

Modification history

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 5.0.

ACMEQD402	Determine equine oral functional efficiency				
Application	<p>This unit of competency describes the skills and knowledge required to determine equine oral function efficiency. It includes knowledge of the anatomy and physiology of the equine head including oral structures and dentition, and how they relate to general health and in particular, to dental conditions and disease.</p> <p>The unit applies to individuals who provide routine dental care to ensure the health and efficient physiological function of equine dentition. They work autonomously and apply in depth, technical knowledge and skills to provide and communicate solutions for predictable and unpredictable problems..</p> <p>Legislative and regulatory requirements, including work health and safety and animal welfare, apply to the scope of work of equine dental service providers, and vary according to state/territory jurisdictions. Users must check with the relevant regulatory authority before delivery.</p>				
Prerequisite Unit	<p>Nil</p> <p>Prerequisite units of competency for this unit are:</p> <ul style="list-style-type: none"> ACMEQU202 Handle horses safely <p>Note the following chain of prerequisites that also apply to this unit-</p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Unit of competency</th> <th>Prerequisite requirement</th> </tr> </thead> <tbody> <tr> <td>ACMEQU202 Handle horses safely</td> <td>ACMEQU205 Apply knowledge of horse behaviour</td> </tr> </tbody> </table>	Unit of competency	Prerequisite requirement	ACMEQU202 Handle horses safely	ACMEQU205 Apply knowledge of horse behaviour
Unit of competency	Prerequisite requirement				
ACMEQU202 Handle horses safely	ACMEQU205 Apply knowledge of horse behaviour				
Unit Sector	Equine Dentistry (EQD)				

Commented [SH1]: This appears to be a very knowledge based unit. Could the content be merged into other units i.e. in PCs and knowledge evidence

Commented [SH2]: Add veterinary acts?

Commented [SH3]: Review - delete and embed in the unit

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. Identify the structures and determine the function of the equine oral cavity	1.1 Define structures within the oral cavity by name and location from embryonic (or foetal) to mature equine 1.2 Describe the functions of oral cavity structures 1.3 Analyse and define structures and body systems that affect growth and health of oral structures and their functions 1.4 Describe and relate the process of prehension and mastication of food to normal oral function including the influence of different food types
2. Relate the prehensile and masticatory function to teeth types	2.1 Identify and classify equine teeth by name and location using established equine dental formulae and terminology 2.2 Identify structures of equine teeth and periodontium by name and location 2.3 Identify and define stages of development and eruption of equine teeth 2.4 Identify normal development and eruption 2.5 Identify abnormalities of development and eruption 2.6 Define the function of individual equine teeth

Commented [SH4]: Very knowledge based

ACMEQD402 Determine equine oral functional efficiency

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
3. Age the horse by interpreting tooth eruption, dental wear patterns and tooth angles	3.1 Identify and define stages of equine dental eruption and age indicators 3.2 Determine incisor angles in relation to age and define the variables that affect this assessment 3.3 Identify and define occlusal wear and shape of teeth throughout horse life 3.4 Estimate the age of the horse based on presence or absence of deciduous and permanent teeth, wear patterns, tooth form and tooth angles 3.5 Document tooth status and oral conditions using accepted industry notation methods

Commented [SH4]: Very knowledge based

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Interpret dental information in equine treatment records and veterinary advice
Writing	<ul style="list-style-type: none"> Record equine dental conditions and treatments accurately using accepted dental encoded systems

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
ACMEQD402 Determine equine oral functional efficiency	ACMEQD402 Determine equine oral functional efficiency		

Links
Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103

TITLE	Assessment requirements for ACMEQD402 Determine equine oral functional efficiency
Performance Evidence	
<p>An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that the individual has determined the oral function efficiency for at least six different horses on a variety of diets and of different ages, including:</p> <ul style="list-style-type: none"> • locating and describing oral cavity features by name, location and function • identifying lateral excursion, rostro-caudal movement and occlusion function • determining the age of horses based on tooth development, wear, shape and incisor angulation • using dental formulae and established terminology to describe and document tooth status and oral conditions • performing the activities outlined in the performance criteria of this unit during, and contributing to, an overall period of at least 120 hours of work supervised by supervised by an equine dental service provider who is a dental association member and/or a qualified equine dental service provider and/or is currently commercially active in providing equine dental services. 	

Commented [SH5]: Can we add more specific tasks e.g
 *systematically examine the mouths of at least X live equines. The equines must cover different life stages and different diets (we can be more specific- 1 foal, 2 adult and 2 senior plus diets pasture, feed for high performance etc???)
 *complete accurate dental charts for each equine
 *explain features of each equine to owner or carer

Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • principles and practices for determining equine oral function efficiency • anatomy and physiology of the equine head and oral structures including: <ul style="list-style-type: none"> • detailed features and functions of the equine head, mouth and teeth • soft tissues - lips, tongue, gums and cheeks • hard palate and palatine artery • periodontal structures • bone structures of the head • normal and abnormal functions • equine teeth and tooth types • incisors • canines • premolars (including wolf teeth) • molars • stages of tooth development, growth, wear and ageing • classification of equine tooth types: <ul style="list-style-type: none"> • Triadan system nomenclature • anatomical nomenclature • type and timing of eruption • deciduous • permanent • structures of equine teeth and periodontal structures: <ul style="list-style-type: none"> • apical foramen • alveolus (socket) periodontal ligament • cementum, dentine and enamel • root and crown, infundibulum • pulp canals (or chamber) nerves, vessels and structures • stages of development and eruption of teeth, including: <ul style="list-style-type: none"> • bud, cap and bell stages • apposition and calcification of enamel and dentine • attrition (wear) • abnormalities of development and eruption: <ul style="list-style-type: none"> • absence of teeth (oligodontia) • supernumerary teeth • underdevelopment of cementum or enamel (hypoplasia) • overdevelopment of cementum or enamel (hyperplasia, hypercementosis) • dentigerous cysts • super-eruption (including of unopposed teeth) 	

Knowledge Evidence

- impaction (failure of tooth to erupt)
- lack of wear
- parrotmouth, overbite, overjet (brachygnathism)
- sow mouth, monkey mouth (maxillary brachygnathism or mesiocclusion)
- wry mouth (campylorrhinus lateralis)
- stages of equine dental eruption and age indicators:
 - presence or absence of deciduous teeth
 - presence or absence of permanent teeth
 - presence or absence of infundibula
 - observation of teeth in wear
- masticatory processes:
 - biomechanics of the mandible and maxilla and the temporomandibular joint (TMJ)
 - feed manipulation and formation of food bolus
 - masticatory muscles, the tongue and saliva
 - rugae
 - teeth and their occlusal angles and ridges, the curve of Spee
- process of prehension, mastication and the role of normal oral function
- infectious and/or contagious disease prophylaxis, symptoms, infection control and biosecurity protocols
- animal welfare needs of equines
- relationship between equine dental anatomy and physiology
- legislation, regulations and codes of practice, including work health and safety, animal welfare and ethics, veterinary practices, restricted dental practices, drugs and poisons legislation, and waste disposal
- workplace hygiene standards (including those of biosecurity) including: disinfectants, cleaning agents and techniques, cleaning and appropriate disinfection and/or sterilisation of equipment, materials and personal protective equipment
- safe work practices including safe horse handling techniques and personal protective equipment (PPE).

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an equine workplace or simulated environment that accurately reflects performance in a real workplace setting
- resources, equipment and materials:
 - various equines of different ages on different diets assessed as suitable for the skill level of the individual
 - PPE correctly fitted and applicable to activity for the individual
 - appropriate tack, materials and equipment to provide dental care and treatment for horses
- specifications:
 - legislation, regulations, codes of practice and standards relevant to equine dentistry or technology to access them.

Training and assessment strategies must show evidence of the use of guidance provided in the *Companion Volume: User Guide: Safety in Equine Training*.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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Commented [SH6]: Are live horses needed for this unit?