



Australian Government

AHCLSK334A Plan, prepare and conduct mulesing procedures

Release 1

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Modification History

Release	TP Version	Comment
1	AHC10v8	Initial release

Unit Descriptor

This unit of competency describes the skills and knowledge necessary to conduct the most efficient and humane mulesing procedure in circumstances where all alternative methods of breech flystrike prevention have been evaluated and mulesing is considered the most appropriate of these for the long-term welfare of the sheep.

The unit defines the standard required to assess the indicators for mulesing; prepare appropriate sites, facilities and equipment in line with infection control, workplace health and safety and animal welfare standards; carry out mulesing operations; and monitor animals' behaviour post-mulesing for health and well-being.

Application of the Unit

This unit applies to sheep farmers and contractors in the livestock industry who normally operate under limited supervision.

In addition to complying with legal and ethical responsibilities, handlers are to work with animals gently and calmly. The mulesing operator is required to exhibit appropriate care for animals so that stress, discomfort and pain are minimised. At all times the mulesing operator must consider the welfare of the animal and act appropriately.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. However, candidates should confirm the regulatory requirements that apply in their relevant State or Territory before undertaking this unit.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency

Performance criteria describe the performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Conduct pre-mulesing evaluations	1.1 Relevant State/Territory legislation, regulations and animal welfare standards and guidelines are identified and complied with 1.2 <i>Alternative strategies to manage flystrike susceptibility</i> are discussed with sheep manager and carefully considered prior to undertaking mulesing procedures 1.3 <i>Key indicators for use of mulesing</i> are confirmed 1.4 <i>Pre-operative evaluation</i> of sheep is conducted 1.5 <i>Risks associated with mulesing procedure</i> are identified and discussed with sheep manager
2. Prepare for mulesing operations	2.1 <i>Weather conditions</i> are monitored to determine optimal conditions for operation and recovery 2.2 Time of day for operation is selected to minimise the separation time of lambs and ewes 2.3 Adequate numbers of skilled workers are engaged 2.4 Appropriate <i>yards, paddocks and pastures</i> are selected for each mob, for each day so that adequate time is allowed for mothering up 2.5 Low stress stock mustering, movement and handling procedures are followed 2.6 Lambs are allowed to settle and cool after yarding 2.7 All required supplies are identified and ordered in advance
3. Select, maintain and use appropriate equipment	3.1 All <i>equipment</i> is well-maintained and in a clean and hygienic condition to reduce the risk of infection and cross-infection 3.2 <i>Cradles</i> used for mulesing are maintained in good working order and operated to ensure minimal risk to the operator or lamb, especially when loading and unloading 3.3 Mulesing shears are appropriately set, ground and sharpened 3.4 Mulesing shears are disinfected after sharpening, before use, between each animal and at regular intervals during operations 3.5 Wash-down, soaking and disinfecting containers are prepared and ready for use 3.6 Chemical application equipment is prepared and tested to ensure operational efficiency 3.7 All equipment is cleaned and disinfected at the end of operations and stored appropriately to minimise contamination
4. Conduct mulesing procedures	4.1 All procedures are conducted in accordance with <i>workplace health and safety</i> standards and <i>animal welfare considerations</i> 4.2 A <i>high standard of hygiene</i> is maintained throughout the procedures in relation to facilities, hands, handling and equipment

ELEMENT	PERFORMANCE CRITERIA
	<p>4.3 Lambs are handled calmly and appropriately restrained, preferably in cradles</p> <p>4.4 Mulesing procedure is performed in accordance with model code of practice <i>mulesing technique</i></p> <p>4.5 Pain relief is provided, in accordance with industry best practice and legislative requirements, and applied to the wound immediately after the procedure according to label and Material Safety Data Sheet (MSDS) instructions</p> <p>4.6 If required, appropriate chemical application equipment is used to apply insecticide dressing to the intact skin (not the wound), in accordance with the label and MSDS requirements, after the completion of the procedure</p> <p>4.7 Wound symmetry, size and position, and breaks in selvage (muscle fascia) is continually evaluated</p> <p>4.8 Lambs are removed from cradles so they land gently on all four feet</p>
<p>5. Follow post-mulesing management procedures</p>	<p>5.1 Following release lambs are allowed to 'mother-up' to ewes as soon as possible</p> <p>5.2 Sheep manager is advised on the <i>post-mulesing management requirements</i> to assist with rapid mothering-up and convalescence</p> <p>5.3 Required <i>documentation and records</i> are maintained and updated</p>

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit

Required skills include:

Ability to:

- apply 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
- clean, disinfect and maintain equipment to ensure efficient and safe working standards
- communicate effectively with others, including questioning, active listening, asking for clarification and consulting with or seeking advice as required
- comply with animal welfare legislation, animal care standards and guidelines, State and Territory veterinary surgeons or practitioners legislation and regulations and relevant codes of conduct and workplace health and safety legislation
- conduct pre-operational checks of pain relief and/or insecticide application equipment
- employ safe, humane and environmentally responsible systems and procedures when working with and handling livestock
- follow sequenced written instructions
- record information collected accurately and legibly
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- consider infectious, zoonotic and exotic disease possibilities (biosecurity)
- operate equipment effectively and with due consideration to the potential hazards associated with using equipment on lambs
- use numeracy skills to estimate, calculate and record routine workplace measures
- use safe manual handling techniques and equipment
- use safe, hygienic and environmentally friendly waste handling and disposal procedures
- work as a member of a team

Required knowledge includes:

Knowledge of:

- alternative strategies available to manage flystrike susceptibility
- body condition score (BCS) or Fat score (FS) system for sheep
- breech wrinkle score system (BRWR) for lambs and sheep
- breech cover score (BCOV) for lambs and sheep
- chemical label and relevant Material Safety Data Sheets (MSDS) formats
- grazing industry biosecurity manual and related strategies
- industry recognised best practice mulesing technique
- meteorological and other conditions and impacts on safe and effective mulesing operations
- most recent Animal Welfare Standards and Guidelines
- relevant legislation, regulations and codes of practice, including those relating to workplace health and safety, animal welfare, veterinary practitioner/surgeons' Acts, stock diseases and

waste disposal, agricultural and veterinary chemical use

- relevant state or territory legislation covering the use of therapeutic and controlled substances
- principles of animal welfare
- registered chemical products available for application to the mulesing wound
- workplace hygiene standards (biosecurity) including: disinfectants, cleaning agents and techniques, cleaning and appropriate disinfection of equipment and materials

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 competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess alternative strategies and confirm key indicators for the use of mulesing
- understand optimal conditions for carrying out mulesing procedures
- conduct pre-operative evaluation of lambs submitted for mulesing procedures and risk assessment in consultation with sheep manager
- prepare appropriate sites, facilities and equipment in line with infection control, workplace health and safety and animal welfare standards including pain management in accordance with industry best standards and legislative requirements
- follow low stress stock mustering, movement and handling procedures
- carry out mulesing operations in accordance with industry recognised best practice mulesing techniques and hygiene standards
- follow appropriate procedures and label directions to provide pain relief plus insecticide dressing as required
- monitor animals' behaviour post-mulesing for health and well-being including the ability to recognise signs of post-mulesing complications
- communicate post-mulesing management requirements to sheep manager
- accurately document and maintain appropriate records

The skills and knowledge required to plan, prepare and conduct mulesing procedures must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

Context of and specific resources for assessment

Assessment for this unit is to be practical in nature and must be assessed in an on-farm workplace situation with access to the appropriate stock, facilities and equipment to enable one to demonstrate competence consistently over time.

Method of assessment	<p>To ensure consistency of performance, competency must be demonstrated, to industry recognised mulesing standards, covering a range of lambs with differing amounts of wrinkle whilst operating at commercial speed. Assessment must take into account the type of sheep, the acceptable mulesing method practiced in the local area and the environment of the area to tailor the degree of mulesing required and only remove minimum required wool-bearing skin. Competency must also be demonstrated in equipment preparation including assessment of setting and sharpness of mulesing shears and application of pain relief.</p> <p>Assessment must take place over a period of time in order to cover a variety of circumstances, cases and responsibilities. The assessment strategies must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> • written and/or oral assessment of candidate's required knowledge • observed, documented and firsthand testimonial evidence of candidate's application of practical tasks • portfolio records that provide evidence of practical skills <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
Guidance information for assessment	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><i>Alternative strategies to manage flystrike susceptibility</i> may include:</p>	<ul style="list-style-type: none"> • flock husbandry practices, for example: <ul style="list-style-type: none"> • timing of lambing, crutching and shearing • good worm control • breech clips • culling sheep with high wrinkle scores • culling of previously struck sheep • tail docking at an appropriate length • management of dag and stain on lambs • chemical and non-chemical pest management • paddock grazing management • enhanced breeding for flystrike resistance • selection for resistant conformation • selection of replacement sheep with tail length and/or breech modification which will minimise susceptibility to flystrike • consider removing skin from the tail and not the breach of the sheep where conformation of the sheep means that this would achieve sufficient protection from flystrike
<p><i>Key indicators for use of mulesing</i> may include:</p>	<ul style="list-style-type: none"> • property where stock are farmed is regularly subject to a high risk of breech flystrike • sheep have significant wrinkle (BRWR) or wool cover (BCOV) in breech area • risk of dags • lambs to be mulesed are intended to be farmed as adult sheep and satisfy the above criteria
<p><i>Pre-operative evaluation of sheep</i> may include:</p>	<ul style="list-style-type: none"> • optimal seasonal conditions and age when lambs should be mulesed • ensuring sheep are healthy and in the best condition possible, for example: <ul style="list-style-type: none"> • showing sound BCS (weak lambs or lambs suffering from severe disease should not be mulesed) • free from diarrhoea, dags and grass seeds • availability of good nutritional feed • considering past experience on the individual

	property
<i>Risks associated with mulesing procedures</i> may include:	<ul style="list-style-type: none"> • animals with poor BCS • risk of post-operative tetanus • extreme environmental conditions, for example: heat, cold, rain • operator limitations for example: fatigue, lack of experience • poor equipment, yards and other necessary infrastructure <p>Where such risks exist, it is recommended that the overall risks be assessed and risk mitigation put in place in the interests of animal welfare. In some cases the situation will be significant enough to be unmanageable and require deferral of the procedure.</p>
<i>Weather conditions</i>	<p>Weather conditions for operations should be a fine, mild day.</p> <p>Weather conditions to be avoided include:</p> <ul style="list-style-type: none"> • cold weather conditions which place additional stress on lambs • wet or dusty conditions which increase the risk of wound contamination • windy conditions that increase the chill factor and may interfere with mothering up • excessively hot conditions which can increase bleeding and stress on lambs • warm, humid and showery conditions which are ideal for sheep blowfly activity <p>Consideration of ongoing weather conditions during the recovery phase is required.</p>
<i>Yards, paddocks and pastures</i> considerations may include:	<ul style="list-style-type: none"> • using temporary yards to reduce the distance sheep have to travel before and after mulesing • setting up yards on clean, well-drained areas in the paddock • avoiding muddy, manure-laden and dry, dusty areas • arranging yards to include pre-operative holding and work areas • ensuring holding paddock is free of contamination hazards, has sufficient water and provides adequate shelter • property has a well-planned animal health and vaccination program
<i>Equipment</i> may include:	<ul style="list-style-type: none"> • cradles

	<ul style="list-style-type: none"> • mulesing shears • containers for wash-down, soaking and disinfecting (stainless steel recommended) • registered disinfectant solutions • sharpening equipment, jigs and stones • chemical application equipment • chemical treatments including pain relief product stored appropriately and use by dates adhered to • back up systems and equipment
<p><i>Cradles</i> may include:</p>	<ul style="list-style-type: none"> • a single cradle • sets of cradles mounted on a steel yard panel • sets of cradles mounted on a rotating frame <p>Cradles must be well-maintained to prevent injury to sheep and operator and must be designed to:</p> <ul style="list-style-type: none"> • hold the lamb securely in a symmetrical position • position the hind legs close enough together so that folds of skin can easily be picked up • expose the rear end of the lamb in a more horizontal than vertical position • release the lamb on its feet to prevent contact of the wound with the ground to prevent contamination • enable effective cleaning and disinfection
<p><i>workplace health and safety standards</i> may include:</p>	<ul style="list-style-type: none"> • applying appropriate manual handling techniques when handling loads, including livestock and equipment • following safe operating procedures for: <ul style="list-style-type: none"> • cleaning, disinfecting and sharpening instruments • following personal and workplace hygiene procedures • hazard identification and risk minimisation: <ul style="list-style-type: none"> • handling, use, storage, transport and disposal of chemicals • handling and disposal of biological wastes • livestock catching, handling, controlling and restraining methods • avoiding risk of self injection with Gudair vaccine • using materials and equipment in accordance with manufacturers' instructions • using infection control procedures to minimise risks associated with: <ul style="list-style-type: none"> • infectious and zoonotic diseases • release of infective agents (both animal and

	<p>human)</p> <ul style="list-style-type: none"> • chemical spillage • using personal protective equipment (PPE) including: <ul style="list-style-type: none"> • clothing of a protective nature • eye and ear protection • masks for the protection of the respiratory system • gloves • items for sun and other protection • safety footwear and leg protection
<p><i>Animal welfare considerations</i> may include:</p>	<ul style="list-style-type: none"> • providing pain relief • complying with current relevant legislation, regulations concerned with: <ul style="list-style-type: none"> • animal welfare (eg. the most recent Animal Welfare Standards and Guidelines) • the prevention of cruelty to animals • adopting best practice recommendations as relevant in the most recent Animal Welfare Standards and Guidelines and in industry documents such as: <ul style="list-style-type: none"> • industry codes of practice • industry standards and protocols
<p><i>A high standard of hygiene</i> will require:</p>	<ul style="list-style-type: none"> • equipment to be thoroughly cleaned and disinfected before initial use and each time they are changed for cleaning and sharpening • registered disinfectant to be used in accordance to label instructions (MSDS) • disinfecting mulesing shears between each animal procedure • appropriate reprocessing of reusable equipment • personal hygiene practices especially washing and drying hands (e.g. before and after animal contact) • avoidance of wound contact by the operator and with applicators when applying pain relief and fly prevention chemicals • appropriate application of fly prevention chemicals (wool areas only) and pain relief products (wound area only) • safe handling and disposal of clinical, related and general waste • surface cleaning and management of blood and bodily fluid spills • techniques to limit contamination • use of personal protective equipment

<p><i>Mulesing techniques</i> include:</p>	<ul style="list-style-type: none"> • knowledge of the type of sheep, the environment of the area and only removing the minimum required wool bearing skin • appropriate tail length in accordance with industry standard • not cutting through the selvage (muscle fascia) or underlying muscle or bone • not removing or cutting bare skin • symmetry • leaving a 'V' of wool-bearing skin between one-third to two-thirds of the length of the docked tail • ensuring the stretching and size of the resulting wrinkle-free bare area is proportional to the wound size • post-operative application of topical pain relief to entire wound plus insecticide to nearby wool-bearing skin as required
<p><i>Post-mulesing management requirements</i> include:</p>	<ul style="list-style-type: none"> • observing lambs for 24 hours to ensure all lambs well-mothered • recognising signs of post-mulesing complications including infection, septicaemia • ensuring lambs are not disturbed, mustered or handled for at least four weeks after mulesing unless urgent intervention is required to assist wound healing • observing lambs, without disturbance, at least every three days during the healing process to check for flystrike or other adverse reactions • providing immediate treatment to lambs that are abandoned and/or unable to stand up and walk
<p><i>Documentation and records</i> may include:</p>	<ul style="list-style-type: none"> • chemical usage data • vaccination history of the flock • evidence of the use of pain relief that can be provided to Wool Broker, Australian Wool Exchange (AWEX) for the National Wool Declaration (NWD) records (voluntary) • Material Safety Data Sheets (MSDSs) • records of post-mulesing complications

Unit Sector(s)

Livestock