



Australian Government

Department of Education, Employment and Workplace Relations

AHCAIS302A Process and store semen

Release: 1

AHCAIS302A Process and store semen

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of storing and processing semen collected from livestock for the purpose of artificial insemination and defines the standard required to: prepare diluent; maintain temperatures required for storing of diluent and processed semen doses; assess semen for quality parameters for livestock semen intended for use in artificial insemination procedures; ensure incubator is operational and prepare and label doses.
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Application of the Unit

Application of the unit	This unit is performed under limited supervision and with reference to established procedures. Some discretion and independent judgement is required.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Prepare diluent	1.1. Containers to be used for preparation of diluent are cleaned according to enterprise hygiene standards. 1.2. Equipment and tools to be used in processing semen are calibrated according to manufacturers' specifications. 1.3. Distilled water for use in diluent is heated to required temperature. 1.4. Distilled water is added to powdered diluent in correct proportions. 1.5. Diluent is correctly stored before use.
2. Determine number of doses	2.1. Concentration of the ejaculate is determined using spectrophotometer or other appropriate equipment. 2.2. Number of doses is calculated according to the concentration determined. Number of doses is calculated according to the concentration determined.
3. Assess quality of semen batch	3.1. Semen batch is examined and checked for contamination. 3.2. Motility of semen is assessed. 3.3. Quality of semen batch is compared against enterprise benchmarks. 3.4. Poor quality semen is discarded according to enterprise procedures.
4. Ensure incubator is operational	4.1. Temperature and other operational parameters of incubator are checked before use. 4.2. Problems with incubator are reported to supervisor and/or resolved before proceeding.
5. Prepare doses	5.1. Diluent is added to semen batch. 5.2. Diluted semen is divided into doses. 5.3. Each dose is labelled. 5.4. Doses are placed in incubator. 5.5. Quality of doses prepared is assessed.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE
Required skills
• identify hazards and implement safe work practices • operate incubator • operate spectrophotometer • calculate concentration and motility of semen batch • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.
Required knowledge
• temperatures required for storing of diluent and processed semen doses • quality parameters for livestock semen intended for use in artificial insemination procedures • operation of incubator.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • prepare diluent • maintain temperatures required for storing of diluent and processed semen doses • assess semen for quality parameters for livestock semen intended for use in artificial insemination procedures • ensure incubator is operational • prepare and label doses.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Animals may include:	• sheep • goats • alpacas • cattle • poultry • pigs.

Unit Sector(s)

Unit sector	Artificial insemination
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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