



Australian Government

RGRHBR408 Collect, process and evaluate horse semen for artificial insemination

Release: 1

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Modification History

Release	Comments
Release 1	This version released with Racing and Breeding Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to collect, process, analyse the quality of, and supply horse semen to clients for artificial insemination breeding.

The unit applies to individuals who work under broad direction and take responsibility for their own work relating to artificial insemination. They complete routine activities dealing with predictable and unpredictable problems relating to their work in the horse breeding sector.

All work must be carried out to comply with workplace procedures, according to state/territory animal welfare and health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Horse Breeding (HBR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for and collect horse semen	1.1 Follow workplace procedures for work health and safety, biosecurity and animal welfare when collecting semen 1.2 Select and prepare appropriate equipment for semen collection,

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	and personal protective equipment (PPE) appropriate for task 1.3 Prepare, sanitise and calibrate equipment and tools used in processing semen 1.4 Prepare stallion for semen collection in controlled area 1.5 Collect semen from the stallion using hygienic and industry accepted collection techniques
2. Complete post-collection procedures	2.1 Handle and transfer semen safely and promptly to the processing area 2.2 Return horse to stable or designated area 2.3 Clean work area and equipment, and dispose of waste following workplace procedures
3. Process horse semen within required timeframes	3.1 Ensure optimal temperature of incubator and other equipment and materials used to process semen before use 3.2 Prepare diluent (semen extender) and additives to maintain sperm viability according to workplace procedures 3.3 Determine number and volume requirements, and prepare semen doses 3.4 Send semen samples for testing by a veterinarian if an infectious disease is suspected
4. Assess quality of horse semen	4.1 Examine semen batch and check for contamination 4.2 Analyse semen to assess motility and other indicators of fertility 4.3 Investigate reasons for any poor quality batches of semen, and notify and discuss with relevant personnel 4.4 Test semen and extender batches for individual horses to determine viability and timeframes for use, and store correctly
5. Complete records and supply horse semen	5.1 Label and record details of semen doses according to workplace procedures 5.2 Store semen at correct temperature to maintain viability and meet transportation needs 5.3 Complete required documentation and records accurately and promptly 5.4 Organise transport of semen to clients for artificial insemination of mares

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.

Skill	Description
Numeracy	• Use mathematical concepts to calculate ratio, percentages, volume and quantities related to semen collected • Calibrate equipment and temperature
Navigate the world of work	• Take responsibility for following industry and regulatory requirements for own role and area of work
Get the work done	• Plan, sequence and prioritise activities to achieve outcomes • Carry out processing tasks efficiently to required timeframes • Use workplace technology, tools and systems to complete records and documentation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RGRHBR408 Collect, process and evaluate horse semen for artificial insemination	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c4b8489-f7e1-463b-81c8-6ecce6c192a0>

Assessment Requirements for RGRHBR408 Collect, process and evaluate horse semen for artificial insemination

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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 and collected semen from two stallions using safe, industry-approved techniques
- assessed, processed, stored and organised transportation of three batches of semen
- documented processes and recorded information relevant to semen collected from each stallion.

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:

- types, uses and maintenance of personal protective equipment for collecting and handling semen
- types and purpose of equipment, including:
 - artificial vagina
 - thermometers
 - preparing containers and equipment to correct temperature
 - storage equipment, including liquid nitrogen tanks for storing frozen semen
 - non-spermicidal gel and common spermicidal substances
 - equipment to measure motility and sperm concentration
- techniques for safe and humane handling and restraint of horses, including safe zones for handlers and semen collectors
- methods, techniques and procedures for:
 - establishing controlled semen collection areas
 - cleaning work areas and sterilising equipment used in semen collection and processing
 - handling, measurement and usage of cleaning chemicals, disinfectants and sanitisers
 - processing and storing semen, including fresh, chilled or frozen

- types of equine infectious diseases transmitted through artificial insemination, and methods of reducing potential infection and spread
- analysis and evaluation of semen, including for:
 - volume
 - motility
 - concentration
 - sperm morphology
 - presence of bacteria, urine and/or blood
 - longevity
 - per-cycle pregnancy rate
- key features of relevant workplace procedures, regulations and codes of practice relating to collecting and processing horse semen, including:
 - health and safety
 - environmental requirements for disposal of biological waste
 - biosecurity, hygiene and infection control
 - animal welfare requirements
 - documentation and records for specific breeds to ensure stud book compliance.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - various stallions accustomed to having semen collected
 - materials and equipment relevant to semen collection and analysis
- specifications:
 - workplace procedures.

Training and assessment strategies must show evidence of the use of guidance provided in the *Companion Volume: User Guide: Safety in Equine Training*.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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