



Australian Government

Department of Education, Employment and Workplace Relations

ACMMIC401A Implant microchip in cats and dogs

Revision Number: 1

ACMMIC401A Implant microchip in cats and dogs

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	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. 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.
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Application of the Unit

Application of the unit	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. 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.
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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 microchip implantation	1.1. Statutory and local authority requirements, including current and verifiable professional indemnity and public liability cover for the implanter, are complied with. 1.2. Details of the procedure are explained to the animal owner prior to commencement of the process. 1.3. Location for conducting the microchipping procedure is selected, taking into account likely species behaviour. 1.4. Availability of supervisory veterinarian is confirmed in case of adverse animal reaction to procedure. 1.5. Australian Veterinary Association policy and relevant Australian Standards for implantation and scanning devices are read and followed throughout the process.
2. Prepare equipment	2.1. Implantation equipment is inspected and checked. 2.2. First aid equipment for animals and humans is inspected and prepared for use. 2.3. Electronic reader is selected and checked against a 'reference chip' of known performance. 2.4. Microchip to be implanted is checked to ensure it meets legislative and Australian Standards requirements and scanned for serial number against packaging number.
3. Prepare animal	3.1. Prescribed identifying information is obtained and recorded on the approved form. 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. 3.3. Details of animal's previous health history are ascertained for possible complications. 3.4. Owner's permission to appropriately restrain the animal if necessary is obtained. 3.5. Protective equipment is used as required. 3.6. Health of animal is visually assessed and signs of ill health identified. 3.7. Animal restraint device is selected and fitted if required.

ELEMENT	PERFORMANCE CRITERIA
	3.8. Animal is scanned according to legislative and industry practice to check if previous implantation has occurred, and where found, action is in accordance with industry and legislatively approved procedure for previously implanted microchips.
4. Undertake implantation procedure	4.1. Implantation site is checked for abnormalities and owner referred to veterinarian in the event of observed concerns. 4.2. Animal is positioned for implantation taking into account size, species, previous behavioural assessment and relevant occupational health and safety (OHS) risks. 4.3. Injection site between shoulder blades is inspected, prepared aseptically and aseptic technique is used throughout the implantation procedure. 4.4. Sterile pack is opened and needle is attached to the implanting device while maintaining asepsis. 4.5. Skin is grasped and lifted away from the body and needle containing the microchip is inserted subcutaneously at recommended angle limited to the number of attempts permitted as outlined in relevant legislation. 4.6. Microchip is discharged and needle withdrawn and inspected and procedures followed to ensure the chip does not come out. 4.7. Needles are disposed of in an approved sharps container in accordance with relevant waste disposal legislation and regulations. 4.8. Injuries sustained to humans are assessed and first aid treatment provided and/or medical attention sought as required. 4.9. Injuries sustained to animals are assessed and appropriate first aid treatment provided and/or veterinary attention sought as required.
5. Conduct post-implantation procedures	5.1. Implantation site is visually checked and scanned to ensure success of implantation and correct functioning of the microchip. 5.2. Post-implantation advice is provided to owner. 5.3. Animal condition at time of departure is noted and if there are any signs of adverse reactions, veterinary assistance is obtained. 5.4. Processes undertaken by relevant animal registry service are communicated to the owner and

ELEMENT	PERFORMANCE CRITERIA
	distinguished from registering the animal with local government/council. 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.
6. Maintain records	6.1. Procedure is recorded using prescribed identifying information, ensuring legibility and signatures and identification number of implanter are included. 6.2. Documentation is forwarded to the relevant animal registry service in accordance with legislative requirements. 6.3. Copy is maintained and filed by implanter 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

- 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
- 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

REQUIRED SKILLS AND KNOWLEDGE

- 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

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 statutory and local authority requirements associated with identification of companion animals and the responsibilities and obligations of accredited animal identifiers
- prepare documentation and geographic location for microchip implantation of a cat or dog
- prepare all equipment required to perform the microchip procedures
- explain procedures to owner and obtain necessary consents and permissions
- take details of animal's history, visually assess health of the animal and refer the animal to a veterinarian where necessary
- implant microchip in cat or dog following correct procedures and with consideration of OHS and welfare issues
- provide owner with post-procedure instructions
- complete and lodge legislated documentation.

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.

Context of and specific resources for assessment

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.

EVIDENCE GUIDE	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. 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. 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.
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. The assessment strategy must include practical skills assessment. Suggested strategies for this unit are: • written and/or oral assessment of candidate's required knowledge • observed, documented and first-hand testimonial evidence of candidate's application of practical tasks • simulation exercises that reproduce normal work conditions • third-party evidence • workplace documentation • portfolio. This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
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,

EVIDENCE GUIDE

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.

<i>Statutory and local authority requirements</i> may include:	• local government requirements for registration subsidies • microchipping processes • specified types of animals, such as dangerous dogs or restricted breed dogs and/or cats • technology used.
<i>Location</i> for conducting the microchipping procedure should take into consideration:	• the species, for example: • locations for cats should be enclosed and escape-proof with minimal damageable equipment.
<i>Likely species behaviour</i> that may be encountered may include:	• animals exhibiting aggressive behaviour • animals exhibiting anxious or fearful behaviour • flight of the animal • loss of control.
<i>Supervisory Veterinarian</i> is required to be:	• a registered veterinarian who is an authorised implanter with whom you have a prior agreement to attend the animal being microchipped, if necessary.
<i>Implantation equipment</i> includes:	• 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.
<i>First aid equipment</i> may include:	• antiseptic and saline solutions • adhesive strips • sterile bandages and dressings.
<i>Electronic reader</i> required for the procedure means:	• a scanner capable of detecting and decoding approved microchip information • approved multiple frequency scanners that scan for FDXA and FDXB only may be used • familiarity with multi-frequency scanners is required to scan chips from various

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	manufacturers that respond to varying frequencies from 125 kHz non-encrypted and 128 kHz devices.
<i>Microchip</i> means:	• a Permanent Identification Device (PID) which: • is able to be permanently implanted in an animal • is designed to transmit stored information when activated by a reader • complies with the requirements of AS 5019:2001 Electronic animal identification - Radiofrequency methods • contains a unique identification number that: • complies with AS 5018:2001 Electronic animal identification - National coding scheme • the first 6 digits displayed are the manufacturers code for the device as set by the International Committee for Animal Recording (ICAR) • any permanent identification device (microchip) implanted before May 2003 that uniquely identifies the animal.
<i>Prescribed identifying information</i> may include:	• details required in accordance with relevant legislative requirements: • owner and animal residential and location details and signature • local government details • microchip details • implanter name, contact details, signature and • registration number, where applicable.
<i>Protective equipment</i> may include:	• use of Kelvar sleeves to protect implanter.
<i>Signs of ill health</i> which should be referred to veterinary practitioner may include:	• apparent pain • bleeding or swelling of body parts • bloating of abdomen • diarrhoea, especially if bloodstained • difficulty or inability to urinate or defecate • fits or staggering

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	• inability to stand or walk • inappetence • lameness • red or brown coloured urine • repeated sneezing or coughing • runny nose • runny or inflamed eyes • vomiting • weight loss.
<i>Animal restraint devices</i> required for the procedure may include:	• cat restraining bags • collars and leads • muzzles. Note: excludes chemical restraint.
Scanned according to <i>legislative and industry practice</i> means:	• 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 • scanning the animal thoroughly to check its microchip status with an operating reader held just above the hairline of the animal • this should be done at a distance of no more than 50 mm • ensuring the animal is properly scanned • 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 • ensuring a slow, even pace (0.5 m/s) is employed in scanning • 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). Please note: Where two different readers are being used, scanning operations need to be repeated for

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	each reader.
<i>Industry and legislatively approved procedure for previously implanted microchips</i> means:	• 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: • notify the registry to ascertain the current owner details • 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 • 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 • ownership disputes are a civil matter and people should be advised to seek legal advice and/or representation Note: It is the responsibility of the person presenting the animal to provide adequate proof of ownership.
<i>Abnormalities</i> likely to be encountered at implantation site includes:	• injuries • rashes • swellings • ulcers.
<i>OHS risks</i> 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.

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<i>Maintaining asepsis</i> during procedure may include:	- ensuring: - needles or microchip are not contaminated - there is no damage to sterile packs prior to use.
<i>Recommended angle</i> for insertion of the needle means:	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.
Needle <i>inspected</i> means:	inspect needle to ensure the microchip has been injected into the animal.
<i>Procedures</i> to ensure microchip does not come out may include:	- application of tissue glue - 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.
<i>Injuries sustained to humans</i> during procedure may include:	- back injuries - bites - fainting - muscle tears - needle stick injuries - scratches.
<i>Post-implantation advice</i> which should be provided to the owner includes:	- limitations on exercise - limiting site palpation after procedure is performed - restriction from bathing and swimming for recommended period - procedures to be followed in the event of possible complications.
<i>Signs of adverse reactions</i> may include:	- haemorrhage - infection - redness, heat, pain and swelling at the implantation site - seizures - shock - subcutaneous lumps.
<i>Relevant animal registry service</i> 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)

Unit sector	Microchipping
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		