e.g. outdoors or night work)
- handle a variety of schedules and contingencies
- adjust schedules and resource requirements efficiently in response to variations
- communicate and document schedule variations in accordance with procedures
- recognise and use capabilities of team members
- communicate effectively with team members.

**Context of and specific resources for assessment**

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with technical units of competency relevant to the work of the team.

Resources may include:

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• workplace procedures</li> <li>• workplace documentation (e.g. production data).</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of documented work schedules prepared by the candidate which successfully meet a variety of operational requirements</li> <li>• feedback from managers, supervisors and customers serviced by the team involved</li> <li>• feedback from team members regarding the effectiveness of team interactions</li> <li>• questions to check underpinning knowledge of relevant policies, procedures and scheduling principles and handling of possible contingencies</li> <li>• scenarios simulating disruption to workflow</li> <li>• questions to check scientific and technical details underpinning the processes or techniques involved.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show their relevance in a workplace setting.</p> <p><b>Construction materials</b></p> <p>A consulting laboratory working with construction industries receives 10-15 samples to test daily. The technical officer schedules the work for three other laboratory team members depending on the type of tests and equipment required. One of the technical officer's main tasks is to determine daily and weekly work</p>



**EVIDENCE GUIDE**

priorities and distribute the work among team members to maximise their output and use of laboratory equipment. The technical officer monitors work outputs against the schedule and takes corrective action, if required, to ensure that customers receive results within the agreed timeframe.

**Biomedical**

At a regular team meeting a technical officer announced changes to the team's work schedules for the following week. The technical officer explained that the changes were part of a strategy to enable the team to become multi-skilled. However, the technical officer neither documented nor distributed written confirmation of the changes, as required. On the set date, confusion and conflict arose as a number of team members insisted on using the old schedules. Valuable time was taken up resolving the problem and confirming the changes with personnel individually. Afterwards, the laboratory supervisor reviewed the relevant communication protocols with the technical officer to emphasise their importance.

**Environmental**

The annual wastewater audit for a company required analysis of water samples collected at one-hourly intervals over a 24-hour period. The technical officer called his team together to find out what work priorities individual team members had and whether they had any personal commitments for the following two days. Afterwards, the officer drew up a roster for the annual audit, taking into account the commitments of team members. Following the audit, the officer analysed the results and compared them with the previous year's data.

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and

<b>RANGE STATEMENT</b>	
regional contexts) may also be included.	
<b>Codes of practice</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
<b>Laboratory work</b>	<p>Laboratory work may include:</p> <ul style="list-style-type: none"> <li>• setup, pre-use and calibration checks of equipment</li> <li>• preparation and standardisation of solutions</li> <li>• maintenance of laboratory facilities, equipment and stocks</li> <li>• collection, preparation and storage/dispatch of samples</li> <li>• testing and analysis of raw materials, products and specimens</li> <li>• preparation of products (e.g. sterile media) and product batches</li> <li>• trial and modification of methods</li> </ul>
<b>Scheduling for a small team</b>	<p>Scheduling for a small team may include:</p> <ul style="list-style-type: none"> <li>• identification of resources to maintain work flow including: <ul style="list-style-type: none"> <li>• interpreting production data</li> <li>• analysing job tasks</li> <li>• prioritising tasks within a work schedule</li> <li>• determining appropriate human resources in terms of skills and numbers</li> <li>• determining material and equipment requirements</li> <li>• monitoring information regarding orders, stocks and deliveries</li> </ul> </li> <li>• monitoring of work outputs</li> <li>• adjustment of work schedules as agreed with senior personnel to accommodate unexpected events, such as: <ul style="list-style-type: none"> <li>• processing abnormal and urgent results</li> <li>• delays in arrival of samples</li> <li>• seasonal variations and bad weather</li> <li>• analysing and solving operational problems resulting in unacceptable test results</li> <li>• unexpected events, such as equipment</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>failure and sudden personnel absences</p> <ul style="list-style-type: none"> <li>• communication with senior personnel including: <ul style="list-style-type: none"> <li>• determining and organising work priorities and schedules</li> <li>• analysing and solving problems affecting work schedules</li> <li>• adjusting work schedules as necessary</li> <li>• identifying possible problems for following shift</li> </ul> </li> <li>• appropriate communication with team members in relation to: <ul style="list-style-type: none"> <li>• explaining work schedules, priorities and sequences</li> <li>• distributing work schedules</li> <li>• maintaining required output</li> </ul> </li> <li>• documentation of outputs and resource usage <ul style="list-style-type: none"> <li>• quality and quantity of outputs</li> <li>• supplies of stock materials</li> <li>• maintenance and servicing of equipment</li> </ul> </li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Communication/organisation
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## MSL916001A Develop and maintain laboratory documentation

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to develop and maintain relevant documentation and systems in response to identified information requirements or changes in laboratory policy or external accreditation requirements. It includes the analysis of specialised technical requirements and the development and/or amendment of workplace documents, procedures and record keeping systems using established workplace procedures. Final responsibility for documentation and systems generally rests with professional scientific/medical/engineering staff who have the appropriate signatory status or legal delegation.
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### Application of the Unit

<b>Application of the unit</b>	This unit of competency is applicable to technical officers and laboratory supervisors working in all industry sectors.  Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Recognise documentation needs/deficiencies	<p>1.1. Evaluate current documentation to identify instances where documentation is needed or deficient</p> <p>1.2. Analyse development opportunities and discuss with appropriate personnel to assess and confirm requirements</p>
2. Develop/revise documentation	<p>2.1. Specify documentation need and set/prioritise objectives</p> <p>2.2. Analyse existing documentation/records in accordance with specified requirements</p> <p>2.3. Develop/amend documentation as a draft in accordance with review requirements</p> <p>2.4. Issue documentation to appropriate personnel for review</p>

ELEMENT	PERFORMANCE CRITERIA
	2.5. Edit documentation to ensure that the initial identified need/deficiency and review requirements are satisfied 2.6. Recall superseded documentation and issue new documentation in accordance with document control procedures
3. Implement and evaluate new laboratory documentation	3.1. Brief personnel on new/revised documentation to ensure successful implementation of new procedures 3.2. Monitor and evaluate implementation of new/revised documentation and amend documents or provide training, if required

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- analysing, drafting and amending enterprise documentation in accordance with specifications
- completing documentation in a clear and concise manner that is easily understood by others and in accordance with enterprise requirements/ specifications
- recognising problems in systems and documentation
- using internal and external information sources efficiently
- critically analysing information
- preparing documentation that is accurate, free from editorial errors and omissions and easily understood by the intended audience
- obtaining and including relevant feedback on draft documentation
- communicating information and developments in the appropriate manner
- completing the preparation and distribution of documents in the given time

#### Required knowledge

Required knowledge includes:

- documentation development and tracking
- records management and maintenance
- quality systems and continuous improvement
- organisational structure, delegations and responsibilities

## REQUIRED SKILLS AND KNOWLEDGE

- communication protocols and reporting
- scientific, technical and workplace terminology
- occupational health and safety (OHS), environmental and other relevant legislative requirements, regulations and codes
- enterprise standard operating procedures (SOPs)
- technical developments in the sector (current methodologies, ranges and interpretations)
- relevant health, safety and environment requirements
- the laboratory's business goals and key performance indicators

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- analyse, draft and amend enterprise documentation in accordance with specifications
- complete documentation in a clear and concise manner that is easily understood by others and in accordance with enterprise requirements/ specifications
- recognise problems in systems and documentation
- use internal and external information sources efficiently
- critically analyse information
- prepare documentation that is accurate, free from editorial errors and omissions, and in accordance with requirements
- prepare documentation that is easily understood by the intended audience
- obtain and include relevant feedback on draft documentation
- communicate information and developments in the appropriate manner
- complete the preparation and distribution of



<b>EVIDENCE GUIDE</b>	
	documents in the given time.
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL916004A Maintain registration and statutory or legal compliance in work/functional area</i></li> <li>• <i>MSL936001A Maintain quality system and continuous improvement processes within work/functional area</i></li> <li>• <i>MSL946001A Implement and monitor OHS and environmental management systems.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• information directories and databases</li> <li>• enterprise documents and procedures.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• examination of a range of relevant enterprise documentation developed by the candidate</li> <li>• feedback from peers and supervisors that enterprise procedures were followed and that the documentation is accurate and user friendly.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Environmental</b></p>

**EVIDENCE GUIDE**

A water sample thought to contain cadmium had been logged for analysis. Later that day, the technician designated to perform the analysis advised the laboratory supervisor that the procedures had not yet been revised to suit the newly installed analytical equipment. The supervisor created a draft procedure document for the revised procedure and passed it, with an explanation of the reasons for the change, to the appropriate personnel for authorisation. The draft document was approved and the supervisor issued the revised procedures as a control document. The supervisor notified all relevant personnel of the change, removed the old procedures, replaced it with the new document and entered the change in the document control register.

**Food processing**

Two senior technicians in the laboratory of a food processing company hazard analysis and critical control points (HACCP) team suggested extensive changes to the way the laboratory functioned so that it better supported the HACCP system. The technicians reviewed the existing HACCP documentation and legislation and revised the laboratory documentation that was relevant to the HACCP system. They also organised in-house training to provide each member of the laboratory team with the knowledge and skills essential for successful implementation of this system. Overall, the adoption of a HACCP plan by the company proceeded with relatively few problems, in part because of the involvement of the laboratory staff and the training provided by the company.

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>RANGE STATEMENT</b>	
<b>Codes of practice</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
<b>Standards, codes, procedures and/or enterprise requirements</b>	<p>Standards, codes, procedures and/or enterprise requirements may include:</p> <ul style="list-style-type: none"> <li>• Australian and international standards, such as: <ul style="list-style-type: none"> <li>• AS ISO 10013-2003 Guidelines for quality management system documentation</li> <li>• AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories</li> <li>• AS/NZS 2243 Set:2006 Safety in laboratories set</li> <li>• AS/NZS ISO 10005:2006 Quality management systems - Guidelines for quality plans</li> <li>• AS/NZS ISO 14000 Set:2005 Environmental management standards set</li> <li>• AS/NZS ISO 9000 Set:2008 Quality management systems set</li> <li>• Australia New Zealand Food Standards (ANZFS) Code</li> </ul> </li> <li>• Australian code of good manufacturing practice for medicinal products (GMP)</li> <li>• Australian Dangerous Goods Code</li> <li>• gene technology regulations</li> <li>• OHS national standards and codes of practice</li> <li>• principles of good laboratory practice (GLP)</li> <li>• testing procedures and specific method collections for industry sectors: <ul style="list-style-type: none"> <li>• Association of Analytical Communities International (AOAC International) Official Methods of Analysis</li> </ul> </li> </ul>
<b>Workplace documentation</b>	<p>Workplace documentation may include:</p> <ul style="list-style-type: none"> <li>• workplace procedures, SOPs and operating manuals</li> <li>• test procedures</li> <li>• sampling procedures (sampling, preparation, labelling, storage, transport and disposal)</li> <li>• evaluation of materials or products</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• instructions for equipment installation, commissioning, calibration and maintenance</li> <li>• safety requirements for equipment, materials or products</li> <li>• cleaning, hygiene and personal hygiene requirements</li> <li>• methods for extraction or manufacture of a product</li> <li>• risk evaluation, monitoring or control procedures</li> <li>• compliance/non-compliance reports</li> <li>• quality system and continued improvement processes</li> <li>• incident and accident/injury reports</li> <li>• permits</li> <li>• schematics/work flows/laboratory layouts</li> <li>• instructions to comply with new legislation, standards, guidelines and codes</li> <li>• stock records/inventory</li> <li>• training program contents</li> <li>• waste minimisation and disposal</li> </ul>
<b>Items of equipment and systems</b>	<p>Items of equipment and systems may include:</p> <ul style="list-style-type: none"> <li>• online information systems, databases, record and filing systems</li> <li>• computer equipment</li> </ul>
<b>Communication</b>	<p>Communication may be with:</p> <ul style="list-style-type: none"> <li>• supervisors and managers (laboratory, quality and customer service)</li> <li>• other laboratory or production personnel</li> <li>• members of the public, customers and suppliers</li> <li>• external auditors, regulation and licensing/accreditation authorities, such as National Association of Testing Authorities (NATA)</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through</li> </ul>

**RANGE STATEMENT**

	<p>state/territory or federal legislation - these requirements must not be compromised at any time</p> <ul style="list-style-type: none"> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Communication/organisation
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## MSL916003A Supervise laboratory operations in work/functional area

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency covers planning, allocation of tasks, coordination, quality assurance, monitoring resource usage and recording and reporting of laboratory operations. This requires using significant judgement about work sequences and choosing appropriate technology and procedures to ensure that products and services meet customer expectations, and are provided safely and efficiently in keeping with the enterprise business plan.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to senior technical officers and laboratory supervisors working in all industry sectors. Responsibility is undertaken for the day-to-day operation of the functional area under broad direction from more senior staff such as scientists, medical staff and engineers,</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Monitor and direct work practices within functional area	1.1.Ensure that personnel follow all relevant procedures, regulations and standards 1.2.Confirm that all technical work is performed in accordance with relevant standards, standard operating procedures (SOPs) and schedules 1.3.Ensure that analytical results/data are checked, collated and distributed in accordance with enterprise requirements 1.4.Monitor testing and sampling procedures for quality control in accordance with enterprise requirements 1.5.Identify and resolve complex problems by using agreed problem solving strategies and act to prevent their recurrence
2. Manage personnel	2.1.Develop and coordinate rosters to balance job

ELEMENT	PERFORMANCE CRITERIA
within work area	<p>requirements, laboratory efficiency and skill development opportunities</p> <p>2.2. Empower work groups/teams in dealing with technical and work flow problems and suggesting improvements</p> <p>2.3. Provide coaching and mentoring to support personnel who have difficulties with meeting targets for performance and/or resource usage</p> <p>2.4. Establish and maintain effective communication with all personnel and clients to ensure smooth and efficient operations</p>
3. Establish resource requirements and operating budgets	<p>3.1. Collect and analyse available resource information in consultation with appropriate personnel</p> <p>3.2. Prepare operational plans which make the best use of available resources, taking into account client needs and enterprise plans</p> <p>3.3. Identify and analyse possible variances due to external/internal factors and prepare contingency plans</p> <p>3.4. Compile operating budgets as required</p>
4. Procure resources to achieve operational plans	<p>4.1. Analyse resource requirements and sources of supply in terms of suitability, cost, quality and availability</p> <p>4.2. Select and purchase new materials and equipment in accordance with enterprise procedures</p> <p>4.3. Coordinate stocktaking of materials and equipment to ensure maintenance of stock at prescribed levels</p> <p>4.4. Ensure that personnel are competent to perform required tasks and organise training if required</p> <p>4.5. Arrange for the recruitment and induction of personnel as appropriate</p>
5. Monitor and optimise operational performance and resource usage	<p>5.1. Monitor the relationship between budget and actual performance to foresee problems</p> <p>5.2. Analyse variations in budget performance and either report or rectify abnormal/sub-optimal performance</p> <p>5.3. Negotiate with designated personnel and seek approval for variations to operational plans as required</p> <p>5.4. Assess utilisation of plant, equipment and consumables and compare with planned usage</p> <p>5.5. Rectify sub-optimal utilisation of plant, equipment</p>



ELEMENT	PERFORMANCE CRITERIA
	<p>and consumables</p> <p>5.6. Program and arrange for maintenance of plant and equipment in accordance with enterprise maintenance schedules</p> <p>5.7. Maintain systems, procedures and records associated with resource usage in accordance with enterprise requirements</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- collecting, analysing and reporting on information for enterprise operational plans, budgets and performance management
- organising and optimising the use of resources within agreed parameters to achieve planned outcomes
- revising plans to take account of the unexpected
- solving non-routine problems
- making decisions within limits of responsibility and authority
- ensuring that legislation, statutory and enterprise requirements are met in work operations
- monitoring outputs, analyses, processes and introducing ways to improve operations
- using effective consultative processes
- promoting a learning environment for personnel in the immediate work area
- motivating and counselling personnel to improve performance

#### Required knowledge

Required knowledge includes:

- enterprise:
  - business, strategic and operational plans
  - key performance indicators
  - laboratory services
  - products

## REQUIRED SKILLS AND KNOWLEDGE

- customers
- legislation, codes, standards and registration criteria relevant to the work area or function
- principles of budgeting, operational planning and efficient resource use
- workplace industrial agreements and regulations dealing with hygiene, dress and behaviour of employees
- SOPs and the technical details of sampling, testing, equipment and instrumentation within the work area
- problem solving techniques and contingency planning
- broad trends in production data (e.g. seasonal and annual)
- auditing procedures
- team leadership and development techniques
- mentoring and coaching techniques
- relevant health, safety and environment requirements

### Specific industry

Additional knowledge requirements may apply for different industry sectors. For example:

Biomedical and environmental:

- access information from sources, such as relevant Federal and State/Territory Acts, Environmental Protection Agency (EPA), National Pathology Accreditation Advisory Council (NPAAC) and National Health and Medical Research Council (NHMRC)

Food processing:

- Codex Alimentarius standards, Association of Analytical Communities International (AOAC International) Official Methods of Analysis

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- collect, analyse and report on information for enterprise operational plans, budgets and

<b>EVIDENCE GUIDE</b>	
	<p>performance management</p> <ul style="list-style-type: none"> <li>• organise and optimise the use of resources within agreed parameters to achieve planned outcomes</li> <li>• revise plans to take account of the unexpected</li> <li>• make decisions within limits of responsibility and authority</li> <li>• supervise laboratory operations and personnel so that planned outcomes are achieved within agreed resource and budget parameters without compromising safety, quality and ethics</li> <li>• ensure that legislation, statutory and enterprise requirements are met in work operations</li> <li>• monitor outputs, analyses processes and introduce ways to improve operations</li> <li>• solve a range of non-routine problems</li> <li>• use effective consultative processes</li> <li>• promote a learning environment for personnel in immediate work area</li> <li>• motivate and counsel personnel to improve performance.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency should be assessed in a laboratory environment that meets Australian standards for working laboratories or is accredited by NATA or the Royal College of Pathology. The assessment timeframe must allow for adequate assessment over a planning cycle.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL916002A Manage and develop teams</i></li> <li>• <i>MSL916004A Maintain registration and statutory or legal compliance in work/functional area</i></li> <li>• <i>MSL946001A Implement and monitor OHS and environmental management systems.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• laboratory equipped with appropriate services, equipment, instruments and consumables</li> <li>• relevant enterprise policies, procedures, operational reports, financial reports and stock records</li> <li>• technical manuals, SOPs and quality manuals.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• direct observation of the candidate's interactions with personnel</li> </ul>

**EVIDENCE GUIDE**

	<ul style="list-style-type: none"> <li>• review of reports from subordinates, peers, managers and customers</li> <li>• review of reports, operational budgets and plans generated by the candidate</li> <li>• review of performance reports for the candidate's work area</li> <li>• review of documented examples of quality performance improvements achieved and examples of significant problems solved</li> <li>• simulations/role plays to assess situations which are critical but did not arise during the negotiated assessment period.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>A laboratory supervisor analysed the costs of regular heavy metal testing of the wastewater stream leaving the company's plant. He/she compared these costs with a quotation from an external environmental consulting company and noted that it would be more cost effective to outsource the current level of testing. However, the supervisor argued that the company should retain this capability in-house given the impact of impending legislation which will require it to develop an environmental management plan and introduce more complex monitoring. He/she demonstrated that it would</p>

**EVIDENCE GUIDE**

benefit the company more in the long run if they recruited one new technician, retrained existing laboratory staff and continued to perform all wastewater testing on site.

**Food processing**

A technical officer had to complete a wide range of chemical analyses that required samples to be ignited for many hours in a muffle furnace, digested with acid, prepared for analysis by atomic absorption spectroscopy and gas chromatography (GC), and titrated against standard solutions. The laboratory supervisor noticed that the number of analyses performed each day by the technician tended to fluctuate widely without an obvious cause. Closer observation showed that the technician's efficiency was dependent on the order in which the analyses were begun and the use of the auto sampler for overnight operation of the GC.

The supervisor suggested several ways to improve the technician's time management. The supervisor installed a timer on the muffle furnace so that it could be operated overnight and organised the technician to perform labour intensive tasks after automated analyses had been initiated. The supervisor then showed the technician the optimum order to perform individual tasks and verified that his instructions were followed over succeeding weeks. The supervisor's actions significantly improved the productivity of the laboratory. Later it became obvious that the technician's time management system was not working as effectively as it had. Again, the supervisor monitored the technician's work and realised that since the daily analytical load was seasonal, a second management system had to be developed that was dedicated to the new season. Both systems were sufficiently flexible to take account of short term fluctuations in workload. In summary, the organisational skills of the supervisor and technician's ability to follow detailed instructions resulted in a more efficient use of company time, labour and resources.

**Range Statement****RANGE STATEMENT**

**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards such as:
  - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
  - AS/NZS 2243 Set:2006 Safety in laboratories set
  - AS/NZS ISO 14000 Set:2005 Environmental management standards set
  - AS/NZS ISO 9000 Set:2008 Quality management systems set
- Australia New Zealand Food Standards (ANZFS) Code
- Australian code of good manufacturing practice for medicinal products (GMP)
- Australian Dangerous Goods Code
- occupational health and safety (OHS) national standards and codes of practice
- principles of good laboratory practice (GLP)
- standard Australian test methods
- registration/licensing requirements
- ethical and legal responsibilities of enterprise personnel such as:
  - animal welfare
  - poisons
  - environmental protection
- National Association of Testing Authorities (NATA) accreditation
- staff performance measures, such as:
  - SOPs

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• three stage proficiency testing (external, interpersonal and replicate)</li> <li>• customer needs, specific testing requirements and standards</li> <li>• waste auditing and minimisation processes</li> <li>• strategic plans, productivity/profit targets and business plans</li> <li>• quality and continuous improvement processes and standards</li> <li>• cost-benefit analysis principles</li> <li>• workplace industrial agreements</li> <li>• hygiene/dress/behaviour regulations</li> <li>• grievance and dispute resolution procedures</li> <li>• access/equity/ethics principles, processes and procedures</li> <li>• batch cards, work schedules and rosters</li> <li>• maintenance and housekeeping schedules</li> </ul>
<b>Equipment and systems</b>	<p>Equipment and systems may include:</p> <ul style="list-style-type: none"> <li>• computer equipment</li> <li>• information management systems</li> <li>• financial accounting systems</li> </ul>
<b>Problem solving</b>	<p>Problem solving may include:</p> <ul style="list-style-type: none"> <li>• troubleshooting and fault finding</li> <li>• risk analysis, root cause analysis and aspect/impact analysis</li> <li>• non-routine operational/technical problems</li> <li>• non-routine administrative and personnel related problems</li> </ul>
<b>Communication</b>	<p>Communication may be with:</p> <ul style="list-style-type: none"> <li>• supervisors and managers</li> <li>• laboratory and production personnel</li> <li>• work teams</li> <li>• members of the public</li> <li>• customers</li> <li>• suppliers</li> </ul>
<b>Supervisory responsibilities</b>	<p>Supervisory responsibilities may include:</p> <ul style="list-style-type: none"> <li>• work practices within functional area: <ul style="list-style-type: none"> <li>• determining quality assurance sequences to</li> </ul> </li> </ul>

**RANGE STATEMENT**

	<p>minimise errors and inconsistencies</p> <ul style="list-style-type: none"> <li>• participating in external quality control programs</li> <li>• ensuring documentation of results and that data is processed and records maintained</li> <li>• personnel within functional area: <ul style="list-style-type: none"> <li>• developing rosters to fulfil both work requirements and skill development opportunities</li> <li>• identifying roles and responsibilities for individuals and team members</li> <li>• providing effective communication pathways to ensure smooth and efficient operations</li> <li>• encouraging teams to solve problems relating to work flow and to suggest possible improvements to work organisation to maximise efficiency</li> </ul> </li> <li>• operational plans: <ul style="list-style-type: none"> <li>• determining work schedules that use resources efficiently and meet customer and enterprise needs</li> <li>• identifying possible variances of operational plans in order to prepare contingency plans</li> </ul> </li> <li>• operational performance: <ul style="list-style-type: none"> <li>• recognising problems and initiating corrective actions</li> <li>• continuously improving the skills of personnel in the workplace</li> </ul> </li> </ul>
<p><b>Occupational health and safety (OHS) and environmental management requirements</b></p>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply</li> </ul>



**RANGE STATEMENT**

	current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health
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**Unit Sector(s)**

<b>Unit sector</b>	Communication/organisation
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## MSL916005A Manage complex projects

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to interpret complex technical briefs, determine project methodologies and resource requirements, establish project plans, manage projects to successful conclusions and evaluate project outcomes.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to senior technical officers and laboratory supervisors working in all industry sectors.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Interpret brief and design feasible project plan	1.1. Interpret and confirm project objectives, deliverables, constraints and principal work activities 1.2. Determine resource requirements, including personnel, equipment and materials 1.3. Develop a detailed implementation plan for the project outlining methodology, milestones and budget 1.4. Identify roles and responsibilities of project team members 1.5. Analyse quality requirements to ensure compliance with quality standards 1.6. Develop risk management strategies and risk management plans to ensure successful and timely outcomes
2. Establish and implement project plan	2.1. Brief team members about the project and allocate roles and responsibilities, balancing job roles and skills development opportunities 2.2. Establish communication and reporting mechanisms 2.3. Implement agreed time management strategies to ensure milestones are met 2.4. Apply agreed quality requirements to measure

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	performance and outcomes
3. Manage project	3.1. Monitor and report progress of activities in relation to the project plan 3.2. Ensure income and expenditure is in line with the agreed project plan and budget 3.3. Work with the team to analyse and diagnose problems and to determine corrective actions 3.4. Implement agreed variations to the plan to accommodate changing situations 3.5. Maintain accurate records and communication with stakeholders and project team members
4. Finalise project	4.1. Ensure project objectives are met and deliverables are provided on time and within budget 4.2. Complete all reporting requirements
5. Evaluate project methodology	5.1. Assess the effectiveness of resource management in delivering project outcomes 5.2. Evaluate the effectiveness of communication processes used throughout the project 5.3. Recommend improvements for future projects

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- analysing a complex technical brief and preparing a feasible project implementation plan
- establishing a project team and implementing a project in response
- reaching milestones within budget
- consulting and communicating effectively to ensure the project outcomes are achieved
- maintaining accurate records and documentation in accordance with the enterprise procedures
- selecting and establishing operational systems for the project
- planning work activities, resources and finances to ensure the project outcomes are

**REQUIRED SKILLS AND KNOWLEDGE**

achieved within the timeframe and budget constraints

- monitoring and evaluating the progress of the project

**Required knowledge**

Required knowledge includes:

- purpose and methods of planning
- techniques for monitoring timelines, expenditure and team performance
- techniques for achieving effective communication and cooperation
- techniques for troubleshooting, problem solving and conflict resolution
- reporting requirements
- techniques for evaluation and continuous improvements
- relevant health, safety and environment requirements
- laboratory's business goals and key performance indicators

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- analyse a complex technical brief and prepare a feasible project implementation plan
- establish a project team and implement a project in response
- reach milestones within budget
- consult and communicate effectively to ensure project outcomes are achieved
- maintain accurate records and documentation in accordance with enterprise procedures
- select and establish operational systems for the project
- plan work activities, resources and finances to ensure project outcomes are achieved within the timeframe and budget constraints
- monitor and evaluate the progress of the project.

<b>EVIDENCE GUIDE</b>	
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL916002A Manage and develop teams</i></li> <li>• <i>MSL936001A Maintain quality system and continuous improvement processes within work/functional area.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• procedures and documentation typically used by the enterprise</li> <li>• scheduling charts/strategic plans</li> <li>• GANTT charts</li> <li>• operational reports</li> <li>• financial plans</li> <li>• sample budgets.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of reports, operational budgets and project plans generated by the candidate</li> <li>• review of project outcomes and customer satisfaction</li> <li>• questioning/interview to assess underpinning knowledge</li> <li>• feedback from project team and management</li> <li>• review of documented examples of quality performance improvements achieved and examples of significant problems solved</li> <li>• observation of the candidate's interaction with project team.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like</p>

<b>EVIDENCE GUIDE</b>	
	environment.
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>A cosmetics manufacturing company decided to upgrade the image of a product range which included lipsticks, nail lacquers, hair shampoos and conditioners. A technical specialist coordinated the project and organised input from marketing, development, quality assurance and production personnel. The production boundaries were defined through consultation with marketing and it was decided to update shades of shaded products and introduce natural ingredients wherever possible. The project had to be completed within a reasonably short timeframe and within a tight budget which placed overall constraints on the way the project could be handled. After developing and gaining approval for an implementation plan, team members were briefed and development samples produced for approval. Product characteristics were checked and recommendations made for adjustments until each product met requirements. When pilot batch manufacture had been successfully completed, project development processes were fully documented and then passed to production to allow for efficient development of production batches.</p> <p><b>Environmental</b></p> <p>The quality team in a laboratory has set a goal of getting reports out more quickly and assigned the coordination of the project to one of the senior technical officers. The officer prepared an outline of the project, a timeframe, a resource list and budget. Specific tasks were allocated to members of the quality team according to their abilities and existing work commitments. The officer monitored the project's progress by tracking and adjusting elements as necessary. After the development of a final draft for the revised procedures, a draft project report was prepared for consideration by the quality team.</p> <p><b>Food processing</b></p> <p>A dairy company currently uses an imported cocoa-based product for the chocolate flavouring of their milk. Following a feasibility study of a range of ingredients, it</p>

**EVIDENCE GUIDE**

	<p>was decided to investigate further an alternative source on the basis of cost. A technical specialist prepared a project plan that included required personnel, materials, equipment and a detailed GANTT chart. Key personnel from quality assurance, production, engineering, product development and marketing were chosen for the project team. The project was monitored to confirm progress, control expenditure and review the suitability of the alternative product source. At the end of the project, the technical specialist assessed the outcomes and prepared a detailed report that recommended the use of a local ingredient.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Complex projects**

Complex projects may include:

- development or modification of products and services
- acquisition and commissioning of new equipment
- commissioning of laboratory facilities
- appraisal of supplies
- development of applications for customers
- validation of analytical methods and/or equipment
- quality improvement or corrective action teams
- restructuring of laboratory services
- reclassification of staff and staffing levels



<b>RANGE STATEMENT</b>	
<b>Records</b>	<p>Records may include:</p> <ul style="list-style-type: none"> <li>• lists of potential costs, invoices and payment records</li> <li>• project and/or enterprise files and records</li> <li>• reports to clients, personnel and higher management</li> <li>• risk management plans and log books</li> <li>• diaries, scheduling charts and other charts</li> </ul>
<b>Communication</b>	<p>Communication may include:</p> <ul style="list-style-type: none"> <li>• computer generated communication</li> <li>• customers, stakeholders, external authorities and project team</li> <li>• reports, briefs, minutes, letters, oral briefings, advice and conversations and telephone calls</li> </ul>
<b>Resources</b>	<p>Resources may include:</p> <ul style="list-style-type: none"> <li>• personnel</li> <li>• budget</li> <li>• equipment, materials and facilities</li> <li>• computer project planning programs</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Communication/organisation
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

## MSL922001A Record and present data

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to record and store data, perform simple calculations of scientific quantities and present information in tables and graphs. The unit of competency requires personnel to solve predictable problems using clear information or known solutions. Where alternatives exist, they are limited or apparent.
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### Application of the Unit

<b>Application of the unit</b>	This unit of competency is applicable to production operators, field assistants and laboratory assistants working in all industry sectors.  Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Record and check data	1.1. Enter data into laboratory information system or record sheets as directed 1.2. Check data to identify transcription errors or atypical entries 1.3. Rectify errors in data using enterprise procedures
2. Calculate simple scientific quantities	2.1. Calculate simple scientific quantities using given formulae and data 2.2. Ensure calculated quantities are consistent with estimations and expectations 2.3. Report all calculated quantities with appropriate precision and units
3. Present data in tables, charts and graphs	3.1. Present data accurately in tables and charts using given formats and scales 3.2. Recognise and report obvious features and trends in data
4. Store and retrieve	4.1. File and store data in accordance with enterprise

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
data	procedures 4.2.Maintain enterprise confidentiality standards

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- performing simple calculations
- preparing and interpreting straightforward tables, graphs and charts
- applying calculations in the workplace
- coding, recording and checking data accurately
- presenting accurate results in the required format
- recognising obvious trends in data
- maintaining the confidentiality of data in accordance with workplace and regulatory requirements

#### Required knowledge

Required knowledge includes:

- concepts of metrology
- the international system of units (SI)
- relevant scientific and technical terminology
- procedures for coding, entering, storing, retrieving and communicating data
- procedures for verifying data and rectifying mistakes
- conversion of units involving multiples and submultiples
- significant figures, estimation, approximation, rounding off
- substitution of data in formulae
- calculations involving fractions, decimals, proportions and percentages
- procedures for maintaining and filing records, security of data

## Evidence Guide

### EVIDENCE GUIDE

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• accurately code, check and record data in the required format</li> <li>• calculate simple scientific quantities</li> <li>• recognise obvious trends in data</li> <li>• maintain the confidentiality of data.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit may be assessed with technical units, such as:</p> <ul style="list-style-type: none"> <li>• <i>MSL973001A Perform basic tests</i></li> <li>• <i>MSL973002A Prepare working solutions</i></li> <li>• <i>MSL973007A Perform microscopic examination.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• data sets and records</li> <li>• computer and relevant software or laboratory information system</li> <li>• relevant enterprise procedures.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of data worksheets, calculations, graphs and tables prepared by the candidate</li> <li>• review of records transcribed, maintained or stored by the candidate</li> <li>• feedback from supervisors and peers</li> <li>• observation of the candidate as they record data and perform calculations</li> <li>• questions to assess understanding of relevant procedures and trends in data.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and</p>

<b>EVIDENCE GUIDE</b>	
	<p>disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p><b>Construction materials</b></p> <p>A laboratory assistant is given 20 soil samples and asked to test their moisture content by weighing each sample, placing them in an oven for 24 hours and then reweighing them. The assistant performs the tests in accordance with the standard method and then calculates the % water content by dividing the weight loss by the wet weight and multiplying by 100. He/she checks the results. After entering them into the laboratory information management system (LIMS), they notice that they are consistently less than the previous results recorded for soils at the same site. The assistant reports the discrepancy to the supervisor who checks whether the oven was operated at the required temperature. The supervisor then discovers that the assistant has calculated the moisture content by dividing the weight loss by the wet weight instead of the dry weight. The assistant recalculates the moisture content for the 20 samples and notes that the results are now consistent with previous results.</p> <p><b>Manufacturing</b></p> <p>On Friday, a laboratory assistant performs the routine set of temperature, pressure and humidity measurements at 10 sites in a refinery. They enter the data on a pre-prepared data sheet that also contains the data recorded for the previous days of that week. The assistant checks the data for any significant variations to that recorded previously. They notice that for site #5, the temperature reading is 250(C which is 100(C below the expected value. The assistant repeats the measurement and gets the same result. After returning to the laboratory, the assistant enters the data into the LIMS</p>

**EVIDENCE GUIDE**

	and reports the odd result to their supervisor. The supervisor contacts the site manager and finds out that the pipeline at site #5 has been isolated as part of unscheduled maintenance in that part of the site.
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards such as:
  - AS ISO 1000-1998 The international system of units (SI) and its application
- national measurement regulations and guidelines

**Concepts of metrology**

Concepts of metrology may include:

- that all measurements are estimates
- measurements belong to a population of measurements of the measured parameters
- repeatability
- precision
- accuracy
- significant figures
- sources of error
- uncertainty
- traceability

**Data**

Data may be recorded on:



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• worksheets</li> <li>• spreadsheets or databases linked to information management systems</li> </ul> <p>Data may include results of:</p> <ul style="list-style-type: none"> <li>• observations</li> <li>• tests and measurements</li> <li>• surveys</li> </ul> <p>Data may be presented in the form of:</p> <ul style="list-style-type: none"> <li>• graphs</li> <li>• tables</li> <li>• control charts</li> <li>• semi-quantitative observations expressed on a scale (for example, 1 to 4 or + to +++)</li> </ul>
<b>Simple calculations</b>	<p>Simple calculations may be performed with or without a calculator or computer software and may include scientific quantities such as:</p> <ul style="list-style-type: none"> <li>• decimals, fractions, ratios, proportions and percentages</li> <li>• perimeters, areas, volumes and angles</li> <li>• concentration</li> <li>• unit conversion, multiples and submultiples</li> <li>• use of significant figures, rounding off, estimation and approximation</li> <li>• substitution of data in formulae</li> <li>• conversions between SI units</li> <li>• areas (m<sup>2</sup>) and volumes (mL, L, m<sup>3</sup>) of regular shapes (e.g. packaging and moulds)</li> <li>• average mass, mass %, density, specific gravity, moisture, relative and absolute humidity</li> <li>• ratios, such as mass to mass, mass to volume and volume to volume percentages</li> <li>• industry specific ratios, such as g/cm<sup>2</sup>, kg/m<sup>2</sup></li> <li>• concentration (for example, g/100mL, mg/L, mg/(L, dilution mL/L)</li> <li>• statistical values such as mean, median, mode and standard deviation</li> <li>• average count, colonies per swab surface and cell counts (live and dead/total)</li> <li>• process variables, such as pressure, velocity</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and flow rates</p> <ul style="list-style-type: none"> <li>• % content of moisture, ash, fat, protein, alcohol, sulphur dioxide and trace metals, such as calcium or zinc</li> <li>• food properties, such as % concentration (dry), friability, bitterness, brix, free amino nitrogen, diastatic power, calorific content and yeast viability</li> </ul>
<b>Obvious features and trends in data</b>	<p>Obvious features and trends in data could include:</p> <ul style="list-style-type: none"> <li>• maximum and minimum values</li> <li>• spread of data</li> <li>• increasing/decreasing data, rate of change</li> <li>• outliers, data beyond control limits or normal range</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	<b>Data</b>

## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## MSL924001A Process and interpret data

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to retrieve data, evaluate formulae and perform scientific calculations, present and interpret information in tables and graphs and keep accurate records. The unit requires personnel to solve problems of limited complexity where the information may be less obvious, but not contradictory, and can be determined by direct reasoning.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory assistants, field/laboratory technicians and instrument operators in all industry sectors.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Retrieve and check data	1.1.Store and retrieve data using appropriate files and/or application software 1.2.Verify the quality of data using enterprise procedures 1.3.Rectify errors in data using enterprise procedures
2. Calculate scientific quantities	2.1.Calculate statistical values for given data 2.2.Calculate scientific quantities using given formulae and data and estimate uncertainties 2.3.Ensure calculated quantities are consistent with estimations and expectations 2.4.Report all calculated quantities using the appropriate units and correct number of significant figures
3. Present data in tables, charts and graphs	3.1.Present data in clearly labelled tables and charts 3.2.Graph data using appropriate scales to span the range of data or display trends 3.3.Report all data using the appropriate units and

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	number of significant figures
4. Interpret data in tables, charts and graphs	4.1. Interpret significant features of graphs, such as gradients, intercepts, maximum and minimum values, and limit lines 4.2. Recognise and report trends in data
5. Keep accurate records and maintain confidentiality	5.1. Transcribe information accurately 5.2. Verify the accuracy of records following enterprise procedures 5.3. File and store workplace records in accordance with enterprise procedures 5.4. File all reference documents logically and keep them up-to-date and secured 5.5. Observe enterprise confidentiality standards

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- performing calculations of scientific quantities
- using scientific notation
- applying the concepts of metrology
- applying calculations to the workplace
- coding, recording and checking of data accurately
- presenting accurate results in the required format
- preparing graphs, tables and charts (pie, bar, histogram) and interpreting trends
- preparing and interpreting process control charts
- maintaining the confidentiality of data in accordance with workplace and regulatory requirements

#### Required knowledge

Required knowledge includes:

- concepts of metrology
- the international system of units (SI)
- relevant scientific and technical terminology

**REQUIRED SKILLS AND KNOWLEDGE**

- uncertainty associated with measurement steps
- procedures for coding, entering, storing, retrieving and communicating data
- procedures for verifying data and rectifying mistakes
- converting units involving multiples and submultiples
- significant figures, rounding off, estimating, approximating
- transposing and evaluating formulae
- calculations involving fractions, decimals, proportions and percent
- determining statistical values of data such as mean, median, mode and standard deviation
- procedures for maintaining and filing records, and maintaining security of data

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- code, record and check the documentation of data
- calculate scientific and statistical quantities relevant to the workplace and present accurate results in the required format
- recognise anomalies and trends in data
- maintain the confidentiality of data in accordance with workplace and regulatory requirements
- keep records up-to-date and secure.

**Context of and specific resources for assessment**

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL924002A Use laboratory application software*
- technical units, such as:
  - *relevant MSL973000 series units of competency*
  - *relevant MSL974000 series units of competency.*

Resources may include:

- data sets and records

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• computer and relevant software or laboratory information system</li> <li>• relevant workplace procedures.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of data worksheets, calculations, computer files (such as spreadsheets, databases, statistical analysis), graphs, tables and/or charts prepared by the candidate</li> <li>• review of records transcribed, maintained or stored by the candidate</li> <li>• feedback from supervisors and peers</li> <li>• questions to assess understanding of relevant procedures and trends in data</li> <li>• observation of the candidate as they process data, file and store records.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>A laboratory assistant in a materials testing laboratory was performing routine tensile tests on samples of vinyl sheet. The assistant converted the readings from the machine to appropriate units using a simple calculation and recorded them in the logbook for that test method. After comparing these test results with previous results for the same type of vinyl material, the assistant found</p>



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that the tensile strength was within the required range. However, it was at the lower rather than the upper end of the range as in previous testing. The assistant discussed the results with the laboratory supervisor. The calibration file for that machine showed that it had been calibrated four months previously and had not needed adjustment. Test results for the same period showed that the machine was giving lower than normal tensile strength readings for the few higher strength materials tested over the last two months. The assistant did some more checks and confirmed this trend. The machine was re-calibrated by the instrument company and the frequency of internal calibration checks by the laboratory assistant was increased. This problem would not have been detected or corrected as quickly without the assistant's initiative and competent recording and retrieval of test results and calibration information.

**Biomedical**

A technical assistant works in a team with laboratory scientists and technical officers. Analyses of electrolytes are routine and occur in large volume throughput even in this small diagnostic laboratory. The assistant is assigned tasks that contribute to the overall production of results, their reporting and the quality control evaluation of the results. One task is the daily collection of the electrolyte analyses from the internal quality control area. In this case, the technical assistant plots the results on a Levy-Jennings graph and computes the mean value. The assistant reports immediately to the supervisor if the plots show deviations which indicate out-of-control results.

**Food processing**

Cooking and holding temperatures greatly affect the nutrient composition of processed foods. The CSIRO provides documentation of nutrient losses with temperature variations. For cooked foods, there is the added problem of microbial growth in the so called 'danger zone'. In one laboratory, the technical assistant conducts simple testing of foods using a temperature probe and also measures the temperature of the storage areas, holding trays or bainmaries and individual tray units. Careful documentation of the temperatures of the foods and times of measurement must be kept. The technical assistant supplies the data as tables and a plot

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	of temperature versus time. For quality control purposes, the assistant is directed to use a cross reference of mercury thermometer readings versus probe measurements for ambient temperature. The assistant plots the thermometer readings against the probe readings and reports to the supervisor if the plot shows a slope other than the defined value.
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards such as:
  - AS ISO 1000-1998 The international system of units (SI) and its application
  - ISO 5725 Accuracy (trueness and precision) of measurement methods and results
  - ISO/IEC Guide 98-3:2008 Uncertainty of measurement - Part 3 Guide to the expression of uncertainty in measurement (GUM)
- Eurachem/CITAC Guide CG4 Quantifying uncertainty in analytical measurement
- national measurement regulations and guidelines
- National Association of Testing Authorities (NATA) Technical notes
- material safety data sheets (MSDS)

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• equipment manuals and warranty, supplier catalogues and handbooks</li> <li>• sampling and test procedures and standard operating procedures (SOPs)</li> <li>• enterprise quality manual and customer quality plan</li> <li>• validation of the equipment and associated software where applicable</li> <li>• validation of spreadsheets developed in-house for assay and process calculations</li> </ul>
<b>Concepts of metrology</b>	<p>Concepts of metrology may include:</p> <ul style="list-style-type: none"> <li>• that all measurements are estimates</li> <li>• measurements belong to a population of measurements of the measured parameters</li> <li>• repeatability</li> <li>• precision</li> <li>• accuracy</li> <li>• significant figures</li> <li>• sources of error</li> <li>• uncertainty</li> <li>• traceability</li> </ul>
<b>Data</b>	<p>Data may be recorded on:</p> <ul style="list-style-type: none"> <li>• worksheets</li> <li>• spreadsheets</li> <li>• databases linked to information management systems</li> </ul> <p>Data may include results of:</p> <ul style="list-style-type: none"> <li>• observations</li> <li>• tests and measurements</li> <li>• analyses</li> <li>• surveys</li> <li>• quality assurance and control assessments</li> </ul> <p>Data may be presented in the form of:</p> <ul style="list-style-type: none"> <li>• graphs</li> <li>• tables</li> <li>• histograms</li> <li>• pie charts</li> <li>• bar charts</li> <li>• control charts</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• semi-quantitative observations and be expressed on a scale (for example, 1 to 4 or + to +++)</li> </ul>
<b>Calculations</b>	<p>Calculations may be performed:</p> <ul style="list-style-type: none"> <li>• with or without a calculator</li> <li>• using computer software, spreadsheets, databases and statistical packages</li> </ul>
<b>Calculations of scientific quantities</b>	<p>Calculated of scientific quantities may include:</p> <ul style="list-style-type: none"> <li>• converting units involving multiples and submultiples</li> <li>• significant figures, round off, estimate and approximate</li> <li>• transposing and evaluating formulae</li> <li>• fractions, decimals, proportions and percentages</li> <li>• perimeters and angles</li> <li>• percentage and absolute uncertainties in measurements and test results</li> <li>• statistical values of data, such as mean, median, mode and standard deviation</li> <li>• areas (<math>m^2</math>) and volumes (<math>mL</math>, <math>L</math>, <math>m^3</math>) of regular shapes, such as packaging</li> <li>• dose (<math>mg</math>), average mass, mass percentage, density, specific gravity, moisture, relative and absolute humidity, viscosity and permeability</li> <li>• ratios, such as mass to mass, mass to volume and volume to volume percentages</li> <li>• concentration, such as molarity, <math>g/100mL</math>, <math>mg/L</math>, <math>mg/L</math>, ppm, ppb, dilution <math>mL/L</math></li> <li>• average count, colonies per swab surface and cell counts, such as live and dead/total</li> <li>• process variables, such as pressure, gauge pressure, velocity and flow rates</li> <li>• biological oxygen demand (BOD), chemical oxygen demand (COD) and total organic carbons (TOC)</li> <li>• % content of moisture, ash, fat, protein, alcohol, sulphur dioxide and trace metals, such as calcium or zinc</li> <li>• food properties, such as % concentration (dry), friability, bitterness, brix, free amino nitrogen, diastatic power, calorific content and yeast</li> </ul>

<b>RANGE STATEMENT</b>	
	viability <ul style="list-style-type: none"> <li>• stress, strain, moduli and force</li> </ul>
<b>Records</b>	Records could include information associated with: <ul style="list-style-type: none"> <li>• purchase of equipment and materials, service records</li> <li>• safety procedures</li> <li>• history of calibration and test results</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	OHS and environmental management requirements: <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Data
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### Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## MSL933001A Maintain the laboratory/field workplace fit for purpose

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the general cleaning of work surfaces, cleaning and storage of equipment and the monitoring of laboratory stocks under direct supervision.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory assistants and instrument operators working in all industry sectors.</p> <p>This unit of competency forms a major part of the work of laboratory assistants. They work in accordance with work instructions and standard operating procedures which incorporate all relevant aspects of occupational health and safety (OHS) legislation and the codes, guidelines, regulations and Australian standards applying to environmental hazards and dangerous goods.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Clean work preparation areas	1.1.Clean preparation areas using appropriate cleaning agents and equipment according to enterprise procedures 1.2.Remove spillages, if they occur, using appropriate agents, personal protective equipment and enterprise procedures 1.3.Collect and segregate wastes in accordance with enterprise procedures, relevant codes and regulations
2. Clean and store equipment	2.1.Collect used equipment, inspect for faults and, where necessary, remove from service 2.2.Use appropriate agents, apparatus and techniques to clean equipment 2.3.Store clean equipment in the designated locations and manner



<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
3. Monitor stocks of materials and equipment	3.1. Perform stock checks and maintain records of usage as directed 3.2. Store labelled stocks for safe and efficient retrieval 3.3. Inform appropriate personnel of impending stock shortages to maintain continuity of supply
4. Maintain a safe work environment	4.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other personnel 4.2. Report potential hazards and/or maintenance issues in own work area to designated personnel 4.3. Minimise the generation of wastes and environmental impacts 4.4. Dispose of wastes in accordance with enterprise procedures, relevant codes and regulations

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- safely cleaning work preparation areas and equipment using appropriate cleaning agents, equipment and techniques
- safely removing spillages and disposing of wastes
- minimising the exposure to hazards of self, others and the laboratory
- safely storing equipment and materials using enterprise procedures, relevant codes and guidelines
- monitoring and reporting stock levels and the condition of laboratory materials and equipment
- keeping accurate, up-to-date records
- reporting potential hazards and maintenance issues using enterprise procedures

#### Required knowledge

Required knowledge includes:

- enterprise procedures for the cleaning of work preparation areas, materials and equipment

**REQUIRED SKILLS AND KNOWLEDGE**

- storage requirements for specific materials and equipment
- enterprise procedures for minimisation and disposal of waste
- enterprise procedures for monitoring of laboratory stocks
- information contained in material safety data sheets (MSDS) for materials handled regularly during the performance of maintenance tasks
- relevant health, safety and environment requirements

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- follow enterprise procedures, relevant codes and guidelines when maintaining the laboratory/field workplace
- work safely and minimise exposure of hazards to self, others and the laboratory
- keep accurate up-to-date records and report potential hazards and maintenance issues.

**Context of and specific resources for assessment**

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL943002A Participate in laboratory/field workplace safety.*

Resources may include:

- access to work preparation areas, stocks, materials and equipment
- cleaning, decontamination and/or disinfection agents and equipment
- personal protective equipment
- stock order forms, labels and records/forms.

**Method of assessment**

The following assessment methods are suggested:

- observation of the candidate's techniques for cleaning

<b>EVIDENCE GUIDE</b>	
	<p>and/or removal of spillages and waste disposal</p> <ul style="list-style-type: none"> <li>• review of stock records completed by the candidate</li> <li>• feedback from supervisors and peers</li> <li>• questioning to assess underpinning knowledge of regulations and procedures where direct observation is difficult (such as dealing with hazards) and choice of materials and equipment.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>On receipt of a bulk container of cleaning or sanitising agent, a laboratory assistant always attached to the container a description of its method of use. The assistant also attached a list of the surfaces, apparatus, utensils and machines that could be safely treated with that chemical agent as outlined in the company's quality manual. This practice reduced the likelihood of misuse of the chemical, wastage, damage to equipment and inadequate cleaning and sanitation.</p> <p><b>Biomedical and environmental</b></p> <p>Laboratory assistants and technical officers routinely examine fluids for micro-organisms using a microscope. They examine fluids, such as urine, seawater, chlorinated pool water, water from catchment areas and bottled water. To maintain microscopes in working order, they</p>

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	<p>thoroughly clean the stage, oculars and each objective after use and sometimes between samples. The 100X objective requires particular care since this is the oil immersion objective. The oil is slightly acidic and will slowly corrode the objective if it is not cleaned thoroughly and regularly. After using the 100X objective they also take care not to drag the other objectives through the oil.</p> <p><b>Food processing</b></p> <p>A laboratory assistant regularly uses standard pH solutions to calibrate the laboratory's pH meters. The assistant is aware from the label that the shelf life of these solutions after opening is two months and records the opening and disposal dates on the container. The assistant is also aware that the shelf life of unopened buffer solutions is twelve months from the date of manufacture and monitors this by noting the production date on the bottle. Requests for stock replacement take into account the normal rate of use of these buffer solutions so that unopened bottles have not reached their expiry date before use.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards such as:
  - AS 1678 Emergency procedure guide - Transport

**RANGE STATEMENT**

- AS 1940-2004 Storage and handling of flammable and combustible liquids
- AS 2252 Biological safety cabinets
- AS 3780-2008 The storage and handling of corrosive substances
- AS 4332-2004 The storage and handling of gases in cylinders
- AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
- AS/NZS 1269 Set:2005 Occupational noise management set
- AS/NZS 1337 Eye protection
- AS/NZS 2161 Set:2008 Occupational protective gloves set
- AS/NZS 2210:1994 Occupational protective footwear
- AS/NZS 2243 Set:2006 Safety in laboratories set
  - AS/NZS 2243.8:2006 Safety in laboratories - Fume cupboards
  - AS/NZS 2865 Set:2005 Safe working in a confined space set
  - AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
  - AS/NZS 4187:2003 Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities
  - AS/NZS 4452:1997 The storage and handling of toxic substances
- AS/NZS 4501 Set:2008 Occupational clothing set
  - AS/NZS ISO 14000 Set:2005 Environmental management standards set
- animal welfare legislation and codes of practice
- Australian code of good manufacturing practice for medicinal products (GMP)
- Australian Dangerous Goods Code
- Australian Quarantine and Inspection Service (AQIS) Export Control (Orders) Regulations

**RANGE STATEMENT**

	<p>1982</p> <ul style="list-style-type: none"> <li>• Australian Quarantine and Inspection Service (AQIS) Import Guidelines</li> <li>• Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Codes of Practice</li> <li>• enterprise or standard operating procedures (SOPs)</li> <li>• equipment manuals and warranties, supplier catalogues and handbooks</li> <li>• gene technology regulations</li> <li>• guide to physical containment levels and facility types</li> <li>• HB 9-1994 Occupational personal protection</li> <li>• material safety data sheets (MSDS)</li> <li>• National Code of Practice for the labelling of workplace substances (NOHSC:2012 (1994))</li> <li>• national environment protection measures</li> <li>• National Health and Medical Research Council (NHMRC) Guidelines</li> <li>• national measurement regulations and guidelines</li> <li>• occupational health and safety (OHS) national standards and codes of practice</li> <li>• principles of good laboratory practice (GLP)</li> <li>• Therapeutic Goods Regulations 1009</li> </ul>
<p><b>Equipment, material procedures and facilities</b></p>	<p>Equipment, material procedures and facilities may include:</p> <ul style="list-style-type: none"> <li>• animal cages</li> <li>• autoclaves</li> <li>• balances</li> <li>• blenders, centrifuges and separating equipment</li> <li>• brushes</li> <li>• cell counters and staining machines</li> <li>• colorimeters/spectrometers and polarimeters</li> <li>• compaction rammers and soil classification equipment</li> <li>• conductivity meters and pH meters</li> <li>• dishwashers, refrigerators, freezers, ovens, microwave ovens, incubators and water baths</li> <li>• disintegration apparatus, thermometers and incubators</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• fume hoods, biohazard containers and biological safety cabinets</li> <li>• gas cylinders</li> <li>• glassware, plastic ware; glass, plastic and quartz cuvettes</li> <li>• hotplates, mantles, burners and muffle furnaces</li> <li>• instrument chart recorders, penetrometers, force measuring equipment and tensiometers</li> <li>• light and fluorescence microscopes</li> <li>• melting point apparatus, viscometers and hardness testing equipment</li> <li>• microtomes and tissue processors</li> <li>• mixing and separating equipment such as centrifuges, riffers and splitters and mixers</li> <li>• noise meters and blasting meters</li> <li>• optical microscopes</li> <li>• pipettes, burettes and volumetric glassware</li> <li>• shovels, scoops, plates, rods, cylinder moulds and buckets</li> <li>• steel ruler/tapes and spirit levels</li> <li>• thermometers, thermohygrographs, instrument chart recorders, hydrometers, pH meters and ion-selective electrodes</li> <li>• ultrasonic cleaners</li> <li>• vehicles</li> </ul>
<b>Typical materials</b>	<p>Typical materials may include:</p> <ul style="list-style-type: none"> <li>• consumable items, such as syringes, pipette tips, weigh boats</li> <li>• disposable clothing and personal protective equipment</li> <li>• distilled water, reagents, chemicals, disinfectants, detergents, agar media and plates</li> <li>• equipment spares, such as fuses, bulbs and batteries</li> <li>• oils/lubricants, fuels, industrial gases and cryogenics, such as dry ice and liquid nitrogen</li> <li>• paper and stationery</li> <li>• reference samples and standards</li> </ul>
<b>Maintenance</b>	<p>Maintenance may include:</p> <ul style="list-style-type: none"> <li>• checking serviceability before storage</li> <li>• cleaning</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• prevention of contamination</li> <li>• storing</li> </ul>
<b>Cleaning requirements</b>	<p>Cleaning requirements may include:</p> <ul style="list-style-type: none"> <li>• decontamination and/or disinfection</li> <li>• hygiene monitoring</li> <li>• minimising environmental impacts</li> <li>• operation of automatic cleaning apparatus, such as pipette washer, ultrasonic cleaners and dishwashers</li> <li>• sterilisation and disposal of wastes using boiling, high pressure air or steam, microwaves, chemicals, gas, filtration, ultraviolet radiation and autoclaving</li> <li>• use of specialised techniques, such as chromic acid baths and soaking in hypochlorite</li> </ul>
<b>Preparation areas</b>	<p>Preparation areas may include:</p> <ul style="list-style-type: none"> <li>• benches</li> <li>• fume cupboards</li> <li>• sheds</li> <li>• sinks</li> </ul>
<b>Agents for cleaning</b>	<p>Agents for cleaning may include:</p> <ul style="list-style-type: none"> <li>• cleaning solutions</li> <li>• decontaminants</li> <li>• organic solvents</li> </ul>
<b>Spillages</b>	<p>Spillages may include:</p> <ul style="list-style-type: none"> <li>• chemicals</li> <li>• radioactive materials</li> <li>• biologically active materials</li> </ul>
<b>Wastes</b>	<p>Wastes may include:</p> <ul style="list-style-type: none"> <li>• broken glass</li> <li>• batteries</li> <li>• disposable personal protective equipment</li> <li>• excess test samples</li> <li>• micro-organisms</li> <li>• plastic and metals</li> <li>• sharps</li> <li>• solvents</li> <li>• spent reagents</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• spent samples and test pieces</li> <li>• used containers, boxes, bags and palettes</li> </ul>
<b>Stock records</b>	<p>Stock records may include:</p> <ul style="list-style-type: none"> <li>• calibration and maintenance history</li> <li>• data sheets</li> <li>• handbooks, warranty documents, catalogues, manuals and MSDS</li> <li>• records of usage, loans and breakages</li> </ul>
<b>Communication</b>	<p>Communication could involve other people, such as:</p> <ul style="list-style-type: none"> <li>• laboratory, production, administration and cleaning staff</li> <li>• internal/external contractors</li> <li>• emergency personnel</li> </ul>
<b>Maintenance issues</b>	<p>Maintenance issues could involve:</p> <ul style="list-style-type: none"> <li>• checking materials and equipment are fit for purpose</li> <li>• equipment malfunction</li> <li>• hygiene issues</li> <li>• potential hazards, incidents and emergencies</li> <li>• recycling and waste disposal</li> <li>• spillages, leakages, breakages and contamination</li> <li>• stock requirements and shortages</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• aerosols from broken centrifuge tubes and pipetting</li> <li>• chemicals, such as acids, heavy metals, pesticides and hydrocarbons</li> <li>• crushing, entanglement and cuts associated with moving machinery or falling objects</li> <li>• cryogenics, such as dry ice and liquid nitrogen</li> <li>• electric shock</li> <li>• fluids under pressure, such as steam and industrial gas cylinders</li> <li>• manual handling, working at heights and working in confined spaces</li> <li>• microbiological organisms and agents associated with soil, air, water, blood and blood</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>products, and human or animal tissue and fluids</p> <ul style="list-style-type: none"> <li>• occupational overuse syndrome, slips, trips and falls</li> <li>• pedestrian and vehicular traffic</li> <li>• sharps, broken glassware and hand tools</li> <li>• solar radiation, dust and noise</li> <li>• sources of ignition, flammable liquids and gases</li> </ul>
<b>Established safe work practices</b>	<p>Established safe work practices may include:</p> <ul style="list-style-type: none"> <li>• applying containment procedures through the use of appropriate equipment, such as biohazard containers, laminar flow cabinets, Class I, II and III biohazard cabinets and Class PCII, PCIII, and PCIV physical containment facilities</li> <li>• ensuring access to service shut-off points</li> <li>• following established manual handling procedures for tasks involving manual handling</li> <li>• handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions</li> <li>• identifying and reporting operating problems or equipment malfunctions</li> <li>• labelling of samples, reagents, aliquoted samples and hazardous materials</li> <li>• recognising and observing hazard warnings and safety signs</li> <li>• reporting to appropriate personnel of abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates</li> <li>• use of MSDS</li> <li>• use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gown, body suits, respirators and safety boots</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through</li> </ul>

**RANGE STATEMENT**

	<p>state/territory or federal legislation - these requirements must not be compromised at any time</p> <ul style="list-style-type: none"> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>
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**Unit Sector(s)**

<b>Unit sector</b>	Maintenance
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## MSL973001A Perform basic tests

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to perform tests and measurements using standard methods with access to readily available advice from supervisors.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory/field assistants working in all industry sectors. In general, they do not calibrate equipment and make only limited adjustments to the controls. They do not interpret or analyse results or troubleshoot equipment problems.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Interpret test requirements	<p>1.1. Review test request to identify samples to be tested, test method and equipment involved</p> <p>1.2. Identify hazards and enterprise controls associated with the sample, preparation methods, reagents and/or equipment</p>
2. Prepare sample	<p>2.1. Record sample description, compare with specification, record and report discrepancies</p> <p>2.2. Prepare sample in accordance with appropriate standard methods</p>
3. Check equipment before use	<p>3.1. Set up test equipment in accordance with test method</p> <p>3.2. Perform pre-use and safety checks in accordance with enterprise procedures and manufacturer's instructions</p> <p>3.3. Identify faulty or unsafe equipment and report to appropriate personnel</p> <p>3.4. Check calibration status of equipment and report any out of calibration items to appropriate personnel</p>
4. Perform tests on samples	<p>4.1. Identify, prepare and weigh or measure sample and standards to be tested</p>

ELEMENT	PERFORMANCE CRITERIA
	4.2. Conduct tests in accordance with enterprise procedures 4.3. Record data in accordance with enterprise procedures 4.4. Perform calculations on data as required 4.5. Identify and report out of specification or atypical results promptly to appropriate personnel 4.6. Shut down equipment in accordance with operating procedures
5. Maintain a safe work environment	5.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel 5.2. Minimise the generation of wastes and environmental impacts 5.3. Ensure safe disposal of laboratory and hazardous wastes 5.4. Clean, care for and store equipment and reagents as required

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- interpreting enterprise procedure or standard methods accurately
- using safety information, such as material safety data sheets (MSDS) and performing procedures safely
- checking test equipment before use
- completing all tests within required timeline without sacrificing safety, accuracy or quality
- calculating, recording and presenting results accurately and legibly
- maintaining security, integrity and traceability of all samples, data/results and documentation
- cleaning and maintaining equipment

#### Required knowledge

## REQUIRED SKILLS AND KNOWLEDGE

Required knowledge includes:

- concepts of metrology
- the international system of units (SI)
- purpose of test
- principles of the standard method
- pre-use equipment checks
- relevant standards/specifications and their interpretation
- sources of uncertainty in measurement and methods for control
- enterprise and/or legal traceability requirements
- interpretation and recording of test result, including simple calculations
- procedures for recognition/reporting of unexpected or unusual results
- relevant health, safety and environment requirements

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- accurately interpret enterprise procedures or standard methods
- complete all tests within the required timeline without sacrificing safety, accuracy or quality
- demonstrate close attention to the accuracy and precision of measurements and the data obtained
- maintain the security, integrity and traceability of all samples, data/results and documentation.

#### Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL922001A Record and present data.*

Resources may include:

- standard laboratory equipped with appropriate

<b>EVIDENCE GUIDE</b>	
	<p>equipment standards and materials</p> <ul style="list-style-type: none"> <li>• enterprise procedures and standard methods, and equipment manuals</li> <li>• MSDS.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of the quality of test data/results achieved by the candidate over time</li> <li>• inspection of records and workplace documentation completed by the candidate</li> <li>• feedback from peers and supervisors</li> <li>• observation of the candidate performing a range of basic tests</li> <li>• oral or written questioning to check underpinning knowledge of test procedures.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>Standard testing methods may be viewed as legal requirements that must be followed to ensure that a product manufactured in a chemical plant meets the specification by which it is sold to the customer. Technical assistants perform tests in a quality control laboratory to ensure that material meets legal requirements and the material is safe and effective in use. Peroxides may be present in ether as a result of</p>



**EVIDENCE GUIDE**

light-catalysed air oxidation. Peroxides are toxic and can give rise to mixtures which are explosive when distilled. Technical assistants test ether to ensure that the level of peroxide is within acceptable limits. The test is done by shaking ether with a solution of potassium iodide. After standing for 30 minutes in the dark the yellow colour of the aqueous phase, due to the liberation of iodine, must not be more intense than a prepared standard solution. These tests ensure the quality and safety of the ether.

**Food processing**

A snack food company produces a range of high quality, impulse purchase snack foods. Some of these products are moisture and/or oxygen sensitive and are therefore packaged in multi-layer flexible packaging to provide optimum shelflife. The packaging must also be able to withstand the rigours of the production and distribution process. While the packaging is purchased to meet the shelflife and distribution specifications, the quality assurance program requires the periodic evaluation of the packaging materials against these specifications. A laboratory assistant uses standard methods to test the tearing resistance, bursting strength, impact resistance and permeability and/or leakage of the snack food packaging. Tests are also conducted on aspects of the manufacturing process that can affect shelflife. These tests involve the measuring of the heat-seam strength and the sealing performance of the closure process. The test results are recorded by the laboratory assistant to verify the conformance of the materials to the supplier specifications and of the process to the manufacturing specifications. The assistant reports any anomalies or non-conformances to the appropriate personnel.

**Construction materials testing**

A technician performs an Aggregate Stripping Test (AS 1141.50) and enters the results in the laboratory's information management system (LIMS). The resulting 20-30% stripped values (i.e. 70-80% adhering) indicate a 'fail' result. The technician notes that he has repeated the test and obtained the same 'fail' result. The laboratory manager reviews the results and asks the technician to explain how he performed the test. He describes how he prepared 3-4 mm thick plates of bitumen and binding agent in the mould and then placed 50 small clean pieces of aggregate on top. After treatment in an oven for 24

**EVIDENCE GUIDE**

	<p>hours and a 50°C water bath in accordance with the test method, the technician had then carefully pulled out the pieces of aggregate and avoiding any twisting motion. He then estimated the % of bitumen adhering to each of the stones with the expectation that the stripped value would be about 5% (i.e. 95% adhering). The manager is satisfied that the technician has performed the test in accordance with the method and suggested that he now re-run the test with a known aggregate as a control. This test gives a stripped value of 5-7% (i.e. 93-95% adhering). The manager is now sufficiently confident of the laboratory's results to sign and issue the test report and explain the aggregate's 'test failure' to the client.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
  - AS ISO 1000-1998 The international system of units (SI) and its application
  - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
  - AS/NZS 2243 Set:2006 Safety in laboratories set
- Australian code of good manufacturing practice for medicinal products (GMP)
- calibration and maintenance schedules

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• enterprise recording and reporting procedures</li> <li>• equipment manuals</li> <li>• equipment startup, operation and shutdown procedures</li> <li>• MSDS and safety procedures</li> <li>• material, production and product specifications</li> <li>• national measurement regulations and guidelines</li> <li>• principles of good laboratory practice (GLP)</li> <li>• production and laboratory schedules</li> <li>• quality manuals</li> <li>• standard operating procedures (SOPs)</li> </ul>
<b>Concepts of metrology</b>	<p>Concepts of metrology may include:</p> <ul style="list-style-type: none"> <li>• that all measurements are estimates</li> <li>• measurements belong to a population of measurements of the measured parameters</li> <li>• repeatability</li> <li>• precision</li> <li>• accuracy</li> <li>• significant figures</li> <li>• sources of error</li> <li>• uncertainty</li> <li>• traceability</li> </ul>
<b>Preparation of samples</b>	<p>Preparation of samples may include:</p> <ul style="list-style-type: none"> <li>• sub-sampling or splitting using procedures, such as riffing, coning and quartering, manual and mechanical splitters</li> <li>• diluting samples</li> <li>• physical treatments, such as ashing, dissolving, filtration, sieving, centrifugation and comminution</li> <li>• moulding, casting or cutting specimens</li> </ul>
<b>Typical tests carried out by laboratory/field assistants</b>	<p>Typical tests carried out by laboratory/field assistants may include:</p> <ul style="list-style-type: none"> <li>• visual/optical tests of appearance, colour, texture, identity, turbidity, refractive index (alcohol content and Baume/Brix)</li> <li>• physical tests: <ul style="list-style-type: none"> <li>• density, specific gravity and compacted</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<p>density</p> <ul style="list-style-type: none"> <li>• moisture content and water activity</li> <li>• particle size, particle shape and size distribution</li> <li>• chemical tests: <ul style="list-style-type: none"> <li>• gravimetric</li> <li>• colorimetric</li> <li>• electrical conductivity (EC) and pH</li> <li>• specific ions using dipsticks and kits</li> <li>• nutrients (e.g. nitrates and orthophosphates) using basic kits</li> <li>• ashes, including sulphated ashes</li> </ul> </li> <li>• biological/environmental tests: <ul style="list-style-type: none"> <li>• pH, oxygen reduction potential (ORP), dissolved oxygen (DO) and (EC)</li> <li>• E coli using test kits</li> <li>• surface hygiene/presence of microbes</li> </ul> </li> <li>• packaging tests: <ul style="list-style-type: none"> <li>• tearing resistance, bursting strength and impact resistance</li> <li>• permeability and/or leakage</li> </ul> </li> <li>• mechanical tests: <ul style="list-style-type: none"> <li>• Emerson class</li> <li>• concrete slump</li> </ul> </li> </ul>
<b>Measurements</b>	<p>Measurements may include:</p> <ul style="list-style-type: none"> <li>• simple ground surveys</li> <li>• meteorological parameters, such as wind direction/strength, rainfall, maximum/minimum temperature, humidity and solar radiation</li> <li>• simple background radiation survey</li> <li>• production/process parameters, such as temperature, flow and pressure</li> <li>• gas levels in a confined space</li> </ul>
<b>Common measuring equipment</b>	<p>Common measuring equipment may include:</p> <ul style="list-style-type: none"> <li>• dimension apparatus</li> <li>• DO and EC</li> <li>• analogue and digital meters and charts/recorders</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• basic chemical and biological test kits</li> <li>• dipsticks and site test kits (e.g. HACK)</li> <li>• timing devices</li> <li>• temperature measuring devices, such as thermometers and thermocouples</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• electric shock</li> <li>• biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids</li> <li>• solar radiation, dust and noise</li> <li>• chemicals, such as sulphuric acid, fluorides and hydrocarbons</li> <li>• aerosols</li> <li>• sharps, broken glassware and hand tools</li> <li>• flammable liquids</li> <li>• dry ice and liquid nitrogen</li> <li>• fluids under pressure</li> <li>• sources of ignition</li> <li>• occupational overuse syndrome, slips, trips and falls</li> <li>• manual handling, working at heights and working in confined spaces</li> <li>• crushing, entanglement and cuts associated with moving machinery or falling objects</li> </ul>
<b>Enterprise controls to address hazards</b>	<p>Enterprise controls to address hazards may include:</p> <ul style="list-style-type: none"> <li>• use of MSDS</li> <li>• use of signage, barriers and service isolation tags</li> <li>• use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots</li> <li>• use of appropriate equipment, such as biohazard containers and cabinets and laminar flow cabinets</li> <li>• recognising and observing hazard warnings and safety signs</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>labelling of samples, reagents, aliquoted samples and hazardous materials</li> <li>handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions, and enterprise procedures and regulations</li> <li>cleaning and decontaminating equipment and work areas regularly using recommended procedures</li> <li>following established manual handling procedures for tasks involving manual handling</li> </ul>
<b>Minimising environmental impacts</b>	<p>Minimising environmental impacts may involve:</p> <ul style="list-style-type: none"> <li>recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals and glass</li> <li>appropriate disposal of hazardous waste</li> <li>correct disposal of excess sample/test material</li> <li>correct storage and handling of hazardous chemicals</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Testing
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## Competency field

Competency field	
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## Co-requisite units

Co-requisite units		

## MSL973002A Prepare working solutions

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to prepare working solutions and to check that existing stocks are suitable for use. Calculations of quantities, choice of reagent grades and required dilutions will be specified by the supervisor.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory assistants working in all industry sectors. Test solutions include those required to perform laboratory tests.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		



## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Safely use laboratory chemicals, glassware and equipment	1.1. Apply appropriate safety precautions for use of laboratory equipment and hazardous chemical materials 1.2. Use appropriate laboratory glassware and measuring equipment 1.3. Clean and store glassware and equipment in accordance with enterprise procedures
2. Make up working solutions	2.1. Identify the relevant standard methods for solution preparation 2.2. Assemble specified laboratory equipment 2.3. Select and prepare materials and solvent of specified purity 2.4. Measure appropriate quantities of reagents for solution preparation and record data 2.5. Prepare labels and log solution details in laboratory register 2.6. Transfer solutions to appropriately labelled containers
3. Check existing stock of solutions	3.1. Monitor shelf life of working solutions according to laboratory procedures

ELEMENT	PERFORMANCE CRITERIA
	3.2. Replace out-of-date or reject solutions according to laboratory procedures 3.3. Conduct routine titrimetric analyses, if appropriate, to determine if solutions are fit for purpose

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- using appropriate materials, equipment and procedures to prepare solutions
- following appropriate occupational health and safety (OHS), and hygiene procedures, if appropriate
- using all equipment safely and efficiently
- using enterprise procedures to calculate concentrations
- identifying solutions not fit for use
- using titrations to determine the concentration of solutions
- labelling, storing and disposing of solutions appropriately
- recording and presenting data appropriately

#### Required knowledge

Required knowledge includes:

- relevant biological, chemical, food and laboratory terminology
- principles of metrology
- the international system of units (SI)
- concentration terms, such as % w/w, % w/v, % v/v, ppm (mg/L) and molarity
- basic theory of acids, bases, salts, buffers and neutralisation
- enterprise procedures for preparing solutions
- calculations required to prepare specified amounts of solutions of specified concentration
- appropriate OHS procedure for preparing, handling and disposal of solutions
- use of material safety data sheets (MSDS)
- relevant health, safety and environment requirements

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• prepare working solutions in compliance with relevant standards, appropriate procedures and/or enterprise requirements</li> <li>• follow OHS procedures to safely use laboratory chemicals glassware and equipment</li> <li>• make up working solutions according enterprise procedures</li> <li>• check existing stocks of solutions as being fit for purpose.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL922001A Record and present data</i></li> <li>• <i>MSL943002A Participate in laboratory/field workplace safety.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• standard laboratory equipped with appropriate equipment and reagents</li> <li>• SOPs and testing methods</li> <li>• access to appropriate containers and storage facilities.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• inspection of solutions prepared, labelled and stored by the candidate</li> <li>• review of solution records and workplace documentation completed by the candidate</li> <li>• feedback from peers and supervisors</li> <li>• observation of the candidate preparing working solutions</li> <li>• oral or written questioning.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess</p>

**EVIDENCE GUIDE**

	<p>directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p><b>Manufacturing</b></p> <p>When starting materials used for the manufacture of common household materials are in transit from the supplier to the manufacturer, they may degrade if subjected to conditions, such as heat, moisture, light and oxygen. Even when the supplier ships quality materials to the manufacturing plant, the materials may be sub-standard when they arrive. Quality control tests are designed to test starting materials to ensure they are within specification. For example, aspirin forms salicylic acid when stored under adverse conditions. Laboratory assistants prepare and monitor the quality of solutions, such as ferric chloride solution, which gives an intense violet colour when added to salicylic acid but gives no colour with aspirin. Absence of the violet colouration indicates that breakdown of the aspirin hasn't occurred.</p> <p><b>Biomedical</b></p> <p>A laboratory assistant made up 1 litre of buffer solution using buffer tablets and a 1 litre volumetric flask as specified in the method. To ensure the solution was suitable for use the assistant measured the pH and found it was within acceptable range. The assistant then appropriately labelled a storage vessel and stored the buffer according to requirements. By following enterprise procedures the shelf life of the buffer was maximised.</p>

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	<p><b>Environmental</b></p> <p>An environmental laboratory is contracted to determine the acidity of water samples taken from local lakes and streams. A laboratory assistant is required to make up small batches of 0.01M sodium hydroxide and to determine its concentration by titrating it against a standard solution of potassium acid phthalate using phenolphthalein indicator. This procedure is carried out monthly to ensure that the concentration of the sodium hydroxide solution is accurately known. Alternatively, the laboratory assistant may be required to prepare and standardise a fresh batch of sodium hydroxide on a monthly basis. In this case, he/she must understand the underpinning knowledge of basic acid/base theory, potential problems of interferences (such as slow absorption of carbon dioxide by sodium hydroxide solution) so as to ensure that the concentrations of workup solutions are accurately known. He/she must also be skilled in calculating and performing dilution when required to prepare such low concentrations (0.01M) of working solutions.</p>
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**Range Statement**

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b>Codes of practice</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
<b>Standards, codes, procedures and/or enterprise requirements</b>	<p>Standards, codes, procedures and/or enterprise requirements may include:</p> <ul style="list-style-type: none"> <li>• Australian and international standards, such as: <ul style="list-style-type: none"> <li>• AS 2163-2000 Laboratory glassware - Measuring cylinders</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• AS 2165-1996 Laboratory glassware - Burettes AS 2162.1-1996 Verification and use of volumetric apparatus - General - Volumetric glassware</li> <li>• AS ISO 1000-1998 The international system of units (SI) and its application</li> <li>• AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories</li> <li>• AS/NZS 2243 Set:2006 Safety in laboratories set</li> <li>• Australian code of good manufacturing practice for medicinal products (GMP)</li> <li>• calibration and maintenance schedules</li> <li>• enterprise recording and reporting procedures</li> <li>• equipment manuals</li> <li>• equipment startup, operation and shutdown procedures</li> <li>• MSDS and safety procedures</li> <li>• material, production and product specifications</li> <li>• national measurement regulations and guidelines</li> <li>• principles of good laboratory practice (GLP)</li> <li>• production and laboratory schedules</li> <li>• quality manuals</li> <li>• standard operating procedures (SOPs)</li> </ul>
<b>Concepts of metrology</b>	<p>Concepts of metrology may include:</p> <ul style="list-style-type: none"> <li>• that all measurements are estimates</li> <li>• measurements belong to a population of measurements of the measured parameters</li> <li>• repeatability</li> <li>• precision</li> <li>• accuracy</li> <li>• significant figures</li> <li>• sources of error</li> <li>• uncertainty</li> <li>• traceability</li> </ul>
<b>Typical test solutions</b>	<p>Typical test solutions may include:</p> <ul style="list-style-type: none"> <li>• solutions required for diagnostic/analytical and limit tests in food and chemical laboratories,</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>such as sulphates, chlorides and heavy metals</p> <ul style="list-style-type: none"> <li>• solutions, such as stains for standard diagnostic/analytical procedures in biomedical/environmental laboratories, such as cell staining, fixation of cells and tissues, suspension of cells and titrimetric indicators</li> <li>• solutions required for laboratory maintenance and disinfection, such as 70% ethanol and hypochlorite</li> </ul>
<b>Laboratory equipment</b>	<p>Laboratory equipment may include:</p> <ul style="list-style-type: none"> <li>• pH meters</li> <li>• balances</li> <li>• magnetic stirrers, water baths and hot plates</li> <li>• measuring cylinders, beakers, conical flasks, volumetric flasks, pipettes and burettes</li> <li>• filter papers and funnels</li> <li>• fume cupboards</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• corrosive chemicals, such as acids and alkalis</li> <li>• sources of heat, such as burners</li> <li>• sharps and broken glassware</li> <li>• spillages</li> </ul>
<b>Safety precautions</b>	<p>Safety precautions may include:</p> <ul style="list-style-type: none"> <li>• use of MSDS</li> <li>• use of personal protective equipment, such as safety glasses, gloves and coveralls</li> <li>• correct labelling of reagents and hazardous materials</li> <li>• handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations</li> <li>• regular cleaning and/or decontamination of equipment and work areas</li> </ul>
<b>Monitoring quality of solutions</b>	<p>Monitoring quality of solutions may include:</p> <ul style="list-style-type: none"> <li>• noting turbidity to exclude absorption of moisture</li> <li>• noting deposits to exclude microbial contamination or chemical degradation</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>noting crystals to exclude evaporation</li> <li>conducting titrations to check concentration</li> <li>noting colour changes indicating a pH shift with solutions containing indicators</li> <li>checking expiry dates on solution containers</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Testing
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	



<b>Co-requisite units</b>		

## MSL973004A Perform aseptic techniques

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to perform aseptic techniques to maintain the integrity of both the sample source and the sample. It applies to sampling techniques in tissue culture and to generic microbiological procedures.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory assistants and technicians working in the field or laboratory in the biomedical, biological, food processing and environmental industry sectors.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for aseptic sampling or transfer	1.1.Ensure that any sampling procedure conforms with the requirements of the sampling plan 1.2.Use specified personal protective clothing and equipment 1.3.Prepare the work area for safe and effective sample transfer 1.4.Select equipment and materials specified by the procedure 1.5.Organise equipment to minimise contamination during manipulations 1.6.Label containers for clear identification 1.7.Record details in relevant log or database
2. Transfer materials aseptically	2.1.Protect the integrity of the sample source by sterilising the sampling site and the mouth of transport or culture vessel 2.2.Sterilise inoculating loops and/or pipette where used

ELEMENT	PERFORMANCE CRITERIA
	<p>to prevent contamination</p> <p>2.3. Perform transfer while minimising opportunities for contamination and cross-infection</p> <p>2.4. After transfer, and before sealing the transport or culture vessel, flame the vessel mouth to maintain sterility</p> <p>2.5. Re-sterilise inoculating loops, minimising the generation of aerosols</p> <p>2.6. Perform quality control checks, if required</p> <p>2.7. Label transport or culture vessels for clear identification</p>
<p>3. Maintain work area and equipment to prevent cross-infection and contamination</p>	<p>3.1. Place disposable and reusable items into relevant receptacles</p> <p>3.2. Clean and disinfect work area and equipment after use</p> <p>3.3. Transport disposable and reusable contaminated materials to relevant areas for disinfection, sterilisation and cleaning or disposal</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- sterilising equipment such as flasks, loops and pipettes
- handling of laboratory equipment and glassware to prevent contamination
- streak plating of inoculations
- sampling transfers
- labelling and storing culture media according to enterprise procedures
- recording data accurately
- reporting non-compliance, anomalies or outofspecification results
- sorting, collecting, treating, recycling or disposing of waste
- following enterprise procedures consistently
- using appropriate personal protective equipment

#### Required knowledge

## REQUIRED SKILLS AND KNOWLEDGE

Required knowledge includes:

- the relationship between sterile practices, hygiene procedures and the ability to obtain growth free of contamination
- cleaning and sanitising requirements of equipment and work area and effects of physical and chemical agents on microbial growth and death
- principles of infection control related to occupational health and safety (OHS), sampling and transfer of materials in microbiological investigations
- disinfection and sterilisation procedures used in the collection, processing and safe disposal of samples and materials
- importance of pure culture techniques and aseptic transfer to the successful microbiological investigation and correct interpretation of laboratory results
- growth requirements of micro-organisms (bacteria, fungi, protozoans, viruses and multi-cellular parasites) in terms of their laboratory culture
- relevant health, safety and environment requirements

### Specific industry

Additional knowledge requirements may apply for different industry sectors. For example:

Food processing:

- food spoilage symptoms
- food safety principles
- beneficial/detrimental organisms relevant to specific food industry sector

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

In particular, assessors should look to see that the candidate:

- follows established laboratory procedures, including recording of samples, operation of equipment and cleaning/decontamination
- prevents cross-contamination of sample source and sample

<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>manipulates equipment to prevent contamination of culture medium during transfer</li> <li>sterilises equipment as required to prevent cross-contamination of work area, personnel and environment.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li><i>MSL943002A Participate in laboratory/field workplace safety</i></li> <li><i>MSL973003A Prepare culture media.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>standard laboratory with appropriate equipment and materials</li> <li>enterprise procedures and standard methods</li> <li>MSDS.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>review of quality assurance results and examination of samples transferred by the candidate</li> <li>observation of the candidate successfully transferring a range of samples</li> <li>written and/or oral questioning to assess underpinning knowledge.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of</p>

**EVIDENCE GUIDE**

competency and show its relevance in a workplace setting.

**Food processing**

As part of the quality assurance program at an ice-cream manufacturer, six ice-creams were removed from the production line, placed in sterile bags and then stored in a freezer in the microbiology laboratory. Later in the morning, the laboratory assistant removed the samples from the freezer, registered the samples with the date received and test code and signed the register book. She/he then placed the samples in a water bath set at 42(C. While the samples were melting, the laboratory assistant labelled the respective agar plates with the registered codes. Using aseptic techniques she/he carefully transferred 1ml of ice-cream mix into the total plate count agar. The plates were then placed in the incubator. The final results were noted and recorded.

**Biomedical**

In preparation for antibiotic sensitivity testing and biochemical identification of presumed pathogenic bacteria, a technical assistant was asked to prepare a sterile peptone suspension of a lactose fermenting colony. The colony had been previously identified by the supervisor on a MacConkey's agar plate. The assistant labelled a 5mL tube of peptone broth with the sample number and a code for the identified colony and then donned a pair of disposable gloves. Bringing the labelled tube and the MacConkey's plate near to the Bunsen, she/he took an inoculating loop and sterilised it in the incandescent flame. She/he carefully cooled the loop in a sterile area of the agar and gently scraped off half the colony. With the other hand, and in the vicinity of the heated air of the Bunsen, she/he removed the cover of the peptone tube in her/his crooked finger. In a continuous and coordinated way she/he flamed the lip of the tube and emulsified the colony in the broth. She/he then flamed the lip of the tube and replaced its cover. Finally, the technical assistant re-sterilised the inoculating loop by introducing and holding it in the Bunsen flame to minimise the generation of bacterial aerosols.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

#### Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

#### Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
  - AS/NZS 2243 Set:2006 Safety in laboratories set
  - AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
  - AS/NZS 4187:2003 Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment and maintenance of associated environments in health care facilities
  - AS/NZS ISO 14000 Set:2005 Environmental management standards set
- HB 9-1994 Occupational personal protection
- Australia New Zealand Food Standards (ANZFS) Code
- Australian code of good manufacturing practice for medicinal products (GMP)
- Australian Dangerous Goods Code
- client and product specifications
- manufacturer's instructions or verbal direction from laboratory manager, supervisor or senior technician
- material safety data sheets (MSDS)
- National Code of Practice for the labelling of workplace substances [NOHSC:2012 (1994)]
- National Health and Medical Research Council (NHMRC) Guidelines
- OHS national standards and codes of practice



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• operation and maintenance manuals for automated media preparation equipment</li> <li>• principles of good laboratory practice (GLP)</li> <li>• production schedules and instructions</li> <li>• standard operating procedures (SOPs)</li> </ul>
<b>Personal protective equipment</b>	<p>Personal protective equipment may include:</p> <ul style="list-style-type: none"> <li>• gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits and respirators</li> <li>• biohazard containers and laminar flow cabinets</li> </ul>
<b>Sample pot and transfer media and the subculturing and/or passaging of culture</b>	<p>Sample pot and transfer media and the subculturing and/or passaging of culture to:</p> <ul style="list-style-type: none"> <li>• sterile broth</li> <li>• media for isolation of colony</li> <li>• tissue culture media</li> <li>• media for continuous culture systems</li> </ul>
<b>Samples</b>	<p>Samples may include:</p> <ul style="list-style-type: none"> <li>• body fluids and liquids</li> <li>• water and soil</li> <li>• sterile pharmaceuticals</li> <li>• yeasts and moulds</li> <li>• milk and yoghurt</li> <li>• swabs and smears</li> <li>• propagation tissue</li> <li>• plant material</li> <li>• fermented foods and beverages</li> </ul>
<b>Equipment</b>	<p>Equipment may include:</p> <ul style="list-style-type: none"> <li>• transfer equipment, such as inoculating loops, pipettes (quantitative and qualitative), flasks, tubes and spatulas</li> <li>• Bunsen burners and bench incinerators</li> <li>• anaerobic jars</li> <li>• incubators, water baths, refrigerators, freezers and possibly dry ice and liquid nitrogen cylinders</li> <li>• laminar flow units and biohazard cabinets</li> <li>• autoclave or pressure cooker</li> <li>• swabs</li> <li>• continuous culture systems</li> </ul>

<b>RANGE STATEMENT</b>	
<b>The range of material</b>	<p>The range of material may involve:</p> <ul style="list-style-type: none"> <li>• solid and/or liquid media</li> <li>• supplied media, such as media manufactured in the enterprise or raw material supplies for media</li> <li>• disinfecting and sterilising agents and materials, such as methylated spirits, ethanol and ether</li> <li>• disposable equipment and clothing</li> <li>• tissue culture media</li> <li>• growth media in broths, plates, deeps or slopes</li> <li>• receptacles for safe disposal of wastes and for processing of reusable materials</li> <li>• bar coding material and labels</li> </ul>
<b>Sterilisation techniques</b>	<p>Sterilisation techniques may include:</p> <ul style="list-style-type: none"> <li>• autoclaving</li> <li>• flaming</li> <li>• steam and membrane filtration</li> <li>• boiling</li> <li>• microwaving</li> <li>• radiation</li> <li>• high temperature</li> <li>• high pressure steam</li> <li>• gas and chemical treatments</li> </ul>
<b>Quality control checks</b>	<p>Quality control checks may include:</p> <ul style="list-style-type: none"> <li>• streaking out of cultures to a single colony</li> <li>• lawn cultures</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• accessing the sample from difficult or dangerous areas</li> <li>• dry ice and liquid nitrogen vapour</li> <li>• ultraviolet (UV) light sources</li> <li>• heat from Bunsen burners</li> <li>• molten agar</li> <li>• sharps</li> <li>• hazardous substances and/or infectious agents</li> </ul>
<b>Workplace information</b>	<p>Workplace information may include:</p> <ul style="list-style-type: none"> <li>• SOPs</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• specifications for safe waste disposal of bio-hazardous materials</li> <li>• production schedules and instructions</li> <li>• work notes</li> <li>• MSDS</li> <li>• manufacturer's instructions</li> <li>• verbal instructions from laboratory manager, supervisor or senior technician</li> <li>• guidelines for small scale genetic manipulation work</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Testing
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**Competency field**

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## MSL973007A Perform microscopic examination

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to set up a light microscope for optimum resolution, to prepare routine samples and to observe, identify and report sample characteristics.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory or technical assistants in all industry sectors. The unit of competency covers limited interpretation and analysis of results. Troubleshooting of equipment and procedures is not required.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Interpret test requirements	<p>1.1. Review test request to identify samples to be tested, test method and equipment involved</p> <p>1.2. Identify hazards associated with the sample, preparation methods and equipment and implement enterprise control measures</p>
2. Set up work area for preparation and examination of samples	<p>2.1. Collect equipment and arrange the workspace so that equipment can be used safely and efficiently</p> <p>2.2. Perform pre-use and safety checks to ensure equipment is fit for purpose and report faulty or unsafe equipment to appropriate personnel</p>
3. Prepare samples for examination	<p>3.1. Log and label samples according to enterprise procedures to ensure traceability</p> <p>3.2. Check suitability of the original and prepared sample for the examination and report unsuitable samples to appropriate personnel</p> <p>3.3. Prepare and store the sample for examination following enterprise methods</p>

ELEMENT	PERFORMANCE CRITERIA
4. Set up and use a light microscope	4.1. Set up the light path to optimise resolution 4.2. Select the appropriate objectives and filter for the sample being examined 4.3. Ensure that the lenses are clean 4.4. Adjust settings and alignment of the light path to optimise performance 4.5. Place sample correctly on the stage
5. Observe, identify and report sample characteristics	5.1. Recognise and identify significant sample characteristics 5.2. Perform required calculations accurately 5.3. Prepare and view control samples and check that results are consistent with expected values 5.4. Identify and report out of specification or atypical results promptly to appropriate personnel 5.5. Record and report data in accordance with enterprise procedures
6. Maintain a safe work environment	6.1. Ensure safety and minimise cross-contamination through the use of personal protective clothing and safety equipment 6.2. Handle all samples and equipment in accordance with enterprise safety protocols 6.3. Clean up spills using appropriate techniques to protect personnel, work area and environment 6.4. Minimise generation of waste and environmental impacts 6.5. Collect and dispose of all wastes safely 6.6. Report hazards and incidents to designated personnel using enterprise procedures

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- setting up the workbench and microscope ergonomically

## REQUIRED SKILLS AND KNOWLEDGE

- setting up, cleaning and using a light microscope to achieve optimum resolution of the specimen
- using personal protective clothing and other safety equipment correctly
- performing counts on samples
- performing basic measurements using grids
- logging and tracking samples through all steps from receiving a sample through to completion of a procedure and reporting
- interpreting and recording test results, including simple calculations
- correctly handling and storing samples and equipment

### Required knowledge

Required knowledge includes:

- parts and functions of a light microscope
- importance and appropriate use of controls and certified reference materials
- hazards and risks in laboratories associated with performing microscopic examination
- enterprise and/or legal traceability requirements
- relevant health, safety and environment requirements

### Specific industry

Additional knowledge requirements may apply for different industry sectors. For example:

Biological industry:

- basic structure and function of cells and organelles
- basic classes and classification of organisms of organisms, such as prokaryotes, eukaryotes, plants, animals, bacteria, viruses and prions
- cell physiology and processes, such as simple and facilitated diffusion, plasmolysis, osmosis, tonicity, active transport, energy production, mitosis, motility, phagocytosis and pinocytosis
- purposes and mechanisms of staining (e.g. Gram +ve and -ve)

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment



<b>EVIDENCE GUIDE</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• follow enterprise standards, procedures and practices</li> <li>• prepare suitable samples</li> <li>• recognise, identify and document significant sample characteristics</li> <li>• set up a light microscope for optimal resolution</li> <li>• maintain personal safety and that of others</li> <li>• minimise cross-contamination and contamination of the laboratory and environment.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL922001A Record and present data</i></li> <li>• <i>MSL933002A Contribute to the achievement of quality objectives</i></li> <li>• <i>MSL943002A Participate in laboratory/field workplace safety</i></li> <li>• <i>MSL953001A Receive and prepare samples for testing.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• standard laboratory equipped with appropriate equipment, such as light microscopes and samples</li> <li>• enterprise procedures, standard methods and materials.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• observation of the candidate performing microscopic examinations</li> <li>• review of data records prepared by the candidate, such as counts, observations and results</li> <li>• feedback from supervisors and peers about adherence to enterprise/technical procedures</li> <li>• questioning to assess underpinning knowledge.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and</p>

<b>EVIDENCE GUIDE</b>	
	<p>disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p><b>Construction materials testing</b></p> <p>The supply of river sand is running out and quarries are accessing alternative sources of sand for use in concrete mixes in construction. The sand should not be an aggregate that is likely to break down into smaller particles. A technician in a quarry company is required to analyse samples of crushed rock using a light microscope. The technician looks for characteristics of the sample, such as angularities, roundness, sharpness, cracks, presence of organic matter, mineral structure and whether the particles are a conglomerate. If the sample does not meet the characteristics, the company will need to treat it to make it suitable for use in concrete mixes (for example by washing, crushing and sieving).</p> <p><b>Food processing</b></p> <p>A customer complaint is received about the baking properties of a flour delivery. The laboratory assistant at the flour mill is given the task of testing the starch content of the suspect flour. He/she prepares iodine stained samples of the returned flour and a range of baked and partially baked products prepared from it. First, the assistant makes up fresh iodine staining solution and then prepares slides of each sample for microscopic examination. He/she identifies the characteristic starch granules of the flour sample and records the degree of gelatinisation in the starch granules in the baked samples. He/she discusses the results with the supervisor and prepares a report for the customer.</p> <p><b>Biomedical</b></p> <p>A laboratory assistant works in the microbiology laboratory of a public hospital and is responsible for</p>

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preparing and staining sputum smears from patients for micro and culture. The assistant puts on a clean gown and gloves before collecting the specimens from the reception area of the laboratory. The assistant prepares cultures of the sputum specimens on simple and selective media before preparing, fixing and staining smears for microscopic examination. The results are checked by the supervisor, entered into the laboratory information management system (LIMS) and sent to the appropriate section of the hospital.

**Environmental**

A laboratory assistant prepares media for plant tissue culture. There has been some contamination of Gram-positive bacteria in the last two batches and the supervisor has initiated an overhaul of the preparation and aliquotting procedure. The laboratory assistant has been asked to follow the new procedure exactly and to remove samples at each stage of ingredient addition for microscopic examination. The laboratory assistant records the exact addition amounts, batch numbers and brands of the reagents, the location of the addition (which biohazard cabinet), the equipment used and the pre-sterilisation records of all equipment.

The laboratory assistant then prepares slides, fixes them and performs a Gram stain on each of the aliquots removed from the new preparation run. Microscopic analysis of each aliquot reveals nil contamination. The supervisor decides that there has been a breach in the old procedure and the laboratory assistant is asked to follow the new procedure and to perform a routine microscopic check on all batches for the next month.

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>RANGE STATEMENT</b>	
<b>Codes of practice</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
<b>Standards, codes, procedures and/or enterprise requirements</b>	Standards, codes, procedures and/or enterprise requirements may include: <ul style="list-style-type: none"> <li>• Australian and international standards, such as: <ul style="list-style-type: none"> <li>• AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories</li> <li>• AS/NZS ISO 9000 Set:2008 Quality management systems set</li> <li>• AS/NZS 2243 Set:2006 Safety in laboratories set</li> </ul> </li> <li>• principles of good laboratory practice (GLP)</li> <li>• Australian code of good manufacturing practice for medicinal products (GMP)</li> <li>• safety manuals</li> <li>• quality manuals and equipment and procedure manuals</li> <li>• standard operating procedures (SOPs)</li> <li>• material safety data sheets (MSDS)</li> <li>• enterprise recording and reporting procedures</li> <li>• production and laboratory schedules</li> <li>• material, production and product specifications</li> </ul>
<b>Preparation of samples</b>	Preparation of samples may include: <ul style="list-style-type: none"> <li>• aseptic transfer of specimen</li> <li>• centrifugation</li> <li>• cooling</li> <li>• drying</li> <li>• filling a counting chamber in one continuous flow without bubbles or overflow</li> <li>• filtration</li> <li>• fixing of films to minimise cell damage and the production of artefacts</li> <li>• labelling</li> <li>• mounting of stained films, sections and whole mounts to ensure long term preservation</li> <li>• permanent labels for smears, films and sections for presentation, storage and retrieval</li> <li>• physical or chemical separation</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• selection of diluent to preserve or enhance visibility of the cells to be counted</li> <li>• selection, filling and cover slipping of a clean, dry counting chamber to ensure even distribution of cells during filling</li> <li>• serial dilution to enable individual cells to be reliably counted</li> <li>• staining of fixed material to illustrate required characteristics</li> <li>• sub-sampling</li> <li>• thin film or smear on a slide</li> </ul>
<b>Checking sample condition</b>	<p>Checking sample condition may include:</p> <ul style="list-style-type: none"> <li>• labelling</li> <li>• spillage</li> <li>• spoilage due to incorrect storage and transport conditions</li> <li>• temperature control</li> <li>• suitability for the examination</li> </ul>
<b>Pre-use checks</b>	<p>Pre-use checks may include:</p> <ul style="list-style-type: none"> <li>• calibration</li> <li>• cleaning/checking use by dates of reagents</li> <li>• routine maintenance</li> </ul>
<b>Equipment</b>	<p>Equipment may include:</p> <ul style="list-style-type: none"> <li>• glass slides</li> <li>• counting chambers (e.g. haemocytometer)</li> <li>• optical graticules and stage micrometers</li> <li>• tissue culture flasks</li> </ul>
<b>Light microscopes</b>	<p>Light microscopes may include:</p> <ul style="list-style-type: none"> <li>• bright field illumination microscopic examination up to 1000x magnification</li> <li>• stereomicroscopes and dissection microscopes</li> <li>• compound microscopes</li> <li>• phase contrast microscopes</li> <li>• inverted microscopes</li> </ul>
<b>Biological samples</b>	<p>Biological samples may include:</p> <ul style="list-style-type: none"> <li>• smears, impression smears, sections, squashes, films and whole mounts</li> <li>• a monolayer of cells in smears and films</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• fixed smears for demonstration of bacteria by the methylene blue and Gram staining techniques</li> <li>• blood films stained by a Romanowsky technique to clearly show differentiation of granulocytes</li> <li>• stained sections of animal tissues using regressive haematoxylin and eosin to differentiate cytoplasmic and nuclear detail</li> <li>• differentially stained monocotyledon and dicotyledon stem sections to demonstrate the structure of vascular bundles (xylem, phloem and cambium)</li> <li>• stained whole mounts of helminths</li> <li>• whole mounts, such as liver flukes, planaria and samples of animal faeces to demonstrate ova, cysts and larvae</li> <li>• pond water organisms</li> <li>• onion root tip squash</li> <li>• midstream sample of urine</li> </ul>
<b>Physical samples</b>	<p>Physical samples may include:</p> <ul style="list-style-type: none"> <li>• sand</li> <li>• asbestos fibres</li> <li>• coal samples</li> <li>• construction testing materials</li> <li>• geological specimens</li> </ul>
<b>Checking prepared samples</b>	<p>Checking prepared samples may include looking for:</p> <ul style="list-style-type: none"> <li>• clean and scratch-free microscope slides to reduce artefacts</li> <li>• preparation according to SOPs</li> <li>• a homogeneous suspension of sample</li> <li>• films and smears that have been fixed rapidly</li> <li>• thin films with a monolayer of cells</li> <li>• appropriate whole mounts for intact organisms</li> <li>• correct sample identification during and after processing</li> </ul>
<b>Sample characteristics</b>	<p>Sample characteristics are restricted to what can be viewed by bright light microscopy and may include:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• shape and size of particles</li> <li>• presence of contamination</li> <li>• colour</li> <li>• consistency and variability</li> <li>• number of cells (e.g. cells in blood or other particulate samples, such as a yeast suspension or pollen grains)</li> <li>• type of cells, percentage of atypical cells, presence/absence of cells, size of cells, viable and non-viable cells and trajectory</li> <li>• presence of stained material, such as starch</li> <li>• colour/staining and morphology</li> <li>• motility</li> </ul>
<b>Calculations</b>	<p>Calculations may include:</p> <ul style="list-style-type: none"> <li>• dilutions</li> <li>• percentage viability</li> <li>• number of cells in original sample after dilution</li> <li>• calculation of cells/ml in a number of squares of a counting chamber</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• micro-organisms and agents associated with soil, air, water, blood and blood products and human or animal tissue and fluids</li> <li>• chemicals and stains</li> <li>• sharps and broken glassware</li> <li>• aerosols</li> </ul>
<b>Safety practices and personal protective equipment</b>	<p>Safety practices and personal protective equipment may include:</p> <ul style="list-style-type: none"> <li>• use of MSDS</li> <li>• use of personal protective equipment, such as safety glasses, gloves and coveralls</li> <li>• use of biohazard containers and laminar flow cabinet</li> <li>• correct labelling of reagents and hazardous materials</li> <li>• handling and storing hazardous materials and equipment in accordance with labels, MSDS and manufacturer's instructions</li> <li>• ergonomic layout, correct illumination and</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>organisation of workbench</p> <ul style="list-style-type: none"> <li>regular cleaning and/or decontamination of equipment and work areas</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Testing
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>	





## MSL973008A Perform histological procedures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to perform straightforward histological procedures involving processing and sectioning (by hand or rotary microtome) of plant and animal tissues in paraffin wax.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to laboratory assistants working in biomedical, biotechnology, environmental and education sectors. Personnel will work under direct supervision and have ready access to enterprise procedures.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Assemble equipment and materials	1.1. Confirm the number and type of sections required 1.2. Collect equipment and arrange the workspace so that equipment can be used safely and efficiently 1.3. Perform pre-use and safety checks to ensure equipment is fit for purpose 1.4. Report faulty or unsafe equipment to appropriate personnel 1.5. Inspect processor reagents for deterioration and adequate volume and report any items requiring replacement
2. Process and embed plant and animal tissue	2.1. Select program and reagents for processing 2.2. Monitor processor regularly during processing sequence to ensure dehydration, clearing and infiltration are complete 2.3. Check that temperature of wax is suitable for embedding process 2.4. Check that volume of wax is sufficient for

ELEMENT	PERFORMANCE CRITERIA
	<p>uninterrupted embedding of processor load</p> <p>2.5. Embed tissue in correct orientation</p> <p>2.6. Allow block to solidify evenly according to wax requirements</p>
3. Cut sections of plant and animal tissue	<p>3.1. Place and secure block and knife in microtome strictly in accordance with safety directions</p> <p>3.2. Label required number of microscope slides in accordance with enterprise traceability requirements</p> <p>3.3. Cut ribbons of representative sections at the required thickness observing prescribed safety measures</p> <p>3.4. Float sections onto water bath to flatten tissues</p> <p>3.5. Pick up sections onto microscope slides ensuring identification on slides matches that on block</p> <p>3.6. Apply procedures to prevent cross-contamination between samples</p> <p>3.7. Cut free hand sections of plant tissue as required</p> <p>3.8. Inspect sections and reject items that do not meet specifications</p>
4. Stain sections	<p>4.1. Select reagents specified in the method</p> <p>4.2. Stain sections according to the method</p> <p>4.3. Examine sections microscopically to ensure expected staining outcomes have been achieved</p> <p>4.4. Mount sections to ensure long term preservation</p> <p>4.5. Attach permanent labels giving specimen details according to enterprise traceability requirements</p>
5. Maintain a safe work environment	<p>5.1. Ensure personal safety and minimise cross-contamination through the use of personal protective equipment</p> <p>5.2. Handle all specimens and equipment in accordance with enterprise safety protocols/procedures</p> <p>5.3. Clean up spills using appropriate techniques to protect personnel, work area and environment</p> <p>5.4. Minimise generation of waste and environmental impacts</p> <p>5.5. Collect and dispose of all wastes safely</p> <p>5.6. Report hazards and incidents to designated personnel using enterprise procedures</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- processing and embedding of plant and animal tissue
- cutting of sections free of wrinkles, scores and folds and at the specified thickness to demonstrate tissue and cellular structures, granules, inclusions and organelles
- regressive haematoxylin and eosin staining
- cover slipping slides, ensuring that no air bubbles are formed and material is preserved for the life of the slide
- labelling slides clearly with case number, specimen and stain details
- maintaining equipment and recording and reporting malfunctions appropriately
- maintaining traceability through all steps from receiving a specimen through to completion of a procedure

#### Required knowledge

Required knowledge includes:

- functions of the components of a rotary microtome
- safety precautions relevant to tissue processing, embedding and microtomy
- importance and appropriate use of certified reference materials
- relationship of the anatomy and morphology of tissue types and the macroscopic and microscopic appearance of stained sections
- correlation between poorly maintained processing reagents and resultant tissue blocks being difficult to cut or unsuitable for cutting
- relationship between correct orientation of the tissue during embedding and ability to cut sections from surface required for subsequent microscopic examination
- occupational health and safety (OHS) procedures related to micrometry and handling irritating, volatile, flammable and potentially carcinogenic substances, such as formaldehyde, xylene, histoclear, ethanol and chloroform
- safe and environmentally responsible disposal of wastes
- enterprise and/or legal traceability requirements
- relevant health, safety and environment requirements

## Evidence Guide

### EVIDENCE GUIDE

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• process, embed and cut tissue safely to enterprise procedures</li> <li>• stain sections according to enterprise procedures</li> <li>• manage tasks and organise work to ensure the timely completion of tasks</li> <li>• use specimens, reagents and materials economically and dispose of wastes safely</li> <li>• maintain equipment, recording and reporting malfunctions appropriately</li> <li>• minimise cross-contamination between specimens</li> <li>• maintain traceability through all steps from receiving a specimen through to completion of a procedure</li> <li>• work safely.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL973007A Perform microscopic examination.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• standard laboratory equipped with appropriate equipment and materials, such as microtomes, stains, animal and plant tissues</li> <li>• processing system for paraffin blocks</li> <li>• associated OHS equipment, such as extractor systems</li> <li>• enterprise procedures and standard methods.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• observation of the candidate performing tissue processing, embedding, cutting, pickup and mounting</li> <li>• inspection of sections and slides prepared by the candidate</li> <li>• review of quality control records for sections and slides prepared by the candidate</li> <li>• feedback from supervisors and peers on adherence to enterprise/technical procedures</li> </ul>

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	<ul style="list-style-type: none"> <li>questioning to assess underpinning knowledge.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p><b>Biomedical</b></p> <p>A laboratory assistant is asked to prepare a series of 5 (m or less, sections of rats' livers as part of a team's work to investigate a new treatment for Hepatitis C. She/he retrieves the liver samples from the cut-up bench for processing. The assistant checks that the processor is warmed up and that all the reagents are topped up. She/he chooses a program to suit the 1cm square liver samples and loads the cassettes into the processor. As processing continues, the assistant regularly checks that the system is working correctly. The next day, the assistant embeds the tissue into paraffin wax and cuts sections from each block using a rotary microtome. She/he checks that each section is smooth, flat and free of artefacts, taking care to ensure that there is no contamination between specimens and that traceability of all specimens and documentation is maintained. The assistant stains the tissue with a routine Haematoxylin and Eosin stain and passes the tray of prepared slides to the researcher for further analysis.</p> <p><b>Education</b></p> <p>A laboratory assistant in a high school was asked to prepare sections of plant tissue using a hand microtome</p>

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	<p>in preparation for a practical class where the students will stain and examine the slides in order to consolidate their knowledge about plant tissue structure and function. He/she was also asked by the supervising teacher to prepare a brief written outline for the students of the procedures used to prepare the plant tissue sections and to demonstrate the procedures to the student group under the control of the teacher. The laboratory assistant emphasised the importance of setup, pre-use checks of the equipment and appropriate disposal of the sections at the end of the practical class.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
  - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
  - AS/NZS ISO 9000 Set:2008 Quality management systems set
  - AS/NZS 2243 Set:2006 Safety in laboratories set
- principles of good laboratory practice (GLP)
- Australian code of good manufacturing practice for medicinal products (GMP)
- safety manuals



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• quality manuals and equipment and procedure manuals</li> <li>• material safety data sheets (MSDS)</li> <li>• enterprise recording and reporting procedures</li> <li>• production and laboratory schedules</li> <li>• material, production and product specifications</li> <li>• standard operating procedures (SOPs) describing personal protective equipment requirements, indications for use of biohazard and laminar flow cabinets, containment and cleanup of spillages and disposal of wastes</li> <li>• instructions to comply with legislation, standards, guidelines and codes</li> <li>• stock records and inventory</li> <li>• waste minimisation and disposal protocols</li> </ul>
<b>Equipment, reagents, specimens and systems</b>	<p>Equipment, reagents, specimens and systems may include:</p> <ul style="list-style-type: none"> <li>• tissue processors</li> <li>• microtomes and microtome knives (non-disposable or disposable)</li> <li>• embedding centres</li> <li>• flotation baths and drying ovens</li> <li>• microtome knife sharpeners</li> <li>• reagents, such as formaldehyde, ethanol, xylene, paraffin and stains</li> <li>• reference material for automated and manual quality control and quality assurance systems</li> <li>• fresh and fixed specimens</li> <li>• computer information systems, databases, record and filing systems, including specimen accessioning</li> </ul>
<b>Histological procedures</b>	<p>Histological procedures may include:</p> <ul style="list-style-type: none"> <li>• cutting paraffin sections of organs, such as kidney, liver, small intestine, stomach and tongue</li> <li>• cutting paraffin sections of dicotyledon and monocotyledon stems</li> <li>• staining tissue sections with Haematoxylin and Eosin (human and animal tissue) and Safranin and Fast Green (plant tissue)</li> </ul>

<b>RANGE STATEMENT</b>	
<b>Pre-use checks</b>	<p>Pre-use checks may include:</p> <ul style="list-style-type: none"> <li>• safety/serviceability</li> <li>• cleanliness</li> <li>• routine maintenance</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• micro-organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids</li> <li>• chemicals and stains</li> <li>• aerosols</li> <li>• sharps and broken glassware</li> </ul>
<b>Safety protocols/practices</b>	<p>Safety protocols/practices may include:</p> <ul style="list-style-type: none"> <li>• use of MSDS</li> <li>• use of personal protective equipment, such as gloves, safety glasses, goggles, faceguards, coveralls and gowns</li> <li>• use of biohazard containers and laminar flow cabinets</li> <li>• correct labelling of reagents and hazardous materials</li> <li>• handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations</li> <li>• regular cleaning and/or decontamination of equipment and work areas</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and</li> </ul>

**RANGE STATEMENT**

	Medical Research Council (NHMRC) and State and Territory Departments of Health
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**Unit Sector(s)**

<b>Unit sector</b>	Testing
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		

## MSL974007A Undertake environmental field-based monitoring

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to organise and undertake field monitoring programs that are primarily focused on the determination of physical and chemical parameters and/or observation and documentation of biological/ecological systems. It covers confirming the requirements of the monitoring activities, sampling, sample handling, physical and chemical monitoring and simple field-based analysis, data collection and recording. It also covers field camp maintenance and field safety. The unit of competency covers gaining clearance for animal trapping, tagging, keeping or experimentation, but does not cover specific animal handling techniques. These tasks would only be performed under the guidance and supervision of a scientific officer.
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### Application of the Unit

<b>Application of the unit</b>	This unit of competency is applicable to technical, field and environmental officers working in the construction materials, mining and environmental services industry sectors.  Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Confirm requirements for field monitoring activities with supervising staff	1.1. Clarify the purpose, objectives and the defined site for the field monitoring activities 1.2. Review all emergency plans, risk assessments, and safety and environmental requirements associated with the field activities 1.3. Review and discuss the detailed work program with supervising staff 1.4. Clarify the need for permits and any access restrictions or local concerns at field site 1.5. Clarify details of all samples to be collected and

ELEMENT	PERFORMANCE CRITERIA
	<p>field parameters to be measured</p> <p>1.6. Confirm final data formats will suit stakeholders who receive or use the data</p> <p>1.7. Review existing in-house protocols and/or associated in-house requirements that relate to field sampling, monitoring and data quality procedures</p>
2. Prepare for field monitoring activities	<p>2.1. Develop checklists, based on work program, to facilitate correct preparation of field activities</p> <p>2.2. Identify and implement all actions required under enterprise emergency plan, risk assessment, and environment, safety and data quality procedures</p> <p>2.3. Complete all administrative requirements and obtain appropriate approvals/permits</p> <p>2.4. Prepare and check all instruments, equipment, materials and supplies required to implement field program</p> <p>2.5. Confirm, correct and safe use of equipment and details of field activities with supervisor</p> <p>2.6. Arrange and check correct operation, packaging and transportation of all supplies and equipment</p> <p>2.7. Arrange all additional pre- and post-monitoring activities</p>
3. Perform field activities	<p>3.1. Establish and maintain field camp in accordance with enterprise procedures, as necessary</p> <p>3.2. Perform field sampling, monitoring, data collection and recording as per the agreed work program</p> <p>3.3. Label all samples and complete data sheets and field log book in accordance with enterprise procedures</p> <p>3.4. Store samples/specimens in accordance with any special requirements for continued wellbeing, viability or integrity</p> <p>3.5. Perform all tests and operate all equipment according to enterprise instructions</p> <p>3.6. Store and maintain equipment and, where appropriate, calibrate instruments during field activities</p> <p>3.7. Perform all activities safely with minimal impact on the environment</p>
4. Close down field monitoring activities	<p>4.1. Arrange and check final packaging and transportation of all samples, equipment and supplies back to home base</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>4.2.Ensure that monitoring/camp site is left in accordance with enterprise and environmental requirements</p> <p>4.3.Ensure all samples and data are stored safely</p> <p>4.4.Ensure dispatch of collected samples for subsequent analysis</p> <p>4.5.Test and, if required, decontaminate equipment before storage</p> <p>4.6.Report results/noting any anomalies with users, data analysers and/or supervisor</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- field sampling and monitoring procedures, including labelling and traceability
- demonstrating correct and safe use, under laboratory and field conditions, of field instruments and/or equipment (including field calibration)
- identifying and rectifying basic instrument faults
- collecting and preserving plants and animals to enable subsequent identification
- operating communication systems
- operating transportation systems
- applying data quality procedures under field conditions
- locating and managing of monitoring sites
- communicating effectively and efficiently
- reviewing and documenting emergency, safety or environmental field plans
- developing checklists covering instruments, equipment and associated supplies
- maintaining, storing and transporting samples/specimens to ensure their wellbeing, viability and integrity
- working safely for the protection of self and others
- negotiating with staff and stakeholders and reaching satisfactory agreements, where possible
- responding effectively to changed or unforeseen circumstances

#### Required knowledge

## REQUIRED SKILLS AND KNOWLEDGE

Required knowledge includes:

- purpose and the objectives of a field activity, including:
  - information and analysis required
  - end users of information
  - significance of outcomes for broader programs
- risk assessment principles
- technical capabilities and limitations of common equipment and instruments
- specific legislation and codes of practice related to sample and animal collection
- a range of chemical and physical field monitoring procedures
- enterprise procedures for the recording of field data
- relevant health, safety and environment requirements, including field safety/survival principles

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- demonstrate understanding of the purpose and objectives of a field activity, including:
  - information and analysis required
  - end users of information
  - significance of outcomes for broader programs
- communicate effectively and efficiently with staff and other relevant parties
- review a written work program and define the major field activities
- review emergency, safety or environmental field plans and document the key aspects which relate to a defined field activity
- develop accurate and complete checklists covering instruments, equipment and associated supplies necessary for a defined field activity
- apply sampling, testing and data quality procedures



<b>EVIDENCE GUIDE</b>	
	<p>accurately under field conditions</p> <ul style="list-style-type: none"> <li>• prepare, check and calibrate field instruments</li> <li>• demonstrate correct and safe use, under laboratory and field conditions, of field instruments and/or equipment (including field calibration)</li> <li>• define and correctly prepare sample containers for different field samples</li> <li>• take samples, under field conditions, according to defined procedures</li> <li>• maintain, store and transport samples/specimens to ensure their wellbeing, viability and integrity</li> <li>• pack and transport supplies, equipment and instruments to and/or from a field site</li> <li>• accurately perform field tests according to written instructions</li> <li>• record data and information, conduct quality checks and field analysis</li> <li>• work safely for the protection of self and others</li> <li>• negotiate with staff and stakeholders and reach satisfactory agreements, where possible</li> <li>• respond effectively to changed or unforeseen circumstances.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL945001A Maintain laboratory/field workplace safety</i></li> <li>• <i>MSL954001A Obtain representative samples in accordance with sampling plan.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• vehicles, survey equipment, sampling/monitoring equipment, consumables and manuals</li> <li>• work program, enterprise procedures, codes of practice and field protocols.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of field data and results obtained by the candidate</li> <li>• feedback from supervisors and peers</li> <li>• demonstration of understanding of existing work program requirements by:</li> </ul>

**EVIDENCE GUIDE**

	<ul style="list-style-type: none"> <li>• developing a checklist of the resources required to carry out a defined work program</li> <li>• developing a list of all pre-and post-monitoring requirements</li> <li>• observation of fieldwork performed by candidate with a focus on: <ul style="list-style-type: none"> <li>• sample collection, preservation, storage and transportation</li> <li>• field sampling and monitoring procedures</li> <li>• accurate data recording</li> <li>• safety, emergency and environmental aspects of monitoring activity</li> <li>• communication techniques</li> <li>• general site reconnaissance</li> </ul> </li> <li>• response to simulation exercises with a focus on: <ul style="list-style-type: none"> <li>• accident and emergency situations</li> <li>• basic environmental impact assessment of a field site</li> <li>• loss of communication system and implementation of alternative procedures</li> </ul> </li> <li>• demonstration of calibration, use and general maintenance of field instruments and equipment</li> <li>• oral and/or written questions to assess underpinning knowledge.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	Industry representatives have provided the case studies below to illustrate the practical application of this unit of

**EVIDENCE GUIDE**

competency and to show its relevance in a workplace setting.

**Environmental (1)**

A technical officer in an environmental protection authority is required to undertake an emergency monitoring program in a small catchment following a public complaint that a small industrial site has illegally discharged a concentrated sodium chloride/acid mixture into a nearby creek system. The monitoring program requires three samples to be taken above and three samples below the industrial site over a distance of two kilometres. Additional tests covering electrical conductivity, pH, temperature and turbidity are to be done in situ at the same time as when the samples are taken. All samples and monitoring procedures are to be clearly documented and undertaken according to statutory and enterprise requirements, as the results may potentially be required to be presented and cross-examined in court. All of the above planning, implementation and reporting must be completed within 24 hours.

**Environmental (2)**

A technical officer is involved in a four day lake survey 100 km from the laboratory. The survey is designed to collect many water samples and undertake netting activity to determine the variety and food requirements of fish in the lake. The technical officer is responsible for collecting the water samples, in accordance with the predetermined sampling plan and enterprise sampling procedures, and disposing of the fish samples after they have undergone field-based gut analysis. Given the large number of water samples and the duration of the field trip, the technical officer arranges for the hire of several 3-way camping refrigerators (gas/12V/240V) to store and transport the water samples at 4°C and for appropriate supervised burial of the fish samples at a local council landfill. In addition, he/she prepares, checks and packs all the supplies and equipment.

**Environmental (3)**

In preparation for a major field trip to collect soil samples in a remote location, a technical officer spent several weeks ensuring that all arrangements were in place. The officer confirmed access to the site and located suitable maps, aerial photos and reconnaissance

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	<p>data. The logistics of food, water, hygiene, fuel, transport, communications and safety were planned with senior staff to suit the fieldwork location, duration and personnel involved. The vehicles were serviced in preparation for remote off-road work and a full complement of spares was assembled. All supplies and field equipment were purchased or assembled, checked against an inventory and securely stowed in the vehicles.</p>
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**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>Codes of practice</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
<b>Standards, codes, procedures and/or enterprise requirements</b>	<p>Standards, codes, procedures and/or enterprise requirements may include:</p> <ul style="list-style-type: none"> <li>• Australian and international standards such as: <ul style="list-style-type: none"> <li>• AS 1678 Emergency procedure guide - Transport</li> <li>• AS 1940-2004 Storage and handling of flammable and combustible liquids</li> <li>• AS 3780-2008 The storage and handling of corrosive substances</li> <li>• AS 4332-2004 The storage and handling of gases in cylinders</li> <li>• AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories</li> </ul> </li> <li>• AS/NZS 2243 Set:2006 Safety in laboratories set</li> <li>• AS/NZS 2865 Set:2005 Safe working in a</li> </ul>

**RANGE STATEMENT**

	<p>confined space set</p> <ul style="list-style-type: none"> <li>• AS/NZS 4452:1997 The storage and handling of toxic substances</li> <li>• AS/NZS 4501 Set:2008 Occupational clothing set</li> <li>• AS/NZS ISO 14000 Set:2005 Environmental management standards set</li> <li>• HB 9-1994 Occupational personal protection</li> <li>• animal welfare legislation and codes of practice</li> <li>• Australian code of good manufacturing practice for medicinal products (GMP)</li> <li>• Australian Dangerous Goods Code</li> <li>• Australian Quarantine and Inspection Service (AQIS) Export Control (Orders) Regulations 1982</li> <li>• Australian Quarantine and Inspection Service (AQIS) Import Guidelines</li> <li>• Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Codes of Practice</li> <li>• data quality procedures</li> <li>• enterprise sampling and monitoring protocols</li> <li>• equipment manuals and warranties, supplier catalogue and handbooks</li> <li>• gene technology regulations</li> <li>• government policy (e.g. sustainable development and impact assessment)</li> <li>• Guide to physical containment levels and facility types</li> <li>• material safety data sheets (MSDS)</li> <li>• national environment protection measures</li> <li>• National Health and Medical Research Council (NHMRC) Guidelines</li> <li>• national measurement regulations and guidelines</li> <li>• occupational health and safety national standards and codes of practice</li> <li>• principles of good laboratory practice (GLP)</li> <li>• site specific requirements</li> <li>• specific environmental standards</li> <li>• Therapeutic Goods Regulations 1009</li> </ul>
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<b>RANGE STATEMENT</b>	
<b>Communications</b>	<p>Communications may include:</p> <ul style="list-style-type: none"> <li>• face-to-face</li> <li>• telephone</li> <li>• written documents</li> <li>• meetings</li> </ul>
<b>Purpose of field monitoring activities</b>	<p>Purpose of field monitoring activities may include:</p> <ul style="list-style-type: none"> <li>• single or multiple site sampling and monitoring</li> <li>• routine monitoring of physical/chemical parameters</li> <li>• biological/ecological surveys</li> <li>• requirement to comply with legislation, regulations or standards</li> <li>• requirement to comply with industry sampling or monitoring protocols or codes of practice</li> </ul>
<b>Related plans and procedures</b>	<p>Related plans and procedures may include:</p> <ul style="list-style-type: none"> <li>• risk assessments</li> <li>• safety and accident/injury plans</li> <li>• emergency plans and procedures, access to nearest medical services</li> <li>• environmental impact assessment procedures</li> <li>• pollution prevention procedures</li> <li>• first aid and survival procedures</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• solar radiation, dust and noise</li> <li>• personnel getting lost</li> <li>• accidents, emergencies and incidents, such as snake, insect or animal bites</li> <li>• exposure to severe weather conditions</li> <li>• manual handling of heavy objects</li> <li>• power tools, generators, moving machinery</li> <li>• vehicle and boat handling in rough/remote conditions</li> </ul>
<b>Safety procedures and control measures</b>	<p>Safety procedures and control measures may include:</p> <ul style="list-style-type: none"> <li>• use of personal protective equipment, such as sunscreen, hats, safety glasses, gloves, coveralls and safety boots</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• 'stay with vehicle' and other survival techniques</li> <li>• regular communication schedule</li> <li>• global positioning system (GPS), maps and aerial photos</li> <li>• handling, storage and disposal of all hazardous materials/waste in accordance with MSDS, labels, enterprise procedures, codes and regulations</li> </ul>
<b>Enterprise procedures for field activities</b>	<p>Enterprise procedures for field activities may include:</p> <ul style="list-style-type: none"> <li>• field note books or log books</li> <li>• standard operating procedures (SOPs) covering fieldwork, sampling and testing</li> <li>• equipment operating manuals, calibration procedures, instrument fault finding procedures and general maintenance and repair procedures</li> <li>• emergency, first aid and survival procedures</li> <li>• field camp procedures for cleaning, cooking, safety, security, hygiene, work management and set up/take down</li> <li>• requirements related to protection of the environment</li> <li>• incident/accident/injury report forms</li> </ul>
<b>Administrative requirements and appropriate approvals</b>	<p>Administrative requirements and appropriate approvals may include:</p> <ul style="list-style-type: none"> <li>• travel requisitions</li> <li>• authority for use of vehicles and equipment</li> <li>• insurance</li> <li>• permits</li> </ul>
<b>Equipment</b>	<p>Equipment may include:</p> <ul style="list-style-type: none"> <li>• navigation and communication equipment (e.g. compass, maps, GPS, two-way radio and mobile phone)</li> <li>• survey equipment</li> <li>• sampling equipment and containers, and animal cages</li> <li>• parameter specific meter or multi-probes (e.g. dissolved oxygen, electrical conductivity, pH, turbidity, nitrates, phosphates and temperature)</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• field test kits to determine such parameters as dissolved gases, chemical anions and cations, heavy metals, E. coli and biological oxygen demand</li> <li>• portable colourimeters, field microscopes</li> <li>• filters, sieves</li> <li>• soil monitoring kits</li> <li>• data loggers</li> <li>• tools, spares and vehicle recovery equipment</li> <li>• first aid equipment</li> </ul>
<b>Pre- and post-field activities</b>	<p>Pre- and post-field activities may include:</p> <ul style="list-style-type: none"> <li>• review of emergency and safety plans, risk assessment and environmental assessment requirements</li> <li>• confirming information regarding location and contact numbers of nearest emergency services</li> <li>• arranging site access (e.g. maps, permission, keys and condition of tracks)</li> <li>• arranging and checking all transportation systems (e.g. vehicles, boats and aircraft)</li> <li>• checking that communication systems are available and operational</li> <li>• confirming correct and safe use of instruments, equipment and field procedures with supervisor</li> <li>• confirming location and details of sampling sites (e.g. maps, photographs and descriptions)</li> <li>• preparing sample containers (e.g. container type and preparation, preservation techniques and labelling)</li> <li>• arranging correct transport, storage and laboratory testing of samples collected during field activities</li> <li>• arranging additional laboratory testing</li> </ul>
<b>Field monitoring activities and skills</b>	<p>Field monitoring activities and skills may include:</p> <ul style="list-style-type: none"> <li>• sample collection, preservation, labelling, storage, and transportation according to written procedures</li> <li>• correct use and calibration of field instruments according to written instructions</li> <li>• correct and accurate performance of field tests</li> </ul>



<b>RANGE STATEMENT</b>	
	<p>for specific parameters</p> <ul style="list-style-type: none"> <li>• clear and accurate recording of data</li> <li>• safe operation of motor vehicles and boats</li> </ul>
<b>Management of field camp activities</b>	<p>Management of field camp activities may include:</p> <ul style="list-style-type: none"> <li>• purchase of supplies</li> <li>• booking of accommodation</li> <li>• assembly, checking and transport of equipment/consumables, such as tents, cooking, bedding, communication system, food, water</li> <li>• mechanical checks of all transport vehicles</li> <li>• rostering and supervision of staff</li> <li>• location, establishment, and maintenance of site, including hygiene and waste</li> <li>• removal of waste and site remediation</li> </ul>
<b>Site and field issues and problems</b>	<p>Site and field issues and problems may include:</p> <ul style="list-style-type: none"> <li>• loss or failure of equipment</li> <li>• failure to bring critical equipment</li> <li>• communication failure/difficulties</li> <li>• unexpected restriction access to site</li> <li>• unforeseen environmental impacts</li> <li>• contact with hazardous wastes</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

### Unit Sector(s)

Unit sector	Testing
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### Competency field

Competency field	
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### Co-requisite units

Co-requisite units		

## MSL974011A Prepare tissue and cell cultures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to prepare primary tissue cultures for applications, such as maintenance of animal cell lines and propagation of plants by tissue culture and basic subculture procedures. Personnel are required to manipulate equipment and materials and samples to prevent contamination at all preparation stages. They will have ready access to enterprise procedures and will work under direct supervision.
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### Application of the Unit

<b>Application of the unit</b>	This unit of competency is applicable to technical assistants working in laboratories in the biomedical, environmental, biotechnology and education industry sectors.  Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		
	MSL973004A	<i>Perform aseptic techniques</i>

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Work safely according to the legal and regulatory framework	1.1.Ensure work practices and personal actions conform to regulations, codes, guidelines and enterprise quality assurance procedures 1.2.Identify hazards and enterprise controls associated with the sample, preparation methods, reagents and equipment 1.3.Select, fit and use personal protective clothing and safety equipment 1.4.Address hazards and incidents as they arise 1.5.Maintain a chain of custody, traceable to the worker, for all cells and tissues
2. Prepare and test cell and tissue culture media	2.1.Select and confirm media specifications and processes/methods

ELEMENT	PERFORMANCE CRITERIA
	2.2.Prepare culture media to suit the application 2.3.Sterilise culture media and check for sterility 2.4.Perform quality control checks to ensure that culture media is fit for purpose 2.5.Store culture media in accordance with specifications
3. Prepare tissue or cell cultures	3.1.Select tissue/cell sample to optimise growth and prepare it for culture 3.2.Add specified growth agents and/or nutrients 3.3.Inoculate culture medium using aseptic techniques
4. Monitor tissue or cell culture	4.1.Incubate culture in specified conditions 4.2.Monitor growth of culture and record appearance and characteristics 4.3.Report presence or absence of contamination 4.4.Subculture the culture to continue the cell line 4.5.Dispose of biohazardous and other laboratory waste safely
5. Maintain records	5.1.Maintain records of batches of media and test data 5.2.Ensure records of tissue cultures are retrievable, legible and accurate 5.3.Ensure records conform to information management, records, quality system and legal requirements

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- working safely
- satisfying all legal and regulatory requirements, including the use and care of biohazard cabinets
- preparing, diluting and sterilising reagents and culture media that are fit for purpose
- growing cell lines and tissue to specifications without contaminating the original sample and the environment

**REQUIRED SKILLS AND KNOWLEDGE**

- identifying expected cell types and recognising normal and abnormal cells using an inverted microscope
- counting cells (total and viable)
- monitoring cell growth and recognising problems such as contamination
- maintaining chain of custody, traceable to the worker, of all cell lines, tissues, logs of work completed and procedures/methods used

**Required knowledge**

Required knowledge includes:

- basic structure and function of cells and organelles
- basic classes and classification of culturable material, such as organisms, plants, animals, bacteria, viruses, tissues, cells and prions
- cell physiology and processes, such as simple and facilitated diffusion, plasmolysis, osmosis, tonicity, active transport, energy production, mitosis, motility, phagocytosis and pinocytosis
- concepts and principles of cell growth, such as need for nutrients, role of growth regulators and removal of wastes
- types and sources of contamination
- purposes and mechanisms of staining
- importance of strict aseptic techniques and cleaning procedures
- hazards and risks in biological laboratories
- relevant health, safety and environment requirements
- enterprise and/or legal traceability requirements
- relevant quality control checks and quality assurance procedures

**Evidence Guide****EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Overview of assessment****Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- work safely and satisfy all legal and regulatory requirements, including the use and care of biohazard cabinets
- prepare, dilute and sterilise reagents and culture

<b>EVIDENCE GUIDE</b>	
	<p>media that are fit for purpose</p> <ul style="list-style-type: none"> <li>• grow cell lines and tissue to specifications without contaminating the original sample and the environment</li> <li>• identify expected cell types and recognise normal and abnormal cells using an inverted microscope</li> <li>• count cells (total and viable)</li> <li>• monitor cell growth and recognises problems, such as contamination</li> <li>• maintain chain of custody, traceable to the worker, of all cell lines, tissues, logs of work completed and procedures/methods used.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• <i>MSL933001A Maintain the laboratory/field workplace fit for purpose</i></li> <li>• <i>MSL973003A Prepare culture media</i></li> <li>• <i>MSL973007A Perform microscopic examination.</i></li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• laboratory equipped with appropriate equipment, samples, cell lines and reagents</li> <li>• enterprise procedures and standard methods.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• examination of tissue and cell cultures prepared by the candidate</li> <li>• observation of the candidate preparing a range of tissue and cell cultures</li> <li>• review of work records and results obtained by candidate</li> <li>• feedback from supervisors and peers on adherence to enterprise/technical procedures</li> <li>• questioning to assess underpinning knowledge.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and</p>

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	<p>disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<p><b>This competency in practice</b></p>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Biotechnology</b></p> <p>A laboratory assistant maintains a leucocyte cell line which is used to routinely produce monoclonal antibodies which have been ordered by researchers. The assistant's job is to ensure that the cell line's growth is optimised to ensure a regular supply of high quality product. Every day, she/he checks for growth and contamination by aseptically removing a sample for microscopic examination. She/he also checks the colour of the pH indicator in the media and records cell line characteristics, such as its appearance, number of cells and any evidence of contamination in her/his laboratory notebook. She/he also checks the incubator temperature and atmosphere together with the labelling and possible leakage of flasks.</p> <p><b>Education</b></p> <p>A laboratory assistant at a regional university is instructed to prepare 95 flasks of Vero (African green monkey kidney) cells for a practical class in three weeks time. She/he routinely passages the cells once per week and usually splits the flasks into six. She/he has three flasks routinely subcultured from last week and calculates that these can be subcultured to produce the required number of flasks while holding back some flasks from each subculture as a back up in case of contamination and for routine passaging after the practical class. She/he prepares the 95 flasks in the third week and checks them for obvious bacterial or fungal contamination and for Mycoplasma contamination. She/he labels all the flasks with the required information, records all the steps in the laboratory cell culture log and puts the flasks out in the teaching laboratory just prior to</p>



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the class.

**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Codes of practice**

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

**Standards, codes, procedures and/or enterprise requirements**

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
  - AS 1678 Emergency procedure guide -Transport
  - AS 2252 Biological safety cabinets
  - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
  - AS/NZS 2243 Set:2006 Safety in laboratories set
  - AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
  - AS/NZS 4187:2003 Cleaning, disinfecting and sterilizing reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities
  - AS/NZS ISO 14000 Set:2005 Environmental management standards set
  - AS/NZS ISO 9000 Set:2008 Quality management systems set
  - HB 9-1994 Occupational personal protection

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• Australian code of good manufacturing practice for medicinal products (GMP)</li> <li>• Australian Dangerous Goods Code</li> <li>• client and product specifications</li> <li>• enterprise procedures, standard operating procedures (SOPs) and quality assurance procedures</li> <li>• gene technology regulations</li> <li>• Guide to physical containment levels and facility types</li> <li>• manufacturer's instructions or verbal direction from laboratory manager, supervisor or senior technician</li> <li>• material safety data sheets (MSDS)</li> <li>• National Code of Practice for the labelling of workplace substances [NOHSC:2012 (1994)]</li> <li>• occupational health and safety (OHS) national standards and codes of practice</li> <li>• operation and maintenance manuals for automated media preparation equipment</li> <li>• principles of good laboratory practice (GLP)</li> <li>• production schedules and instructions</li> <li>• Therapeutic Goods Regulations 1009</li> <li>• verified test methods</li> </ul>
<b>Applications of plant tissue/cell culture</b>	<p>Applications of plant tissue/cell culture may include:</p> <ul style="list-style-type: none"> <li>• mass propagation of commercial species</li> <li>• production of disease free plants by meristem tip culture</li> <li>• conservation of rare plants</li> <li>• haploid plant production by anther/pollen culture</li> <li>• 'sports' produced by somaclonal variation</li> <li>• development of resistant plants by directed cell selection</li> <li>• protoplast fusion to produce novel plant hybrids</li> </ul>
<b>Applications of animal tissue/cell culture</b>	<p>Applications of animal tissue/cell culture may include:</p> <ul style="list-style-type: none"> <li>• establishment and maintenance of animal cell lines, such as liver, epidermal and fibroblastic</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• maintenance of continuous cell lines</li> <li>• preparation of cell cultures for commercial sale</li> <li>• growth and enumeration of viruses</li> <li>• extraction of DNA</li> <li>• extraction of antigens for use in diagnostic tests</li> <li>• research of cell structure and function, cancer and tumour biology</li> <li>• immunofluorescent techniques</li> <li>• testing of media efficacy</li> <li>• production of monoclonal antibodies</li> <li>• production of genetically modified cell cultures</li> <li>• secondary metabolite production</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• biohazards, such as infectious agents and oncogenic DNA</li> <li>• chemical and radiation hazards</li> <li>• allergenic factors</li> <li>• cryogenic liquids, such as nitrogen</li> <li>• heat from burners and molten agar</li> <li>• ultraviolet (UV) light</li> <li>• sharps, broken glassware</li> <li>• contaminated clothing</li> </ul>
<b>Hazard control measures and safety procedures</b>	<p>Hazard control measures and safety procedures may include:</p> <ul style="list-style-type: none"> <li>• ensuring access to service shut-off points</li> <li>• recognising and observing hazard warnings and safety signs</li> <li>• labelling of samples, reagents, aliquoted samples and hazardous materials</li> <li>• handling and storage of hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions</li> <li>• identifying and reporting operating problems or equipment malfunctions</li> <li>• cleaning and decontaminating equipment and work areas regularly using enterprise procedures</li> <li>• using personal protective clothing and equipment, such as gloves, safety glasses,</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>coveralls and gowns</p> <ul style="list-style-type: none"> <li>• using containment facilities (PCII, PCIII and PCIV physical containment laboratories), containment equipment (biohazard containers, laminar flow cabinets, Class I, II and III biohazard cabinets) and containment procedures</li> <li>• following established manual handling procedures</li> <li>• reporting abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates to appropriate personnel</li> </ul>
<b>Tissue culture equipment and facilities</b>	<p>Tissue culture equipment and facilities may include:</p> <ul style="list-style-type: none"> <li>• growth cabinets</li> <li>• culture vessels, growth chambers, sterile containers, culture plates, flasks and bottles</li> <li>• autoclaves</li> <li>• positive filtration apparatus</li> <li>• auto pipettes and pipette pumps</li> <li>• cell counting chambers and haemocytometer</li> <li>• incubators, including specialised atmosphere carbon dioxide</li> <li>• light and binocular inverted microscopes</li> <li>• centrifuges</li> </ul>
<b>Pre-use checks</b>	<p>Pre-use checks include:</p> <ul style="list-style-type: none"> <li>• performing routine maintenance</li> <li>• checks on raw materials and consumables, including use by date, possible contamination and storage conditions</li> </ul>
<b>Sterilisation and disposal of biohazardous wastes</b>	<p>Sterilisation and disposal of biohazardous wastes may include:</p> <ul style="list-style-type: none"> <li>• steam and high pressure air or steam</li> <li>• boiling, microwaving and autoclaving</li> <li>• filtration</li> <li>• gas, chemical and radiation</li> </ul>
<b>Plant tissues and cells</b>	<p>Plant tissues and cells may include:</p> <ul style="list-style-type: none"> <li>• plant tissue, such as petioles, leaves, stems and</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>petals</p> <ul style="list-style-type: none"> <li>• meristem tissue</li> <li>• special tissue, such as fern stolon, seed embryos and somatic embryoids</li> <li>• tissue for callus development to initiate cell suspension cultures</li> </ul>
<b>Animal tissues and cells</b>	<p>Animal tissues and cells may include:</p> <ul style="list-style-type: none"> <li>• primary cells from animal tissue, such as heart, liver, kidney and epidermal</li> <li>• secondary cells, such as epithelial, endothelial and fibroblast</li> <li>• continuous cell lines, such as tumour lines, hybridomers and transformed lines (Epstein-Barr virus)</li> </ul>
<b>Preparing a primary culture</b>	<p>Preparing a primary culture may involve:</p> <ul style="list-style-type: none"> <li>• thawing of cryopreserved cells and monitoring of cell recovery</li> <li>• enzymatic disaggregation from tissue</li> <li>• mechanical disaggregation from tissue</li> <li>• primary explant technique</li> <li>• pre-treatment</li> <li>• disinfestation of explants using hypochlorite and water</li> </ul>
<b>Suitable culture conditions</b>	<p>Suitable culture conditions may include:</p> <ul style="list-style-type: none"> <li>• specified temperature and light intensity</li> <li>• appropriate atmosphere, such as carbon dioxide</li> <li>• shaking of cell suspensions or roller bottles</li> <li>• conditions for establishment, multiplication or planting out</li> <li>• special conditions for protoplast culture</li> </ul>
<b>Monitoring growth of tissue and cell lines</b>	<p>Monitoring growth of tissue and cell lines may include:</p> <ul style="list-style-type: none"> <li>• identification of normal and abnormal cells viewed by an inverted stereo microscope</li> <li>• recognition of contamination, such as bacteria (e.g. Mycoplasma), fungi and other plant or animal tissue in the media</li> <li>• checking growth rates</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>performing viable cell counts</li> </ul>
<b>Subculture</b>	<p>Subculture may include:</p> <ul style="list-style-type: none"> <li>treatment of callus to multiply or regenerate shoots</li> <li>treatment to encourage adventitious bud</li> <li>treatment to encourage rooting</li> <li>subculture of embryoids</li> <li>cell suspensions</li> <li>preparation of protoplasts</li> </ul>
<b>Occupational health and safety (OHS) and environmental management requirements</b>	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> <li>all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time</li> <li>all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Testing
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

Co-requisite units		

## PSPGOV404B Develop and implement work unit plans

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit covers development and implementation of work unit plans at both the work unit and individual level to achieve results through planning. It includes participating in the planning activities of the work unit, preparing individual work plans, and implementing and evaluating work plans.

In practice, development and implementation of work plans may overlap with other generalist or specialist public sector work activities such as acting ethically, complying with legislation, applying government processes, gathering and analysing information, using resources, etc.

This is one of 6 units in the *Working in Government and Management* Competency Fields that deal with working with others. Related units are:

PSPGOV302B Contribute to workgroup activities

PSPGOV511A Provide leadership

PSPGOV516A Develop and use emotional intelligence

PSPGOV604A Foster leadership and innovation

PSPMNGT701B Provide strategic

This unit replaces and is equivalent to *PSPGOV404A Develop and implement work unit plans*.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.



## Pre-Requisites

Not applicable.

## Employability Skills Information

**Employability skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency. Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the Range Statement following.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

#### 1. Participate in planning activities

- 1.1 Contributions are made to planning that reflect a knowledge of corporate goals and their relationship to work unit and individual plans
- 1.2 Consideration of *workplace requirements* is reflected in contributions to *work unit plans*
- 1.3 Planning activities are completed as requested within the defined timeframe and meet the organisation's requirements
- 1.4 Feedback is sought and acted on in relation to effectiveness of input to planning activities

#### 2. Prepare individual work plans

- 2.1 Work plan objectives are linked to and consistent with organisational and work unit aims
- 2.2 Objectives are stated as measurable targets with clear performance indicators
- 2.3 Innovative and cost-effective options for achieving objectives are explored and aligned to organisational aims
- 2.4 Individual work plans are used to promote the achievement of work unit objectives and to reflect personal and organisational accountability to all clients
- 2.5 Collaborative planning with other workgroup members is used

## ELEMENT

## PERFORMANCE CRITERIA

to integrate individual plans and build working relationships

### 3. Implement and evaluate work plans

- 3.1 Work methods and practices to implement plans are identified in consultation with others
- 3.2 Workload and work flows are monitored and balanced
- 3.3 Work is completed in accordance with work plans and meets time and workplace requirements, *legislation, policies and procedures*
- 3.4 Problems in implementing work plans are monitored and solutions are proposed within area of responsibility
- 3.5 Work plans are revised according to changes in work priorities and organisational needs

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

#### Skill requirements

Look for evidence that confirms skills in:

- planning own work to achieve goals
- engaging in collaborative planning with other workgroup members
- applying problem solving
- monitoring and evaluation of progress towards work unit goals
- negotiating goals and outcomes
- responding to diversity, including gender and disability
- applying public sector legislation such as occupational health and safety and environment in the context of work planning

#### Knowledge requirements

Look for evidence that confirms knowledge and understanding of:

- legislation, regulations, policies, procedures and guidelines relating to work planning in the public sector
- effective planning processes
- policies and procedures on sustainable practice
- corporate goals or aims
- organisational procedures
- importance of aligning work unit plans with organisational goals

## REQUIRED SKILLS AND KNOWLEDGE

- equal employment opportunity, equity and diversity principles
- public sector legislation such as occupational health and safety and environment in the context of work planning

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

#### Units to be assessed together

- *Pre-requisite* units that must be achieved prior to this unit: *Nil*
- *Co-requisite* units that must be assessed with this unit: *Nil*
- *Co-assessed units* that may be assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:

PSPBORD401A Create and maintain profiles

PSPETHC401A Uphold and support the values and principles of public service

PSPGOV403B Use resources to achieve work unit goals

PSPGOV405B Provide input to change processes

PSPGOV406B Gather and analyse information

PSPGOV408A Value diversity

PSPGOV411A Deal with conflict

PSPGOV412A Use advanced workplace communication strategies

PSPGOV413A Compose complex workplace documents

PSPGOV417A Identify and treat risks

PSPGOV422A Apply government processes

PSPLEGN401A Encourage compliance with legislation in the public sector

PSPOHS401B Implement workplace safety procedures and programs

PSPPM401B Design simple projects

PSPPM402B Manage simple projects

## EVIDENCE GUIDE

### PSPPROC410A Administer contracts

#### Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of Employability Skills as they relate to this unit
- work unit plans developed and implemented in a range of (3 or more) contexts (or occasions, over time)

#### Resources required to carry out assessment

These resources include:

- legislation, policy, procedures and protocols relating to work planning in the public sector
- case studies and workplace scenarios to capture the range of situations likely to be encountered when developing and implementing work unit plans

#### Where and how to assess evidence

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when developing and implementing work unit plans, including coping with difficulties, irregularities and breakdowns in routine
- work unit plans developed and implemented in a range of (3 or more) contexts (or occasions, over time).

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations.

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies

## EVIDENCE GUIDE

- observation
- portfolios
- projects
- questioning
- scenarios
- simulation or role plays
- authenticated evidence from the workplace and/or training courses

### **For consistency of assessment**

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

## Range Statement

### RANGE STATEMENT

The Range Statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in *italics* in the Performance Criteria is explained here.

### ***Workplace requirements may relate to***

- staffing procedures
- resourcing allocations and requirements
- identified timeframes
- relevant legislation affecting organisational administration
- organisation, corporate and strategic plans and activity calendars
- relevant industrial awards
- financial circulars (or equivalent)
- organisation financial and personnel management guidelines
- technology and data associated with work
- environmental and sustainability practices

### ***Work unit plans may include***

- daily/weekly/monthly work unit plans
- project plans

## RANGE STATEMENT

- specific purpose plans including equal employment opportunity, industrial democracy and occupational health and safety
- resource plans

### *Legislation, policy and procedures may include*

- State/Territory and Commonwealth legislation and regulations such as:
  - public sector management acts
  - financial management acts
  - privacy legislation
  - equal employment opportunity, anti-discrimination and harassment legislation
  - occupational health and safety legislation
  - consumer legislation
  - environmental and sustainability legislation
  - risk management guidelines.
  - ethics and accountability standards
  - public sector standards
  - fraud control standards
  - government security standards
  - organisational policy, procedures and protocols

## Unit Sector(s)

Not applicable.

## Competency field

Competency field      Working in Government

## PSPPM401B Design simple projects

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit covers the planning and development of simple, generally low risk projects that may be small scale and managed by one person or by a person with a small team. It includes identifying project requirements, preparing a business case, preparing the project plan and establishing project infrastructure. Contract management requirements are not included as this aspect is addressed by units of competency within the Competency field of *Procurement and Contract Management*.

In practice, project planning and development overlaps with other generalist and specialist work activities such as applying government processes, using resources, developing work plans, gathering information, etc.

When this unit is completed in conjunction with *PSPPM402B Manage simple projects* and *PSPPM403B Close simple projects*, the three units together are equivalent to the eight private sector Business Services project management competencies: BSBPM401A - BSBPM408A inclusive.

This unit, and unit *PSPPM405A Administer simple projects*, are mutually exclusive. One or the other, but not both, may contribute to a qualification.

This unit replaces and is equivalent to *PSPPM401A Develop a project*.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

**Employability skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency. Together, performance criteria specify the requirements for competent performance. Text in *bold italics* is explained in the Range Statement following.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

#### 1. Identify project requirements

- 1.1 A rationale for the project is outlined that identifies the purpose, outcomes and likely benefits for the user/s
- 1.2 *Stakeholders* are identified and their input is obtained at the planning stage to ensure the project proposal and its objectives are required and achievable
- 1.3 The project environment is assessed and environmental issues are addressed in the project proposal
- 1.4 *Project parameters* are determined and a project proposal is completed to organisational standards and within guidelines
- 1.5 The project proposal is structured so it is compatible with organisational objectives and other organisational projects, and is designed in accordance with the organisation's *policies and procedures* and in consultation with *specialists* to meet user/client requirements

#### 2. Prepare business case

- 2.1 Research and analysis is undertaken to identify impacts and risks, *constraining factors* and alternate options
- 2.2 Options and solutions are identified, advice is obtained and recommendations are made in accordance with the strategic direction of the organisation/work unit
- 2.3 A *report* is prepared that demonstrates a business case for the project in accordance with organisational requirements
- 2.4 *Approvals* for the project proposal are obtained in accordance



<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	with organisational policy and procedures
<b>3. Prepare project plan</b>	<p>3.1 Project <i>scope</i> is determined in terms of objectives, outcomes and project deliverables</p> <p>3.2 Specialists are consulted where necessary, to advise on potential risks, and <i>options to manage risks</i> are investigated and recorded in the <i>project plan</i></p> <p>3.3 Each of the <i>parameters</i> identified in the proposal are addressed in the project plan in consultation with relevant parties and appropriate approvals are sought and recorded</p> <p>3.4 <i>Project management tools</i> are utilised for planning in accordance with project requirements</p> <p>3.5 Project outputs are determined that are measurable and achievable and indicators to monitor the performance of the project are developed, under guidance, and agreed by relevant parties in accordance with organisational policy and procedures</p>
<b>4. Establish project infrastructure</b>	<p>4.1 An implementation strategy is developed in accordance with the project plan and organisational guidelines, and presented to stakeholders to gain project support</p> <p>4.2 Terms of reference and <i>project infrastructure</i> requirements for set-up and implementation of the project are clarified in the implementation strategy in accordance with the project plan</p> <p>4.3 Resources are obtained to set up the project office, and roles and responsibilities are assigned to team members and stakeholders as agreed in the project plan</p> <p>4.4 Processes identified for monitoring, evaluating and reporting performance against project objectives are established in accordance with the project plan</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

#### Skill requirements

Look for evidence that confirms skills in:

detailing requirements, writing recommendations and preparing plans requiring precision of expression

negotiating timelines, roles and responsibilities with stakeholders or team members

## REQUIRED SKILLS AND KNOWLEDGE

communicating with stakeholders or team members using a range of communication styles to suit different audiences and purposes

responding to diversity, including gender and disability

using project management tools

applying workplace safety procedures in line with project planning requirements

accessing/preparing information electronically or in hard copy

### Knowledge requirements

Look for evidence that confirms knowledge and understanding of:

legislation, organisational policies and procedures that may impact on the project and management of the project, for example:

public sector codes of ethics/conduct

occupational health and safety and environment requirements

quality standards

risk management

financial management

procurement

human resources

equal employment opportunity, equity and diversity principles

organisational project approval processes

scheduling

change management

project planning methods for small scale or low risk projects

project management tools to suit the projects planned

principles relating to the planning phase of project management for small scale or low risk projects

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

#### Units to be assessed together

- *Pre-requisite units that must be achieved prior to this unit: Nil*
- *Co-requisite units that must be assessed with this unit: Nil*
- *Co-assessed units that may be assessed with this unit to increase the efficiency and realism of the assessment process*

## EVIDENCE GUIDE

include, but are not limited to:

- PSPETHC401A Uphold and support the values and principles of public service
- PSPGOV402B Deliver and monitor service to clients
- PSPGOV403B Use resources to achieve work unit goals
- PSPGOV405B Provide input to change processes
- PSPGOV408A Value diversity
- PSPGOV411A Deal with conflict
- PSPGOV412A Use advanced workplace communication strategies
- PSPGOV416A Monitor performance and provide feedback
- PSPGOV422A Apply government processes
- PSPLEGN401A Encourage compliance with legislation in the public sector
- PSPOHS401B Implement workplace safety procedures and programs
- PSPPROC409A Receive and select offers
- PSPPROC410A Administer contracts
- PSPPM402B Manage simple projects
- PSPPM403B Close simple projects
- *Excluded units* that may not contribute to the same qualification as this unit:
- PSPPM405A Administer simple projects

### Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of the Employability Skills as they relate to this unit (see Employability Summaries in Qualifications Framework)
- design of simple projects in a range of (2 or more) contexts (or occasions, over time)

### Resources required to carry out assessment

These resources include:

- legislation, guidelines, procedures and protocols relating to project management
- workplace project documentation
- scenarios and case studies
- documented information and/or examples of the assessee's

## EVIDENCE GUIDE

### Where and how to assess evidence

- personal work
- project management tools

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when planning projects, including coping with difficulties, irregularities and breakdowns in routine
- design of simple projects in a range of (2 or more) contexts (or occasions, over time)

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies
- demonstration
- portfolios
- projects
- questioning
- scenarios
- authenticated evidence from the workplace and/or training courses

### For consistency of assessment

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

## Range Statement

### RANGE STATEMENT

The Range Statement provides information about the context in which the unit of competency

## RANGE STATEMENT

is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in *italics* in the Performance Criteria is explained here.

- Stakeholders may include*
- project sponsor/funding bodies
  - clients or customers (internal and external)
  - industry
  - other agencies
  - general public
  - relevant interest groups
  - unions
  - functional areas
  - the organisation's senior management
  - Ministers
  - project team
  - steering committee
  - end user
  - supplier/service provider
- Project parameters include*
- project scope - outcomes, objectives, project deliverables
  - feasibility
  - skills required for project team
  - people required for project including specialist expertise
  - communications including reporting requirements
  - risks associated with project including people, environment, resources, technology change during the life of the project, if applicable
  - steering committee arrangements
  - timeframe and milestones
  - cost
  - resources for project
  - acquisition/procurement
  - organisational structure for project
  - project quality control and operational flexibility
  - project governance structure
  - monitoring through staged rollout
  - project delivery requirements
  - pilot outcomes
  - intellectual property
  - integration of project within organisation
  - transition arrangements

## RANGE STATEMENT

- change management
- project evaluation
- Policies and procedures may include*
  - government legislation (Federal, State and Local) affecting organisation's administration such as:
  - public sector management acts
  - financial management and accounting legislation and regulations
  - privacy legislation
  - government and organisational guidelines and procedures relating to:
    - project governance
    - resourcing
    - security
    - strategic plans
    - recruitment
    - risk management
    - procurement guidelines
    - designation approvals
    - industrial agreements
- Specialists may include*
  - legal
  - technical
  - financial
  - other functional areas
  - other relevant agencies
  - logistics
- Constraining factors may include*
  - political
  - industrial
  - legislative
  - technical
  - financial
  - resourcing
  - social and cultural considerations
  - cultural change management (internal)
  - security/privacy
  - environmental
  - logistic support
- Analysis report will contain*
  - cost-benefit analysis

## RANGE STATEMENT

*Approval may be required from*

- project sponsor/funding body
- business owner of the project
- program manager
- line manager
- project governance office/personnel in the organisation
- chief executive officer, manager or management representative
- customer or client

*Project scope is defined by*

- objectives - aims/goals for doing the project
- outcomes - measurable benefit achieved from the utilisation of the outputs delivered by the project
- outputs/project deliverables - the services/products delivered by the project

*Options to manage risks may include*

- acceptance
- avoidance
- minimisation
- transfer
- strategies
- flexibility
- empathy
- emotional intelligence

*Project plan will include some or all of*

- acquisition strategies
- budget and financial management strategy
- contract management
- cost estimates
- evaluation criteria
- expected outcomes/measurable benefits of the project
- facilities
- inclusions and exclusions from project
- information/communication strategy
- intellectual property strategies
- milestones
- objectives
- outputs/project deliverables and their acceptance criteria
- people plan including human resource management and human resource development
- performance criteria/indicators
- project control mechanisms
- project implementation strategy
- project governance strategy
- purpose

## RANGE STATEMENT

- quality assurance
  - quality control
  - quality standards for project
  - rationale
  - required project resources
  - resource management
  - risk management
  - roles and responsibilities
  - schedule/timeline
  - task/work breakdown structure (WBS)
- Project parameters include*
- risk management
  - schedule management
  - financial management
  - communication, including reporting
  - resources management
  - logistics management
  - scope management
  - change management
  - quality management
  - people management
  - occupational health and safety management
- Project management tools may include*
- risk analysis
  - organisational project governance framework
  - communications plan
  - reporting framework
  - project management software and other tools:
  - Gantt and bar charts
  - Program Evaluation and Review Technique (PERT) charts
  - Critical Path Method
  - cost schedule control system
  - logistics support analysis
  - life cycle cost analysis
  - spreadsheets
  - recording systems - electronic and manual
- Project infrastructure may include*
- staffing levels/need for recruitment action and training
  - equipment and technical support
  - resource requirements including travel, finance etc
  - project office accommodation
  - management infrastructure



## **Unit Sector(s)**

Not applicable.

## **Competency field**

**Competency field**            Project Management

## PSPREG404C Investigate non-compliance

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit covers identification of possible non-compliance and recommendations for ensuing action. It includes initiating a preliminary investigation to confirm non-compliance, and planning, conducting and finalising the investigation.

In practice, investigating non-compliance may overlap with other generalist or specialist public sector work activities such as acting ethically, exercising regulatory powers, acting on non-compliance, conducting formal records of interview, gathering and managing evidence, etc.

This unit replaces and is equivalent to PSPREG404B Investigate non-compliance with legislation.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

**Employability skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency.

Together, performance criteria specify the requirements for competent performance. Text in *bold italics* is explained in the Range Statement following.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

#### 1. **Initiate preliminary investigation to confirm non-compliance**

- 1.1 Information is assessed in terms of its accuracy and against legislative requirements to confirm likely non-compliance
- 1.2 Information is tested against the legislation to confirm whether the possible breach falls within jurisdiction
- 1.3 Importance/urgency of the matter is assessed and the priority is allocated to enable timely and effective action
- 1.4 Documentation to commence investigation of alleged breach is initiated and meets legislative and organisational requirements

#### 2. **Plan investigation**

- 2.1 Objectives of the investigation are determined and *resources* to conduct the investigation are determined and obtained in accordance with organisational policy and procedures
- 2.2 Risks associated with the investigation are identified and planned for, including sensitivities that might affect the organisation
- 2.3 *Methods* to achieve the investigation's objectives are selected and authorised in accordance with *legislation, policies and guidelines*
- 2.4 Timelines are identified and tasks prioritised to inform the sequence of activities and provide for future review of the investigation process
- 2.5 Communication and case management requirements are confirmed and initiated in accordance with organisational policy and procedures
- 2.6 Investigation *planning* and recording is conducted in accordance with legislative requirements and organisational policy and procedures

#### 3. **Conduct investigation**

- 3.1 Subjects and suspects involved in the possible breach are identified and details are recorded in accordance with legislative requirements and organisational policy and procedures
- 3.2 Information relevant to the investigation is collected and analysed in accordance with legislative requirements, rules of evidence and organisational policy and procedures
- 3.3 *Exhibits* are processed and managed in accordance with

## ELEMENT

## PERFORMANCE CRITERIA

	legislative requirements, rules of evidence and organisational policy and procedures
	3.4 Likely defences are anticipated and evidence to counter them is included
	3.5 The need for <i>expert assistance</i> is determined and arranged in accordance with organisational procedures
<b>4. Finalise investigation</b>	4.1 If no breach has occurred or no action is to be taken, documentation includes reasons and justification, and is completed in accordance with organisational policy and procedures
	4.2 If breach is confirmed, appropriate, timely <i>action</i> is <i>recommended</i> within the officer's discretion under the legislation and organisational policy and procedures
	4.3 A record of the investigation and consequent recommendations for action are prepared and submitted in accordance with legislative and organisational requirements

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

#### Skill requirements

Look for evidence that confirms skills in:

acting ethically

applying legislation, regulations and codes of practice

using process mapping

undertaking research, analysis and problem solving in the context of investigating non-compliance

reading and applying complex information from legislation

communicating including questioning and negotiating meaning in sometimes difficult situations

responding to diversity, including gender and disability

using planning and time management in the context of investigations

preparing written reports and recommendations requiring accuracy and formal structures and language

using information technology for data analysis, recording and reporting

applying public sector legislation such as occupational health and safety and

## REQUIRED SKILLS AND KNOWLEDGE

environmental procedures in the context of investigation

### Knowledge requirements

Look for evidence that confirms knowledge and understanding of:

investigation methodology and techniques

rules and types of evidence

storage and continuity of evidence

applicable legislation

aspects of criminal, civil or administrative law

jurisdiction, powers and restrictions to investigate

organisational policy and procedures

cultural awareness

confidentiality and privacy issues

procedures re lines of reporting

report procedures which provide a written and/or electronic audit trail

public sector legislation such as occupational health and safety and environment

relating to investigations

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

#### Units to be assessed together

- *Pre-requisite units that must be achieved prior to this unit: Nil*
- *Co-requisite units that must be assessed with this unit: Nil*
- *Co-assessed units that may be assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:*

PSPETHC401A Uphold and support the values and principles of public service

PSPGOV406B Gather and analyse information

PSPGOV408A Value diversity

PSPGOV422A Apply government processes

PSPLEGN401A Encourage compliance with legislation in the public sector

## EVIDENCE GUIDE

PSPREG401C Exercise regulatory powers

PSPREG407B Produce formal record of interview

PSPREG412A Gather and manage evidence

### Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of the Employability Skills as they relate to this unit (see Employability Summaries in Qualifications Framework)
- investigation of non-compliance in a range of (3 or more) contexts (or occasions, over time)

### Resources required to carry out assessment

These resources include:

- legislation, regulations, policy, guidelines and standards
- public sector values and codes of conduct
- case studies and workplace scenarios to capture the range of investigation situations likely to be encountered

### Where and how to assess evidence

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when investigating non-compliance, including coping with difficulties, irregularities and breakdowns in routine
- investigation of non-compliance in a range of (3 or more) contexts (or occasions, over time)

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies
- portfolios

## EVIDENCE GUIDE

- questioning
- scenarios
- authenticated evidence from the workplace and/or training courses

### For consistency of assessment

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

## Range Statement

### RANGE STATEMENT

The Range Statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in *italics* in the Performance Criteria is explained here.

#### *Resources may include*

- human, physical and financial and may include other agencies, such as:
- other police organisations
- National Crime Authority
- Criminal Justice Commission/s
- other government departments/agencies
- non-government agencies such as financial institutions and insurance companies

#### *Investigation methods may include*

- forensic examination/analysis
- informants/informers
- listening devices and other covert surveillance techniques
- search and search warrants
- computer interrogation/data retrieval
- door knocks
- using other sources of information, such as the media

#### *Legislation, policies and guidelines may include*

- enabling legislation
- confidentiality
- privacy
- criminal, civil or administrative law
- contract law
- equal employment opportunity and anti-discrimination law

- disciplinary procedures
  - government policy
  - organisational guidelines
  - regulatory standards
  - codes of practice
  - international treaties (equal employment opportunity, world heritage)
- Investigation planning may include*
- objectives
  - methods
  - risks
  - timelines
  - resources
  - activities
  - communication
  - case management
  - evidentiary elements of the offence
- Exhibits may include*
- the individual items of evidence that could be presented to a court and may be required for viewing by:
    - judicial officers
    - prosecutors
    - defence counsel
    - expert and non-expert witnesses
    - those required for audit purposes
- Expert assistance may include*
- advice on/assistance with evidentiary matters
  - audit matters
  - data analysis
  - document examination
  - execution of search warrants
  - fingerprinting
  - forensic
  - handwriting
  - legal advice - director of public prosecutions, government solicitor
  - photography
  - recovery issues
  - scientific or technical matters
  - surveillance
- Recommended action may include*
- measures to control/contain breach
  - warning
  - caution



- notice
- fine
- arrest
- criminal prosecution
- civil action
- debt recovery strategy
- no action (must specify criteria for use of no action):
- used where investigation identifies no offence or a relevant defence is raised
- also used when exercising prosecutorial discretion

## **Unit Sector(s)**

Not applicable.

## **Competency field**

**Competency field**            Regulatory

## PSPREG405B Act on non-compliance

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit covers the competency to issue advice, instructions, warnings, notices, fines and other actions in response to non-compliance situations. It includes attending situations where non-compliance is suspected/alleged, and taking action on non-compliance.

In practice, acting on non-compliance may overlap with other generalist or specialist public sector work activities such as acting ethically, exercising regulatory powers, promoting compliance, assessing non-compliance, etc.

This unit replaces and is equivalent to *PSPREG405A Act on non-compliance*.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

**Employability skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency. Together, performance criteria specify the requirements for competent performance. Text in *bold italics* is explained in the Range Statement following.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

#### 1. Attend situations where non-compliance is suspected/alleged

- 1.1 Procedure is followed in accordance with legal requirements and organisational policy and procedures
- 1.2 Personal conduct is maintained in accordance with organisational guidelines and protocols
- 1.3 Safety of self and others is protected in accordance with operational policy and procedures
- 1.4 When *assistance* is required, requests are timely and in accordance with *legislation, policy and procedures*
- 1.5 Activities and actions are carried out in accordance with legislation, organisational policy and procedures and the rules of evidence

#### 2. Take action on non-compliance

- 2.1 Mitigating circumstances are considered, where appropriate, in accordance with organisational policy and procedures
- 2.2 *Action on non-compliance* is selected to match the seriousness of the offence
- 2.3 *Clients* are informed of the action, justification for it and their rights of appeal in accordance with legislation, organisational policy and procedures
- 2.4 Action is taken in accordance with legal requirements and organisational guidelines
- 2.5 Personal actions/conduct are carried out in accordance with organisational guidelines and protocols and protect the rights and responsibilities of clients

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

## REQUIRED SKILLS AND KNOWLEDGE

### Skill requirements

Look for evidence that confirms skills in:

undertaking negotiation and conflict resolution  
applying risk management and self preservation techniques  
using judgment and decision making  
exchanging often complex oral information in a form to suit diverse audiences  
responding to diversity, including gender and disability  
writing requiring accuracy of expression and formality in structure and format  
applying public sector legislation such as occupational health and safety and environmental procedures in the context of actions on non-compliance

### Knowledge requirements

Look for evidence that confirms knowledge and understanding of:

legislation, organisational procedures and guidelines  
organisational parameters for decision making  
range of appropriate actions possible for different offences  
negotiation in the context of achieving compliance  
awareness of social and cultural issues (demographics)  
public sector legislation and standards  
occupational health and safety and environmental considerations to ensure the safety of self and others

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

#### Units to be assessed together

- *Pre-requisite* units that must be achieved prior to this unit: *Nil*
- *Co-requisite* units that must be assessed with this unit: *Nil*
- *Co-assessed units* that may be assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:

PSPETHC401A Uphold and support the values and principles of public service

## EVIDENCE GUIDE

PSPGOV408A Value diversity

PSPGOV422A Apply government processes

PSPLEGN401A Encourage compliance with legislation in the public sector

PSPREG401C Exercise regulatory powers

PSPREG402C Promote client compliance

PSPREG403B Assess compliance

### Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of the Employability Skills as they relate to this unit (see Employability Summaries in Qualifications Framework)
- action on non-compliance in a range of (3 or more) contexts (or occasions, over time)

### Resources required to carry out assessment

These resources include:

- legislation, regulations, policy, guidelines and standards
- public sector values and codes of conduct
- range of actions appropriate for non-compliance under the legislation/regulations/standards
- case studies and workplace scenarios to capture the range of situations likely to be encountered when acting on non-compliance

### Where and how to assess evidence

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when acting on non-compliance, including coping with difficulties, irregularities and breakdowns in routine
- action on non-compliance in a range of (3 or more) contexts (or occasions, over time)

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people

## EVIDENCE GUIDE

- people in rural and remote locations

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies
- portfolios
- questioning
- scenarios
- authenticated evidence from the workplace and/or training courses

### For consistency of assessment

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

## Range Statement

### RANGE STATEMENT

The Range Statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in *italics* in the Performance Criteria is explained here.

#### *Assistance may include*

- other officers
- other jurisdictions
- other organisations
- police

#### *Legislation, policy and procedures may include*

- enabling legislation
- organisational processes
- codes of conduct
- equal employment opportunity and anti-discrimination law

#### *Action on non-compliance may include*

- oral or written instructions
- warnings
- seizure
- infringement notices
- expiation

- cautions
  - fines
  - summons
  - notice of legal action
  - negotiation to achieve compliance if legally possible, and in accordance with organisational policy and procedures, undertaken when exercising prosecutorial discretion (sufficiency of evidence, public interest, reasonable prospect of success)
- Clients may include*
- people from all age groups, cultural and linguistic backgrounds
  - other public sector or private sector organisations
  - people with weapons
  - people affected by alcohol or drugs

## **Unit Sector(s)**

Not applicable.

## **Competency field**

**Competency field**            Regulatory

## **RTC3310A Operate specialised machinery and equipment**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the functions involved in operating specialised machinery and equipment. It requires particular skills and knowledge to operate specialised agricultural, horticultural or conservation and land management machinery. An ability to perform pre-operational checks on machinery, assess work requirements, determine work plans, monitor performance and maintain records is also required. In addition, it requires knowledge of licensing requirements, workplace safety, and positive environmental practices associated with the operation of machinery. Judgement and discretion combined with the ability to work under minimal supervision is necessary.

This competency standard covers the functions involved in operating specialised machinery and equipment. It requires particular skills and knowledge to operate specialised agricultural, horticultural or conservation and land management machinery. An ability to perform pre-operational checks on machinery, assess work requirements, determine work plans, monitor performance and maintain records is also required. In addition, it requires knowledge of licensing requirements, workplace safety, and positive environmental practices associated with the operation of machinery. Judgement and discretion combined with the ability to work under minimal supervision is necessary.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.



## Elements and Performance Criteria Pre-Content

Not applicable.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 Select and prepare specialised machinery and equipment for use	1.1 <b>Specialised machinery and equipment</b> is selected and prepared to job requirements and confirmed against <b>work plan</b> .
	1.2 Routine <b>pre-operational checks</b> of specialised machinery and equipment are completed to manufacturers specifications and <b>enterprise requirements</b> .
	1.3 <b>OHS hazards</b> in the workplace are recognised, risk assessed and minimised according to enterprise requirements.
2 Operate specialised machinery and equipment	2.1 Machinery and equipment is operated in a <b>safe and controlled</b> manner and monitored for performance and efficiency.
	2.2 Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly.
	2.3 Suitable <b>personal protective clothing and equipment</b> is selected, used, maintained and stored according to OHS requirements.
	2.4 <b>Environmental implications</b> associated with machinery operation are identified, assessed and reported to the supervisor.
3 Complete and report on specialised machinery and equipment operation	3.1 <b>Shut-down</b> procedures for specialised machinery and equipment are completed to manufacturers specifications and enterprise requirements.
	3.2 Specialised machinery and equipment operational records are completed and maintained according to enterprise requirements.
	3.3 Malfunctions, faults, irregular performance and damage to specialised machinery and equipment

are detailed and reported according to enterprise requirements.

- 3.4 Specialised machinery and equipment is cleaned, secured and stored according to OHS and enterprise requirements.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in the operation of specialised machinery and equipment requires evidence of the ability to effectively utilise their respective various components, controls and features to perform specific tasks. It involves selecting the appropriate machinery and equipment for the job, determine operating methods, provide solutions for faults or breakdowns, demonstrate emergency operating procedures, evaluate performance and maintain records. Evidence must also be demonstrated in safe workplace and environmentally responsible practices. The skills and knowledge required to operate specialised machinery and equipment must be **transferable** to a different work environment. For example, this could include different machinery, equipment, workplaces and environments.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

Components, controls and features of specialised machinery and equipment and their functions.

Risks associated with the operation of machinery and equipment in different weather and difficult terrain conditions.

Relevant State/Territory legislation, regulations and Codes of Practice with regard to workplace OHS, and the use and control of hazardous substances, chemical

and biological agents.

Relevant State/Territory legislation, regulations and Codes of Practice with regard to licensing, roads and traffic requirements, and the use and control of specialised machinery and equipment.

Environmental impacts and minimisation measures associated with the operation of specialised machinery and equipment.

Personal protective equipment and when and how it should be used.

Enterprise policies with regard to specialised machinery and equipment use, recording and reporting routines.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

Operate specialised machinery and equipment in normal and adverse conditions to industry standards.

Demonstrate emergency operating procedures in normal and adverse conditions.

Attach and detach a range of three point linkage implements, front-mounted and PTO operated equipment.

Demonstrate safe and environmentally responsible workplace practices.

Obtain relevant licences and permits.

Interpret manufacturers specifications, work and maintenance plans, and MSDS.

Communicate faults, malfunctions and workplace hazards, report and maintain operational records.

Measure and calculate volumes, load weights, consumption and servicing requirements.

## What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information** (1) be applied?  
Information and ideas with regard to specialised machinery and equipment, their components and application to complete work tasks may be discussed with colleagues and the supervisor.
2. How can **information be collected, analysed and organised** (1)?  
Information with regard to performance, faults and maintenance may be observed and monitored for analysis and organised by records and reports.
3. How are **activities planned and organised** (1)?  
Activities involving maintenance and repairs to specialised machinery and equipment may be planned and coordinated around work schedules or sequenced as required.
4. How can **team work** (1) be applied?  
Team work may be applied in communication, methods and procedures to complete maintenance and repairs to complete work tasks.
5. How can the use of **mathematical ideas and techniques** (1) be applied?  
Mathematics may be applied in the calculation and measurement of load weights, distance, consumption, and oil and fuel requirements.
6. How can **problem-solving skills** (1) be applied?  
Specialised machinery and equipment breakdown, faults or malfunctions will need to be arranged for repair or replacement to meet work plan requirements.
7. How can the **use of technology** (1) be applied?  
To access, communicate, measure and record information with regard to maintenance, usage and performance of specialised machinery and equipment.

## Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the **Assessment Guidelines** and the relevant **Sector Booklet**.

## Range Statement

### Range of Variables

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available

What range of **specialised machinery and equipment** may be covered in this standard?

Skidsteer loaders, self-propelled harvesters and pickers, front end loaders, irrigation equipment, scissor lifts, excavators, forklifts, land levellers, feed mixers, milking machinery, specialised turf equipment, specialised nursery equipment, livestock feeding systems, watering systems, filtering and pumping equipment, poultry performance monitoring equipment, cultivation equipment, fertilising application and grain handling equipment.

**This unit does not include machinery and equipment covered under RTC2306A - Operate vehicles, RTC2307A - Operate machinery and equipment and RTC2309A - Operate tractors.**

What may be included in a **work plan**?

Pre-operational checks and maintenance procedures, designated job tasks, equipment, resources and materials for use, supervisors instructions, timeframe for work completion and reporting requirements.

What may be involved in routine **pre-operational checks** of machinery and equipment?

Pre-start and safety checks including the service and maintenance of cooling system.  
Checking fuel, oils and lubricants, electrolyte

levels, wheels, tyre pressure, fan belts, leads, lines, connections, air filters, brakes, clutch, gearbox, steering, lighting, and transmission.

Inspection of safety guards, PTO stubs and shafts, and hitch and towing points.

Checking and confirming equipment calibration settings and operating methods for turbo-charged engines.

Observing and monitoring noise levels for correct operation.

Preparation of independently powered tools may include cleaning, priming, tightening, basic repairs and adjustments.

Identify and segregate unsafe or faulty equipment for repair or replacement.

What **enterprise requirements** may apply to this standard?

Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), OHS procedures, supervisors oral or written instructions, work and routine maintenance plans.

What **OHS** requirements may be relevant to this standard?

Systems and procedures for

- the safe operation and maintenance of specialised machinery and equipment.
- hazard and risk identification.
- emergency operating and defensive driving procedures ensuring working loads are secure and within specifications.
- appropriate use, maintenance and storage of personal protective equipment.

outdoor work include protection from solar radiation, hazardous noise, mechanical vibration and organic and other dusts.

protection of people in the workplace.

passengers are carried only when there is a seat approved by the manufacturer.

What **hazards** may be encountered in the workplace?

Exposure to loud noise and fumes, solar radiation, heat stress, fatigue, crushed by a roll over, dust, ergonomic hazards associated with posture and vibration, hazardous substances (fuel, oils, fertiliser), oil and grease spills, the presence of bystanders, livestock and wildlife, difficult terrain and varying gradients, potholes, ditches, gullies, embankments, obstacles (rocks, logs, fences, debris, buildings), extreme weather conditions, electricity, overhead hazards including powerlines, mechanical malfunctions and exposed moving parts, and other machinery including hydraulics.

How might **safe and controlled** operation of machinery and equipment be demonstrated?

This may include:

Appropriate selection and use of machinery and equipment.

Using operational techniques for the specific terrain (on and off-road environments) and weather conditions.

Maintaining working loads within specifications including ensuring hitch-points are operated at the correct height.

What **personal protective equipment** may be relevant to this standard?

Boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, high visibility clothing, respirator or face mask, and sun protection (sun hat, sunscreen).

What **environmental implications** may be associated with the operation of machinery and equipment?

Negative environmental impacts may result from excessive noise and exhaust emissions, the incorrect use and disposal of maintenance debris (oil containers, chemical residues), and hazardous substances (fuel, fertiliser). Impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from high activity traffic (including irrigation equipment).

What procedures may be included in the **shut-down** of machinery and equipment?

Safe dismount procedures (including turning engine off), maintaining a clear thoroughfare, parking away from hazards, securing, refuelling, cleaning, engaging

handbrake and removing vehicle keys.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

## **Unit Sector(s)**

Not applicable.



## RTD2101A Apply animal trapping techniques

### Modification History

Not applicable.

### Unit Descriptor

This competency standard covers the process of live trapping and holding, releasing or humanely destroying animals. It requires the ability to prepare baits or lures, lay trails, handle and set traps, handle, transport, release and/or destroy animals. Applying trapping techniques requires knowledge of relevant legislation, animal life cycles and behaviours, trapping and catching equipment and operations, basic animal handling and care, legislation applying to the capture and care of animals, and transportation methods of caught animals.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

Not applicable.

### Elements and Performance Criteria Pre-Content

Not applicable.

### Elements and Performance Criteria

#### Elements and Performance Criteria

#### Element

#### Performance Criteria

1 Plan animal capture

1.1 **Purpose of capture** of animals is identified as determined from the management strategy and

- action plans.
- 1.2 Target **animal** range and behaviour are confirmed.
  - 1.3 Trapping location and placement of equipment are determined.
  - 1.4 Time required to complete capture is estimated and trapping effort is determined.
  - 1.5 Materials and equipment for trapping are identified.
  - 1.6 Hazards associated with trapping are identified in accordance with OHS practices and procedures.
  - 1.7 Environmental risks associated with capturing animals are identified in accordance with statutory and local authority requirements.
- 2 Prepare for trapping
- 2.1 Locations for the trapping activity are mapped to be consistent with target animal behaviour and in accordance with the management strategy and relevant monitoring programs.
  - 2.2 **Relevant licenses and permission to enter property are obtained.**
  - 2.3 Precautions to minimise hazards are identified in accordance with OHS practices and procedures.
  - 2.4 Precautions to minimise environmental risks associated with capturing the target animal are identified.
  - 2.5 Precautions to minimise trapping of non-target animals are considered.
  - 2.6 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
- 3 Place and set traps
- 3.1 Site for trapping is selected to maximise chance of trapping target animals and minimise chance of trapping non-target animals.
  - 3.2 Site for capturing animals is prepared in accordance with industry practice.
  - 3.3 Trapping equipment is constructed, positioned and

- secured in accordance with industry practice.
- 3.4 Trapping equipment is set safely in accordance with manufacturer's instructions.
  - 3.5 Trapping equipment is checked for strength and security in accordance with industry practice.
  - 3.6 Trap mechanisms are set or calibrated in accordance with manufacturer's instructions.
  - 3.7 Lures or baits are applied in accordance with industry practice if required.
  - 3.8 Traps are camouflaged as required.
  - 3.9 Precautions to prevent trapping of non-target animals are applied in accordance with industry practice.
- 4 Check and remove traps
- 4.1 Traps are checked regularly in accordance with industry practice.
  - 4.2 Trapped animals are identified then released, killed or prepared for transport in accordance with industry practice.
  - 4.3 Captured animals are handled humanely according to enterprise requirements and animal welfare guidelines.
  - 4.4 Animals are checked according to supervisor instructions and enterprise guidelines.
  - 4.5 Animals are transported from site where required in a safe and appropriate manner according to legislative and enterprise requirements.
  - 4.6 Occupational health and safety and public safety requirements are met prior to and during trapping activities.
  - 4.7 Trap mechanism is released safely and trap is removed in accordance with industry practice.
  - 4.8 Trap site is restored to prior condition.
- 5 Report completion of work
- 5.1 Results of trapping activities are reported according to enterprise guidelines.

- 5.2 **Incidents** with animals are dealt with and reported according to legislative, enterprise, occupational health and safety and public safety requirements.
- 6 Clean and store equipment and materials
- 6.1 **Carcases** for research or other purposes are cleaned and stored in accordance with relevant policies and procedures and industry practice.
- 6.2 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.
- 6.3 Target and non-target kills are recorded in accordance with statutory requirements and enterprise guidelines.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in apply animal trapping techniques requires evidence that animals have been humanely trapped and released or destroyed according to enterprise guidelines and industry best practice. The skills and knowledge required to apply trapping techniques must be **transferable** to a range of work environments and contexts. For example, this could include different trapping techniques, animal species or locations.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Relevant legislation.

Common law principles relating to property, stock, duty of care and due diligence.

Animal life cycles and behaviours.

Catching techniques, equipment and

operation.

Suitable traps for the given animal species.

Animal welfare.

Animal identification.

Basic animal handling and care.

Legislation applying to the capture and care of wildlife.

Transportation methods of caught animals.

Occupational health and safety and public welfare legislation, regulations, Codes of Practice and enterprise procedures.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Plan animal capture.

Prepare for trapping.

Place and set traps.

Check and remove traps.

Report completion of work.

Clean and store equipment and materials.

**What processes should be applied to this competency standard?**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information** (1) be applied?

Clarify requirements and expectations for the job, liaise with work colleagues during work activities, and document work activities in writing.

2. How can **information be collected,**

Determine appropriate bait and trap type.

**analysed and organised (2)?**

- |  |  |
|--|--|
| 3. How are <b>activities planned and organised (2)?</b>                        | Organise own work activities.  |
| 4. How can <b>team work (1)</b> be applied?                                    | Collaborate with work colleagues during work activities.   |
| 5. How can the use of <b>mathematical ideas and techniques (2)</b> be applied? | Determining number of traps required and their distribution, recording counts of animals caught. |
| 6. How can <b>problem-solving skills (2)</b> be applied?                       | Consider problems that arise during the job and determine contingency activities.                |
| 7. How can the <b>use of technology (2)</b> be applied?                        | Use and maintain traps and firearms.   |

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

**Range Statement****Range of Variables**

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts

- |  |   |
|--|---|
| Which <b>purposes for capture</b> may be included? | Scientific research, removal of animals from unsuitable locations or to another habitat, protection of humans from attack, disturbance or disease, collection of animals to establish breeding populations and vertebrate pest control, fauna survey. |
|--|---|

Which <b>locations</b> may be relevant to this standard?	Urban, including roadways, railways, open space, inside buildings, rural, including roadways, farmland, inside buildings, parks/reserves including steep and rugged lands and in dense growth, and off park areas.
Which <b>licenses</b> may be included?	Firearms, wildlife capture, keeping of wildlife, occupational health and safety certification, scientific and Animal Care and Ethics Committee or equivalent, small boat handling.
What types of <b>equipment</b> may be relevant?	Vehicles, vessels, elevating work platforms, cages, sacks and traps, bait, firearms and ammunition, ladders, identification tags, ropes and related equipment, personal protective equipment, first aid kit, scientific research equipment and instruments, cameras, 2 way radios and mobile telephones, equipment for safe transport and care of species, appropriate food for species, maps and identification keys.
What sorts of <b>incidents</b> may be considered?	Animals attacking people, animals on roadways and railways, bites, cuts, scratches, falls, injured animals, damage to vehicles, escapes from traps and cages, and animals loose in or under vehicles.
What are the relevant <b>Federal, State legislation and local regulations</b> that may be included?	Environmental protection, vertebrate pests, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.
Which <b>animals</b> may be included in this standard?	Native animals, domestic species and species determined to be pests of primary production, the environment or public health and lifestyle. This standard covers small, medium and large animals.
What might be included as <b>resources</b> ?	Human, financial, land, air, water transport facilities, physical (traps, firearms,

ammunition, veterinary products), plant (excavators, front-end loaders) and fencing materials.

How should killed **animal carcasses** be dealt with?

Animal carcasses with commercial or scientific value should be stored in accordance with the enterprise guidelines. Other animal carcasses should be disposed of as required in accordance with statutory requirements and industry practice.

Which **types of traps** may be included?

A range of trap construction designs, spring loaded rubber-jawed traps, barrel netting or mesh traps, lures, cage traps, cannon netting and mist nets, pitfall traps.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

## Unit Sector(s)

Not applicable.



## **RTD2502A Maintain wildlife habitat refuges**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the process of maintaining wildlife habitats and refuges to protect desirable animal species from predators. It requires the ability to assess the scope of the refuge maintenance job, prepare for the work, maintain wildlife habitat refuges, and clean and store equipment and materials. Maintaining wildlife habitat refuge for protection of desirable animal species requires knowledge of relevant legislation and regulations, common law principles relating to property, stock, duty of care and due diligence, vertebrate pest life cycles and behaviours, harbours used by vertebrate pests, and harbours used by desirable animal species.

This competency standard covers the process of maintaining wildlife habitats and refuges to protect desirable animal species from predators. It requires the ability to assess the scope of the refuge maintenance job, prepare for the work, maintain wildlife habitat refuges, and clean and store equipment and materials. Maintaining wildlife habitat refuge for protection of desirable animal species requires knowledge of relevant legislation and regulations, common law principles relating to property, stock, duty of care and due diligence, vertebrate pest life cycles and behaviours, harbours used by vertebrate pests, and harbours used by desirable animal species

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

## Elements and Performance Criteria Pre-Content

Not applicable.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 Assess the scope of the refuge maintenance job	1.1 Desirable wildlife species to be protected are identified and their behaviour pattern determined. 1.2 Characteristics of wildlife habitat refuges are identified. 1.3 Locations of wildlife habitat refuges are determined. 1.4 Time required to complete the wildlife habitat refuge maintenance job is estimated. 1.5 Hazards associated with the wildlife habitat refuge maintenance job are identified in accordance with OHS standards. 1.6 Environmental risks associated with the wildlife habitat refuge maintenance job are identified in accordance with statutory and local authority requirements. 1.7 Vehicles, equipment and materials required to complete the wildlife habitat refuge maintenance job are identified.
2 Prepare for the refuge maintenance job	2.1 Location and boundaries for the wildlife habitat refuge maintenance job are determined in accordance with the vertebrate pest management strategy and monitoring program. 2.2 Precautions to minimise hazards associated with the wildlife habitat refuge maintenance job are taken in accordance with OHS standards. 2.3 Precautions to minimise environmental risks associated with the wildlife habitat refuge maintenance job are taken in accordance with statutory and local authority requirements.

- 2.4 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
- 3 Maintain wildlife habitat refuges for protection of desirable species from predators
  - 3.1 Vehicles and equipment are operated and/or driven in accordance with manufacturer's instructions, statutory requirements and industry practice.
  - 3.2 Wildlife habitat refuges which protect desirable animal species are maintained in accordance with industry practice and environmental statutory requirements.
  - 3.3 Desirable animal species are protected as required in accordance with environmental statutory requirements.
  - 3.4 Debris is disposed of in accordance with industry practice.
- 4 Clean and store equipment and materials
  - 4.1 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.
  - 4.2 Job completion is reported or recorded in accordance with relevant policies and procedures.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining wildlife habitat refuge for protection of non-target animals from predators requires evidence that a site has been selected, assessed and maintained according to enterprise and industry standards. The skills and knowledge required to maintain wildlife habitat refuge for protection of native species from predators must be **transferable** to a range of work environments and contexts. For example, this could include different wildlife habitats and locations and predators.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Relevant legislation and regulations.

Common law principles relating to property, stock, duty of care and due diligence.

Risks to land users' posed by vertebrate pests including exotic diseases and zoonoses.

Vertebrate pest life cycles and behaviours.

Harbours used by vertebrate pests.

Wildlife habitats used by desirable animal species.

Wildlife habitat modification techniques.

### **What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Communicate with work colleagues.

Use and maintenance of tools and equipment.

Record and report task completion and, where necessary, observations of property status.

Prepare for the refuge maintenance job.

Maintain wildlife habitat refuges for protection of desirable animal species from predators.

Clean and store equipment and materials.

### **What processes should be applied to this competency standard?**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

How can **communication of ideas and information** (1) be applied?

Clarify requirements and expectations for the job and liaise with work colleagues.

How can **information be collected, analysed and organised** (2)?

Inspect areas to be maintained and distinguish between features which harbour pests and features which provide protection for desirable animal species.

How are **activities planned and organised** (2)?

Organise own work activities.

How can **team work** (2) be applied?

Collaborate with work colleagues during work activities.

How can the use of **mathematical ideas and techniques** (2) be applied?

Perform mathematical operations - estimation of task duration.

How can **problem-solving skills** (1) be applied?

Consider problems that arise during the job and determine contingency activities.

How can the **use of technology (2)** be applied?

Apply modern techniques and utilise equipment and materials.

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

**What evidence is required to demonstrate competence for this standard as a whole?**

Competence in maintaining wildlife habitat refuge for protection of non-target animals from predators requires evidence that a site has been selected, assessed and maintained according to enterprise and industry standards. The skills and knowledge required to maintain wildlife habitat refuge for protection of native species from predators must be **transferable** to a range of work environments and contexts. For example, this could include different wildlife habitats and locations and predators.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Relevant legislation and regulations.

Common law principles relating to property, stock, duty of care and due diligence.

Risks to land users' posed by vertebrate pests including exotic diseases and zoonoses.

Vertebrate pest life cycles and behaviours.

Harbours used by vertebrate pests.

Wildlife habitats used by desirable animal species.

Wildlife habitat modification techniques.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Communicate with work colleagues.

Use and maintenance of tools and equipment.

Record and report task completion and, where necessary, observations of property status.

Prepare for the refuge maintenance job.

Maintain wildlife habitat refuges for protection of desirable animal species from predators.

Clean and store equipment and materials.

**What processes should be applied to this competency standard?**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

How can **communication of ideas and information** (1) be applied?

Clarify requirements and expectations for the job and liaise with work colleagues.

How can **information be collected, analysed and organised** (2)?

Inspect areas to be maintained and distinguish between features which harbour pests and features which provide protection for desirable animal species.

How are **activities planned and organised** (2)?

Organise own work activities.

How can **team work** (2) be applied?

Collaborate with work colleagues during work activities.

How can the use of **mathematical ideas and techniques** (2) be applied?

Perform mathematical operations - estimation of task duration.

How can **problem-solving skills** (1) be applied?

Consider problems that arise during the job and determine contingency activities.

How can the **use of technology** (2) be applied?

Apply modern techniques and utilise equipment and materials.

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

## Range Statement

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are **desirable wildlife species**?

Native animals that are not targeted as vertebrate pests.

What **wildlife habitat maintenance work** may be relevant to this standard?

Monitoring of vertebrate pest occurrence, trapping of pest animals, removal of pest habitats, planting of vegetation including revegetation of open areas, and installation of structures including exclusion fencing.

What are the **relevant federal, state legislation and local regulations** that may be included?

Environmental protection, threatened species conservation, vertebrate pests, humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What might be included as **resources**?

Human, financial, physical (traps, firearms, ammunition, poisons, fencing materials, veterinary products), land, air and water transport facilities and plant (excavators, front-end loaders), and plant materials.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

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What are **desirable wildlife species**?

Native animals that are not targeted as vertebrate pests.

What **wildlife habitat maintenance work** may be relevant to this standard?

Monitoring of vertebrate pest occurrence, trapping of pest animals, removal of pest habitats, planting of vegetation including revegetation of open areas, and installation of structures including exclusion fencing.

What are the **relevant federal, state legislation and local regulations** that may be included?

Environmental protection, threatened species conservation, vertebrate pests, humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What might be included as **resources**?

Human, financial, physical (traps, firearms, ammunition, poisons, fencing materials, veterinary products), land, air and water transport facilities and plant (excavators, front-end loaders), and plant materials.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

## Unit Sector(s)

Not applicable.

## **RTD3125A Respond to wildlife emergencies**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the process of evaluating and coordinating a response to natural resource emergencies involving fauna. It requires the ability to evaluate the type of emergency, implement and coordinate a response to the emergency, care for affected animals, determine management options, remove animal carcasses and complete debrief and prepare reports. Responding to wildlife emergencies requires a knowledge of animal biology and general behaviour, health risks associated with animals, public relations and media management, incident management systems, state/territory emergency procedures and networks and machinery and equipment operation.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

### **Elements and Performance Criteria**

#### **Elements and Performance Criteria**

<b>Element</b>	<b>Performance Criteria</b>
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- 1 Evaluate wildlife emergency
  - 1.1 Nature of emergency is investigated from eyewitnesses and/or inspection to determine what procedures should be implemented.
  - 1.2 Assessment of the incident is made to identify **key factors that may impact on an appropriate response.**
  - 1.3 State/Territory authorities are notified of incident according to enterprise guidelines.
  - 1.4 Interim care of animals is implemented where appropriate and according to enterprise procedures pending instructions from authorities.
  - 1.5 Appropriate staff are deployed in interim care for animals according to assessment of incident and enterprise guidelines.
  - 1.6 Personnel assisting in interim care are appropriately equipped and briefed according to enterprise and legislative requirements.
  - 1.7 Care instructions from authorities and/or veterinarians are implemented according to legislative and enterprise requirements.
  - 1.8 Information is collected about the reported situation to determine response.
  - 1.9 Informants are interviewed to obtain necessary details about the reported situations.
- 2 Implement response to emergency
  - 2.1 Nature of emergency is investigated from eyewitnesses and/or inspection to determine what procedures should be implemented.
  - 2.2 Communications to manage situation are established to enterprise policies and procedures.
  - 2.3 **Resources** and personnel are transported to site to implement action to enterprise procedures.
  - 2.4 Site procedures are established to legislative requirements, enterprise procedures and emergency plans to control risks to people, the environment and to property.
  - 2.5 Live fauna are moved in accordance with

- legislative and enterprise procedures.
- 2.6 Dead fauna are removed from site and biological matter is disposed of in accordance with enterprise procedures and health and safety requirements.
  - 2.7 Site is cleaned in accordance with enterprise procedures to maintain public and environmental health and safety.
  - 2.8 Measures are implemented that minimise risk to significant places, area, habitats, species and communities.
- 3 Coordinate response
- 3.1 General public and media are informed of the nature of the incident and agency decisions in accordance with enterprise guidelines.
  - 3.2 Volunteers are coordinated and deployed according to their skills and available personal protective equipment.
  - 3.3 Volunteers and staff are briefed on occupational health and safety hazards, preventive measures and reporting requirements.
  - 3.4 Physical barriers are established to keep public away from animals to minimise distress to it and to protect the public.
  - 3.5 Media is managed until authorities provide instructions.
  - 3.6 Media is utilised according to instructions and enterprise procedures.
- 4 Care for affected animals
- 4.1 Team(s) are allotted to animals according to incident assessment, care instructions and skills within teams.
  - 4.2 Animal first aid is applied.
  - 4.3 Role in wildlife operations team is performed according to the command structure and procedures of the management plan.
  - 4.4 Animal is cared for using a range of skills and according to veterinary instructions and enterprise procedures.

- 4.5 Occupational health and safety procedures are followed according to legislative, management plan and enterprise requirements.
- 5 Determine management options
  - 5.1 Veterinary advice is sought where appropriate and according to enterprise guidelines.
  - 5.2 **Biological and incident data** on animals is collected according to enterprise procedures and scientific standards.
  - 5.3 Management options are evaluated according to advice, condition of animal, risk assessment and according to enterprise guidelines.
  - 5.4 Where required for scientific purposes and under enterprise procedures, released animals are humanely banded or tagged.
  - 5.5 Selected management option is implemented according to enterprise guidelines, OHS requirements and risk assessment.
  - 5.6 Equipment and staff required for return to wild or temporary captive management are sourced to enterprise procedures.
- 6 Remove carcass
  - 6.1 Where necessary, inter-agency agreement is developed with local authority for removal of carcass.
  - 6.2 Carcass is disposed of according to authority instructions.
  - 6.3 Equipment and staff for disposal are sourced to enterprise procedures.
  - 6.4 **OHS requirements** are met.
- 7 Complete debrief and report
  - 7.1 Where applicable, incident management processes for debrief and wash-up are followed.
  - 7.2 Report provided to management according to enterprise guidelines.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in responding to wildlife emergencies requires evidence that an individual can demonstrate that they have the required knowledge and skills to respond to wildlife emergencies according to enterprise guidelines and industry best practice. The skills and knowledge required to respond to wildlife emergencies must be **transferable** to a range of work environments and contexts. For example, this could include different animal species, type and scope of emergencies and environments.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Animal biology and general behaviour.

Health risks associated with animals.

Public relations and media management.

Incident management systems.

State/Territory emergency procedures and networks.

Machinery and equipment operation.

### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Evaluate natural resource emergency.

Implement and coordinate response to emergency.

Care for affected animals.

Determine management options.

Remove animal carcasses.

Complete debrief and prepare reports.

### What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

- |  |   |
|--|---|
| 1. How can <b>communication of ideas and information (3)</b> be applied?       | To public, media and management.              |
| 2. How can <b>information be collected, analysed and organised (3)</b> ?       | On incident or emergency.                     |
| 3. How are <b>activities planned and organised (3)</b> ?                       | Coordinate staff and volunteers.              |
| 4. How can <b>team work (3)</b> be applied?                                    | Caring for affected animals.                  |
| 5. How can the use of <b>mathematical ideas and techniques (1)</b> be applied? | Estimating and measuring animals.             |
| 6. How can <b>problem-solving skills (3)</b> be applied?                       | Determining and selecting management options. |
| 7. How can the <b>use of technology (2)</b> be applied?                        | Machinery and equipment.                      |

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

## Range Statement

### Range of Variables

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts

Which <b>key factors may impact on an appropriate response</b> ?	Site condition, species, species number, animal condition and weather conditions.
What <b>natural resource emergencies</b> may be included?	Marine animal incident management (whales and dolphins, seals and sea lions, turtles, sharks, dugongs, crocodiles, sea snakes, sea birds), oil and chemical spills, injured or dangerous animals (small animals and birds causing nuisance to the public, animals, birds and reptiles behaving aggressively or likely to behave aggressively to the public or causing public fear, either due to their normal behaviour patterns and/or injury) and animals injured by flood, fire or disease.
Which types of <b>fauna</b> may be relevant to this standard?	Live or dead animals, single or mass stranding, healthy, injured or diseased animals, young and adult animals, entangled animals.
From which source would <b>Incident Management</b> emerge?	ICS and/or enterprise procedures.
How would <b>veterinarians</b> be employed?	By the enterprise or contracted under enterprise procedures.
What could <b>Intra-agency co-operation</b> include?	Police, State Emergency Services, Marine authority.
What <b>resources</b> may be included?	Vessels and personnel and equipment to operate vessels, vehicles, equipment and materials for moving live animal or carcass, load shifting equipment for shifting and burying carcass, aircraft and helicopters, firearms and ammunition, OHS protective and emergency equipment including first aid kits, nets, traps, ropes, protection for animals during handling, barriers to control public, personal protective equipment and special clothing for cold and wet work, food, drink and protective equipment for personnel and

lighting for night work.

What **biological and incident data** may be relevant to this standard?

Records of sequence of events leading to incident and resolution of incident, biological data required for research in enterprise, museums and/or universities such as physical dimensions, estimated weight and condition, veterinary information, including evidence of injury and/or disease, the taking of samples from animal and/or carcass and strict hygiene protocols (TB).

What **OHS requirements** may be included?

General industry and enterprise OHS procedures, vessel safety in water and around distressed animals, safety of personnel in water, vehicle safety in dunes, beaches and other coastlines, marine animal attacks, bites and scratching, transmission of disease from live or dead animals, animals rolling on or trapping personnel, use of firearms, transport, handling and use of chemicals and veterinary substances and material handling in a beach/marine environment.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

## Unit Sector(s)

Not applicable.

## **RTD4402A Define the pest problem in a local area**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the process of defining the pest problem in a local area. It requires the ability to define the land use process for the local area affected by the target pest problem, analyse the pest problem in the local area, determine critical control points for management of the pest problem and document and collate the impacts of the pest. Defining the pest problem in a local area requires knowledge of pest biology, land management processes, production processes, relevant legislative and regulatory requirements and environmental protection legislation.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

### **Elements and Performance Criteria**

#### **Elements and Performance Criteria**

<b>Element</b>	<b>Performance Criteria</b>
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- 1 Define the land use process for the local area affected by the target pest problem
  - 1.1 Consultation with local land users and other relevant stakeholders in the affected area is documented.
  - 1.2 Desired land management and/or production outcomes are identified.
  - 1.3 1.4 Critical activities required to achieve the desired outcomes are identified.
  - 1.4 1.5 Local land management and/or production process is mapped against the annual planning cycle.
  - 1.5 1.6 Local land management and/or production process budget is determined.
- 2 Analyse the pest problem in the local area
  - 2.1 Target **pest population** distribution within the affected local area is determined in consultation with stakeholders.
  - 2.2 Target pest population data supplied by stakeholders is validated.
  - 2.3 Other relevant data on target pest population are obtained.
  - 2.4 Factors which influence the target pest population and distribution within the local area are described.
  - 2.5 Pest life cycle is documented.
- 3 Determine critical control points for management of the pest problem
  - 3.1 Periods of greatest risk in the local land management and/or production process are identified in consultation with stakeholders.
  - 3.2 Periods of target pest vulnerability within the life cycle are identified.
  - 3.3 Local land management and/or production process map and target pest life cycle map are consolidated.
  - 3.4 Critical points for controlling pest populations and/or changing land management or production practices within the annual planning cycle are determined in consultation with **other stakeholders**.

- 4 Document and collate the impacts of the pest
  - 4.1 Economic losses resulting from the pest presence are measured or estimated in consultation with stakeholders.
  - 4.2 Environmental impacts from the pest presence are measured or estimated in consultation with stakeholders.
  - 4.3 Potential risks relating to exotic disease are defined.
  - 4.4 Pest problem is documented according to industry and enterprise standards and guidelines.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in defining the pest problem in a local area requires evidence that an analysis of pest problem has been completed and documented according to industry and enterprise standards and expectations. The skills and knowledge required to define the pest problem in a local area must be **transferable** to a range of work environments and contexts. For example, this could include different pests and local areas.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Pest biology.

Land management processes.

Production processes.

Relevant legislative and regulatory requirements.

Environmental protection legislation.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Define the land use process for the local area affected by the target pest problem.

Analyse the pest problem in the local area.

Determine critical control points for management of the pest problem.

Document and collate the impacts of the pest.

Analyse local problems.

Plan strategically for local context.

Communicate with local land users.

**What processes should be applied to this competency standard?**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information** (2) be applied?

Establishing and maintaining consultation and liaison processes with land users and stakeholders.

2. How can **information be collected, analysed and organised** (3)?

Collecting and analysing local data relating to pest activities.

3. How are **activities planned and organised** (2)?

Organising survey and pest management activities.

4. How can **team work** (1) be applied?

Working with local landholders.

5. How can the use of **mathematical ideas and techniques** (2) be applied?

Collating and determining significance of data.

6. How can **problem-solving skills** (3) be

Analysing pest data and defining the scope

applied?	of the problem.
7. How can the <b>use of technology (1)</b> be applied?	Collating data, documenting findings and developing the report.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

## Range Statement

### Range of Variables

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts

What <b>pests</b> may be relevant to this competency standard?	Weeds and vertebrate pests.
Which <b>relevant Federal or State legislation and local regulations</b> may be included?	Environmental protection, noxious weeds, vertebrate pests, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations and common law principles relating to property, stock, duty of care and due diligence.
Which <b>types of land uses</b> may be included?	Agricultural production, forestry, nature and wildlife reserves, heritage areas and recreation.
What forms of land value may be relevant?	Economic and environmental value.

Who might the <b>other stakeholders</b> referred to in this standard be?	Land managers in the region, recreational land users, regional land management bodies, local regulatory authorities and landcare committees.
Which <b>measures of potential or actual impact</b> may be included in the management units?	Biological values, agricultural values, environmental values, recreational and social values and public health values.
Which methods for determining <b>vertebrate pest population</b> distribution may be used?	Animal counts (including spotlight and aerial counts, faecal counts, warren, burrow, den and nest counts), and tracking pads and feeding stations.
How may <b>supporting and validating data</b> be obtained?	From direct observation, satellite information, GIS and air-flown MSS.
What <b>other relevant data on target vertebrate pest population</b> may be covered?	Diseases, dietary habits, antibodies, viruses and ageing.
Which <b>vertebrate pests</b> may be relevant to this standard?	Kangaroo, wallaby, emu, wombat, possum, fruit bat, cockatoo/parrot, waterfowl, seagull, starlings, pigeon and other birds, goat, horse, deer, pig, camel, cat, cattle, dog, water buffalo, donkey, rabbit, red fox, brown hare, cane toads, European carp, house mouse, black rat and brown rat.
What other relevant data on target <b>weed populations</b> may be covered?	Disease and vectors.
What might <b>weeds</b> include?	Economic weeds, aquatic weeds and environmental weeds.
What sorts of <b>damage and loss</b> caused by pests may be relevant to this standard?	Loss of pasture, loss of crops, loss of livestock, loss of native fauna, loss of native flora, soil erosion, loss of recreational and social amenity, reduction in water quality, increased incidence of disease vectors and reduced tourism.
For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.	

## **Unit Sector(s)**

Not applicable.

## RTD4406A Implement pest management action plans

### Modification History

Not applicable.

### Unit Descriptor

This competency standard covers the process of implementing of pest management action plans at the local level. It requires an ability to schedule activities, estimate resources required to complete the work, brief and supervise employees or contractors (where necessary), consult stakeholders, coordinate contingency management activities, and report progress in relation to the pest management action plan. Implementing pest management action plans at a local level requires knowledge of pest biology, vectors, plant survey, ecological systems and production systems.

### Application of the Unit

Not applicable.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

Not applicable.

### Elements and Performance Criteria Pre-Content

Not applicable.

### Elements and Performance Criteria

#### Elements and Performance Criteria

Element	Performance Criteria
---------	----------------------

- |   |  |  |
|---|--|--|
| 1 | Schedule pest management activities                  | <p>1.1 Activities identified in the action plan are scheduled within the monthly, weekly or daily work plans.</p> <p>1.2 Work time is allocated to complete the activities in accordance with the requirements of the action plan, and within realistic expectations.</p> <p>1.3 Employees or contracted personnel with relevant skills and competency are allocated for the completion of required activities.</p> <p>1.4 Plant, machinery, equipment and materials required to complete required activities are procured for the time the activities are to be carried out.</p> <p>1.5 <b>Relevant stakeholders</b> are consulted regarding the scheduling of activities.</p> <p>1.6 Relevant OHS standards and other <b>Federal, State and local legislation&amp;regulations</b> are applied in the allocation and procurement of human and physical resources.</p> <p>1.7 Milestones are aligned to critical control points in the target pests' life cycle, behaviour patterns and the local land management and production activity cycles.</p> <p>1.8 Measurable performance criteria for objectives at each milestone are determined.</p> <p>1.9 Activities required to achieve objectives by proposed deadlines are listed in consultation with local land users.</p> <p>1.1 Activities are selected and scheduled to comply with the pest management strategy, in consideration of community attitudes, and in accordance with relevant statutory and regulatory requirements.</p> <p>1.1 Monitoring and measurement activities are selected and scheduled to comply with the vertebrate pest management strategy and in accordance with <b>relevant</b> statutory and <b>regulatory</b> requirements.</p> |
| 2 | Estimate resources required to complete the required | <p>2.1 Personnel required to carry out activities are estimated.</p>   |



- activities
- 2.2 Plant and machinery required to carry out activities are estimated.
  - 2.3 Materials required to carry out activities are estimated.
  - 2.4 Personnel, plant, machinery and materials are sourced and costed in consultation with **other stakeholders**.
- 3 Brief employees or contracted personnel regarding the pest management activities
- 3.1 Employees or contracted personnel are informed of the requirements of the pest management plan and action plan.
  - 3.2 Employees or contracted personnel are informed of land owner/manager expectations and reporting and recording requirements.
  - 3.3 Employees or contracted personnel are advised of OHS standards and other statutory and regulatory requirements to be applied in carrying out the required activities.
- 4 Supervise employees or contracted personnel in carrying out the pest management activities
- 4.1 Plant, machinery and equipment are checked for serviceability in accordance with manufacturer's specifications and statutory and regulatory requirements.
  - 4.2 Materials are checked for compliance with OHS standards and other statutory and regulatory requirements.
  - 4.3 Personal protective equipment and clothing used or worn by employees or contracted personnel are checked for compliance with OHS standards and other statutory and regulatory requirements.
  - 4.4 Procedures and skills applied by employees and contracted personnel are monitored for compliance with OHS standards and other statutory and regulatory requirements.
  - 4.5 Feedback, advice and coaching are provided to employees and contracted personnel as required to improve or correct procedures and skills.
- 5 Coordinate contingency management activities
- 5.1 First aid procedures are initiated and coordinated in response to accident or injury to employees or contracted personnel.

- 5.2 Relevant authorities are notified and arrangements made in the event of the need for rescue of injured employees or contracted personnel.
  - 5.3 Activities that are not carried out due to accidents, injury, other incidents or unfavourable conditions are rescheduled within the monthly, weekly or daily work plans.
- 6 Report progress in relation to pest management action plan
- 6.1 Reports and records supplied by employees and/or contracted personnel are received and assessed.
  - 6.2 Reports and records are compiled and documented in accordance with employer or organisational requirements and statutory and regulatory requirements.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing pest management action plans requires evidence that a pest management action plan has been appropriately scheduled, costed, communicated to staff and stakeholders, and effectively implemented and reported. The skills and knowledge required to implement pest management action plans must be **transferable** to a range of work environments and contexts. For example, this could include different pests, locations and implementation procedures and protocols.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

Relevant legislative and regulatory requirements.

Pest control methods and techniques.

Integrated pest management.

Pest biology.

Social and environmental issues.

Contingency management principles.

First aid and rescue procedures.

Ecological systems.

Sustainable production systems.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

Plan and manage resources and time.

Communicate, negotiate and liaise with other statutory authorities, agencies and stakeholders.

Organise the work of others.

Record and report actions and work progress.

**What processes should be applied to this competency standard?**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information** (3) be applied?

Communicating and negotiating work allocation with work team.

2. How can **information be collected, analysed and organised** (2)?

Using the pest management strategy and action plans.

3. How are **activities planned and organised** (3)?

Organising work schedules.

- |  |  |
|--|--|
| 4. How can <b>team work (3)</b> be applied?                                    | Working with work team and supporting team activities.   |
| 5. How can the use of <b>mathematical ideas and techniques (2)</b> be applied? | Allocating realistic time to pest management activities. |
| 6. How can <b>problem-solving skills (2)</b> be applied?                       | Developing and implementing contingencies.               |
| 7. How can the <b>use of technology (1)</b> be applied?                        | Documenting work schedules and activities.               |

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about **assessing this competency standard for consistent performance and where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package.

## Range Statement

### Range of Variables

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts

- |   |   |
|---|---|
| Which <b>types of land</b> uses may be included?  | Agricultural production, forestry, nature and wildlife reserves, community lands, heritage areas and recreation.  |
| Which <b>relevant Federal, State legislation and local regulations</b> may be included? | Environmental protection, vertebrate pests, noxious weeds, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic |

	disease, OHS regulations and common law principles relating to property, stock, duty of care and due diligence.
What forms of <b>land value</b> may be relevant?	Economic and environmental value.
Who might the <b>other stakeholders</b> referred to in this standard be?	Land managers in the region, recreational land users, regional land management bodies, local regulatory authorities and landcare committees.
Which <b>measures of potential or actual impact</b> may be included in the management units?	Biological values, agricultural values, environmental values, recreational and social values and public health values.
Which <b>management options</b> may be included?	Commercial management, crisis management, no management, local eradication and strategic management (sustained, targeted and one-off).
What <b>methods and techniques</b> for controlling pest problems may be used?	Changing land management or production processes and practices (e.g., changing lambing times, changing sowing times and changing crops), modifying habitat, pasture management and pest population control (shooting, poisoning, trapping, mustering, relocation, fumigation, sedation, exclusion fencing, biological controls, harvesting and tagging), and weed control (poisoning, biological controls).
Which factors may affect <b>vertebrate pest population</b> ?	Food supply, habitat conditions, existing control by hunting and harvesting activities, climate and weather, water supply, natural predators, disease and parasites and land topography.
How might supporting and <b>validating data</b> be obtained?	By direct observation, GIS, air-flown MSS and satellite information.
Which <b>vertebrate pests</b> may be relevant to this standard?	Kangaroo, wallaby, emu, wombat, possum, fruit bat, cockatoo/parrot, waterfowl, seagull, starlings, pigeon and other birds, goat, horse, deer, pig, camel, cat, cattle, dog, water buffalo, donkey, rabbit, red fox, brown hare, cane toads, European carp, house mouse, black rat and brown rat.
Which methods for <b>determining vertebrate</b>	Animal counts (including spotlight and aerial

<b>pest population distribution</b> may be used?	counts, faecal counts, warren, burrow, den and nest counts), and tracking pads and feeding stations.
What sorts of <b>damage or loss</b> may be caused by pests?	Loss of pasture, loss of livestock, loss of crops, loss of native fauna, loss of recreational and social amenity, increased incidence of disease vectors, reduced tourism, loss of crops, damage to fences, loss of native flora, soil disturbance and erosion, reduction in water quality, pollution, increased incidence of disease vectors and reduced tourism.
What <b>comparative data</b> may be included?	Reduction in damage and loss observed and regeneration observed.
What forms of <b>documentation</b> may be relevant to this standard?	Poisons register, MSDS and other relevant documents.
What <b>types of weeds</b> may be relevant to this competency standard?	Economic weeds, aquatic weeds and environmental weeds.

## Unit Sector(s)

Not applicable.

## RTE3407A Identify and report unusual disease or plant pest signs

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit of competency specifies the outcomes required to recognise unusual disease or plant pest signs during day-to-day work and take appropriate reporting action.

### Application of the Unit

#### Application of the unit

The work in this unit is typically performed by those who have daily contact with plants, birds, animals or fish. It would usually be carried out in conjunction with routine animal or plant husbandry tasks.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

#### Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills.

### Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 <b>1 Identify signs of unusual disease or a plant pest.</b>	<p>1.1 <b>Signs of disease or a plant pest</b> are identified.</p> <p>1.2 Signs of disease or a plant pest are compared with own experience of common endemic disease or a plant pest in the species.</p> <p>1.3 Where signs indicate an <b>unusual disease or a plant pest</b>, severity and extent of problem in the species are assessed.</p> <p>1.4 Where signs indicate an unusual disease or a plant pest, immediate advice is sought from supervisors, professionals or appropriate authorities.</p>
2 <b>2 Report signs of unusual disease or a plant pest.</b>	<p>2.1 Signs of unusual disease or a plant pest are reported immediately to <b>appropriate authorities</b>.</p> <p>2.2 Biosecurity measures are implemented according to enterprise biosecurity plans and instructions from appropriate authority.</p>

## Required Skills and Knowledge

This section describes the essential skills and knowledge and their level, required for this unit.

### Required skills include:

observing

recognising unusual disease or plant pest signs.

### Required knowledge includes:

required procedures to follow in notifying appropriate authorities

where to access additional reliable information or personnel.

## Evidence Guide

### Overview of assessment



Assessment for this unit of competency may be undertaken on or off the job. The unit could be assessed on its own or in combination with other units of competency relevant to the job function, such as RTE4409A **Carry out field surveillance for a specific emergency disease or plant pest**.

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The critical requirements for this unit of competency as a whole are listed below.

Assessment must confirm one's ability to:

identify unusual disease or pest signs within one's own experience

notify appropriate authorities where appropriate

implement appropriate biosecurity measures.

### **Context and specific resources for assessment**

For valid assessment, one must have opportunities to participate in a range of exercises, case studies and other real and simulated practical and knowledge assessments that demonstrate the skills and knowledge required to identify and report unusual disease or plant pest signs.

The candidate must also have access to resources such as photographs of signs of emergency and endemic diseases and of plant pests.

### **Guidance information for assessment**

To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

The skills and knowledge required to identify and report unusual disease or plant pest signs must be transferable to a range of work environments and contexts, including the ability to deal with unplanned events. For example, this could include a range of diseases for a particular species or a variety of pests.

## **Range Statement**

### **RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Bold italicised** wording in the performance criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

**Signs of disease or a plant pest** may include:

abnormality

clinical signs

decline and dieback

insect damage or presence of insects

mortalities and mode of death

presence of highly specific vectors  
results of post-mortem examinations  
unexplained levels of morbidity or mortality  
in populations.

**Unusual diseases or plant pests** may include:

disease that is classified as an emergency disease

disease that presents in an unusual, uncommon or atypical form

plant pest species, biotype or strain of invertebrate pest or pathogen injurious to plants or plant health.

**Appropriate authorities** may include:

national disease watch hotlines

property owner or manager

regulatory officers from state and territory departments of Primary Industries, Agriculture, Fisheries and Forestry.

## **Unit Sector(s)**

Not applicable.

## **RTE3904A Keep records for a primary production business**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the process of creating and maintaining physical records, preparing and processing basic financial transactions, establishing and maintaining a cashbook, and reconciling and preparing invoices within primary production businesses. Both the physical and financial records of the business are vital for use by management for planning purposes, meeting legislative requirements, and the efficient operation of the business on a daily basis.

Work performed at this level requires a full range of well-developed skills where some discretion and judgement is required. One will take responsibility for own outputs and limited responsibility for the output of others.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

### **Elements and Performance Criteria**

#### **Elements and Performance Criteria**

Element	Performance Criteria
1 Prepare and store <b>physical records</b>	<p>1.1 Physical records and inventories required for the organisation are determined in consultation with the <b>management team</b>.</p> <p>1.2 <b>Methods for collecting information</b> are reliable, and time and resources are used efficiently.</p> <p>1.3 Appropriate <b>interpersonal skills</b> are used to access relevant information from individuals and teams.</p> <p>1.4 Information is organised into a <b>format</b> suitable for analysis, interpretation and dissemination in accordance with organisational requirements.</p> <p>1.5 <b>Business equipment/technology</b> is used to maintain information in accordance with organisational and OHS requirements.</p> <p>1.6 Records are updated and stored in accordance with organisational requirements.</p>
2 Process petty cash transactions	<p>2.1 Petty cash claims and vouchers are <b>checked for accuracy and authenticity</b> prior to processing.</p> <p>2.2 Petty cash transactions are processed and recorded in accordance with organisational requirements.</p> <p>2.3 2.2 Petty cash book balanced in accordance with organisational requirements.</p>
3 Establish and maintain a <b>cash book</b> in accordance with organisational requirements	<p>3.1 Cash receipts and payments book created, and <b>documentation</b> relating to financial <b>transactions checked for validity</b> prior to processing.</p> <p>3.2 Cashbook balances reconciled with bank and creditor statements.</p> <p>3.3 Cashbook balances are used to complete <b>legislative reporting requirements</b>.</p> <p>3.4 <b>Cash flow statements</b> are prepared on the basis of summarised cashbook entries.</p>
4 Reconcile invoices for payment to <b>creditors</b>	<p>4.1 Adjustments and errors are identified, reported and rectified in accordance with organisational requirements.</p>

- 4.2 Invoices processed and payment made in accordance with organisational requirements.
- 5 Prepare invoices for **debtors**
- 5.1 Invoices are prepared accurately and, if required, distributed to nominated person for verification prior to despatch.
- 5.2 Adjustments are made as required in accordance with organisational requirements.
- 5.3 Invoices and other related documents copied and filed in accordance with organisational requirements for **taxation and auditing** purposes.

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in record keeping in rural businesses requires evidence that both physical and financial records for the business can be created, maintained and stored in accordance with legislative and organisational requirements. Financial transactions involving cash, electronic funds transfer, cheques and invoices must be processed and recorded accurately in accordance with legislative and organisational requirements.

The skills and knowledge required to keep records in a rural business must be **transferable** to a different work environment. For example, across a wide range of small, medium and large agricultural and horticultural businesses.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

nature of the business and its legal and organisational structure

relevant National, State and local government legislative requirements,

especially in regard to OHS and environmental requirements

organisational policies and procedures relating to the distribution of workplace information, legal and ethical obligations

methods to identify sources of information

procedures to analyse information to identify patterns and trends

the organisations record keeping/filing systems, security of information and safe record keeping procedures

principles of effective interpersonal communication

principles and procedures for cash and non cash handling

principles of single entry accounting, and cash flow statements.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

relate to people from a range of social, cultural and ethnic backgrounds, and of varying physical and mental abilities

collect and record accurate and reliable information

present data in a format suitable for the organisations requirements

use business equipment and technology correctly and safely

file records accurately in accordance with organisational requirements

perform calculations and balance accounts

prepare cash flow statements and budgets

reconcile creditors invoices and prepare debtors invoices

process forms and other documentation.

### What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information (2)** be applied? By research and discussion with the management team, employees and outside organisations.
2. How can **information be collected, analysed and organised (2)**? By collecting and presenting information from a variety of sources and organising it into records, graphs, charts and tables.
3. How are **activities planned and organised (2)**? By capturing and storing data generated within the business on a regular basis.
4. How can **team work (2)** be applied? By working with business employees and the management team to assist in providing information on particular aspects of the business.
5. How can the use of **mathematical ideas and techniques (2)** be applied? By the processing of financial transactions and the development of cash flow statements and budgets.
6. How can **problem-solving skills (2)** be applied? Information that is contradictory, inconsistent, ambiguous or incomplete can be rejected.
7. How can the **use of technology (2)** be applied? By using technology to research information, keep records and perform calculations.

### Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

## Range Statement

### Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available

What sort of things will be recorded in **physical records**?

Records may include a property plan, livestock, paddock treatments including spraying, paddocks, rainfall, production, sales data, supplies, machinery and equipment, and stock.

Who might be members of the **management team**?

They may be oneself, family members, fellow managers, employees, professional advisors, partners, and mentors.

What **methods for collecting information** might be used?

Methods for collecting information may include observation and listening, previous file records, individual research, statistics and reports from other organizations, producing reports from data collected on the farm, translating data from diaries and note-books, or professional data collection agency.

What type of **interpersonal skills** may be required?

Interpersonal skills may include effective listening, open questioning techniques, verbal and non verbal communication skills, appropriate body language, and the ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities.

What type of **format** might be relevant?

Format for records and inventories could include maps, graphs, charts, cards, electronic, databases, diaries, or notebooks.



What sort of **business equipment/technology** might be used?

Business equipment and technology that might be used include computer, software, Internet, email, calculator, fax or phone.

What type of **checking for accuracy and authenticity** might be used?

Checking may include correct information on voucher, receipt of purchase, and ensuring items are business related.

What is meant by a **cashbook**?

A cashbook documents the daily receipts and payments of the business. It may be created and maintained manually and/or electronically.

What sort of **documentation** requires checking for **validity** in this context?

Documentation may include cheques, taxation invoices, accounts, and credit card vouchers.

Validity may include checking date, signature, details on cheque are correct, expiry date of credit cards, information on taxation invoice, and accounts are accurate.

What sort of **legislative reporting requirements** would be included?

Legislative reporting requirements may include recording Australian Business Number (ABN), business activity statements (BAS), instalment activity statements (AIS), PAYG withholding, superannuation, taxation, or work cover.

What is meant by **cash flow statements** in this context?

Cash flow statements summarise the organisations actual and expected cash flow over designated periods of time. Budgets allocate income against expenses. Both types of statements can be created manually or electronically.

Who might be **creditors and debtors**?

Creditors and debtors may include financial institutions, goods and service suppliers, rural merchants, contractors, professional advisors, and co-operatives.

What sort of **taxation and auditing requirements** may be required?

Taxation and auditing requirements would include accurate records of all business assets, liabilities, income, expenses and entitlements to be analysed by an accountant for compliance purposes.

What type of financial **transactions** might the business undertake?

Financial transactions may include purchasing and selling products, machinery

and equipment, vehicles and supplies,  
banking cheques, paying invoices and bills,  
or transferring funds electronically.

For more information on contexts, environment and variables for training and assessment,  
refer to the Sector Booklet.

## **Unit Sector(s)**

Not applicable.

## **SIRXCCS001A Apply point-of-sale handling procedures**

### **Modification History**

Not applicable.

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the performance outcomes, skills and knowledge required to operate point-of-sale equipment, apply store policy and procedures to a range of transactions, interact with customers, and package or wrap an item for transportation.

### **Application of the Unit**

#### **Application of the unit**

This unit applies to frontline service personnel. It requires the team member to demonstrate the ability to operate a range of point-of-sale equipment in order to complete sales, returns and exchange transactions according to store policies, and process a number of methods of payment. It further requires the demonstrated ability to package and arrange transportation for goods where required.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

#### **Prerequisite units**

Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Operate point-of-sale equipment.	<p>1.1 Operate <b><i>point-of-sale equipment</i></b> according to design specifications.</p> <p>1.2 Open and close point-of-sale terminal according to <b><i>store policy and procedures</i></b>.</p> <p>1.3 Clear point-of-sale terminal and transfer tender according to store procedure.</p> <p>1.4 Handle cash according to store security procedures.</p> <p>1.5 Maintain supplies of change in point-of-sale terminal according to store policy.</p> <p>1.6 Attend active point-of-sale terminals according to store policy.</p> <p>1.7 Complete records for transaction errors according to store policy.</p> <p>1.8 Maintain adequate supplies of dockets, vouchers and <b><i>point-of-sale documents</i></b>.</p>

ELEMENT	PERFORMANCE CRITERIA
	1.9 Inform <i>customers</i> of delays in the point-of-sale operation.
2 Use numbers in the workplace.	2.1 Accurately list a range of possible retail workplace <i>numerical problems</i> .
	2.2 Collect numerical information from various sources and calculate accurately with or without the use of a calculator.
3 Perform point-of-sale transactions.	3.1 Complete <i>point-of-sale transactions</i> according to store policy.
	3.2 Identify and apply store procedures in respect of cash and non-cash transactions.
	3.3 Identify and apply store procedures in regard to exchanges and returns.
	3.4 Move goods through point-of-sale area efficiently and with attention to fragility and packaging.
	3.5 Accurately enter information entered into point-of-sale equipment.
	3.6 State price or total and amount of cash received verbally to customer.
	3.7 Tender correct change.
4 Complete sales.	4.1 Complete customer order forms, invoices and receipts accurately.
	4.2 Accurately identify and process customer delivery requirements according to set timeframes.
	4.3 Process sales transactions or direct customers to point-of-sale terminals according to store policy without undue delay.
5 Wrap and pack goods.	5.1 Maintain and request adequate supplies of <i>wrapping and packaging materials</i> .
	5.2 Select appropriate wrapping or packaging material.
	5.3 Wrap merchandise neatly and effectively where required.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	5.4 Pack items safely to avoid damage in transit, and attach labels where required.
	5.5 Arrange transfer of merchandise for parcel pick-up or other <i>delivery methods</i> if required.

## **Required Skills and Knowledge**

### **REQUIRED SKILLS AND KNOWLEDGE**

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- following set routines and procedures
- interpersonal communication skills to:
  - inform customers of delays
  - state price or total and amount of cash received
  - request adequate supplies of wrapping material or bags through clear and direct communication
  - ask questions to identify and confirm requirements
  - share information
  - use language and concepts appropriate to cultural differences
  - use and interpret non-verbal communication
- questioning and active listening
- dealing with different types of transactions
- wrapping and packing techniques
- store bag checking procedures
- merchandise handling techniques
- literacy skills in regard to sales and delivery documentation
- numeracy skills in regard to rendering change.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in relation to:
  - customer service
  - point-of-sale transactions
  - allocated duties and responsibilities
  - exchanges and returns

## **REQUIRED SKILLS AND KNOWLEDGE**

- handling, packing and wrapping of goods or merchandise
- the range of services provided by the store
- stock availability
- relevant legislation and statutory requirements, including:
  - Trade Practices Act and consumer law
  - industry codes of practice
  - OHS
- cash and non-cash handling procedures, including:
  - opening and closing point-of-sale terminal
  - clearance of terminal and transference of tender
  - maintenance of cash float
  - tendering of change
  - counting cash
  - calculating non-cash documents
  - balancing point-of-sale equipment
  - recording takings
  - security of cash and non-cash transactions
  - change required and denominations of change
- numeracy skills in regard to workplace functions:
  - addition
  - subtraction
  - multiplication
  - division
  - percentages
  - use of a calculator
- functions and procedures for operating point-of-sale equipment, including:
  - registers
  - numerical display board
  - calculators
  - electronic scales
  - scanners.

## **Evidence Guide**

### **EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the

## EVIDENCE GUIDE

performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- consistently operates point-of-sale equipment according to manufacturer instructions and store policy and procedures
- consistently applies store policy and procedures in regard to cash handling and point-of-sale transactions
- interprets, calculates and records numerical information accurately
- processes sales transaction information responsibly and accurately according to store policy and procedures
- constantly applies store policy and procedures in regard to the handling, packing, wrapping and delivery of goods or merchandise.

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a real or simulated work environment
- relevant documentation, such as:
  - stock, inventory and price lists
  - financial transaction dockets and slips
  - lay-by, credit and product return slips
  - store policy and procedures manuals
- a range of point-of-sale equipment.

### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- a role play
- third-party reports from a supervisor
- customer feedback
- answers to questions about specific skills and knowledge
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the



## EVIDENCE GUIDE

industry sector, workplace and job role is recommended, for example:

- SIRXRSK001A Minimise theft
- SIRXCCS002A Interact with customers
- SIRXINV001A Perform stock control procedures
- SIRXFIN001A Balance point-of-sale terminal.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Point-of-sale equipment*** may include:

- cash register
- cash drawer
- scanner
- EFTPOS terminal
- electronic scales
- security tagging
- numerical display board.

***Store policy and procedures*** in regard to:

- operation of point-of-sale equipment
- security
- sales transactions

## **RANGE STATEMENT**

- handling techniques of stock
- financial transactions
- cash handling.

*Point-of-sale documents* may include:

- order forms
- lay-by slips
- credit slips
- product return slips
- message pads
- promotional materials.

*Customers* may include:

- new or repeat contacts
- internal and external contacts
- customers with routine or special requests
- people from a range of social, cultural and ethnic backgrounds and with varying physical and mental abilities.

*Numerical problems* may include:

- calculations of cash amounts and change
- addition and subtraction
- multiplication and division
- percentages
- measurement
- estimation of quantities.

*Point-of-sale transactions* may include:

- EFTPOS
- cheques
- travellers cheques
- credit cards and store cards
- smart cards
- lay-by
- returns
- exchanges
- gift vouchers.

*Wrapping and packaging*

- boxes
- bags

## **RANGE STATEMENT**

*materials* may include:

- paper
- bubble wrap
- gift wrapping
- adhesive tape
- ribbon
- string.

*Delivery methods* may include:

- parcel pick-up
- post or express post
- courier
- freight
- domestic or international delivery.

## **Unit Sector(s)**

**Sector**

Cross-Sector

## **Competency field**

**Competency field**

Client and Customer Service

## SIRXFIN001A Balance point-of-sale terminal

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit describes the performance outcomes, skills and knowledge required to balance a register or terminal in a retail environment. It involves clearing the register, counting money, calculating non-cash transactions and reconciling takings.

### Application of the Unit

#### Application of the unit

This unit is undertaken with some supervision. It requires the team member to apply store policy and procedures to accurately and efficiently balance a register or terminal, maintain a cash float, reconcile cash and non-cash transactions and record takings.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

#### Prerequisite units

Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Remove takings from register or terminal.	<p>1.1 Perform <b><i>register or terminal</i></b> balance at designated times according to <b><i>store policy and procedures</i></b>.</p> <p>1.2 Separate cash float from takings prior to balancing procedure and secure according to store policy.</p> <p>1.3 Supply change to register or terminal according to store policy.</p> <p>1.4 Acquire and accurately interpret register or terminal reading or print-out.</p> <p>1.5 Remove and transport cash and <b><i>non-cash documents</i></b> according to store security policy and procedures.</p>
2 Reconcile takings.	<p>2.1 Count cash accurately.</p> <p>2.2 Calculate non-cash documents accurately.</p> <p>2.3 Determine balance between register or terminal reading and sum of cash and non-cash transactions.</p>

## ELEMENT

## PERFORMANCE CRITERIA

- 2.4 Report discrepancies between register or terminal reading and sum of cash and non-cash transactions to *relevant personnel* according to store policy.
- 2.5 Record store and individual department takings and file *records* according to store policy.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- operating register or terminal
- completing tasks in a set timeframe
- literacy skills in regard to:
  - interpreting documentation
  - completing documentation
- numeracy skills in regard to:
  - counting cash
  - calculating non-cash transactions
  - reporting on takings.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to:
  - register or terminal balance
  - cash and non-cash transactions security
  - cash float
  - operation of equipment used at register or terminal
- cash and non-cash handling procedures, including:
  - opening and closing point-of-sale terminal
  - clearance of terminal and transference of tender
  - maintenance of cash float
  - counting cash

## REQUIRED SKILLS AND KNOWLEDGE

- calculating non-cash documents
- balancing point-of-sale terminal
- recording takings
- security of cash and non-cash transactions
- change required and denominations of change
- EFTPOS
- credit cards
- gift vouchers
- lay-by
- credit and returns.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

#### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- operates register or terminal equipment according to manufacturer instructions and store policy
- consistently applies store policy and procedures in regard to handling cash and removing takings from register or terminal
- consistently applies store policy and procedures in regard to cash float
- consistently applies store policy and procedures in regard to reading registers and recording information
- processes documentation and records responsibly and according to store policy and procedures
- reconciles takings according to store policy and procedures.

#### **Context of and specific**

Assessment must ensure access to:

## EVIDENCE GUIDE

### resources for assessment

- a real or simulated work environment
- relevant documentation, such as:
  - financial transaction dockets, slips and invoices
  - sample debit card and credit card vouchers
  - recording and tally sheets
  - store policy and procedure manuals in regard to register or terminal balance
- register or terminal and related equipment.

### Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- a role play
- third-party reports from a supervisor
- written or verbal questioning to assess knowledge and understanding
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- SIRXCCS001A Apply point-of-sale handling procedures
- SIRXRSK001A Minimise theft.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Register or terminals*** may be:

- manual
- electronic
- cleared by operator or specialist staff
- cleared at intervals during or at close of trading.

***Store policy and procedures*** in regard to:

- register or terminal balance
- cash handling
- security.

***Non-cash documents*** may relate to:

- credit cards
- cheques
- gift vouchers
- hire-purchase
- lay-by
- cash on delivery (COD)
- customer refunds
- customer credit ratings.

***Relevant personnel*** may include:

- manager
- supervisor
- team leader.

***Records*** may be:

- manual
- electronic.

## Unit Sector(s)

Sector

Cross-Sector

## Competency field

Competency field            Finance

## SIRXICT001A Operate retail technology

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit describes the performance outcomes, skills and knowledge required to operate a variety of retail equipment. It involves identifying the correct equipment required for a given task, maintaining retail equipment, applying keyboard skills and operating data entry equipment.

### Application of the Unit

#### Application of the unit

This unit requires the skilled operation and maintenance of a range of retail equipment, including point-of-sale systems, keyboards and data entry equipment according to manufacturer instructions, design specifications, store policy and designated timeframes. This work is undertaken with some supervision and guidance.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

#### Prerequisite units

Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Maintain retail equipment.	1.1 Identify purpose of <b><i>equipment</i></b> used in store or department. 1.2 Operate equipment according to design specifications and <b><i>safety requirements</i></b> . 1.3 Identify equipment faults and report to <b><i>relevant personnel</i></b> . 1.4 Identify and apply maintenance program for retail equipment according to <b><i>store policy and procedures</i></b> .
2 Apply keyboard skills.	2.1 Operate keyboard using typing techniques within designated speed and accuracy requirements. 2.2 Enter and edit information accurately.
3 Operate data entry equipment.	3.1 Enter data using relevant equipment according to store policy and procedures.

## ELEMENT

## PERFORMANCE CRITERIA

- 3.2 Operate price marking equipment according to manufacturer instructions and store policy.
- 3.3 Enter data accurately and within designated time limits.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- completing tasks in set timeframe
- dealing with different types of transactions
- following common fault-finding procedures
- operation and use of store retail equipment
- literacy and numeracy skills in regard to:
  - reading store procedures for operating equipment
  - data entry
  - performing point-of-sale transactions.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to:
  - the operation of store retail equipment
  - maintenance of store retail equipment
  - reporting problems and faults
- relevant legislation and statutory requirements
- relevant OHS regulations
- relevant industry codes of practice
- purpose and impact of using electronic technology
- operation and maintenance of store retail equipment
- licensing requirements for carrying and moving merchandise (if applicable).

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

#### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- operates a range of store retail equipment according to store policy and procedures and industry codes of practice
- operates and maintains a range of store retail equipment according to manufacturer instructions and design specifications
- applies store maintenance program and reports faults and problems
- consistently applies safe working practices in the operation and maintenance of store retail equipment according to OHS legislation and codes of practice
- reads and interprets operation manuals to solve routine faults and errors and maintains and uses equipment effectively
- uses keyboard skills to enter and edit data accurately
- completes tasks in set timeframe.

#### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a real or simulated work environment
- relevant documentation, such as:
  - store policy and procedure manuals
  - manufacturer instructions and operation manuals
- a range of store retail equipment.

#### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- a role play
- third-party reports from a supervisor
- customer feedback

## EVIDENCE GUIDE

- answers to questions about specific skills and knowledge
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Equipment*** may include:

- point-of-sale terminals
- electronic bar coding equipment for price labelling and stocktaking
- portable data entry
- printers
- EFTPOS terminals
- electronic ordering equipment
- wrapping and packing equipment
- equipment for carrying or moving merchandise
- equipment for storage of merchandise, including refrigerators
- weighing machines

## RANGE STATEMENT

- thermometers
- security tag systems
- trolley return equipment
- computers
- scanners
- numerical keyboard equipment, including calculators.

*Safety requirements* may include:

- hazard identification (e.g. workplace inspections)
- emergency, fire and accident procedures
- personal safety procedures
- stress management
- procedures for the use of personal protective clothing and equipment
- reporting incidents and accidents in the workplace.

*Relevant personnel* may include:

- supervisor
- team leader
- manager.

*Store policy and procedures* in regard to:

- store administration
- clerical systems
- operating and maintaining retail equipment
- OHS.

## Unit Sector(s)

**Sector**

Cross-Sector

## Competency field

**Competency field**

Computer Operations and ICT Management



**Competency field**

Computer Operations and ICT Management

## **SIRXICT003A Operate retail information technology systems**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit describes the performance outcomes, skills and knowledge required to use and apply store information technology systems in a retail environment. It involves demonstrating knowledge of the hardware and software in use, editing and updating information and solving problems in relation to hardware and software.

### **Application of the Unit**

**Application of the unit** This unit requires the team member to demonstrate the capacity to operate information technology systems, resolve system faults, perform point-of-sale financial transactions, and safely and securely store electronic information according to store policy and procedures and relevant legislation. Those with managerial or supervisory responsibility undertake this unit.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

**Prerequisite units** Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Use store information technology system.	<p>1.1 Demonstrate knowledge of store <b><i>information technology system</i></b> and convey to other <b><i>staff members</i></b> as required.</p> <p>1.2 Identify and operate <b><i>hardware</i></b> according to manufacturer instructions and <b><i>store policy and procedures</i></b>.</p> <p>1.3 Identify and use <b><i>software</i></b> according to manufacturer instructions and store procedures.</p> <p>1.4 Describe the <b><i>application and uses</i></b> of information technology systems available.</p> <p>1.5 Transmit data according to electronic data interchange procedures as required.</p> <p>1.6 Use keyboard skills to accurately enter <b><i>information</i></b> as required by store policy.</p> <p>1.7 Regularly perform <b><i>back-up procedures</i></b> according to store policy.</p>

ELEMENT	PERFORMANCE CRITERIA
2 Edit and update information.	2.1 Identify information to be edited and updated according to store procedures. 2.2 Edit and update information on system according to store policy and procedures. 2.3 Identify and enter price changes into store system as required. 2.4 Ensure shelf data price and computer records match.
3 Solve problems.	3.1 Identify equipment, hardware and software <i>faults</i> and rectify where possible or seek expert assistance without delay. 3.2 Monitor and implement maintenance program for hardware and software systems according to manufacturer specifications and store procedures. 3.3 Handle routine problems using appropriate <i>problem-solving techniques</i> and refer to <i>relevant personnel</i> as required. 3.4 Evaluate and resolve problems arising at point of sale according to store procedures and <i>relevant legislation</i> . 3.5 Provide assistance positively and actively to staff as problems arise.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- using store technology information systems
- application and use of hardware and software
- interpersonal communication skills to:
  - convey knowledge of store technology system to other staff members

## REQUIRED SKILLS AND KNOWLEDGE

- refer problems to appropriate personnel
- provide assistance to staff through clear and direct communication
- ask questions to identify and confirm requirements
- share information
- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication
- literacy and numeracy skills in regard to processing, recording and documenting information.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to use and operation of store information technology systems, including:
  - use and maintenance of hardware and software systems
  - solutions to problems and breakdowns
  - operation of equipment
- relevant legislation and statutory requirements, including:
  - consumer law
  - credit procedures
  - OHS
- relevant industry codes of practice
- store products and services range, including pricing structure
- manufacturer specifications in regard to operation of hardware and software
- software licensing specifications
- problem-solving techniques

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in** Evidence of the following is essential:

- applies store policy and procedures in regard to information technology systems, including:

## EVIDENCE GUIDE

### **this unit**

- resolution of system faults
- use and application of store credit and EFTPOS
- reviewing and entering information on store system
- follows requirements of relevant legislation and statutory requirements, including consumer law and credit procedures.

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a real or simulated work environment
- hardware and software instruction manuals
- information technology system
- relevant documentation, such as:
  - store or sample policy and procedures on management of information technology systems
  - legislation and statutory requirements
  - OHS requirements
  - industry codes of practice.

### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- a role play
- third-party reports from a supervisor
- answers to questions about specific skills and knowledge
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

### **Assessing employability skills**

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be

## EVIDENCE GUIDE

assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Information technology system*** used may be:

- centrally based
- store-based
- networked.

***Staff members*** may be:

- full-time, part-time or casual
- under contract
- people with varying degrees of language and literacy
- people from a range of cultural, social and ethnic backgrounds
- people with a range of responsibilities and job descriptions.

***Hardware*** may include:

- personal computers or terminals (stand-alone or networked)
- scanning equipment
- bar coding
- point-of-sale terminals
- hand-held pricing equipment.

***Store policy and procedures*** in regard to:

- information technology systems
- processing sales orders.

## **RANGE STATEMENT**

*Software* may include:

- word processing
- databases
- spreadsheets
- financial
- electronic data interchange (EDI).

*Application and uses* may include:

- point-of-sale operations, including:
  - EFTPOS
  - credit cards
  - smart cards
  - loyalty cards
  - fly buys
  - online sales
- credit checks for granting of credit or loans
- arrangement of credit for customer via a third party
- customer records
- financial management
- pricing, price changes
- inventory control
- electronic cataloguing
- stock transfers and delivery
- individual, department or item sales performance analysis
- staff payroll (from staff log-in and log-out)
- staff rosters
- use of multimedia
- use of internet facilities.

*Information* may include:

- price changes (manually or electronically)
- staffing information
- customer details or records, including names, addresses, and consumer information or profiles
- stock records
- stock transfers
- orders.

*Back-up procedures* may

- zip disc
- CD



## **RANGE STATEMENT**

include:

- DVD
- digital tape
- external hard drive
- off-site data storage.

*Faults* may include:

- hardware faults or breakdowns
- software
- staff abilities and training
- point-of-sale (e.g. EFTPOS, credit facilities and cheque clearances)
- pricing variations.

*Problem-solving techniques* may include:

- routine procedures
- manufacturer recommendations
- lateral thinking
- referral to:
  - operator or manager
  - specialist or expert.

*Relevant personnel* may include:

- relevant managers
- supervisor
- team leader
- technical specialist.

*Relevant legislation* may include:

- consumer law
- credit procedures
- OHS.

## **Unit Sector(s)**

**Sector**

Cross-Sector

## **Competency field**

**Competency field**            Computer Operations and ICT Management

## SIRXINV001A Perform stock control procedures

### Modification History

Not applicable.

### Unit Descriptor

**Unit descriptor** This unit describes the performance outcomes, skills and knowledge required to handle stock in a retail environment. It involves receiving and processing incoming goods, rotating stock and dispatching goods.

### Application of the Unit

**Application of the unit** This unit requires the consistent application of store policy and relevant legislation, including safe working practices in the handling and moving of stock, to ensure efficient stock control in a retail environment. Team members are required to receive and process incoming goods, dispatch outgoing goods, rotate stock and maintain stock levels, assist with stocktaking, and report problems or discrepancies in stock to relevant personnel.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

**Prerequisite units** Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Receive and process incoming goods.	<p>1.1 Maintain cleanliness and orderliness in receiving bay according to <b><i>store policy and procedures</i></b>.</p> <p>1.2 Unpack goods using correct <b><i>handling techniques and equipment</i></b> according to store policy.</p> <p>1.3 Remove and promptly dispose of packing materials according to store policy and relevant <b><i>legislative requirements</i></b>.</p> <p>1.4 Check incoming stock and validate against purchase orders and delivery documentation according to store policy and relevant legislative requirements.</p> <p>1.5 Inspect items received for damage, quality, use-by dates, breakage or discrepancies and record according to store policy.</p> <p>1.6 Record stock levels on store <b><i>stock systems</i></b> according to store policy.</p> <p>1.7 Rotate and store stock according to the first in first out (FIFO) principle.</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	1.8 Dispatch stock to appropriate area or department.
	1.9 Apply stock price and code labels when required according to store policy.
2 Rotate stock.	2.1 Carry out stock rotation procedures according to store routine and policy.
	2.2 Perform store code checking and reporting procedures, including recording of waste and markdowns.
	2.3 Place merchandise to achieve a balanced, fully-stocked display appearance and promote sales.
	2.4 Place excess stock in storage or dispose of according to store policy and legislative requirements.
	2.5 Maintain safe lifting, shifting and carrying techniques according to store OHS policy and legislative requirements.

## **Required Skills and Knowledge**

### **REQUIRED SKILLS AND KNOWLEDGE**

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- following set routines and procedures
- using electronic labelling and ticketing equipment
- literacy and numeracy skills in regard to:
  - stock records and delivery documentation
  - reporting problems.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to:
  - stock control
  - store labelling policy
  - product quality standards

## REQUIRED SKILLS AND KNOWLEDGE

- correct unpacking of goods
- out-of-date, missing or damaged stock
- equipment used
- stock location
- waste disposal
- methods of storage
- delivery documentation
- stock record documentation
- dispatch documentation
- reporting faults and problems
- relevant legislation and statutory requirements
- relevant industry codes of practice
- relevant OHS regulations.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in this unit** Evidence of the following is essential:

- consistently applies store policy and procedures, industry codes of practice, relevant legislation and statutory requirements in regard to stock control
- consistently applies safe working practices in the manual handling and moving of stock according to OHS legislation and store policy
- interprets and applies manufacturer instructions with regard to handling stock and using relevant equipment
- receives and processes incoming goods and dispatches outgoing goods according to store policy and procedures
- rotates stock and performs out-of-code checking and reporting according to store policy and procedures
- interprets and processes information accurately and responsibly.

## EVIDENCE GUIDE

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a retail work environment
- relevant equipment, including:
  - stock moving equipment
  - manual and electronic labelling and ticketing equipment
- computers and stock recording equipment
- relevant documentation, such as:
  - invoices, packing slips, dispatch documents and order forms
  - recording and tally sheets
  - store policy and procedures manuals
  - OHS regulations
  - relevant legislation and statutory requirements
  - industry codes of practice.

### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- written or verbal questioning to assess knowledge and understanding
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- SIRXCCS001A Apply point-of-sale handling procedures
- SIRXRSK001A Minimise theft
- SIRXCCS002A Interact with customers
- SIRXFIN001A Balance point-of-sale terminal.

### **Assessing employability skills**

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry

## EVIDENCE GUIDE

sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Store policy and procedures*** may relate to:

- stock control
- reception and dispatch
- OHS
- food safety.

***Handling techniques*** may vary according to:

- stock characteristics
- industry codes of practice
- legislative requirements.

***Equipment*** may include:

- electronic bar coding equipment
- weighing machines
- thermometers
- trolley return equipment
- portable data entry
- cutting equipment
- protective clothing.

***Legislative requirements*** may include:

- OHS
- hazardous substances and dangerous goods
- labelling of workplace substances



## **RANGE STATEMENT**

- waste removal and environmental protection
- transport, storage and handling of goods.

*Stock systems* may be:

- manual
- electronic.

## **Unit Sector(s)**

**Sector** Cross-Sector

## **Competency field**

**Competency field** Inventory

## SIRXINV002A Maintain and order stock

### Modification History

Not applicable.

### Unit Descriptor

#### Unit descriptor

This unit describes the performance outcomes, skills and knowledge required to maintain and order stock in a retail environment. It involves monitoring receipt and dispatch of goods, maintaining stock records, coordinating stocktake, identifying stock losses, processing orders and following up on orders.

### Application of the Unit

#### Application of the unit

This unit requires staff to exercise managerial responsibility to monitor and coordinate stock levels, storage, distribution and reorder cycles; roster staff, organise and coordinate stocktakes, maintain accurate records and routinely report on inventory status to relevant personnel according to store policy and procedures.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

#### Prerequisite units

Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Monitor receipt and dispatch of goods	<p>1.1 Delegate responsibility for receipt and dispatch of goods to <b><i>appropriate staff</i></b>.</p> <p>1.2 Implement store procedures in regard to receipt, dispatch and secure storage of goods.</p> <p>1.3 Observe <b><i>staff</i></b> functions to ensure store procedures are followed and documentation is completed correctly.</p> <p>1.4 Implement store procedures to ensure goods inspected for quantity and quality on receipt.</p> <p>1.5 Act upon variations to quantity and quality of delivered goods according to <b><i>store policy and procedures</i></b>.</p> <p>1.6 Supervise safe <b><i>handling and storage of goods</i></b> according to store policy.</p>

ELEMENT	PERFORMANCE CRITERIA
2 Maintain stock records.	2.1 Monitor and maintain stock levels at required levels. 2.2 Maintain, monitor and adjust stock reorder cycles as required. 2.3 Inform team members of their individual responsibilities in regard to recording of stock. 2.4 Maintain stock storage and movement <i>records</i> according to store policy. 2.5 Record stock discrepancies and follow procedures according to store policy. 2.6 Monitor stock performance and identify and <i>report</i> fast and slow selling items according to store policy.
3 Coordinate stocktake or cyclical count.	3.1 Interpret policy and procedures in regard to <i>stocktaking</i> and cyclical counts and explain to team members. 3.2 <i>Roster</i> staff according to allocated budget and time constraints. 3.3 Allocate stocktaking tasks to individual team members. 3.4 Provide team members with clear directions for the performance of each task. 3.5 Allocate team members to ensure effective use of staff resources to complete task. 3.6 Produce accurate reports on stocktake data, including discrepancies, for management.
4 Identify stock losses.	4.1 Identify, record and assess losses against potential loss forecast on a regular basis. 4.2 Identify avoidable losses and establish reasons. 4.3 Recommend and implement possible solutions.
5 Process orders.	5.1 Process and raise orders for stock as requested according to store policy and procedures. 5.2 Maintain <i>ordering and recording system</i> . 5.3 Ensure availability of sample range according to buying plan.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	5.4 Order pricing materials as required.
	5.5 Record negotiated purchase and supply agreements and file for retrieval.
6 Follow up orders.	6.1 Monitor delivery process to meet agreed deadlines.
	6.2 Handle routine supply problems or refer to management as required by store policy.
	6.3 Maintain ongoing liaison with buyers, store or departments, warehouse and <i>suppliers</i> to ensure continuity of supply.
	6.4 Distribute stock according to store or department allocation.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- store stocktaking systems
- use of electronic recording equipment
- interpersonal communication skills to:
  - inform team members of their responsibilities and give instructions
  - explain policies and procedures to staff
  - allocate tasks and provide directions for performance of tasks
  - liaise with buyers, store and departments, warehouse and suppliers through clear and direct communication
  - ask questions to identify and confirm requirements
  - use language and concepts appropriate to cultural differences
  - use and interpret non-verbal communication
- time management
- negotiation skills
- report preparation and presentation
- literacy and numeracy skills in regard to:
  - stock control reports and documentation
  - processing orders

## REQUIRED SKILLS AND KNOWLEDGE

- maintaining delivery and supply records
- stock distribution records
- maintaining stock ordering and recording systems.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to:
  - stock control
  - store merchandising system
  - current and future stock levels
  - bar codes, labels and price tags
  - store stock recording system
  - stock replenishment and reorder procedures
  - inter- and intra-store and department transfers
  - reporting of stock discrepancies and damage
  - identifying and recording stock losses
  - identifying and recording discrepancies
  - existing suppliers
  - quality control procedures and requirements
  - receipt and dispatch of goods, including inspection for quality and quantity
- relevant licensing requirements for moving stock mechanically
- relevant legislation and statutory requirements
- relevant industry codes of practice
- relevant OHS legislation and codes of practice
- principles and techniques for interpersonal communication skills.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in** Evidence of the following is essential:

- consistently implements and monitors store policy and

## EVIDENCE GUIDE

### **this unit**

procedures regarding receipt, dispatch and secure storage of goods

- regularly monitors staff implementation of store procedures and documentation in regard to receipt, dispatch and secure storage of goods
- monitors stock levels, storage, movement and reorder cycles on a regular basis.
- organises and coordinates stocktake according to store policy and procedures
- consistently raises and processes stock orders and maintains record system according to store policy and procedures
- monitors delivery processes and distributes stock to ensure continuity of supply.

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a retail work environment
- relevant documentation, such as:
  - store policy and procedures for receipt and dispatch of goods
  - store procedures for stocktake
  - OHS legislation and codes of practice
  - industry codes of practice
  - legislation and statutory requirements
  - store merchandising and marketing policy and procedures
  - inter- and intra-store and department transfer procedures
  - store quality control procedures and requirements.

### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- written or verbal questioning to assess knowledge and understanding
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

## EVIDENCE GUIDE

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Appropriate staff*** may include:

- frontline staff
- relevant managers
- supervisor
- team leader
- specialist staff.

***Staff*** may include:

- full-time, part-time, casual or contract staff
- people from a range of social, cultural and ethnic backgrounds
- people with varying degrees of language and literacy levels.

***Store policy and procedures*** in regard to:

- stock control
- stock control system
- recording procedures



## **RANGE STATEMENT**

- procedures for investigating discrepancies
- store merchandise and marketing
- pricing, labelling and packaging requirements
- quality control policy and procedures.

***Handling and storage of goods*** may vary according to:

- stock characteristics
- industry codes of practice.

***Records*** may be:

- manual
- digital.

***Reports*** for management may include:

- financial reports
- business documents
- informal reports
- stocktake reports.

***Stocktaking*** may be:

- cyclical
- compliance driven.

***Roster*** may include:

- varying levels of staff training
- staffing levels
- routine or busy trading conditions
- full-time, part-time or casual staff
- range of staff responsibilities.

***Ordering and recording system*** may be:

- manual
- digital.

***Suppliers*** may include:

- existing contacts
- new contacts
- local suppliers
- overseas supplies.

## **Unit Sector(s)**

**Sector** Cross-Sector

## **Competency field**

**Competency field** Inventory

## **SIRXINV005A Control inventory**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit describes the performance outcomes, skills and knowledge required to control inventory in a retail environment. It involves managing receipt, dispatch and storage of merchandise, and managing stock control.

### **Application of the Unit**

**Application of the unit** This unit requires the team member to operate at a supervisory level to plan, coordinate and implement activities associated with the receipt, dispatch, storage and movement of merchandise, including observing maintenance procedures for storage areas and equipment according to store policy and procedures and relevant legislation.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

**Prerequisite units** Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Manage receipt, dispatch and storage of merchandise.	<p>1.1 Receive, dispatch and store merchandise according to <b><i>store policy and procedures</i></b>.</p> <p>1.2 Determine cost-effective and efficient methods for goods movement according to store policy.</p> <p>1.3 Implement maintenance procedures for storage areas and <b><i>equipment</i></b> according to store policy.</p>
2 Manage stock control.	<p>2.1 Implement store policy and procedures in regard to <b><i>stock control</i></b> and inventories.</p> <p>2.2 Establish and implement store procedures to monitor and control stock levels.</p> <p>2.3 Maintain budgeted stock levels.</p> <p>2.4 Establish and implement stocktaking procedures.</p> <p>2.5 Establish and implement <b><i>contingency plans</i></b> in regard to stock delivery times.</p>

## ELEMENT

## PERFORMANCE CRITERIA

2.6 Document and prepare accurate *reports* on stock inventories.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- store stocktaking systems
- use of electronic recording equipment
- time management
- report preparation and presentation
- literacy and numeracy skills in regard to:
  - stock control reports and documentation
  - processing orders
  - maintaining delivery and supply records
  - stock distribution records
  - maintaining stock recording systems
  - data analysis.

The following knowledge must be assessed as part of this unit:

- store policy and procedures in regard to:
  - receipt of goods from suppliers
  - dispatch of goods
  - shrinkage prevention
  - waste controls
  - safety controls
  - secure storage in an appropriate environment
  - equipment used to move stock
- store systems and equipment for stock recording and control
- inventory control
- storage security
- licensing requirements for operating moving equipment (if applicable)
- relevant legislation and statutory requirements

## REQUIRED SKILLS AND KNOWLEDGE

- relevant industry codes of practice
- OHS legislation and codes of practice.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

#### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- plans, coordinates and implements activities associated with receipt, dispatch, storage and movement of merchandise according to store policy and procedures, including OHS policies and guidelines
- implements maintenance procedures for storage areas and equipment according to store policy
- plans, coordinates and implements activities associated with stock control, including:
  - monitoring and controlling stock levels
  - establishing and maintaining stocktaking procedures
  - documenting and reporting on inventories according to store policy and procedures.

#### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a retail work environment
- relevant documentation, such as:
  - store policy and procedures on inventory control
  - legislation and statutory requirements
  - industry codes of practice
  - OHS legislation and codes of practice
- access to:
  - a stock control system
  - stock control equipment

## EVIDENCE GUIDE

- a team.

### Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- written or verbal questioning to assess knowledge and understanding
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Store policy and procedures*** in regard to:

- receipt of goods from suppliers
- dispatch of goods
- shrinkage prevention
- waste controls

## **RANGE STATEMENT**

- safety controls
- secure storage
- stock control and inventories.

*Equipment* may include:

- electronic bar coding equipment
- weighing machines
- thermometers
- climate control
- cold storage units
- storage fixtures
- trolley return equipment
- portable data entry
- cutting equipment
- protective clothing.

*Stock control* may include:

- stocktaking
- monitoring stock levels
- cyclical counts
- minimisation of out-of-date stock
- quality control.

*Contingency plans* may include:

- breakdowns
- delays
- floods
- breakages.

*Reports* may include:

- business documents
- informal reports
- stocktake reports.

## **Unit Sector(s)**

**Sector**

Cross-Sector



## Competency field

Competency field                  Inventory

## SIRXMER002A Coordinate merchandise presentation

### Modification History

Not applicable.

### Unit Descriptor

**Unit descriptor** This unit describes the performance outcomes, skills and knowledge required to supervise sales and other staff implementing and maintaining displays according to store merchandising standards.

### Application of the Unit

**Application of the unit** This unit requires the team member to apply knowledge of store merchandising and pricing policy and standards staff to support and coordinate relevant frontline staff members and ensure that they arrange, present and label or price merchandise according to store requirements. It also involves informing staff of store merchandise presentation requirements for sales, promotions and special events, and providing feedback to management in regard to improvement of store marketing and promotional activities.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

**Prerequisite units** Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Coordinate merchandise presentation and display.	<p>1.1 Identify items to be advertised or promoted according to store merchandising policy.</p> <p>1.2 Plan, coordinate and evaluate promotions or special events as directed by management.</p> <p>1.3 Plan and supervise construction and maintenance of <i>displays</i> in order to achieve balance and visual impact.</p> <p>1.4 Inform <i>staff</i> of store <i>display standards and requirements</i>.</p> <p>1.5 Inform staff of occurrence and timing of <i>promotions and special events</i>.</p> <p>1.6 Ensure product or service <i>display information</i> accurately depicts product or service being promoted.</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	1.7 Ensure displays are completed according to required time schedule, with minimum disruption to <i>customer</i> service and traffic flow.
	1.8 Construct and maintain displays in a safe, secure manner.
	1.9 Regularly monitor replenishment of merchandise and rotation of stock on store displays and take action as required.
	1.10 Inform staff of appropriate timing for dismantling and disposal of displays.
	1.11 Evaluate merchandise presentation against sales turnover and store presentation standards.
	1.12 Provide management with feedback in regard to improvement of store marketing and promotional activities.
2 Implement merchandise pricing.	2.1 Implement store policy and procedures in regard to pricing and ticketing.
	2.2 Identify current prices for products and services and amend according to store policy.
	2.3 Inform team members of price changes and current pricing policies.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- use and maintenance of electronic labelling and ticketing equipment
- interpersonal communication skills to:
  - provide information to staff
  - provide feedback to management through clear and direct communication
  - share information

## **REQUIRED SKILLS AND KNOWLEDGE**

- give instructions
- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication
- literacy and numeracy skills in relation to:
  - machine or manual preparation of labels and tickets
  - reading and interpreting store policies and procedures
  - merchandise presentation and pricing.

The following knowledge must be assessed as part of this unit:

- store policies and procedures, in regard to:
  - merchandising, pricing and ticketing
  - merchandise range
  - storage of stock
  - stock rotation and replenishment
  - minimum stock levels required
- procedure for accessing information and implementing price changes
- principles of display and design
- location of display areas
- availability and use of materials
- store promotional themes
- occurrence and timing of store promotions, including advertising, catalogues and special offers
- load-bearing capacity of fixtures and display areas
- correct storage procedures for labelling and ticketing equipment and materials
- relevant OHS legislation and codes of practice
- relevant legislation and statutory requirements, including Trade Practices and Fair Trading Acts
- pricing procedures, including GST requirements
- relevant industry codes of practice
- principles and techniques of interpersonal communication skills
- manufacturer specifications for the use of electronic labelling and ticketing equipment.

## **Evidence Guide**

### **EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the

## EVIDENCE GUIDE

performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- implements store policies and procedures in regard to displaying, merchandising, ticketing and pricing of stock
- coordinates and monitors display, promotion and presentation of merchandise according to store policies and procedures and legislative requirements
- identifies products to be advertised or promoted according to store merchandising policies
- coordinates construction and maintenance of displays within time schedule set in regard to advertising, catalogues, special offers and in-store promotions in a safe and secure manner
- informs staff of pricing policies, promotions, special events, display standards and requirements and timing for dismantling and disposal of displays
- evaluates and reports sales and presentation effectiveness of store merchandising and promotional activities to management and staff as required by store policies and procedures.

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a retail environment
- pricing and ticketing equipment
- merchandise for display
- display materials and props
- relevant documentation, such as:
  - store policy and procedures manuals on merchandising
  - OHS requirements
  - manufacturer instructions and operation manuals on electronic ticketing equipment
  - legislation and statutory requirements
  - industry codes of practice
  - a work team.

## EVIDENCE GUIDE

### Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- customer feedback
- answers to questions about specific skills and knowledge.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Displays*** may be located in a variety of areas, including:

- windows
- shelves
- walls
- fixtures on floor
- permanent or temporary
- interior or exterior
- publicly accessible areas.

## RANGE STATEMENT

*Staff* may be:

- full-time, part-time, casual or contract
- from within or outside own work team
- from a range of social, cultural and ethnic backgrounds.

*Display standards and requirements* may include :

- setting up new displays
- maintaining existing displays
- ticketing and display signage
- safety.

*Promotions and special events* may include:

- stock characteristics
- industry codes of practice.

*Display information* may include:

- product brand
- product characteristics, such as:
  - size
  - weight capacity
  - materials
- special guarantees
- price
- discount information.

*Customers* may include:

- new or repeat contacts
- external and internal contacts
- people from a range of social, cultural and ethnic backgrounds and with varying physical and mental abilities.

## Unit Sector(s)

**Sector**

Cross-Sector



## Competency field

Competency field            Merchandising

## **SIRXMER004A Manage merchandise and store presentation**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit describes the performance outcomes, skills and knowledge required to manage merchandise and store presentation.

### **Application of the Unit**

**Application of the unit** This unit requires the team member to apply knowledge of store merchandising to plan and manage store advertising and promotions, manage store pricing policies and housekeeping. It includes interpretation of and compliance with store layout and visual merchandising policies, developing and implementing procedures to manage merchandise pricing, and managing all aspects of store housekeeping, including contingency procedures. This role applies to frontline retail managers.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

**Prerequisite units** Nil

## Employability Skills Information

**Employability skills** The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Manage store merchandising.	<p>1.1 Ensure layout and presentation support market position and promote customer flow according to store <b><i>visual merchandising policies and plans</i></b>.</p> <p>1.2 Develop and implement layout assessment checks.</p> <p>1.3 Define standards for visual presentations and displays and clearly communicate to all staff</p> <p>1.4 Consult floor staff to assess customer response to space allocations.</p>
2 Plan and manage store advertising and promotions.	<p>2.1 Manage and implement store policies and procedures, in regard to store <b><i>promotional activities</i></b>.</p> <p>2.2 Organise activities in line with anticipated or researched customer requirements.</p> <p>2.3 Manage <b><i>promotions</i></b> in order to achieve maximum customer impact.</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	2.4 Negotiate arrangements with suppliers in regard to special promotional activities.
	2.5 Coordinate store activities to complement shopping centre or retail complex promotions.
	2.6 Develop and implement assessment checks to measure effectiveness of promotions, including layout, visual impact and customer response.
	2.7 Document and report on promotional activities.
3 Manage store pricing policies.	3.1 Maintain store pricing according to <b><i>organisation pricing policies and procedures</i></b> in regard to pricing.
	3.2 Maintain accurate information on pricing trends and changes and communicate to relevant staff.
	3.3 Develop and implement procedures for pricing according to store policies and <b><i>legislative requirements</i></b> .
4 Manage housekeeping.	4.1 Develop and implement store policies and procedures in regard to <b><i>store housekeeping and maintenance</i></b> .
	4.2 Develop and manage rosters or schedules, ensuring store housekeeping standards are monitored and maintained.
	4.3 Initiate <b><i>contingency plan</i></b> in the event of merchandise or store presentation problems.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- providing feedback on performance
- interpersonal communication skills to:
  - communicate store standards and expectations to staff
  - consult floor staff
  - negotiate arrangements with suppliers, through clear and direct communication
  - ask questions to identify and confirm requirements

## **REQUIRED SKILLS AND KNOWLEDGE**

- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication
- roster development
- report writing
- literacy skills in regard to:
  - researching, analysing and interpreting a broad range of written material
  - preparing rosters
  - preparing reports
  - documenting results

The following knowledge must be assessed as part of this unit:

- store policies and procedures, in regard to:
  - layout and presentation
  - advertising and promotions
  - pricing or marking down of goods, including risk assessment
  - housekeeping for premises, fittings, fixtures and equipment
  - store merchandise and service range
  - store merchandising plan
  - range and availability of new products and services
  - customer demand and market trends
  - product quality standards
- OHS legislation and codes of practice
- relevant legislation and statutory requirements
- relevant industry codes of practice
- pricing procedures, including GST requirements
- principles and techniques in:
  - visual merchandising
  - project management

## **Evidence Guide**

### **EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

## EVIDENCE GUIDE

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- collaboratively plans layout and presentation of merchandise according to store policies and procedures
- assesses effectiveness of layout and presentation according to sales targets or predetermined objectives
- collaboratively plans, coordinates and implements advertising and promotions activities according to store policies and procedures
- assesses and reports on effectiveness of advertising and promotions to staff and management according to store policies and procedures
- collaboratively plans, coordinates and implements pricing activities according to store policies and procedures
- collaboratively plans, coordinates and implements housekeeping activities according to store policies and procedures and OHS legislation, regulations and codes of practice.

### **Context of and specific resources for assessment**

Assessment must ensure access to:

- a retail work environment
- relevant documentation, such as:
  - store policy and procedures manuals
  - store merchandising plan
  - legislation and statutory requirements
  - OHS legislation, regulations and codes of practice
- a work team.

### **Methods of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- customer feedback
- answers to questions about specific skills and knowledge.

Holistic assessment with other units relevant to the

## EVIDENCE GUIDE

industry sector, workplace and job role is recommended.

### Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

***Visual merchandising policies and plans*** may include:

- target market
- market research
- store image
- store layout and space availability
- seasonal lines
- pricing policy.

***Promotional activities*** may involve:

- external and in-store activities
- corporate or locally based activities
- dealing with advertising agencies and consultants.

***Promotions*** may include:

- advertising
- catalogues
- newspapers
- posters

## RANGE STATEMENT

- Organisation pricing policies and procedures* may include:
- radio or TV
  - suppliers
  - internet
  - website.
  - marking down of slow moving stock
  - soiled or damaged goods
  - goods close to use-by date
  - end of season stock
  - pricing policies, including GST requirements.
- Legislative requirements* may include:
- Trade Practices and Fair Trading Acts
  - consumer law.
- Store housekeeping and maintenance* may include:
- store premises
  - fittings
  - fixtures
  - equipment.
- Contingency plan* may include:
- major spillages
  - flood, storm or cyclone
  - breakages
  - blackout
  - break-in.

## Unit Sector(s)

Sector Cross-Sector

## Competency field

Competency field Merchandising





## **TAADEL403A Facilitate individual learning**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit specifies the competency required to facilitate individual learning through a one-on-one relationship between a learner and facilitator.

#### **Competency Field**

Delivery and Facilitation

#### **Application of the Unit**

Learning facilitation relationships may take a number of forms including structured/semi-structured activities and formal/informal agreements. They may be independent of or part of a broad learning and delivery strategy. Identifying which learners and learning contexts may benefit from individual learning facilitation forms part of this competency.

Establishing an appropriate mutual relationship is critical, and the communication and interpersonal skills of the trainer/facilitator are paramount in creating the necessary preconditions for individual learning facilitation to be effective.

Two major techniques to facilitate individual learning are derived from mentoring and coaching methodologies. Other similar instructional techniques may also be appropriate, such as tutoring. The trainer/facilitator may use these techniques with one learner or with individual learners in a small group context.

Individual learning/facilitation relationships may be used to help an individual or individuals meet personal or job goals, learn new skills/knowledge or develop new learning / work behaviours. The role of the trainer/facilitator using these techniques is to advise, guide, support and respond to the needs of the individual learner.

The delivery mode may be face-to-face, online, via telecommunication or using a combination of media.

The competency specified in this unit is typically required by trainers/facilitators, supervisors, managers, leaders, practitioners, teachers, assessors and consultants.

This unit specifies the competency required to facilitate individual learning through a one-on-one relationship between a learner and facilitator.

#### **Competency Field**

Delivery and Facilitation

#### **Application of the Unit**

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Establishing an appropriate mutual relationship is critical, and the communication and interpersonal skills of the trainer/facilitator are paramount in creating the necessary preconditions for individual learning facilitation to be effective.

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The competency specified in this unit is typically required by trainers/facilitators, supervisors, managers, leaders, practitioners, teachers, assessors and consultants.

## **Application of the Unit**

Not applicable.

## **Licensing/Regulatory Information**

Not applicable.

## **Pre-Requisites**

Not applicable.

## **Employability Skills Information**

Not applicable.

## **Elements and Performance Criteria Pre-Content**

Not applicable.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 Identify individual learning facilitation requirements	<p>1.1 The need for individual learning/facilitation in the learning area is identified</p> <p>1.2 The goals for learning for individual learning/facilitation are identified and discussed with relevant persons</p> <p>1.3 Appropriate individual learning/facilitation techniques and processes are identified and documented to support individual learning needs and goals</p> <p>1.4 Evaluation processes are developed and agreed</p> <p>1.5 Organisational support for implementation is obtained, where relevant</p>
2 Establish the learning/facilitation relationship	<p>2.1 The individual's learning style, learner characteristics and the context for learning are identified</p> <p>2.2 The appropriate technique/process to facilitate individual learning is selected or organised and the basis of the technique/process is explained and discussed with the individual learner</p> <p>2.3 The boundaries and expectations of the learning/facilitation relationship are clarified and agreed using effective communication and interpersonal skills</p> <p>2.4 Any equity or additional support needs are clarified</p> <p>2.5 An individualised learning plan is developed, documented and discussed with the learner</p>
3 Maintain and develop the learning/facilitation relationship	<p>3.1 Preparation for each meeting/session is evident</p> <p>3.2 Effective communication and interpersonal skills are used to grow the relationship and sustain active participation</p> <p>3.3 Structured learning activities are developed to support and reinforce new learning, build on</p>

- strengths and identify areas for further development
- 3.4 Leadership and motivational skills are demonstrated to enable the learner to take responsibility for learning
  - 3.5 Learner cues are observed and changes in approach are made, where necessary, to maintain momentum
  - 3.6 Ethical behaviours are practised at all times
  - 3.7 Regular meetings are agreed to by both parties and scheduled to monitor the effectiveness of the learning/facilitation relationship
  - 3.8 Appropriate documentation to support the relationship is mutually developed and maintained
- 4 Close and evaluate the learning/facilitation relationship
- 4.1 Tools and signals are used to determine readiness for closure of individual learning/facilitation relationship
  - 4.2 The closure is carried out smoothly using appropriate interpersonal and communication skills
  - 4.3 Feedback is sought from the learner on the outcomes achieved and the value of the relationship
  - 4.4 The impact of the learning/facilitation relationship is reviewed using identified evaluation processes
  - 4.5 Self evaluation and reflection on own performance in managing the relationship is carried out and areas for improvement are identified
  - 4.6 The outcomes of the learning/facilitation relationship and evaluation of the process are documented and filed in accordance with legal, organisational and personal requirements

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of assessment followed by identification of specific aspects of evidence that will need to be addressed in determining competency. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the TAA04 Training and Assessment Training Package.

### Overview of Assessment

To demonstrate competency against this unit candidates must be able to provide evidence that they can establish and maintain an effective learning/facilitation relationship with an individual learner.

The trainer/facilitator must demonstrate the development of a relationship, in one or more delivery modes which is learner centred, adaptable to individual needs, and appropriate to the learning area or focus of the relationship. Demonstration of effective techniques, communication, interpersonal skills and problem solving skills are pivotal to demonstrated competency in this unit.

### Evidence Requirements

#### Required knowledge includes:

the effects of verbal and non verbal communication, for example:

- how to interpret behaviours
- how to model behaviours and values

sound knowledge of different learning styles and how to encourage different learners, for example:

- theoretical learners
- pragmatic learners
- activist learners
- reflective learners
- kinaesthetic learners
- audio learners
- visual learners
- tactile learners
- left/right brain learners

the learning cycle, including:

- concrete experience
- observation and reflection
- concept formation

- testing new learning

learning principles, for example:

- adults have a need to be self directing and decide for themselves what they want to learn
- adults have a range of life experience, and connecting learning to experience is meaningful
- adults have a need to know why they are learning something
- adults need to be respected
- adults prefer learning to be relevant and practical

the needs and characteristics of the individual learner

change processes, for example:

- how people work through change
- behaviours associated with change

the organisational culture, for example:

- how individualised learning is perceived and valued
- workplace arrangements for individualised learning
- industrial relations implications
- regulatory requirements

current techniques to facilitate individual learning

how to create new learning activities

learner cues that may reflect difficulties with individual learning facilitation relationships

sources of external support

measurement or evaluation tool development

other learning options, learning activities and referrals

relevant policy, legal requirements, codes of practice and national standards including Commonwealth and state/territory legislation, for example:

- competency standards
- licensing
- industry/workplace requirements
- duty of care under common law
- recording information and confidentiality requirements
- anti discrimination including equal opportunity, racial vilification and disability discrimination
- workplace relations
- industrial awards/enterprise agreements
- National Reporting System

OHS relating to the work role, including:

- reporting requirements for hazards
- safe use and maintenance of relevant equipment
- emergency procedures
- sources of OHS information

**Required skills and attributes include:**

use of empathy to:

- build rapport
- communicate the feeling of threat and risk when facilitation begins
- deal appropriately with a range of emotions

interpersonal skills to:

- set up a comfortable environment
- demonstrate awareness of own behaviour
- use appropriate humour to lighten atmosphere
- keep the sessions learner centred

analysis skills to:

- identify suitable learning/facilitation techniques and activities for the individual learner

flexibility to:

- determine and alter a learning plan
- negotiate with the learner to ensure facilitation is suitable
- be patient with individual's learning ability
- interpret information gathered and adapt own style accordingly

communication skills to:

- give positive and negative feedback
- demonstrate awareness of own behaviour
- negotiate and manage conflict
- confirm, clarify or repair understanding
- build constructively on what has been said

learning and facilitation techniques to:

- lead and motivate learners to take responsibility for their own learning
- maintain momentum during the learning process
- facilitate individual learning through a one on one relationship

literacy skills to:

- develop the learning plan



- maintain records and other documentation
- read and interpret relevant documentation

recognising and being sensitive to individual difference and diversity, for example:

- being sensitive to and valuing culture
- acting without bias/discrimination
- responding to individuals with particular needs
- recognising the importance of religion

time management skills to:

- structure sessions
- drive the process to achieve goals

**Products that could be used as evidence include:**

individual learning plan

facilitation activities

evaluations from participants or organisation

evidence of self evaluation and improvement of skills, for example, a learning journal

audio or video of a facilitation session

**Processes that could be used as evidence include:**

how communication skills have been used in facilitating/learning, particularly questioning techniques, listening and interpretation, and why

how the individual's learning area, style and context were matched to the learning facilitation methods, process and activities utilised

how learning was structured to build new skills, and why

how reflection and insight into learning was developed in the learner

how the trainer/facilitator relationship was terminated, and why

**Resource implications for assessment include:**

materials and information for facilitation

permission of organisation for time and resources

**The collection of quality evidence requires that:**

assessment must address the scope of this unit and reflect all components of the unit i.e. the Elements, Performance Criteria, Range Statement, Evidence Requirements and Key Competencies

a range of appropriate assessment methods/evidence gathering techniques is used to determine competency

evidence must be gathered in the workplace whenever possible. Where no workplace is available, a simulated workplace must be provided

the evidence collected must relate to a number of performances assessed at different points in time and in a learning and assessment pathway these must be separated by further learning and practice

assessment meets the rules of evidence

a judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated

**Specific evidence requirements must include:**

a minimum of two examples of a learning facilitation relationship being conducted, with different individuals to demonstrate communication skills and flexibility; one or more of the processes/techniques identified must be demonstrated

**Integrated assessment means that:**

this unit can be assessed alone or as part of an integrated assessment activity involving other relevant units in the TAA04 Training and Assessment Training Package. Suggested units include but are not limited to:

- TAADEL401A Plan and organise group based delivery
- TAADEL402A Facilitate group based learning
- TAADEL404A Facilitate work based learning
- TAADEL501A Facilitate e learning.

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- emergency procedures
- sources of OHS information

**Required skills and attributes include:**

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- deal appropriately with a range of emotions

interpersonal skills to:

- set up a comfortable environment
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analysis skills to:

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how learning was structured to build new skills, and why

how reflection and insight into learning was developed in the learner

how the trainer/facilitator relationship was terminated, and why

**Resource implications for assessment include:**

materials and information for facilitation

permission of organisation for time and resources

**The collection of quality evidence requires that:**

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the evidence collected must relate to a number of performances assessed at different points in time and in a learning and assessment pathway these must be separated by further learning and practice

assessment meets the rules of evidence

a judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated

**Specific evidence requirements must include:**

a minimum of two examples of a learning facilitation relationship being conducted, with different individuals to demonstrate communication skills and flexibility; one or more of the processes/techniques identified must be demonstrated

**Integrated assessment means that:**

this unit can be assessed alone or as part of an integrated assessment activity involving other relevant units in the TAA04 Training and Assessment Training Package. Suggested units include but are not limited to:

- TAADEL401A Plan and organise group based delivery
- TAADEL402A Facilitate group based learning
- TAADEL404A Facilitate work based learning
- TAADEL501A Facilitate e learning.

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

### **Need for individual learning/ facilitation may be:**

proposed by the learner, a manager/department in the organisation, or the trainer/facilitator  
a requirement of management

part of the delivery strategy of a Training Package qualification, course or learning program

a request for additional support to enhance learning

based on observation

### **Learning area may be:**

organisational/individual

a new/changed job role

new or changed work procedures/work skills

technical skills

life skills

generic skills

management skills

units of competency in Training Packages

curriculums

### **Goals for learning may include:**

learning a new skill/area of knowledge or competency

defined through learning outcomes or objectives of a learning program

increasing productivity

career advancement or redirection

changes in life direction

setting personal directions/achievements

relationship development

### **Relevant persons may include:**

the learner

the workplace supervisor/coordinator/manager

other team members

other trainers/facilitators/teachers/lecturers

**Individual learning/facilitation techniques and processes may include:**

a formal or informal process

an ongoing or one off process

a specific circumstance or an integrated feature of the overall learning process

coaching techniques

mentoring techniques

tutoring techniques

peer relationships

matching experienced workers/learners

single or double loop learning approaches

**Evaluation processes may include:**

a formal evaluation tool

quantifiable measures such as increased productivity/achievement of new skills

level of attendance

critical feedback from learner and others

**Organisational support may include:**

agreement by organisation to provide additional assistance to individuals through identified techniques

venue and equipment support

additional time with learner

**Individual's learning style may include:**

auditory

visual

kinaesthetic

tactile

left/right brain

global/analytical

theoretical

activist

pragmatist

reflective

**Learner characteristics may include:**

language, literacy and numeracy requirements

specific needs, physical or psychological



preferred learning styles

employment status

past learning experiences

level of maturity

cultural background and needs

level of formal schooling in Australia or overseas

length of time resident in Australia

**Context for learning may be:**

determined by the area of learning

determined by the trainer/facilitator and the learner

defined by the work/learning activities

in a classroom, tutorial room, meeting room, office, work in situ, any agreed meeting place

in a workplace, training and/or assessment organisation, college, community, university or school

defined by the time requirements for individual facilitation and how these will be built into learning activities

impacted by the health, safety or welfare of the learner

**Selected is defined as:**

where the trainer/facilitator has the capacity to independently determine which technique/process will be most appropriate

**Organised is defined as:**

where the trainer/facilitator is operating in circumstances where the technique/process is part of an existing delivery system

**Boundaries and expectations may include:**

the roles and responsibilities of the trainer/facilitator

the roles and responsibilities of the learner

extent/limits of the relationship

the techniques/processes to be used

confidentiality

the range of expertise of the trainer/facilitator

the involvement of others

organisational expectations

reporting requirements

**Communication skills must include:**

using icebreakers as appropriate

building rapport with the learner  
using effective verbal and body language  
demonstrating a capacity to communicate clearly to facilitate the learning  
using critical listening and questioning techniques  
providing constructive and supportive feedback  
accurately interpreting verbal messages  
assisting learners to paraphrase advice/instructions to the trainer/facilitator  
providing clear and concrete options/advice  
using appropriate terminology and language of the industry/profession  
ensuring language, literacy and numeracy (LLN) used is appropriate to the learner

**Interpersonal skills must include:**

showing respect for the expertise and background of the learner  
demonstrating sensitivity to diversity, disability, culture, gender and ethnic backgrounds  
modelling facilitation and learning behaviours  
engaging in two way interaction  
encouraging the expression of diverse views and opinions  
negotiating complex discussions by establishing a supportive environment  
using language and concepts appropriate to cultural differences  
accurately interpreting non verbal messages

**Equity or additional support needs may include:**

English language, literacy and numeracy support  
disability support  
Aboriginal and Torres Straight Islander support  
ethnic support services  
interpreting services  
counselling services  
community support

**An individualised learning plan includes:**

the goals to be achieved  
contingency plans  
the logistics of the learning relationship, for example:  
- period of relationship  
- frequency of meetings/length of sessions  
- location of meetings/contact

the structure of the learning relationship, for example:

- activities to be undertaken
- monitoring processes
- tools/equipment needed
- shadowing

occupational health and safety (OHS) considerations

**Preparation may include:**

planning for each meeting/session

being organised for each meeting/session

reflecting on outcomes of previous meeting/session

being punctual

identifying 'where we are' at the start

appearing relaxed and confident

enabling learner to identify his/her perspective

providing a relaxing, non threatening environment

**Structured learning activities may include:**

direction, guidance and mutual discussion

role-plays

written exercises

demonstrations

practice opportunities e.g. practicum or supervised teaching/facilitation

role modelling

projects

readings

research

video/audio analysis

a learning journal

**Leadership and motivational skills may include:**

maintaining focus

transferring responsibility

empowering the learner

inspiring the learner

visualising the learner's perspective

using effective communication

**Learner cues may include:**

level of engagement/disengagement

regular/irregular attendance/absences

evidence of frustration, distraction, stress

level of communication/interaction

level of ease/difficulty in undertaking learning activities

stagnation in learning

level of dependence/independence

evidence of problems/issues which may be personal, employment based or related to the individualised learning

**Changes in approach may include:**

revision of individualised learning plan

fresh approach/shift in technique

problem solving

shift in level of guidance/level of independence

**Ethical behaviours include:**

trust

integrity

privacy and confidentiality of the session

following organisational policies

knowing own limitations

having a range of other intervention referrals ready when needed

honesty

fairness to others

**Tools and signals may include:**

self assessment by the learner

a measure of improvement in a particular area

readiness for formal assessment

level of independence in learning

readiness to maintain learning through other means or modes

severe/fixed blockages in the relationship

agreed time period over

**Feedback may be:**

interview

formal discussion

informal discussion

written questionnaire

**Impact may be:**

successful achievement/rate of achievement/lack of achievement of identified goals

achievement of other outcomes as a result of the relationship

development of new goals

increased/new motivation to learn

greater capacity to learn

development of or increase in the self confidence of the learner

**Self-evaluation and reflection may include:**

asking critical questions about own ability, what worked, what did not work and how the relationship building process could be improved

reviewing records and journals on sessions and critically evaluating own performance

reviewing feedback from learner and identifying critical aspects and areas for improvement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

**Need for individual learning/ facilitation may be:**

proposed by the learner, a manager/department in the organisation, or the trainer/facilitator  
a requirement of management

part of the delivery strategy of a Training Package qualification, course or learning program

a request for additional support to enhance learning

based on observation

**Learning area may be:**

organisational/individual

a new/changed job role

new or changed work procedures/work skills

technical skills

life skills

generic skills

management skills

units of competency in Training Packages

curriculums

**Goals for learning may include:**

learning a new skill/area of knowledge or competency  
defined through learning outcomes or objectives of a learning program  
increasing productivity  
career advancement or redirection  
changes in life direction  
setting personal directions/achievements  
relationship development

**Relevant persons may include:**

the learner  
the workplace supervisor/coordinator/manager  
other team members  
other trainers/facilitators/teachers/lecturers

**Individual learning/facilitation techniques and processes may include:**

a formal or informal process  
an ongoing or one off process  
a specific circumstance or an integrated feature of the overall learning process  
coaching techniques  
mentoring techniques  
tutoring techniques  
peer relationships  
matching experienced workers/learners  
single or double loop learning approaches

**Evaluation processes may include:**

a formal evaluation tool  
quantifiable measures such as increased productivity/achievement of new skills  
level of attendance  
critical feedback from learner and others

**Organisational support may include:**

agreement by organisation to provide additional assistance to individuals through identified techniques  
venue and equipment support  
additional time with learner

**Individual's learning style may include:**

auditory

visual

kinaesthetic

tactile

left/right brain

global/analytical

theoretical

activist

pragmatist

reflective

**Learner characteristics may include:**

language, literacy and numeracy requirements

specific needs, physical or psychological

preferred learning styles

employment status

past learning experiences

level of maturity

cultural background and needs

level of formal schooling in Australia or overseas

length of time resident in Australia

**Context for learning may be:**

determined by the area of learning

determined by the trainer/facilitator and the learner

defined by the work/learning activities

in a classroom, tutorial room, meeting room, office, work in situ, any agreed meeting place

in a workplace, training and/or assessment organisation, college, community, university or school

defined by the time requirements for individual facilitation and how these will be built into learning activities

impacted by the health, safety or welfare of the learner

**Selected is defined as:**

where the trainer/facilitator has the capacity to independently determine which technique/process will be most appropriate

**Organised is defined as:**

where the trainer/facilitator is operating in circumstances where the technique/process is part of an existing delivery system

**Boundaries and expectations may include:**

the roles and responsibilities of the trainer/facilitator

the roles and responsibilities of the learner

extent/limits of the relationship

the techniques/processes to be used

confidentiality

the range of expertise of the trainer/facilitator

the involvement of others

organisational expectations

reporting requirements

**Communication skills must include:**

using icebreakers as appropriate

building rapport with the learner

using effective verbal and body language

demonstrating a capacity to communicate clearly to facilitate the learning

using critical listening and questioning techniques

providing constructive and supportive feedback

accurately interpreting verbal messages

assisting learners to paraphrase advice/instructions to the trainer/facilitator

providing clear and concrete options/advice

using appropriate terminology and language of the industry/profession

ensuring language, literacy and numeracy (LLN) used is appropriate to the learner

**Interpersonal skills must include:**

showing respect for the expertise and background of the learner

demonstrating sensitivity to diversity, disability, culture, gender and ethnic backgrounds

modelling facilitation and learning behaviours

engaging in two way interaction

encouraging the expression of diverse views and opinions

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reviewing feedback from learner and identifying critical aspects and areas for improvement

**Unit Sector(s)**

Not applicable.

## **TAADEL404B Facilitate work-based learning**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**This unit specifies the outcomes required to use work effectively as a learning process.**

### **Application of the Unit**

Learning through work is an ongoing and everyday reality of being in work. However, the effectiveness of that learning can be shaped by interventions and actions that modify, direct and provide support to the workplace learner. This guided learning ensures a planned approach to learning through work activities, effective strategies to support the learning and appropriate monitoring and safeguards.

This unit addresses the processes, skills and knowledge involved in using the work process and the work environment as the basis for learning in the workplace.

Learning through work may contribute to an educational outcome, such as a qualification or Statement of Attainment; and/or a work outcome, such as learning how to use a new piece of equipment; and/or a personal outcome, such as extending an individual's self-esteem.

Providing a guided approach to work-based learning is an essential component of any apprenticeship or traineeship arrangement and also has application in induction processes, change management processes and ongoing employee development.

The competency specified in this unit is typically required by trainers/facilitators, teachers, workplace supervisors, team leaders, human resource or industrial relations managers, consultants and any employee responsible for guiding learning through work.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 <b>Establish an effective work environment for learning</b>	1.1 The <b>purpose or objectives of the work-based learning</b> are established and agreed with <b>appropriate personnel</b>
	1.2 The <b>areas of work</b> encompassed by the work-based learning are defined and documented
	1.3 <b>Work practices and routines</b> are analysed to determine their effectiveness in meeting the work-based learning objectives
	1.4 Changes are proposed to work practices, routines and the work environment to support more effective learning, where appropriate, and discussed with <b>relevant persons</b>
	1.5 <b>Occupational health and safety (OHS)</b> and <b>industrial relations implications</b> of using work as the basis for learning are identified and addressed
2 <b>Develop a work-based learning pathway</b>	2.1 The documented work areas are analysed to determine an <b>effective work-based learning pathway</b>
	2.2 <b>Organisational strategies</b> to support the work-based learning are proposed
	2.3 Any <b>contractual requirements and responsibilities</b> for learning at work are addressed
	2.4 Connections are made with the training and/or assessment organisation to integrate and monitor the <b>external learning activities</b> with the work-based learning pathway where relevant

- 2.5 The proposed work-based learning pathway is evaluated against **appropriate criteria**
    - 2.6 Agreement is obtained from relevant personnel to implement the work-based learning pathway
  - 3 **Implement the work-based learning pathway**
    - 3.1 The **learners' profile and characteristics** are evaluated to determine **possible requirements for support**
    - 3.2 The purposes/objectives for undertaking work-based learning and the processes involved are clearly explained to the learners
    - 3.3 The introduction of workplace tasks, activities and processes is sequenced to reflect the agreed work-based learning pathway
    - 3.4 Agreed organisational strategies are put into effect
    - 3.5 Relations with other work personnel affected by the work-based learning pathway are managed to ensure effective implementation
    - 3.6 **Appropriate communication and interpersonal skills** are used to develop a collaborative relationship with learners
  - 4 **Monitor learning and address barriers to effective participation**
    - 4.1 **Access and equity considerations** are addressed, where appropriate
    - 4.2 The readiness of the worker to participate in and/or take on new tasks and responsibilities is effectively monitored
    - 4.3 Work performances are observed and alternative approaches suggested where needed
    - 4.4 Learners are encouraged to take responsibility for learning and to self-reflect
    - 4.5 **Techniques for learners to demonstrate transferability** of skills and knowledge are developed
    - 4.6 **OHS requirements** are monitored to ensure health, safety and welfare
    - 4.7 **Feedback** is provided to learners about work performance and success is communicated and

acknowledged

- 5 **Review the effectiveness of the work-based learning pathway**
- 5.1 Work performance and learning achievement are documented and recorded in accordance with legal/organisational requirements
  - 5.2 Learners are encouraged to provide critical feedback on their learning experiences
  - 5.3 The effectiveness of the work-based pathway is evaluated against the objectives, processes and models used
  - 5.4 The effectiveness of any integration of work-based learning and external learning activities is assessed
  - 5.5 Improvements and changes to work-based practice are recommended in light of the review process

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of Assessment

To demonstrate competency against this unit candidates must be able to provide evidence that they have developed work-based learning pathways that integrate learning through work.

This includes identifying learning needs, analysing work practices, the environment and work tasks; organising and allocating work in a way that reflects the learning needs and provides effective learning opportunities, and monitoring the effectiveness of the selection of work-based learning pathway.

### Evidence Requirements

**Required knowledge includes:** work organisation systems, processes, practices within the organisation where

work-based learning is taking place  
operational demands of the work and impact  
of changes on work roles

organisational work culture including  
industrial relations environment

systems for identifying skill needs, for  
example:

performance reviews

training needs analysis

identifying additional training needs of  
learners

learning principles, for example:

learning and experience are connected for  
meaning

adults need to know why they are learning

adults can self-evaluate

adults learn in different ways

individual facilitation techniques to support  
and guide learning

change processes, for example:

how people work through change

behaviours associated with change

introductory knowledge of different learning  
styles and how to encourage learning in each,  
for example:

visual learners

audio learners

kinaesthetic learners

theoretical learners

relevant policy, legislation, codes of practice  
and national standards including  
Commonwealth and state/territory  
legislation, for example:



industrial awards  
enterprise bargaining agreements  
licensing requirements  
industry/workplace requirements  
duty of care under common law  
information and confidentiality requirements  
anti-discrimination including equal  
opportunity, racial vilification and disability  
discrimination

workplace relations

National Reporting System

OHS relating to the work role, including:

hazards relating to the industry and specific  
workplace

reporting requirements for hazards and  
incidents

specific procedures for work tasks

safe use and maintenance of relevant  
equipment

emergency procedures

sources of OHS information

organisational strategies that provide support  
to the workplace learning

**Required skills and attributes include:**

communication skills to:

identify needs

communicate suggestions

give feedback constructively

ask open-ended questions to tease out  
required knowledge and information

evaluate learner profiles and characteristics

coach learners

literacy skills to:

read and interpret organisational documents,

legal documents and contracts  
complete and maintain documentation

monitor and manage work environment and individual dynamics, for example:  
assess the climate of the group  
facilitate employee acceptance  
ensure each individual feels valued

organisational skills to:  
allocate and reorganise work  
organise changes with relevant persons  
provide guidance and feedback to individuals

cognitive skills to:  
set learning outcomes through work  
interpret and analyse competency standards and/or other performance specifications to actual work processes  
design a learning process through work

**Products that could be used as evidence include:**

redesigned individual/group work plans  
documented individual work-based learning pathways  
training gap identification materials  
documented reviews of work-based learning pathways  
performance management feedback

**Processes that could be used as evidence include:**

how learning needs were identified and why  
how learning opportunities were matched to work  
how work was organised/reorganised to reflect learning needs  
how learning was promoted

**Resource implications for assessment include:**

work opportunities  
learning opportunities in work

time to support learner needs e.g. organised time for learner to watch work and talk with work colleagues and trainer/facilitator and reflect on learning

**The collection of quality evidence requires that:**

assessment must address the scope of this unit and reflect all components of the unit i.e. the Elements, Performance Criteria, Range Statement, Evidence Guide, Employability Skills

a range of appropriate assessment methods/evidence gathering techniques is used to determine competency

evidence must be gathered in the workplace whenever possible. Where no workplace is available, a simulated workplace must be provided

the evidence collected must relate to a number of performances assessed at different points in time and in a learning and assessment pathway these must be separated by further learning and practice

assessment meets the rules of evidence

a judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated

**Specific evidence requirements must include:**

a minimum of two examples of developing work-based learning pathways, that includes:

identifying needs for learning

analysing work practices, work environment and work activities

organising and allocating work in a way that reflects the learning needs and which provides effective learning opportunities through work processes

**Integrated assessment means that:**

this unit can be assessed alone or as part of an integrated assessment activity involving other relevant units in the **TAA04 Training and Assessment Training Package**. Suggested units include but are not limited to:

**TAADEL403B Facilitate individual learning****TAADES401B Use Training Packages to meet client needs.****Range Statement**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Bold italicised** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

The **purpose or objectives of the work-based learning** may include:

introduction of new technology  
 new product/service  
 new organisational direction/workplace change  
 new position or job roles  
 addressing identified skills gap/deficit  
 OHS requirements  
 quality improvements  
 competency achievement  
 part of traineeship/apprenticeship

**Appropriate personnel** may include:

workplace supervisor/frontline manager  
 training/human resources/industrial relations manager  
 trainer/facilitator/assessor  
 learner  
 training and/or assessment organisation personnel  
 group training company personnel

**Areas of work** may include:

work or job tasks  
 work activities

	processes to carry out work
	use/operation of equipment to carry out work projects
	team-based or individual work
<b>Work practices and routines</b> may include:	work schedules
	work timelines
	work performance expectations
	work organisation/organisational change
	work models/multi-skilling
	work structures and systems
	operational/organisational guidelines
	OHS guidelines, systems and safeguards
	work demarcations and industrial relations concerns
	English language, literacy and numeracy (LLN) requirements
<b>Relevant persons</b> may include:	workplace supervisor/frontline manager
	training/human resources/industrial relations manager
	union representatives/delegates
	workers whose own jobs may be affected by the proposed changes
<b>OHS implications</b> may include:	OHS legal obligations
	workplace OHS policies and procedures
	ensuring work practices, routines and proposed changes do not pose a risk to the learner and others
<b>Industrial relations implications</b> may include:	work demarcations created through changes to work practices
	ensuring compliance with an award or enterprise bargaining agreement
	licensing requirements
<b>An effective work-based learning pathway</b> may include:	identifying specific goals for work-based learning
	identifying job tasks or activities to be

included in the learning process  
appropriate sequencing of job tasks/activities to reflect learner incremental development  
direct guidance and modelling from experienced co-workers and experts  
opportunities for practice

**Organisational strategies** may include:

appropriate supervision during learning  
appropriate time to observe and talk to others in work  
use of co-workers to model or demonstrate tasks and activities or to teach technical terminology and language of the workplace  
use of internal work experts/mentors/coaches with whom the learner is comfortable  
sufficient time for practice  
job rotation

**Contractual requirements and responsibilities** may include:

training plans under apprenticeships/traineeships  
Workplace English Language and Literacy (WELL) or other government funded training program requirements

**External learning activities** may include:

external courses e.g. institution-based  
off-the-job components of apprenticeship/traineeship  
equipment supplier training  
online learning  
conferences/seminars/workshops  
self-directed learning

**Appropriate criteria** may include:

breadth and depth  
inclusion of a range of routine and non-routine work tasks/activities  
appropriate sequencing of work tasks/activities  
sufficient learning and practice time  
capacity to address learning that underpins knowledge within the work tasks/activities

	identified relationship/synthesis with learning provided by other sources
<b>Learners' profiles and characteristics</b> may include:	language, literacy and numeracy needs specific needs employment status past learning experiences work roles level of maturity culture
<b>Possible requirements for support</b> may include:	referral to an external agency for assistance with language, literacy and numeracy use of interpreters mentor/coach peer support physical support needs other support mechanisms
<b>Appropriate communication skills</b> may include:	using icebreakers as appropriate building rapport with the learner/s using effective verbal and body language demonstrating a capacity to communicate clearly to facilitate the individual/s learning using critical listening and questioning techniques giving constructive and supportive feedback accurately interpreting verbal messages assisting learners to paraphrase advice/instructions back to the trainer/facilitator providing clear and concrete options/advice using appropriate terminology and language of the industry/profession ensuring language, literacy and numeracy (LLN) used is appropriate to learner/s
<b>Interpersonal skills</b> may include:	showing respect for the expertise and background of learner/s

demonstrating sensitivity to diversity, disability, culture, gender and ethnic backgrounds

modelling facilitation and learning behaviours

engaging in two-way interaction

encouraging the expression of diverse views and opinions

negotiating complex discussions by establishing a supportive environment

using language and concepts appropriate to cultural differences

accurately interpreting non-verbal messages

**Access and equity considerations** may include:

minimising physical barriers

identifying and addressing direct and indirect barriers to learning

building on learner strengths

providing access to a range of resources and/or equipment

making referrals to a range of relevant agencies

**Techniques for learner/s to demonstrate transferability** may include:

problem solving

situated learning

hypothetical questioning

opportunities for learner/s to demonstrate autonomy in learning

opportunities for learner/s to apply the knowledge and skills in different contexts

**OHS requirements** may include:

reporting procedures

emergency procedures

**Feedback** may include:

performance reviews

formal or informal group or individual discussions



## **Unit Sector(s)**

Not applicable.

## **Competency Field**

**Delivery and Facilitation**