



Australian Government

AHCAIS402 Supervise artificial breeding and embryo transfer programs

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to determine livestock breeding method, and supervise, monitor and maintain livestock artificial breeding and embryo transfer (ET) programs.

The unit applies to individuals who apply specialist skills and knowledge to supervise livestock artificial breeding and embryo transfer programs. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, animal welfare legislative, regulatory and codes of practice requirements, and biosecurity practices.

Accreditation requirements apply in some jurisdictions to performing commercial artificial breeding and embryo transfer. Users are advised to check with the relevant State or Territory regulatory authority.

Pre-requisite Unit

Nil

Unit Sector

Artificial Insemination (AIS)

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. Determine breeding method	1.1 Review options for artificial breeding to determine most suitable and affordable method according to breeding objectives

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Select and match artificial breeding option to resources and breeding objectives 1.3 Identify, source and arrange breeding program resources 1.4 Prepare program schedules according to available resources 1.5 Source personal protective equipment for staff and self, according to workplace health and safety procedures
2. Implement breeding method	2.1 Check the disease status of donor and recipient animals according to biosecurity requirements 2.2 Obtain genetic material from appropriate and reliable source 2.3 Select tools and or materials required 2.4 Receive, check and store genetic material according to workplace procedures 2.5 Handle animals according to workplace animal welfare practices 2.6 Ensure females are inseminated at the optimal stage of oestrus cycle where artificial insemination is the selected option 2.7 Check to ensure intended recipients are prepared and correctly scheduled where ET is the selected option 2.8 Provide hormone injections to intended recipients or donors at appropriate stages of transfer programs where ET is selected option according to veterinary prescription 2.9 Conduct embryo transfers according to codes of practice and industry standards where ET is selected option
3. Monitor and maintain program	3.1 Monitor environment and health of livestock in breeding program 3.2 Review adjustments in genetic material transfer practices to enhance success of future programs 3.3 Document and maintain data on genetic material transfer programs

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
Reading	Identify and interpret textual information from a range of sources to identify relevant and key information about livestock artificial breeding and embryo transfer programs
Writing	Use clear language, accurate industry terminology and logical structure to prepare genetic material transfer program documents

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCAIS402 Supervise artificial breeding and embryo transfer programs	AHCAIS401 Supervise artificial breeding and embryo transfer programs	Minor changes to application Minor changes to performance criteria Foundation skills added Assessment requirements updated	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCAIS402 Supervise artificial breeding and embryo transfer programs

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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 supervised a livestock artificial breeding or an embryo transfer program on at least one occasion, and has:

- determined breeding method
- applied relevant workplace health and safety and environmental and biosecurity legislation, regulations, and workplace procedures
- implemented breeding method
- applied workplace animal welfare practices
- monitored and maintained breeding program.

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:

- workplace requirements applicable to health and safety in the workplace for supervising livestock artificial breeding and embryo transfer programs, including appropriate use of personal protective equipment (PPE)
- environment and biosecurity legislation and regulations and workplace practices relevant to supervising livestock artificial breeding and embryo transfer programs
- principles and practices of livestock artificial breeding and embryo transfer programs, including:
 - animal welfare industry standards, legislation and codes of practice and procedures relevant to supervising livestock artificial breeding and embryo transfer programs
 - codes of practice, industry standards and procedures for livestock artificial insemination and embryo transfer
 - resources requirements, types and characteristics of livestock artificial breeding methods and programs

- advantages, disadvantages and cost-benefit analysis of livestock artificial breeding programs for the livestock workplace
- requirements, methods and procedures for sourcing, acquiring, transporting and storing genetic material
- reproductive physiology, reproductive behaviour and pregnancy development of female livestock
- procedures for artificial insemination
- procedures for embryo transfer
- causes, signs, treatment and management of reproductive diseases and complications in female livestock
- methods and procedures for improving the success of livestock artificial breeding programs and their impacts on herd performance
- documentation and record requirements.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - work instructions and workplace procedures applicable to supervising livestock artificial breeding and embryo transfer programs
 - live animals
 - materials, tools and equipment applicable to supervising livestock artificial breeding and embryo transfer programs
 - PPE applicable to supervising livestock artificial breeding and embryo transfer programs
- specifications:
 - workplace requirements applicable to health and safety in the workplace for supervising livestock artificial breeding and embryo transfer programs
 - environment and biosecurity legislation and regulations and workplace practices applicable to supervising livestock artificial breeding and embryo transfer programs
 - industry standards, legislation and codes of practice and procedures for animal welfare applicable to supervising livestock artificial breeding and embryo transfer programs
- timeframes:
 - according to job requirements.

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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