AHCAIS303A Artificially inseminate livestock
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Modification History
Not Applicable

Unit Descriptor

| Unit descriptor | This unit covers the process of artificially inseminating livestock and defines the standard required to: prepare for insemination; observe animals on heat to detect correct insemination timing; prepare equipment and work sites; correctly select and thaw semen for insemination; inseminate animals; record data after insemination is complete. |

Application of the Unit

| Application of the unit | This unit applies to working under minimal supervision within enterprise guidelines. |

Licensing/Regulatory Information
Not Applicable

Pre-Requisites

<table>
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<tr>
<th>Prerequisite units</th>
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Employability Skills Information

| Employability skills | This unit contains employability skills. |

Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

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<thead>
<tr>
<th>ELEMENT</th>
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<td>ELEMENT</td>
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</table>
| 1. Prepare for insemination of animals | 1.1. Timing of insemination process is scheduled to ensure availability of resource and personnel requirements.  
1.2. Hygiene factors are identified and appropriate procedures followed.  
1.3. Semen supplies are accessed from appropriate and reliable sources and stored appropriately.  
1.4. Animals are prepared to maximise success of insemination program.  
1.5. Suitable personal protective equipment and clothing is selected, used and maintained according to Occupational Health and Safety (OHS) and enterprise requirements. |
| 2. Inseminate animals | 2.1. Semen is prepared according to accepted industry and enterprise practices.  
2.2. Insemination equipment is sterile and clean and applied according to industry code of practice.  
2.3. Intended recipient is correctly identified and observed, and checked for signs of ovulation.  
2.4. Intended recipient is restrained and prepared for insemination to optimise results according to recognised handling techniques that minimise stress.  
2.5. Insemination is carried out in sterile conditions and according to appropriate hygiene procedures. |
| 3. Document and record data | 3.1. Data on insemination process is accurate and recorded according to enterprise requirements.  
3.2. Historical data is reviewed to measure performance of herd in insemination program.  
3.3. Conception rates are calculated and used to determined success of AI program.  
3.4. Information is supplied to relevant authorities to promote research and improvements in industry practice.  
3.5. Necessary modifications to herd program are identified and recorded to assist continuous improvement processes. |
| 4. Clean work area and equipment | 4.1. Waste is disposed of according to recommended hygiene standards and environmental policy.  
4.2. Work area is cleaned to industry standards and returned to operating order.  
4.3. Restraints and harnesses are cleaned and returned to |

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<td>safe and operational order.</td>
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<td>4.4. Animals are safely returned to designated area according to enterprise requirements and instructions.</td>
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Required Skills and Knowledge

**REQUIRED SKILLS AND KNOWLEDGE**

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

**Required skills**

- identify hazards and employ safe work practices
- store and dethaw semen and check sire details
- sterilise equipment and prepare hygienic worksite prior to insemination procedures
- observe animals on heat to detect correct insemination timing
- accurately scan for ovulation
- carry out artificial insemination procedure
- maintain hygiene during the operation
- clean up work site and dispose of waste in an environmentally responsible manner
- monitor pregnancy rates to review effectiveness of operation
- 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**

- working knowledge of enterprises herd improvement or animal production plan
- basic breeding principles, including the oestrus cycle and its significance
- pregnancy testing
- animal health and abnormalities
- preparation techniques such as puberty stimulation
- semen thawing and storage techniques
- preparation requirements for artificial insemination of animals
<table>
<thead>
<tr>
<th>REQUIRED SKILLS AND KNOWLEDGE</th>
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<tbody>
<tr>
<td>• animal movement and behavioural characteristics</td>
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<td>• harness and restraint equipment, components and functions</td>
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<td>• handling techniques, restraint methods and when to use them</td>
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<td>• enterprise and industry identification system for animals</td>
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<td>• personal protective equipment and when and how it should be used</td>
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<tr>
<td>• relevant State/Territory legislation, regulations and codes of practice with regard to workplace OHS and animal welfare</td>
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<tr>
<td>• legislative and regulatory controls with regard to artificial insemination</td>
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<tr>
<td>• enterprise and industry policies with regard to artificial insemination and recording and reporting routines.</td>
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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 for insemination
- observe animals on heat to detect correct insemination timing
- prepare equipment and work sites
- correctly select and thaw semen for insemination
- inseminate animals
- record data after insemination is complete.

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:

- cattle
- sheep
- goats
- alpacas
- deer.

Unit Sector(s)
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<th>Unit sector</th>
<th>Artificial insemination</th>
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**Co-requisite units**

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**Competency field**

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