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| Training Package | Rural Production (RTE03) | HSC Requirements and Advice |
| Title | Monitor livestock to parturition | |
| Unit code | This competency standard covers the processes required to monitor animal health, wellbeing and welfare during gestation. Competency requires the application of knowledge and skills to observe livestock health and wellbeing from joining and to maintain appropriate nutritional and environmental requirements. The work is likely to be carried out under routine supervision within enterprise guidelines. Pregnancy testing of animals is covered by other competency standards. | HSC Indicative Hours |
| RTE2113A | | 10 |

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in this standard requires evidence of the ability to effectively observe and report animals' condition, health and behaviour during gestation, and maintain nutritional requirements. In addition, it requires the ability to recognise and report abnormalities for remedial action and to provide a safe and secure environment for the promotion of the welfare and wellbeing of pregnant animals through to birthing. Evidence must also be demonstrated in the employment of positive environmental, safe workplace practices and humane animal handling methods.

The skills and knowledge required to monitor animals to parturition must be **transferable** to another rural workplace. For example, if competence is evident in providing and maintaining appropriate nutritional and environmental requirements for cows during gestation, it should also be evident in providing care for pregnant sheep and goats.

| What specific knowledge is needed to achieve the performance criteria? | What specific skills are needed to achieve the performance criteria? | Are there other competency standards that could be assessed with this one? | Assessment guide | HSC Requirements and Advice |
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| <p>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:</p> <ul style="list-style-type: none"> • health and nutritional requirements for pregnant animals • livestock identification methods • pregnant animals behaviour and abnormalities • pregnancy checking and confirmation procedures (including scanning) | <p>To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complimentary skills are required. These include the ability to:</p> <ul style="list-style-type: none"> • handle pregnant animals with due care • observe and accurately report animal behaviour • carry out basic repairs to paddocks, shelter, and housing • administer preventative health treatments • control environmental impacts associated with animal production | <p>This competency standard <u>could</u> be assessed on its own or in combination with other competencies relevant to the job function.</p> | <p>There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant Sector Booklet.</p> | <p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • animal welfare • dry animals • enterprise records/documentation • enterprise requirements • environmental implications • feed supplements • feeding plan • gestation • hazard • health and nutritional requirements for pregnant animals • indicators of animal condition and health status • intensively produced animals |

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| <ul style="list-style-type: none"> • handling techniques for dry and pregnant animals • effects of adverse weather conditions and inadequate nutrition on pregnant animals and their newborn • housing requirements for intensively produced animals • preventative health treatments, procedures and methods • environment codes of practice with regard to animal production • OHS and animal welfare legislative requirements. | <ul style="list-style-type: none"> • communicate orally and in writing animal behaviour and identified abnormalities • calculate animal numbers, measure feed, assess rate and frequency of feeding, and calculate animal gestation. | | | <ul style="list-style-type: none"> • joining • legislation • livestock identification methods • occupational health and safety (OHS) • parturition • pregnancy tests • preventative health treatments • <i>Prevention of Cruelty to Animals Act 1979</i> (NSW) (as amended) • <i>Prevention of Cruelty to Animals (General) Regulation 1996</i> (NSW) • remedial action • safe and secure environment • Standard Operating Procedures (SOP). |

| Element | Performance Criteria | Range of Variables | HSC Requirements and Advice |
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| 1 Check health status of animals | 1.1 Condition and health status of animals is checked and confirmed against enterprise health strategies and records . | <p>The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.</p> <p>For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.</p> <p>What aspects of animals' condition and health status might be assessed?</p> <p>This may include weighing and condition scoring, the presence of flystrike, pregnancy toxaemia, any occurrences of abortion, identifying animals in oestrus, and the observation of general condition, animal soundness and wellbeing.</p> <p>What animals are covered by this standard?</p> <p>Cows and heifers (beef and dairy cattle), ewes (sheep), does (goats), and brood mares (horses), pigs (sows and gilts).</p> <p>What relevant information may be detailed in records?</p> <p>Relevant information may include current and historical details of condition and health status, feeding plan including supplementary feeding requirements, administered health treatments, pregnancy status (including estimated date of birthing, parentage identification), pedigrees, and stud book entries. Relevant information may also include the number of pregnant animals in enterprise, the number of abortions, newborn deaths, twins, multiple births, assisted births and predator attacks.</p> | <p>Learning experiences for the HSC must address:</p> <p>Definition of:</p> <ul style="list-style-type: none"> • gestation • parturition. <p>A basic understanding of indicators to an animal's condition and health status including:</p> <ul style="list-style-type: none"> • weight • condition scoring • presence of flystrike • pregnancy toxaemia • occurrences of abortion • identification of animals in oestrus • observation of general condition, animal soundness and wellbeing. <p>Information required, as appropriate, for keeping accurate enterprise records/documentation:</p> <ul style="list-style-type: none"> • current and historical details of condition and health status • feeding plan • administered health treatments • pregnancy status • pedigrees • stud book entries • the number of pregnant animals in enterprise • the number of abortions • newborn deaths • twins and multiple births • assisted births • previous history of birthing problems • possibility of oversize foetus • predator attacks • livestock identification methods, including <ul style="list-style-type: none"> – microchipping – tags (ear and tail) – tattoos – branding (freeze and paint) – bands – computerised collars and anklets. |

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| | 1.2 Signs of poor health and condition or abnormal behaviour are recognised and reported to the supervisor for remedial action . | What remedial action might be taken? This may include sourcing advice and information from veterinary professionals, and the Departments of Agriculture and Primary Industries. | Learning experiences for the HSC must address: Indicators of poor health and abnormal behaviour including: <ul style="list-style-type: none"> • coat lustre • irregular or abnormal gait • bellowing • high-pitched noises • non-rumination in ruminants • swellings and distension • variations in core body temperatures • herding or flocking behaviour abnormalities • discharges • loss of normal function • changes in live weights • abortion or premature parturition • decrease in production quantity or quality. Remedial action to be taken including <ul style="list-style-type: none"> • sourcing advice and information from <ul style="list-style-type: none"> – enterprise policies and Standard Operating Procedures (SOP) – supervisor/manager – veterinary professionals – government departments. |
| | 1.3 Preventative health treatments are arranged and administered according to manufacturers specifications and the supervisor's instructions. | What preventative health treatments might be administered? Vaccinations, drenching, and blowfly control for sheep. | Learning experiences for the HSC must address: A basic understanding of preventative health treatment procedures and methods including: <ul style="list-style-type: none"> • vaccinations • drenching • blowfly control • foot pairing • drenching, dipping and jetting • administration of feed supplements • genetic screening. Importance of administering preventative health treatment according to specifications and instructions. |

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| | 1.4 Existing and potential hazards in the workplace are identified and risk is assessed and controlled according to OHS requirements. | <p>What existing and potential hazards may be encountered in the workplace?</p> <p>Animal movement and handling, solar radiation, organic and other dusts, excessive noise, hazardous substances (veterinary chemicals), moving machinery and vehicles.</p> <p>What OHS requirements may be relevant to this standard?</p> <p>Safe systems and procedures for:</p> <ul style="list-style-type: none"> • animal handling including zoonoses control (Q Fever, leptospirosis) • hazard and risk control- • manual handling including lifting • horse and working dog handling • the operation of motorcycles and other vehicles • handling, application and storage of hazardous substances (drenches, vaccines) • outdoor work including protection from solar radiation, dust and noise • the appropriate use and maintenance of personal protective equipment. | <p>Learning experiences for the HSC must address:</p> <p>An awareness of potential hazards.</p> <p>A basic understanding of risk assessment:</p> <ul style="list-style-type: none"> • identify hazards • assess associated risks • strategies to control/eliminate risks. <p>An awareness of appropriate occupational health and safety (OHS) strategies including:</p> <ul style="list-style-type: none"> • select, use and maintain appropriate personal protective equipment (PPE) • sufficient drinking water • basic first aid training • access to first aid kit • safe work practices and procedures • access to appropriate communication devices • emergency plan • safety signs • environmental policies. |
| | 1.5 Environmental implications associated with production are identified, assessed and reported to the supervisor. | <p>What environmental implications may be associated with production?</p> <p>Negative environmental impacts may result from the unsafe use and disposal of veterinarian chemicals. Impacts may also result from high concentrations of animals, particularly in holding or confined areas, causing odours, increased run-off flows, loss of ground cover, soil disturbance, pugging, dust problems, weed seeds in animal manure, and contamination of ground and surface water supplies.</p> | <p>Learning experiences for the HSC must address:</p> <p>Enterprise procedures designed to control environmental implications associated with animal production.</p> <p>Environment codes of practice with regard to animal production.</p> |
| 2 Identify pregnant animals | 2.1 Animals are identified and separated on basis of pregnancy status according to enterprise guidelines. | <p>What animals are covered by this standard?</p> <p>Cows and heifers (beef and dairy cattle), ewes (sheep), does (goats), and brood mares (horses), pigs (sows and gilts).</p> | <p>Learning experiences for the HSC must address:</p> <p>Standard Operating Procedures (SOP) for identification of pregnancy status including:</p> <ul style="list-style-type: none"> • the observation of typical signs of pregnancy • conducting manual pregnancy tests • ultrasound scanning. |

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| | 2.2 Dry animals are identified and procedures implemented according to enterprise requirements . | <p>How might pregnancy be determined in animals?</p> <p>This may include conducting pregnancy ultrasound scanning, or the observation of typical signs of pregnancy.</p> <p>What enterprise requirements may be applicable to this standard?</p> <p>Standard operating procedures (SOPs), industry standards, enterprise quality assurance manual, production schedules, MSDS, work notes and plans, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions.</p> <p>What enterprise procedures might apply to dry animals?</p> <p>This may include rejoining procedures or being run separately.</p> | <p>Learning experiences for the HSC must address:</p> <p>Standard Operating Procedures (SOP) for dry animals including:</p> <ul style="list-style-type: none"> • rejoining • run separately. |
| | 2.3 Additional assistance required for assessing pregnancy status is reported to the supervisor for remedial action. | <p>How might pregnancy be determined in animals?</p> <p>This may include conducting pregnancy ultrasound scanning, or the observation of typical signs of pregnancy.</p> | |
| 3 Feed pregnant animals | 3.1 Nutritional needs of pregnant animals are identified and confirmed against the feeding plan according to enterprise requirements. | <p>What animals are covered by this standard?</p> <p>Cows and heifers (beef and dairy cattle), ewes (sheep), does (goats), and brood mares (horses), pigs (sows and gilts).</p> <p>How might the nutritional needs of pregnant animals vary?</p> <p>This may depend on the breed, weight and condition of the animals, stage of pregnancy, number of embryos, condition of pasture and weather conditions.</p> <p>What might be included in a feeding plan?</p> <p>Target weights, amount and type of feed, feed</p> | <p>Learning experiences for the HSC must address:</p> <p>Nutritional requirements for pregnant animals taking into consideration:</p> <ul style="list-style-type: none"> • breed • weight and condition of the animals • stage of pregnancy • number of embryos • condition of pasture • weather conditions. <p>Details required for a feeding plan including:</p> <ul style="list-style-type: none"> • target weights • amount and type of feed • feed supplements trace element nutrition |

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| | | <p>supplements or trace element nutrition requirements, feeding frequency and rates, feeding methods and procedures, weed control strategy, supervisors instructions, reporting and recording requirements.</p> <p>What enterprise requirements may be applicable to this standard?</p> | <p>requirements</p> <ul style="list-style-type: none"> • feeding frequency and rates • feeding methods and procedures • weed control strategy • supervisor's instructions • reporting and recording requirements. |
| | <p>3.2 Animals with special feeding needs are identified and given preferential feeding, and are recorded according to enterprise requirements.</p> | <p>Standard operating procedures (SOPs), industry standards, enterprise quality assurance manual, production schedules, MSDS, work notes and plans, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions.</p> | |
| | <p>3.3 Supplementary feeding is implemented as required and recorded according to enterprise requirements.</p> | <p>What provisions might be made for a safe and secure environment for animals?</p> <p>This may include the provision of paddocks and yards suitable to the size of the herd/flock with secure fencing, farrowing housing, the provision of a safe and predator-free environment, the provision of shelter and housing for protection against adverse weather conditions, and the availability of adequate and clean feed and water supplies.</p> <p>How might animals be appropriately handled? Procedures may include the appropriate use of handling equipment with minimum force, a reasonable amount of time for animals to complete movement, and the use of positive and calming techniques to foster the physical and mental wellbeing of animals. Dogs may also be used to assist in the controlling and directing of animals.</p> | <p>Learning experiences for the HSC must address:</p> <p>Awareness of a range of feed supplements including:</p> <ul style="list-style-type: none"> • hay • haylage • grain • predetermined rations • silage • paddock feed • grain legumes • nutrient supplements including <ul style="list-style-type: none"> – mineral blocks – protein meals – trace elements – vitamins • pellet feed • specific purpose feeds. |
| | <p>3.4 A safe and secure environment for pregnant animals is maintained according to enterprise requirements.</p> | <p>What type of feed supplements might be provided?</p> <p>Hay, grain, predetermined rations, trace elements, vitamins and sources of nutrients including silage, paddock feed, grain legumes, mineral blocks, protein meals, calcium and other</p> | <p>Learning experiences for the HSC must address:</p> <p>Provision of a safe and secure environment for animals including:</p> <ul style="list-style-type: none"> • paddocks and yards suitable to the size of the herd/flock • secure fencing • farrowing housing • predator-free environment • shelter and housing for protection against |

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| | | nutrient supplements, and specific purpose feeds. | <p>adverse weather conditions</p> <ul style="list-style-type: none"> the availability of adequate and clean feed and water. <p>A basic understanding of housing requirements for intensively produced animals.</p> |
| | <p>3.5 Handling is conducted with minimum stress and discomfort to the animals without excessive yarding or shedding according to animal welfare and enterprise requirements.</p> | | <p>Learning experiences for the HSC must address:</p> <p>Enterprise procedures for the appropriate handling of dry and pregnant animals including:</p> <ul style="list-style-type: none"> the appropriate use of handling equipment with minimum force allowing a reasonable amount of time for animals to complete movement the use of positive and calming techniques to foster the physical and mental wellbeing of animals use of dogs to assist in controlling and directing animals. <p>A basic understanding of animal welfare legislation requirements including:</p> <ul style="list-style-type: none"> <i>Prevention of Cruelty to Animals Act 1979</i> (NSW) (as amended) <i>Prevention of Cruelty to Animals (General) Regulation 1996</i> (NSW) Australian code of practice for the care and use of animals for scientific purposes. <p>A basic understanding of the role of the</p> <ul style="list-style-type: none"> Animal Welfare Unit, NSW Agriculture Royal Society for Prevention of Cruelty to Animals (RSPCA) NSW Animal Welfare League (AWL) NSW Rural Lands Protection Board. |

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where

0 = not required 1 = perform the process 2 = perform and administer the process 3 = perform, administer and design the process

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| 1. How can communication of ideas and information (1) be applied? | Animals' abnormal behaviour may be observed and accurately reported to the supervisor for remedial action. |
| 2. How can information be collected, analysed and organised (1) ? | Details of animals' condition and health status, gestation, and feeding routines may be observed and monitored for analysis and organised by records and reports. |
| 3. How are activities planned and organised (1) ? | Animal monitoring activities may be planned and organised to ensure regular and effective observation. |
| 4. How can team work (1) be applied? | Team work may be applied in methods and procedures for handling animals to administer preventative health treatments. |
| 5. How can the use of mathematical ideas and techniques (1) be applied? | Mathematics may be applied to calculate gestation periods, and to measure feed and feed supplements provisioning. |
| 6. How can problem-solving skills (1) be applied? | Animal feeding abnormalities may require remedial action to maintain adequate nutrition ingestion. |
| 7. How can the use of technology (1) be applied? | To communicate, calculate and record animal gestation data. |