



Australian Government

ACMVET413 Prepare for anaesthesia and monitor animal anaesthesia and analgesia

Release: 2

ACMVET413 Prepare for anaesthesia and monitor animal anaesthesia and analgesia

Modification History

Release	Comments
Release 2	This version released with ACM Animal Care and Management Training Package Version 5.0.
Release 1	This version released with ACM Animal Care and Management Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to prepare for and monitor anaesthesia and analgesics in animals for surgical and medical procedures.

The unit applies to veterinary nurses who work under the supervision of a registered veterinarian in a veterinary practice. Veterinary nurses who prepare and monitor patients for anaesthesia and analgesics need to hold and apply specialised knowledge of animal anatomy and physiology.

Legislative and regulatory requirements apply to veterinary nurses but vary according to state/territory jurisdictions. Users must check with the relevant regulatory authority before delivery.

NOTE: The terms ‘occupational health and safety’ (OHS) and ‘work health and safety’ (WHS) generally have the same meaning in the workplace. In jurisdictions where the national model WHS legislation has not been implemented, RTOs must contextualise the unit of competency by referring to current OHS legislative requirements.

Pre-requisite Unit

Nil

Unit Sector

Veterinary Nursing (VET)

Elements and Performance Criteria

Elements	Performance Criteria
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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for anaesthesia	1.1 Prepare surgery and ensure personnel are ready for anaesthesia according to practice policy and procedures 1.2 Prepare and test equipment to ensure appropriate function for procedure 1.3 Set-up anaesthetic and analgesia monitoring equipment according to practice policy and procedures 1.4 Ensure the correct use and storage of anaesthetic gases including scavenging of gases according to practice policy and procedures
2. Prepare animals for anaesthesia procedures	2.1 Handle, restrain and position animals safely according to practice policies and procedures 2.2 Assess animal physical health status and body condition and note any abnormalities 2.3 Perform a pre-anaesthetic evaluation on animals according to practice policies and procedures 2.4 Prepare anaesthetic and analgesic plan for each patient, under the guidance of the veterinarian 2.5 Calculate and prepare anaesthetic and analgesic drugs specific for the animal under the guidance of the veterinarian 2.6 Identify and locate animal anatomical features relevant to the administration of drugs for induction of anaesthesia and anaesthetic monitoring 2.7 Identify and know the physiological effects of anaesthesia on different body systems 2.8 Follow safe work practices according to WHS and practice policies and procedures
3. Assist in administering anaesthesia and monitoring animals	3.1 Assist in the induction of anaesthesia according to legislative requirements and practice policies and procedures 3.2 Assist with endotracheal intubation 3.3 Monitor animal and chart animal's vital signs 3.4 Identify stages and planes of anaesthesia and communicate with the veterinarian any abnormal values and be able to initiate an appropriate response to correct abnormality 3.5 Identify an anaesthetic emergency and provide assistance under the guidance of the veterinarian 3.6 Monitor and record changes in the post-operative period

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Assist in administering analgesia for animals	4.1 Identify, monitor and assess analgesic requirements in animals 4.2 Provide analgesia to manage pain in animals under veterinary guidance 4.3 Provide supportive therapies to manage pain 4.4 Monitor animals by evaluating behaviour, vital signs, clinical signs and using recognised pain scoring scales 4.5 Recognise and respond to emergencies immediately according to practice policies and procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Oral Communication	Listen to and clarify veterinarian's instructions
Numeracy	Calculate accurate dosages of anaesthetics and analgesics
Get the work done	Address irregularities and contingencies in the context of the work role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ACMVET413 Prepare and monitor anaesthetics and analgesics in animals Release 2	ACMVET413 Prepare and monitor anaesthetics and analgesics in animals Release 1	Corrected typographical error in Knowledge Evidence	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103>

Assessment Requirements for ACMVET413 Prepare for anaesthesia and monitor animal anaesthesia and analgesia

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has prepared for anaesthesia, and monitored anaesthesia and analgesia, for a minimum of two different animals, including (for each):

- calculating dosage of anaesthetic and other medications and verifying with supervising veterinarian
- assisting with premedication, induction and maintenance of anaesthetic recovery
- assisting with endotracheal intubation and extubation
- monitoring animal vital signs and reflexes before, during and after anaesthesia and accurately recording findings
- assessing and monitoring each animal's analgesic requirements
- using equipment and materials according to manufacturer and practice policies and protocols
- performed the activities outlined in the performance criteria of this unit during a period of at least 240 hours of work in a veterinary practice.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- principles and practices for monitoring anaesthesia and analgesia in animals
- procedures for pre-anaesthetic evaluation on animals, including:
 - clinical examination
 - pathology, including haematology and biochemistry
 - ASA physical status
- physiological effects of anaesthesia/analgesia drugs on different body systems, including:

- respiratory
- cardiovascular
- central, peripheral and autonomic nervous systems
- renal
- hepatic
- clinical indications of an emergency, including:
 - respiratory
 - cardiovascular
 - thermoregulation
 - regurgitation
- fluid therapy, including types of fluids and rates in emergency cases
- emergency procedures, including:
 - anaesthetic emergencies
 - haemorrhage
 - hypothermia or hyperthermia
 - respiratory distress
 - shock
 - hypotension
- techniques for cardio-pulmonary resuscitation (CPR)
- information that should be documented for the administration of anaesthetic and related substances
- methods used to administer anaesthetics and analgesics, including intravenous (IV) and intramuscular (IM)
- types of surgical and medical procedures that require local and general anaesthesia
- basic anaesthetic agents, including injectable and gaseous compounds
- audible, visual or measured signs of pain, including pain scoring guides
- vital signs and reflexes monitored under anaesthesia, including:
 - blood pressure
 - pulse rate, rhythm and quality
 - arterial oxygen saturation
 - respiratory rate and effort
 - rectal temperature
 - pulse oximetry
 - anaesthesia depth
 - capillary refill time
 - palpebral reflex
 - heart rate and identification of normal rhythm
 - mucous membrane colour
 - pedal withdrawal reflex
 - end tidal carbon dioxide

- the planes and stages of anaesthesia
- methods and equipment used to monitor animals during anaesthesia and post anaesthesia
- anaesthetic equipment and supplies, including:
 - anaesthetic machine
 - gas sources
 - gas cylinders
 - anaesthetic machine anaesthetic trolley/emergency crash cart
 - vaporisers anaesthesia circuits (rebreathing and non-breathing)
 - scavenger systems
- monitoring equipment, including:
 - stethoscope
 - thermometer
 - pulse oximeter
 - blood pressure monitor
 - capnography monitor
 - electrocardiogram
- anaesthetic premedicants and analgesic agents
- sedatives and analgesics used in animals and the effects
- organisational policies and safe work procedures, including work health and safety and emergency procedures
- organisational policies and procedures for different classes of drugs
- safe animal handling techniques and procedures
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions where procedures requiring anaesthesia are carried out on real, live animals
- resources, equipment and materials:
 - a range of real animals
 - equipment and resources typically available for procedures that require anaesthesia
- specifications:
 - organisational policies and procedures, current legislation, regulations and relevant codes of practice
- relationships (internal and/or external):
 - interactions with team members
 - interactions with a registered veterinarian or minimum of Certificate IV qualified veterinary nurse.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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