

## Collect and test diagnostic samples from large animals, and prepare the samples for dispatch

**Level** 3

**Credits** 5

**Purpose** People credited with this unit standard are able to: collect, label, and store blood samples from large animals; collect, label, and store samples related to diseases of large animals; carry out tests on samples related to diseases of large animals; prepare samples from large animals for dispatch to external laboratories; maintain safety of workplace and self in the course of duties associated with handling large animal samples; and follow quality control procedures and describe a system for re-ordering stock for work associated with collection and handling of large animal samples.

**Subfield** Animal Care and Handling

**Domain** Animal Care

**Status** Registered

**Status date** 26 July 2005

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**Entry information** Open.

**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

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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### Special notes

- For credit, evidence must be in accordance with the statutory and industry requirements contained in the following documents.  
Relevant and current National Animal Welfare Advisory Committee (NAWAC) Codes of Welfare and Codes of Recommendations and Minimum Standards, available at <http://www.maf.govt.nz>, under animal welfare.  
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 BESTPRACTICE™ *Standards for Large Animal Practice Module*. New Zealand Standard NZS 4304:2002 *Management of Healthcare Waste*. Animal Welfare Act 1999, Health and Safety in Employment Act 1992, and any subsequent amendments.

## 2 Definitions

*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.

*Large animals*, in this unit standard, refers to all ruminant species, pigs, and horses.

- 3 To achieve credit, candidates must collect samples from at least one ruminant, a horse, and one of any other large animal.

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## Elements and performance criteria

### Element 1

Collect, label, and store blood samples from large animals.

#### Performance criteria

- 1.1 Collection equipment and containers are assembled according to samples required and techniques to be used.
- 1.2 Animal is restrained to allow samples to be collected, without injury to self or animal, and with minimum stress to animal.
- 1.3 Site is prepared and cleaned according to the type of samples to be taken.
- 1.4 Blood vessel is raised for sampling and a sample is collected according to practice protocol and dependent on the type of test required.
- 1.5 Needle is withdrawn from the blood vessel and the site is treated to prevent haemorrhage.
- 1.6 Sample is transferred to a bottle or tube in a manner that prevents haemolysis and handled according to the type of test required.
- 1.7 A blood smear is prepared and labelled for examination without causing damage to individual cells.
- 1.8 Samples are labelled and stored immediately after collection according to diagnostic laboratory requirements.

### Element 2

Collect, label, and store samples related to diseases of large animals.

### Performance criteria

- 2.1 Collection equipment and containers are assembled according to samples required and techniques to be used.
- Range urine, faeces, milk, pasture litter.
- 2.2 Animal is restrained to allow samples to be collected, without causing undue stress to animal.
- 2.3 Site is prepared and cleaned according to the type of samples to be taken.
- 2.4 Urine is collected by free flow from animal into a suitable container, and stored using a method appropriate to the test required.
- 2.5 Fresh faeces are collected by salvage and free of contaminants from surrounding area, and stored to prevent deterioration and contamination.
- 2.6 Milk is collected in a manner that minimises risk of external contaminants, and stored to prevent deterioration and contamination.
- 2.7 Pasture litter samples are collected according to standard procedures and to reflect the overall facial eczema status of the pasture.
- 2.8 Samples are labelled and stored immediately after collection according to diagnostic laboratory requirements.

### Element 3

Carry out tests on samples related to diseases of large animals.

### Performance criteria

- 3.1 Tests are carried out according to standard procedures and manufacturers' instructions.
- Range must include but is not limited to –  
blood – packed cell volume (PCV);  
urine – urinalysis (specific gravity, urine chemistry);  
faecal egg count – McMaster's Technique;  
milk – Rapid Mastitis Test.
- 3.2 A pasture litter test for facial eczema spores is carried out according to standard procedures.

### Element 4

Prepare samples from large animals for dispatch to external laboratories.

Range blood (tube and smear), urine, faeces, cytology, milk.

### **Performance criteria**

- 4.1 Individual samples are packed to prevent damage and leakage during transport.
- 4.2 Samples are packaged, labelled and marked according to postal regulations and courier requirements.
- 4.3 Written instructions are included according to diagnostic laboratory requirements.
- 4.4 Latest dispatch time for optimum results from samples is identified.

### **Element 5**

Maintain safety of workplace and self in the course of duties associated with handling large animal samples.

### **Performance criteria**

- 5.1 Designated working area is clean and organised to prevent contamination in accordance with NZVA BESTPRACTICE™ standards.
- 5.2 Special wastes are bagged in safety-approved polythene bags and disposed of according to current waste management standards.
- 5.3 Protective clothing and disposable gloves are used throughout the process where there is a known or suspected personal safety risk, in accordance with NZVA BESTPRACTICE™ standards.
- 5.4 Reporting of notifiable diseases is described in accordance with workplace protocol and Ministry of Agriculture and Forestry requirements.

### **Element 6**

Follow quality control procedures and describe a system for re-ordering stock for work associated with collection and handling of large animal samples.

### **Performance criteria**

- 6.1 Quality control procedures are followed in accordance with the manufacturer's instructions and diagnostic test specifications to ensure accurate results.  
  
Range procedures include but are not limited to – records, equipment, reagents, techniques.
- 6.2 A system for checking and re-ordering stocks of clinical supplies is described according with in-house procedures.

### **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.

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### **Comments on this unit standard**

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