# **Modification history**

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 3.0.

ACMATE4X3	Assist researchers with aseptic animal surgery	
Application	This unit of competency describes the skills and knowledge required to assist researchers to undertake survival surgery of animals performed under aseptic conditions. It involves applying strict procedures to prevent contamination from pathogens, minimise the risk of infection to the animal and potential problems to research program.	
	The unit applies to individuals who work as animal technicians, using practices and procedures to ensure effective surgery outcomes for research animals (commonly rodents).	
	No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.	
Prerequisite Unit	Nil	
Unit Sector	Animal Technology (ATE)	

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
Prepare surgical operating area for procedure	1.1 Disinfect and sterilise operating work surface 1.2 Sterilise instruments and supplies using appropriate equipment and sterilising solutions 1.3 Transfer surgical packs, gowns and equipment required for surgery to the operating area ensuring sterility is maintained 1.4 Assist researcher with gloving and gowning procedures according to organisational procedures and aseptic techniques	
2. Prepare animal for surgery	<ul> <li>2.1 Use appropriate handling techniques to prepare animals for anaesthesia and surgery, disposing of contaminated materials safely</li> <li>2.2 Place animal on operating area and position and/or restrain according to species requirements</li> <li>2.3 Prepare, clean and disinfect the surgical site on the animal according to surgery requirements and organisational procedures</li> <li>2.4 Apply drapes, lubricants or other products to protect the animal according to species and operational procedures</li> </ul>	
3. Provide aseptic surgery support	<ul> <li>3.1 Open surgical packs and equipment using aseptic techniques and organise for easy access during surgery</li> <li>3.2 Provide sterile assistance to the researcher during aseptic surgery as instructed</li> <li>3.3 Prepare additional equipment and supplies as instructed by researcher, including for surgeries on multiple animals</li> <li>3.4 Monitor surgery conditions for breaches of asepsis and report to researcher</li> </ul>	
4. Complete post-surgery duties	<ul> <li>4.1 Clean animal post-surgery and transfer to warm recovery area providing immediate care as instructed</li> <li>4.2 Dispose of all chemical and biological waste according to organisational and regulatory requirements</li> <li>4.3 Clean and disinfect operating area and equipment and send gowns and linen for laundering</li> <li>4.4 Clean, maintain and sterilise surgical instruments</li> <li>4.5 Store equipment, surgical instruments and gowns for future use according to organisational procedures</li> </ul>	

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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.

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Skill	Description	
Reading	Interpret requirements and medical terminology in written surgical instructions and procedures	
Writing	Complete workplace forms accurately and completely to document activities related to animal surgery	
Numeracy	Calculate ratios and measure sterilising solutions for disinfecting equipment and operating area	
Get the work done	Plan, sequence and organise tasks, identifying possible risks and breaches to asepsis and responding according to organisational requirements	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
ACMATE4X3 Assist researchers with aseptic animal surgery	Not applicable	New unit	No equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-
	54c9-4cc9-a5db-d3502d154103

TITLE	Assessment requirements for ACMATE4X3 Assist researchers	
	with aseptic animal surgery	

#### **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:

- carried out the preparation of the surgical operating area, prepared the animal for surgery and assisted a researcher with aseptic surgery on at least three occasions
- · completed post-surgery duties for each occasion.

# **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:

- · aseptic surgery procedures, including:
  - roles and protocols in operating area
  - equipment and sterile instruments
  - personal hygiene and scrubbing, and fitting of gloves, masks, goggles, gowns
  - aseptic techniques
  - pre-operative medications including analgesics and antibiotics
- potential sources of contamination
  - · human and animal hair and tissue
  - dust and environmental pollutants
- range of equipment and surgical packs required for surgery procedure, including:
  - · anaesthetic equipment
  - bandages
  - disposables
  - drapes
  - surgical instruments
  - sutures
  - · instrument processing and sterilisation
  - autoclave operation
- techniques for sterilising equipment and instruments
- · techniques used to transfer animals to and from surgical procedures
- · outcome of breaches in asepsis:
  - · wound infection
  - · animal pain and distress
  - animal illness, death
  - changes to the animal's physiology that interferes with research
- organisational procedures for:
  - · storage, use and disposal of chemicals and biological waste from surgical procedures
  - post-surgical equipment cleaning, sterilising and storage
- protocols, legal and ethical considerations in documenting observations, measurements, treatments and decisions relating to animal surgery
- relevant animal technology regulations and codes, including the Australian Code for the Care and Use of Animals for Scientific Purposes
- relevant state or territory legislation and regulations relating to health and safety, animal welfare and research.

## **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions

## **Assessment Conditions**

- resources:
  - research animals or appropriate simulations.

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

