Modification history

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

| ACMATE4X1 | Prepare for and monitor anaesthesia in animals |
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| Application | This unit of competency describes the skills and knowledge required to prepare for and monitor anaesthesia in animals.  The unit applies to individuals who work as assistant level animal technicians working under the supervision of a senior or more experienced staff member. All work is performed where required and when appropriate, as directed by a supervisor. Animal technicians administering anaesthesia operate under and must comply with legislative requirements, and the Australian Code 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).  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 |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for anaesthesia | 1.1 Prepare facility and personnel for animal anaesthesia including confirming facility ethics approvals and suitable space to perform surgeries  1.2 Select suitable anaesthetic options and equipment for animal anaesthesia  1.3 Prepare equipment according to manufacturer specifications, organisational procedures and/or job requirements  1.4 Prepare anaesthetic and monitoring equipment including routine sterilisation and disinfection of equipment |
| 2. Prepare animals for anaesthesia procedures | 2.1 Assess animal health and condition according to species specific standards  2.2 Handle and restrain animals safely and humanely according to workplace policies and procedures, ethics protocols and legislative requirements  2.3 Perform pre-anaesthetic evaluations on animals, including the use of checklists and scoresheets, according to ethics protocols  2.4 Prepare animals for anaesthesia, including animal site preparation, provision of heat sources and monitoring equipment, according to species specific requirements  2.5 Identify and locate species specific animal structures, tissues and organs relevant to administration and monitoring of induction of anaesthesia  2.6 Follow safe work practices, including health and safety, according to organisational policies and procedures |
| 3. Assist in administering anaesthesia and monitoring animals | 3.1 Perform induction of anaesthesia  3.2 Monitor and detect species specific signs of pain and/or distress while anaesthetised  3.3 Record variations in the physiological parameters and signs of anaesthesia in animals using appropriate organisational checklist or score sheet  3.4 Comply with organisational protocols for anaesthetic procedures on animals  3.5 Provide anaesthetic emergency assistance according to organisational policies and procedures and supervisor instructions |
| 4. Provide post-anaesthetic care for animals | 4.1 Use analgesics and other supportive therapies to manage animals post-anaesthesia according to ethics protocols and supervisor instructions  4.2 Apply fluid therapy and oxygen supplementation to animals according to ethics protocols, supervisor directions and/or procedures  4.3 Recognise and respond, according to supervisor instructions, to post-anaesthetic emergencies immediately  4.4 Monitor animals post-anaesthesia by evaluating behaviour and vital clinical signs using appropriate organisational checklist or score sheet  4.5 Maintain post-anaesthetic monitoring records accurately and completely according to legislative requirements and ethics protocols |
| 5. Maintain anaesthetic facilities and equipment | 5.1 Clean facilities, sterilise instrumentation and linen, and store equipment according to organisational policies and procedures  5.2 Carry out routine maintenance on anaesthetic equipment according to manufacturer specifications or job requirements  5.3 Validate sterilisation of instrumentation and linen according to organisational 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. | |
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| Skill | Description |
| Writing | * Complete organisational documentation in relation to monitoring animals pre- and post-anaesthesia |
| Numeracy | * Correctly calibrate equipment used for anaesthesia * Calculate and confirm dose rates of anaesthetics and medications with supervisor |
| Oral communication | * Listen to clear sequenced instructions by supervisor and ask clarifying questions as required in order to assist with administering anaesthesia |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| ACMATE4X1  Prepare for and monitor anaesthesia in animals | ACMATE303 Prepare for and monitor anaesthesia in animals | Code changed to reflect indicative AQF level. Minor changes to performance criteria and knowledge evidence for clarity. Revised performance evidence to reduce duplication with performance criteria | Equivalent unit |

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| 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 ACMATE4X1 Prepare for and monitor anaesthesia in animals |
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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, administered and monitored anaesthesia of at least three animals * maintained hygiene and infection control standards for each anaesthetic procedure * prepared, used and maintained equipment and materials correctly and according to manufacturers' specifications and organisational procedures for each anaesthetic procedure. | |

| Knowledge Evidence |
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| 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 of anaesthesia monitoring in animals * anatomical terminology, structures, tissues and organs relevant to the induction and monitoring of animals under anaesthetic * indicators of normal and undesirable responses to anaesthetic and related medications * animal anaesthetic emergencies and responses, including animal first aid techniques * biohazards in the workplace of significance to animals and humans * characteristics of healthy, sick or distressed animals * communication procedures and systems and technology relevant to the organisation and the individual's work responsibilities * information that should be documented for the administration of anaesthetic and related substances * methods and equipment used to: * measure, interpret and record objective measure of animal health * anaesthetise animals in animal technology workplaces * monitor animals during anaesthesia * organisational policies and safe work procedures, including WHS and emergency procedures * preparation of animals for gaseous and/or injectable anaesthetic, including: * shaving, injection site * heat sources * eye gel * physiological features of animals related to the application of anaesthesia and related medications * relevant, current codes, including the Australian Code for the Care and Use of Animals for Scientific Purposes * safe animal handling techniques and procedures * types of non-surgical or tissue collection procedures used in animal technology facilities that require the use of anaesthetics and related medications * organisational hygiene standards and cleaning requirements: * disinfectants and cleaning agents, cleaning techniques, equipment and materials * sterilisation, packing and validation processes for instrumentation and linen. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in an animal technology laboratory * resources, equipment and materials: * a range of live animals to be anaesthetised.   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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