



Australian Government

Department of Education, Employment and Workplace Relations

ACMEQD403A Identify potential health impacts of equine oral conditions

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This Unit of Competency covers the process of evaluating the anatomy and physiology of the equine head, with specific reference to how the teeth and dental related structures, can affect the health of horses.

Application of the Unit

The Unit is applicable to the equine industry where it may be necessary to provide dental care to ensure the health and efficient physiological function of horses. In addition to legal and ethical responsibilities, all Units of Competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort are minimised.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements may apply to this Unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Unit.

Pre-Requisites

There are no pre-requisite Units for this competency standard.

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 |
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| 1 Evaluate the impact of dental and oral health on digestion and nutrient absorption | <p>1.1 Structures of the head that relate to mastication and digestion are identified and described</p> <p>1.2 Functions of head and oral structures are determined in relation to digestion and general health</p> <p>1.3 Relationship between muscular structure, dental occlusion and masticatory action is identified</p> <p>1.4 Changes in the skull due to age, disease and injury are determined</p> <p>1.5 Other factors affecting digestive processes and digestive efficiency are defined and identified.</p> <p>1.6 Consequences of poor dental and oral health on nutrient absorption are defined and identified</p> |
| 2 Evaluate the impact of dental and oral conditions on the health of the horse | <p>2.1 Dental and oral trauma is identified and described</p> <p>2.2 Dental and oral related conditions are identified and described</p> <p>2.3 Dental congenital and genetic abnormalities are identified and described.</p> <p>2.4 Other abnormal conditions are identified and described</p> <p>2.5 Potential impact and consequences on general health of dental injuries, diseases, dental abnormalities and other conditions are defined</p> |
| 3 Identify features of head and neck structures that may relate to dental functions, oral functions and general health | <p>3.1 Soft tissue structures of the head and neck are identified and the impact of disease or injury on dental and general health is evaluated</p> <p>3.2 Bony structures of the skull and neck are identified and impact of disease or injury on dental or general health is evaluated</p> <p>3.3 Structures of the circulatory system of the head and neck are identified and the impact of disease or injury on dental or general health is evaluated</p> <p>3.4 Structures of the nervous system in the head and neck are identified and impact of disease or injury on dental and general health is evaluated</p> |
| 4 Evaluate the impact of unskilled or inappropriate dental care on the health of the horse | <p>4.1 Potential consequences of the absence of dental care on the health of the horse are evaluated</p> <p>4.2 Consequences of unskilled or inappropriate dental techniques are identified and defined</p> <p>4.3 Implications of leaving tooth fragments behind, post extraction are defined</p> <p>4.4 Consequences of excessive filing (floating) of teeth and the</p> |

impact on the masticatory ability is defined

4.5 Other possible causes of dental damage or disease are identified and consequences are defined

Required Skills and Knowledge

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

Required skills include:

Ability to:

- analyse and solve problems using available information and resources including recording information and prioritising daily tasks
- apply interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- communicate effectively with others, including questioning, active listening, asking for clarification and consulting with or seeking advice from other appropriate service providers
- comply with animal welfare legislation, animal care guidelines, state and territory veterinary surgeons or practitioners legislation and regulations, relevant equine dental association code of conduct, equine dental service provider accreditation requirements and standards
- condition score the horse
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- follow sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of defined tasks
- identify evidence of conditions, practices, devices or structures which have been contributing to pain or distress to the horse, while at liberty (grazing/feeding) or under restraint (handling, riding, driving)
- identify potential causes of poor condition and behaviour issues in the horse related to dental care or dental condition
- interpret behavioural signals of the horse
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection considering zoonotic and exotic disease possibilities (biosecurity)
- prepare and maintain equine records using appropriate terminology
- read, understand and follow required policies and procedures, including OHS, infection control and waste management
- use safe manual handling techniques and equipment
- use safe, hygienic and environmentally friendly waste handling and disposal procedures.

Required knowledge includes:

Knowledge of:

- anatomy and physiology of the equine head and oral structures including features and functions of the equine mouth and teeth including normal and abnormal functions
- anatomical directional terminology
- appropriate industry and state/territory equine dental codes of conduct and standards of practice
- causes and consequences of horse ailments, infections and injuries relevant to dental care

- contagious disease symptoms, prophylaxis and biosecurity protocols
- established dental terminology related to equine dental care
- features of correctly formed, healthy and well-maintained equine dental and oral structures
- indicators of horse distress, illness and disease
- influence of different diets and husbandries on mastication and oral health
- normal and abnormal features of equine dental and oral structures including physiology and effect of diet
- nutritional requirements and digestive processes of the horse
- principles of animal welfare
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics, veterinary practice, restricted dental practices and waste disposal
- relevant state or territory legislation covering the supply, possession and use of restricted and controlled substances
- safe work practices
- techniques and instruments used to provide equine dental care
- workplace hygiene standards (biosecurity) including: disinfectants, cleaning agents and techniques, cleaning and appropriate disinfection or sterilisation of equipment, materials and personal protective equipment (PPE).

Evidence Guide

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| 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 | <p>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:</p> <ul style="list-style-type: none"> • describe the process of mastication and nutrient absorption and the impact of poor occlusion or masticatory action on the health of the horse • condition score the horse • evaluate a range of ailments, diseases and injuries that could occur as a result of unskilled or inappropriate dental care • identify evidence of unskilled or inappropriate dental care. <p>The skills and knowledge required to identify potential health impacts of equine oral conditions must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.</p> |
| Context of and specific resources for assessment | <p>Assessment for this Unit is to be practical in nature and will be most appropriately assessed in an equine dental workplace or in a situation that reproduces normal work conditions.</p> <p>There must be access to a range of horses and anatomical models and the relevant equipment and resources to enable one to demonstrate competence.</p> |
| Method of assessment | To ensure consistency in performance, competency should be demonstrated, to industry standards, on more than two occasions over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities. |

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| | <p>The assessment strategy must include assessment of competency in a work environment. Suggested strategies for this Unit are:</p> <ul style="list-style-type: none">• written and oral assessment of candidate's required knowledge• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks• simulation exercises that reproduce normal work conditions• case studies• third-party evidence• workplace documentation. <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 socio-economic backgrounds).</p> |

Range Statement

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.

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| <i>Structures of the head</i> include: | <ul style="list-style-type: none"> teeth: <ul style="list-style-type: none"> incisors canines premolars and molars salivary glands cavities, including sinuses lymph nodes bones major muscles of the head major arteries and veins sensory and motor nerves. |
| <i>Functions of head and oral structures</i> may include: | <ul style="list-style-type: none"> prehension of food mastication of food bolus ingestion of food bolus production and effects of saliva. |
| <i>Consequences of poor dental and oral health on nutrient absorption</i> may include: | <ul style="list-style-type: none"> weight loss decreased resistance to illness diarrhoea passage of undigested food failure to thrive including: <ul style="list-style-type: none"> poor coat condition poor body score poor hoof health. |
| <i>Dental and oral trauma</i> may include: | <ul style="list-style-type: none"> loose, fractured or damaged teeth, fractured tooth roots, dental alveoli and cranial bones |
| <i>Dental and oral related conditions</i> may include: | <ul style="list-style-type: none"> calculus ("tartar") caries cementum, dentine and enamel defects retained deciduous teeth or tooth fragments endodontic disease periodontal disease nasal discharge sinus infections. |

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| <p><i>Dental congenital and genetic abnormalities</i> may include:</p> | <ul style="list-style-type: none"> • abnormal tooth eruption angle or position • absence of teeth (oligodontia) • cementum or enamel hypoplasia • diastemata • parrot mouth (brachygnathia) • sow/monkey mouth (prognathia) • supernumerary teeth • wry nose (campylorrhinus lateralis). |
| <p><i>Other abnormal conditions</i> may include:</p> | <ul style="list-style-type: none"> • fractured maxilla or mandible • fractured pre maxilla or rostral mandible • osteopathies such as bighead • restricted lateral excursion of mandible • restricted rostro-caudal movement • tumours. |
| <p><i>Potential impact</i> on general health of dental injuries, diseases, dental abnormalities and other conditions may include:</p> | <ul style="list-style-type: none"> • abnormal temperature • choke, quidding or other masticatory anomalies • colic • epistaxis • facial distortion and deformity • head shaking syndrome (excessive shaking of the head) • inability to masticate effectively • metastatic transmission of organisms • reluctance to accept a bit, bridle or head collar • stomach ulcers • supereruption of teeth. |
| <p><i>Potential consequences</i> related to no dental care may include:</p> | <ul style="list-style-type: none"> • behavioural problems • choke • gastrointestinal tract impaction and/or colic • death • decreased resistance to illness • diarrhoea • failure to thrive • inability to achieve soft lateral or vertical flexion of the horse • lacerated oral tissue • quidding • resisting bit, tack or riding aids • starvation • shortened life and use • supereruption of teeth • weight loss and other bodily signs of ill thrift. |

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| <i>Consequences of unskilled or inappropriate dental techniques</i> may include: | <ul style="list-style-type: none">• absence of appropriate referral• bony fractures• choke• colic• inability to masticate effectively after dental procedure• inability to graze• infection• neglect due to the absence of appropriate care by owner or carer• nerve damage• psychological trauma• pulp inflammation or pulp necrosis (tooth death) due to pulp exposure or thermal or mechanical damage• retained tooth or root fragments post extraction• retention of sharp enamel buccal and lingual points• severing of nerves or blood vessels, such as palatine artery• soft tissue damage• tooth fracture from speculum use• fracture of the pre maxilla or rostral mandible from incorrect speculum use• treatment of the incorrect teeth• untreated pathology including periodontal disease. |
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Unit Sector(s)

Equine dentistry