



Australian Government

ACMEQD502 Conduct assessment of equine masticatory system and plan dental treatment

Release: 1

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Modification History

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

Application

This unit of competency covers the skills and knowledge required to assess the equine masticatory system and plan dental and/or oral care procedures; or initiate referral procedures to a suitable practitioner where dental and/or oral care is outside the technician's scope of practice.

The unit applies to individuals, working as equine dental technicians, who use practical skills and knowledge to identify a range of equine dental conditions and plan equine dental treatment. They work autonomously and apply in-depth, technical knowledge and skills to provide and communicate solutions for predictable and unpredictable problems.

Commonwealth and state/territory health and safety and animal welfare legislation, regulations and codes of practice relevant to interacting with horses apply to workers in this industry. Requirements vary between industry sectors and jurisdictions.

State/territory veterinary practice legislation, restricted acts of veterinary science, and pharmacy, controlled drugs and prohibited substance legislation apply to the scope of work of equine dental technicians. These vary according to jurisdictions.

Pre-requisite Unit

Nil

Unit Sector

Equine Dentistry (EQD)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

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1. Conduct pre-examination procedures	1.1 Assess potential risks and safety considerations for equine and handlers in performing an oral inspection, and apply safety procedures and risk controls 1.2 Assess and evaluate equine behaviour and response to general handling 1.3 Carry out hygiene and infection controls in preparation for examination 1.4 Evaluate equine health, injury and use, and assess any previous history records 1.5 Conduct and document a basic assessment of equine condition 1.6 Identify features of head and neck anatomy and assess general condition, heart rate, temperature, capillary refill times and mucosa colour
2. Prepare to carry out oral and dental examination	2.1 Determine need for sedation to carry out a thorough and complete examination of oral cavity, considering health and safety and animal welfare, safety and comfort 2.2 Follow required protocols within relevant state/territory legislation relating to sedation, and advise client to contact their registered veterinarian regarding the administration of sedation, if sedation is assessed as necessary 2.3 Position, secure and support equine as required 2.4 Assist attending veterinarian or other ancillary staff as required
3. Conduct oral and dental examination	3.1 Inspect equine head for symmetry, swellings or other abnormalities using safe handling techniques 3.2 Rinse oral cavity using appropriate product to remove food and debris 3.3 Assess the rostro-caudal and lateral excursion range of motion of mandible and determine masticatory function 3.4 Inspect and assess incisors for evidence of pathology and occlusion that may impact on use of speculum 3.5 Determine appropriate type of oral speculum required, and fit and remove speculum according to health and safety and animal welfare considerations 3.6 Examine oral structures by palpation and visual inspection using bright light source with appropriate instrumentation

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.7 Inspect and assess all teeth for normal and abnormal features related to position, alignment, regular and irregular dentition development, wear, and angulations
4. Record post-inspection assessment and advice	4.1 Explain examination findings clearly to owner or agent 4.2 Document results of inspection using established terminology and appropriate dental charting system 4.3 Document dental conditions using imagery, if appropriate
5. Prioritise dental issues	5.1 Consider dental examination findings in conjunction with use, wellbeing and history of equine 5.2 Prioritise dental conditions found during examination based on animal welfare considerations, health impact and equine comfort, taking into consideration time required to perform treatment, and level of expertise of dental technician 5.3 Identify conditions requiring referral to a dental veterinarian or appropriate service provider
6. Select dental treatment strategy	6.1 Plan and document treatment stages and timing for services to be provided with dental health and equine welfare as a priority 6.2 Explain treatment plan and post-treatment care and monitoring of equine to owner or agent 6.3 Confirm consent for treatment strategy with owner or agent

Foundation Skills

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.

Skill	Description
Reading	Interpret and consolidate key information in charts and records
Writing	Enter data and observations into print-based or electronic record-keeping systems accurately using current industry terminology and dental encoded systems in English

Skill	Description
Numeracy	Calculate ratios and volumes relevant to mixing liquids and chemicals used for oral rinsing and for cleaning and sterilising equipment
Oral communication	- Use listening and questioning techniques to convey and confirm information in English - Use terminology and concepts appropriate for the audience

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ACMEQD502 Conduct assessment of equine masticatory system and plan dental treatment	ACMEQD404 Conduct equine oral inspection and assessment and plan equine dental treatment	Title and code updated to reflect work requirements Prerequisite removed and horse safety embedded in unit Elements and Performance Criteria updated for clarity and industry currency Foundation Skills table and Assessment Requirements updated	Not equivalent

Links

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

Assessment Requirements for ACMEQD502 Conduct assessment of equine masticatory system and plan dental treatment

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has:

- conducted oral examinations of at least twelve different equines, including for each:
 - obtained history, assessed and documented current general condition and behaviour
 - checked and complied with infection control and hygiene protocols
 - determined need for sedation, and if required, advised client to contact their registered veterinarian for administration of sedation according to relevant state/territory legislation
 - fitted a speculum and inspected oral cavity and dentition
 - used industry recognised charts to record oral condition and dentition
- planned and documented dental treatment, oral care and post-care treatment for twelve equines
- interacted effectively with at least three different owners or agents, including:
 - reported assessments and impact of findings to owner or agent of each equine
 - identified an issue outside scope of practice, and referred owner or agent to a registered veterinarian or other appropriate service provider on at least one occasion
 - explained treatment plan, post-treatment care and monitoring requirements to owner or agent.

Knowledge Evidence

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:

- anatomy and physiology of equine head and oral structures including:
 - features of correctly formed, healthy and well-maintained equine dental and oral structures
 - normal and abnormal features and functions of masticatory system

- key requirements of relevant state/territory legislation, regulations and codes of practice for:
 - veterinary practice legislation
 - restricted acts of veterinary science
 - poisons legislation and supply, possession and use of restricted and controlled substances
 - scope of practice relevant to jurisdiction
 - types of treatments referred to a registered veterinarian or other appropriate service provider
- recording oral and dental conditions and treatment procedures, including:
 - use of industry recognised terminology to describe dental conditions, position/direction, treatments, and oral features
 - charting systems for documenting equine dental information
 - equine health condition, including evidence of abnormal pathology
 - imagery, including photographs and/or video
- common equine dental conditions and diseases, including:
 - abnormalities in mandible or maxilla
 - soft and hard tissue swellings/formations
 - incisor malocclusions; diagonal, ventral curve, dorsal curve incisors, sharp enamel points, ramps, hooks, waves, steps, excessive transverse ridge, inconsistent occlusal table angles
 - tartar/calculus
 - developmental defects, including defects in cementum, enamel, dentine, tooth formation
 - misaligned or displaced teeth, missing teeth, supernumerary teeth
 - trauma; damaged bars, buccal or lingual soft tissue lesions, damage to tongue, abnormal tissue formation
 - gingivitis, periodontal disease
 - occlusal surface openings, seen as a developmental defect in the secondary dentine
 - caries, including infundibular caries, peripheral cemental decay
 - fractured teeth
 - equine odontoclastic tooth resorption and hypercementosis (EOTRH) syndrome
 - age-related infundibular wear, cupping out, senile wear to root dentine
- indicators of general equine health and signs of dental conditions, including:
 - common illness or injuries that may impact on dental health
 - equine behavioural signs that may indicate dental problems
 - signs of equine and zoonotic infectious disease
- hygiene and biosecurity procedures, including:
 - personal hygiene and personal protective equipment (PPE)
 - cleaning, disinfection and sterilisation of equipment and materials
 - safe biological and general waste disposal

- equine infectious disease, notifiable diseases and quarantine procedures
- zoonotic disease and notification procedures
- techniques and instruments used for conducting equine oral examinations, including:
 - suspension/support system
 - irrigation systems
 - speculums
 - mirrors, head lamps, explorers, probes, picks, scalers
 - cameras and associated equipment
 - palpation techniques, including for temporomandibular joint (TMJ), temporalis, masseter and medial pterygoid muscles
- techniques used to safely and humanely restrain equines for dental examination, including:
 - safe horse facilities or crush
 - chemical restraints/sedatives
- equine sedation (chemical restraint), including:
 - state/territory legislative requirements relating to acquiring sedatives and administering sedation to equines
 - role and responsibilities of registered veterinarians, owners or agents, and equine dental technicians relating to sedation of equines
 - general principles, indications, advantages and disadvantages, and side effects of sedation in equines for dental examination and treatment
 - clinical signs, lag phase and duration of effects relative to route of administration; side-effects of sedative drugs
 - consideration of equine patient status – health, breed, age, condition, pain, pregnancy, stallions
 - impact of adrenalin on sedation, and contraindication to use of sedation when elevated significantly
 - time for sedatives to take effect and duration period
 - equine behaviour and responses to sedation and recovery
 - sedation reversal and risks to equine and handlers
 - identification where referral to a veterinarian is required for sedation and analgesia; continuous rate infusion; local anaesthetic and/or regional nerve blocks
- post-dental treatment monitoring and care procedures
- key requirements of health and safety, including:
 - risk assessment and control
 - safe handling techniques for catching, handling, controlling and restraining equines
 - safe work practices, including manual handling and use of PPE
 - storage of drugs and chemicals
- key requirements of animal welfare relevant to safe, humane and ethical care of equines.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - an equine workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - various live equines with a range of oral care needs specified in the performance evidence, and assessed for suitability for skill level being assessed and safety of handler and equine – noting that where equines need to be sedated, sedation must be administered according to state/territory legislation by, or under the sponsorship of, a registered veterinarian
 - appropriate gear and restraints
 - dental instruments, materials and equipment for carrying out oral inspections
 - PPE correctly fitted and applicable to tasks
- relationships:
 - owners or agents as specified in the performance evidence
 - registered veterinarian for sedation of equine, if assessed as necessary, according to the requirements of relevant state/territory legislation.

Two Companion Volumes are available:

- *Companion Volume: User Guide: Equine Allied Health* provides delivery and assessment information tailored for equine dental technicians, and detailed guidelines relating to anatomical requirements and industry expectations
- *Companion Volume: User Guide: Safety in Equine Training* provides advice and sample templates to assist assessors with the risk assessments that should be undertaken to help ensure the safety of all involved in the assessment.

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

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