## Assist the veterinarian with animal anaesthetic and analgesic procedures

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### Purpose
People credited with this unit standard are able to: assist the veterinarian with local anaesthesia; prepare the anaesthetic machine and associated equipment; prepare for anaesthesia and assist in anaesthetic induction; intubate the patient; maintain and monitor the patient under gaseous anaesthesia, and describe anaesthetic emergencies that may arise and appropriate responses; monitor the animal's recovery from anaesthesia; maintain anaesthetic equipment and apparatus; assist the veterinarian with analgesia; and advise on basic post-operative nursing care.

### Subfield
Animal Care and Handling

### Domain
Veterinary Nursing

### Status
Registered

### Status date
26 July 2005

### Date version published
25 June 2007

### Planned review date
31 July 2009

### Entry information
Prerequisites: Unit 5155, *Prepare animal patients for surgery*; and Unit 5189, *Follow safe working practices and standards in the animal facility*; or demonstrate equivalent knowledge and skills.

### Accreditation
Evaluation of documentation and visit by NZQA, industry and teaching professional in the same field from another provider.

### Standard setting body (SSB)
Primary Industry Training Organisation

### Accreditation and Moderation Action Plan (AMAP) reference
0228

Special notes

1 For credit, evidence must be in accordance with the statutory and industry requirements contained in the following documents.
Relevant New Zealand Veterinary Association (NZVA) standards, available from NZVA, PO Box 11-212, Manners Street, Wellington (http://www.vets.org.nz) including the current versions of Standard Procedures for Veterinary Nursing and Animal Care (referred to in this unit standard as standard procedures); BESTPRACTICE™ Standards for Companion Animal and Large Animal Combined Module for Mixed Practices; and Standard Procedures for Veterinary Nurses and Animal Care (referred to in this unit standard as standard procedures).
Prescription Animal Remedies (PAR) Classification of Animal Remedies.

2 Definition
In-house procedures refer to the documented policies and procedures for animal care, handling, and ethical behaviour codes required by the employer, consistent with NZVA BESTPRACTICE™ standards.

Elements and performance criteria

Element 1

Assist the veterinarian with local anaesthesia.

Performance criteria

1.1 Local anaesthetics are described in terms of their indications, speed of action, and duration of effects.

1.2 Local anaesthetic drugs are prepared for use as directed by the veterinarian.

1.3 Patient is restrained, without stress or injury to animal or self, to allow veterinarian to administer anaesthetic agent.
Element 2

Prepare the anaesthetic machine and associated equipment.

Performance criteria

2.1 Anaesthetic circuits and equipment are selected ensuring suitability for individual patient.

2.2 Function checks are carried out on anaesthetic equipment and scavenging system according to standard procedures.

2.3 Monitoring equipment is readied according to in-house procedures.

Range stethoscope, oesophageal stethoscope, apnoea monitor, pulse monitor, charts.

Element 3

Prepare for anaesthesia and assist in anaesthetic induction.

Performance criteria

3.1 Base line vital signs of the animal are measured and recorded according to standard procedures.

Range temperature, pulse, respiration rates, mucous membrane colour, capillary refill time.

3.2 Intravenous anaesthetics and reversal agents are prepared for use as directed by the veterinarian.

3.3 Endotracheal tubes and associated equipment are selected according to individual animal’s trachea and veterinarian’s preference, patency checked, and prepared for use.

Range associated equipment includes – laryngoscope, lubricant, laryngeal local anaesthetic.

3.4 Animal is positioned for induction, and assistance provided to veterinarian in induction of anaesthesia as directed.

Range prepare injection site, vein raised, patient restraint, support/positioning of patient during induction, needle/cannula secured to patient’s leg.
Element 4

Intubate the patient.

Performance criteria

4.1 Animal is intubated, as supervised by the veterinarian, to ensure distal end of endotracheal tube is mid cervical in the trachea.

4.2 Cuff is inflated to form airtight seal, and tube is tied in to prevent prolapse and connected to machine.

4.3 Problems of intubation are described in terms of potential injury to animal.

Range over-inflation, incorrect tube size, over-extended time of placement, cross-infection, species differences, laryngospasm and ways of overcoming, damage to laryngeal structures, oesophageal intubation, securing tubes.

Element 5

Maintain and monitor the animal under gaseous anaesthesia, and describe anaesthetic emergencies that may arise and appropriate responses.

Performance criteria

5.1 Animal is connected to gaseous anaesthetic machine and machine is adjusted according to individual patient's needs as supervised by the veterinarian.

Range flow rate, circuits for rebreathing and non-rebreathing system, masks.

5.2 Depth of anaesthesia is monitored and recorded according to standard procedures, and adjusted as directed by the veterinarian.

5.3 Anaesthetic emergencies are described in terms of changes to vital signs of patient.

Range respiratory rate and character, heart rate and character, pulse, mucous membrane colour, capillary refill time, pupil size and position, pedal and palpebral reflexes, jaw tone.

5.4 Immediate response to an anaesthetic emergency is described in terms of ongoing assistance given to the veterinarian.

Range cardiac massage, intubation, intermittent positive pressure ventilation (IPPV), drug preparation and administration.
Element 6

Monitor the animal's recovery from anaesthesia.

Performance criteria

6.1 Recovering animal is placed in safe place, and monitored according to standard procedures, to avoid recovery trauma.

6.2 Animal is placed in position and airways checked according to in-house procedures to ensure patency.

6.3 Endotracheal cuff is deflated and endotracheal tube removed as directed by the veterinarian, without stress or injury to patient.

6.4 Possible complications arising during recovery from anaesthesia are described in terms of appropriate responses.

Range vomiting, apnoea, dyspnoea, haemorrhage, hyper-excitement, pain, discomfort.

Element 7

Maintain anaesthetic equipment and apparatus.

Performance criteria

7.1 Equipment used in anaesthetic process including anaesthetic machine is maintained, cleaned, sterilised, and stored according to the manufacturer's instructions.

7.2 Faulty equipment is identified, and repair/replacement initiated according to in-house procedures.

7.3 Anaesthetic gases, equipment, and agents are assessed and safely refilled according to the manufacturer's specifications, and supply ordered according to in-house procedures.

7.4 Anaesthetic emergency kit is maintained according to in-house procedures.
Element 8

Assist the veterinarian with analgesia.

Performance criteria

8.1 Pain in animals is described in terms of its signs.

8.2 Nursing techniques to relieve pain are described in terms of the nature of the illness or injury.

8.3 Analgesic drugs are prepared for use as directed by the veterinarian.

8.4 Patient is restrained without stress or injury to animal or self, site is prepared, and analgesic agent administered according to practice protocol and legislative requirements.

Element 9

Advise on basic post-operative nursing care.

Performance criteria

9.1 Type of surgery and anticipated progress of patient is explained in an easy to understand manner.

9.2 Ongoing nursing care and follow up consultation requirements for the patient are explained as directed by the veterinarian.

Range exercise, feeding instructions or special diets, wound and suture care and protection, bandage and cast care, normal recovery time, medications, situations when veterinary attention is required, protection from other pets or children, toileting requirements.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.
Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.