



**Australian Government**

# **ACMVET405A Carry out surgical nursing routines**

**Revision Number: 2**

## ACMVET405A Carry out surgical nursing routines

### Modification History

Release	TP Version	Comments
2	ACM10v3	Reference to OHS legislation replaced with generic terminology
1	ACM10v1	Initial release. Supersedes and is equivalent to RUV4605A

### Unit Descriptor

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.

### Application of the Unit

This Unit applies to a veterinary nurse working under supervision of a veterinarian in a veterinary clinic or similar practice. 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.

### Licensing/Regulatory Information

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.

### Pre-Requisites

Nil.

### 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

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>workplace health and safety</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 accordance with required procedures and industry standards. 1.5. Safe work practices are adopted and practised as an integral part of the clinic's theatre procedures.
2. Provide support for surgical routines	2.1. <i>Animals are prepared</i> for anaesthesia and the surgical procedure in accordance with clinic policies and procedures. 2.2. <i>Analgesics</i> are administered to patients as directed by the veterinarian and in accordance with legislative requirements. 2.3. Animals are held, restrained or positioned during the operation and administration of anaesthesia as instructed. 2.4. <i>Sterile</i> and/or non-sterile assistance is provided to the veterinarian as instructed. 2.5. <i>Routines</i> are carried out and theatre equipment is provided to the veterinarian as instructed.
3. Monitor patients and anaesthesia	3.1. <i>Anaesthesia</i> induction and maintenance is continually monitored under veterinary supervision. 3.2. Endotracheal intubation is completed in accordance with clinic policy. 3.3. <i>Pain and vital signs</i> are monitored and recorded as instructed from premedication to anaesthesia through to recovery. 3.4. Anaesthetic depth is assessed and response is initiated in accordance with clinic policies and procedures. 3.5. <i>Emergency procedures</i> are followed in accordance with clinic policy. 3.6. <i>Post-operative anaesthesia procedures</i> are completed in accordance with clinic policy.
4. Perform post-operative procedures	4.1. Wound or surgical site is monitored post-operatively for signs of <i>abnormality</i> .

**ELEMENT**

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**PERFORMANCE CRITERIA**

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- 4.2. Defined *post-operative patient management procedures* are carried out in accordance with the veterinarian's instructions.
- 4.3. Post-operative advice is provided to the animal owner in accordance with the veterinarian's instructions.

## Required Skills and Knowledge

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

### Required skills

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#### Ability to:

- assist the veterinarian safely and effectively as directed
- clean and sterilise surgical equipment as required
- employ keen observation skills
- follow workplace health and safety 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
- use literacy skills to read, select and implement policies and procedures, including workplace health and safety, infection control and other clinic policies and procedures; coordinate patient admission and discharge; implement sequenced written instructions; and record patient details accurately and legibly
- 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
- use 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
- use numeracy skills required to prepare veterinary medicines
- use 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

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#### Knowledge of:

- 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

- 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

<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>	
<p><b>Overview of assessment</b></p>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this Unit</b></p>	<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>• prepare surgical instruments and equipment, including surgical packs, in an aseptic environment ready for surgery</li> <li>• carry out preoperative processes</li> <li>• prepare animals for anaesthesia and surgical procedures and administer analgesics as directed by the veterinarian</li> <li>• handle and restrain animals in a safe and ethical manner</li> <li>• provide effective sterile and/or non-sterile support to the veterinarian during surgical procedures</li> <li>• monitor patients' vital signs and anaesthesia during surgery</li> <li>• provide post-operative care for animals and post-operative advice for clients</li> <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>
<p><b>Context of and specific resources for assessment</b></p>	<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>
<p><b>Method of assessment</b></p>	<p>To ensure consistency of 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>



	<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>
<p><b>Guidance information for assessment</b></p>	<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

<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>Surgical procedures</i></b> may include:</p>	<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>
<p><b><i>Pre-operative care advice</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• fasting and limited fluid intake.</li> </ul>
<p><b><i>Workplace health and safety</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>Sourcing <b><i>surgical packs</i></b> may include:</p>	<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>
<p><b><i>Pre-operative processes</i></b> may include but are not limited to:</p>	<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> </ul>

	<ul style="list-style-type: none"><li>• preparing correct quantities of anaesthetic agents under veterinary supervision</li><li>• administering necessary premedication, medication and analgesia under veterinary supervision.</li></ul>
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<b><i>Animal preparation</i></b> 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 <b><i>analgesics</i></b> 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>
<b><i>Sterile</i></b> 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>
<b><i>Routines</i></b> 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> <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 <b><i>anaesthesia</i></b> may include:	<ul style="list-style-type: none"> <li>• gaseous and injectable preparations</li> <li>• intermittent positive pressure ventilations.</li> </ul>
<b><i>Pain and vital signs</i></b> 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> </ul> </li> </ul>

	<ul style="list-style-type: none"><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><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>
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<b><i>Emergency procedures</i></b> 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>
<b><i>Post-operative anaesthesia procedures</i></b> may include:	<ul style="list-style-type: none"> <li>• continued monitoring of vital signs</li> <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>
<b><i>Abnormalities</i></b> 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>
<b><i>Post-operative patient management procedures</i></b> 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)

Veterinary nursing