ACMEQU405A Maintain and monitor horse health and welfare

Release 1
ACMEQU405A Maintain and monitor horse health and welfare

Modification History

<table>
<thead>
<tr>
<th>Release</th>
<th>TP Version</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACM10v3</td>
<td>Initial release</td>
</tr>
</tbody>
</table>

Unit Descriptor

This Unit of Competency covers the process required to determine, implement and monitor health management programs and procedures for horses.

Application of the Unit

The work functions in this Unit are likely to be carried out under minimal supervision within industry guidelines.

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 is minimised.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this Unit at the time of publication.

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

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Determine horse health and emergency care procedures | 1.1 *Health care protocols* and *emergency care protocols* and programs are determined.  
1.2 Horses are kept in appropriate premises that are maintained to health and safety standards, relevant regulations and/or local by-laws.  
1.3 *Safe horse handling procedures* to calmly handle and restrain horses are followed to avoid injury to horse, self or others.  
1.4 *Health status* of individual horses is assessed.  
1.5 Characteristics, signs and symptoms of healthy and sick or injured horses are reviewed.  
1.6 *Infectious diseases* are identified and control measures implemented.  
1.7 Procedures for reporting notifiable diseases are implemented in accordance with legislative requirements. |
| 2. Relate elements of the equine diet to physiological function | 2.1 *Nutrient elements* are classified according to needs of the body.  
2.2 *Structures of the digestive system* are located and the nutrient absorption and metabolism processes are described, including changes associated with the ages from foal to adult.  
2.3 Features of a well balanced diet are related to horse health condition and workload.  
2.4 *Impact of an unbalanced or deficient diet* on horse health is evaluated. |
| 3. Implement health management programs for horses of all ages | 3.1 Dental health programs are overseen.  
3.2 Vaccination programs are implemented.  
3.3 Parasite control programs are implemented.  
3.4 Hoof maintenance programs are overseen.  
**3.5 Health records** are compiled and updated. |
| 4. Treat injury and disease | 4.1 *Health care and management* are determined.  
4.2 Prognosis for *common illnesses and injuries* is discussed.  
4.3 Need for *professional* advice or *veterinary assistance* is determined.  
4.4 *Pharmaceutical and therapeutic treatments* are applied in accordance with veterinary instructions, legislative requirements and animal welfare codes of practice.  
4.5 Surplus medications and treatments are returned to veterinary clinic stock or disposed of according to manufacturer's recommendations, waste disposal and workplace health and safety requirements. |
| 5. Monitor health management program | 5.1 Horses are monitored during and after treatment for signs of effectiveness and indicators of further health problems are |
ELEMENT PERFORMANCE CRITERIA

reported to appropriate person.
5.2 Program implementation and outcomes are reviewed to inform effective management planning and best practice.
5.3 Health management program and treatments are accurately documented and records maintained in accordance with industry standards, legislation and enterprise requirements.
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
- assess vital signs of horses
- communicate effectively to fulfil the job role including questioning, active listening, asking for clarification and consulting with or seeking advice from appropriate persons
- comply with relevant state and legislation and regulations including animal welfare and workplace health and safety
- employ safe, humane and environmentally responsible organisational systems and procedures when working with, handling and restraining horses
- follow sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of defined tasks
- identify and administer different medications and treatments in accordance with directions
- identify common illnesses and injuries in horses
- identify elements of a nutritionally balanced diet and relate them to the function of horse body systems, general health and behaviour
- maintain appropriate records
- 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)
- read, understand and follow required policies and procedures, including workplace health and safety, infection control and waste management
- recognise normal physical and behavioural signs in horses
- use numeracy skills to estimate, calculate and record routine and more complex workplace elements
- use safe manual handling techniques and/or equipment
- use safe, hygienic and environmentally friendly waste handling and disposal procedures.

Required knowledge includes:

Knowledge of:

- anatomical features of the horse and the relationship between anatomy and health issues
- anatomical and physiological structures, features and functions related to dietary needs and the absorption and metabolism of nutrients
- appropriate horse housing
- common horse behaviour, social traits and vices
- common illnesses and injuries in horses
- consequences of an unbalanced or deficient diet to horse function, health and behaviour
- equine dental programs
- emergency protocols and quarantine measures
- feedstuffs commonly fed to horses and the general principles of a balanced diet for horses
- handling techniques for horses
- horse health record systems
- hoof maintenance programs
- methods of restraining horses
- parasite programs
- principles and practices of infection control
- principles of animal welfare
- relevant legislation, regulations and codes of practice, including workplace health and safety, animal welfare and ethics, veterinary practices, waste disposal and notifiable diseases
- safe storage and disposal of medications and other remedies
- signs and symptoms of communicable diseases
- symptoms and indicators of normal and abnormal system function
- understanding of the purpose and use of relevant medications and treatments for common diseases and injuries
- vaccination programs
- 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

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

<table>
<thead>
<tr>
<th>Critical aspects for assessment and evidence required to demonstrate competency in this Unit</th>
<th>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:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• undertake health management programs for horses</td>
</tr>
<tr>
<td></td>
<td>• determine emergency care procedures</td>
</tr>
<tr>
<td></td>
<td>• ensure provision of safe, compliant and secure housing arrangements for horses</td>
</tr>
<tr>
<td></td>
<td>• apply safe horse handling procedures</td>
</tr>
<tr>
<td></td>
<td>• evaluate the impact of an unbalanced or nutrient deficient diet on horse health and behaviour</td>
</tr>
<tr>
<td></td>
<td>• follow workplace health and safety and animal welfare requirements</td>
</tr>
<tr>
<td></td>
<td>• implement infection control procedures</td>
</tr>
<tr>
<td></td>
<td>• determine horse health problems and treatment options in consultation with veterinarians and professionals as required</td>
</tr>
<tr>
<td></td>
<td>• administer treatments as directed and monitor horse's progress</td>
</tr>
<tr>
<td></td>
<td>• accurately document and maintain appropriate records.</td>
</tr>
</tbody>
</table>

The skills and knowledge required to maintain and monitor horse health and welfare 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 will be most appropriately assessed in an equine industry workplace with access to a variety of horses of different ages and sexes, safe horse handling areas and the appropriate materials and/or resources to enable one to demonstrate competence.

### Method of assessment

To ensure consistency of performance, competency should be demonstrated, to industry defined 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. The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:

- written and/or 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
- third-party evidence
- workplace documentation
- case studies
- portfolio.

This Unit may be assessed in a holistic way with other Units of competency relevant to the industry sector, workplace and job role.

<table>
<thead>
<tr>
<th>Guidance information for assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
</tr>
</tbody>
</table>
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.

Health care protocols

<table>
<thead>
<tr>
<th>Health care protocols may include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• advice to other organisations, as required by legislation, regulations and/or enterprise policy</td>
</tr>
<tr>
<td>• horse management</td>
</tr>
<tr>
<td>• comprehensive record keeping</td>
</tr>
<tr>
<td>• routine health checks</td>
</tr>
<tr>
<td>• equipment and gear cleanliness</td>
</tr>
<tr>
<td>• handling and monitoring horses</td>
</tr>
<tr>
<td>• hazard identification</td>
</tr>
<tr>
<td>• maintaining first aid and treatments stores</td>
</tr>
<tr>
<td>• notifiable diseases</td>
</tr>
<tr>
<td>• zoonotic diseases</td>
</tr>
<tr>
<td>• permissible medication and treatments</td>
</tr>
<tr>
<td>• quarantine measures</td>
</tr>
<tr>
<td>• veterinary or specialist advice and assistance</td>
</tr>
<tr>
<td>• stable and yard cleanliness</td>
</tr>
<tr>
<td>• risk control measures:</td>
</tr>
<tr>
<td>• controlling insects and rodents</td>
</tr>
<tr>
<td>• disinfection and hygiene measures</td>
</tr>
<tr>
<td>• fire drills</td>
</tr>
<tr>
<td>• health programs</td>
</tr>
<tr>
<td>• isolation or quarantine of sick horses</td>
</tr>
<tr>
<td>• monitoring movement of horses</td>
</tr>
<tr>
<td>• vaccinations and boosters</td>
</tr>
<tr>
<td>• waste disposal</td>
</tr>
<tr>
<td>• staff management:</td>
</tr>
<tr>
<td>• access to and administration of treatments</td>
</tr>
<tr>
<td>• communication procedures</td>
</tr>
<tr>
<td>• emergency drills</td>
</tr>
<tr>
<td>• literacy and numeracy skills</td>
</tr>
<tr>
<td>• training.</td>
</tr>
</tbody>
</table>

Emergency care protocols

| Situations requiring emergency care may include: |

Approved

Page 10 of 18

© Commonwealth of Australia, 2012

AgriFood Skills Australia
- acute illness (eg. colic)
- acute lameness including fractures
- acute respiratory distress
- arterial blood loss
- being cast, trapped or entangled in wire fencing or other situations
- eye injury
- fire
- inability to rise or walk
- trauma.
### Safe horse handling procedures

Safe horse handling procedures may include:

- being prepared to say no to handling an uneducated, stressed or difficult horse
- establishing a safe working environment
- following safe work practices for:
  - completing inspection tasks
  - infection control (biosecurity) precautions
  - horse catching, handling, controlling and restraining methods using safe manual handling procedures
  - using Personal Protective Equipment (PPE)
- recognising possible symptoms of and risks of zoonotic diseases such as Hendra virus and required reporting procedures
- safe horse transport procedures including welfare and adherence to current legislated recommendations.

### Health status of individual horses

Health status of individual horses is assessed:

- by routine health checks
- prior to travelling
- upon arrival at new premises
- when illness or injury is suspected

Health status may be determined by:

- checking for signs of illness, injury, distress, lameness, heat, swelling, soreness
- assessing breeding status
- checking for quality and quantity of manure and urine
- monitoring feed and water intake
- monitoring vital signs
- observing behaviour.

### Infectious diseases

Infectious diseases may include, but are not limited to:

- Exotic:
  - African horse sickness
  - anthrax
  - contagious equine metritis
  - dourine
  - epizootic lymphangitis
  - equine encephalomyelitis (Eastern, Western, Venezuelan)
<table>
<thead>
<tr>
<th>Infectious Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>- equine influenza</td>
</tr>
<tr>
<td>- glanders</td>
</tr>
<tr>
<td>- Japanese encephalitis</td>
</tr>
<tr>
<td>Endemic:</td>
</tr>
<tr>
<td>- equine herpes virus</td>
</tr>
<tr>
<td>- hendra virus</td>
</tr>
<tr>
<td>- salmonellosis</td>
</tr>
<tr>
<td>- strangles</td>
</tr>
</tbody>
</table>

Indicators of infectious disease may include:

- blisters, ulceration or erosions
- dead horses
- nervousness or other behaviour changes
- profuse, bloody diarrhoea
- rapid spread of signs and symptoms throughout stable
- recent overseas contact
- unexplained lethargy, listlessness or depression
- unusually high numbers of sick horses
- severe hacking cough.
### Nutrient elements

Nutrient elements may include:
- glucose
- carbohydrates
- fat
- fibre
- protein
- vitamins and minerals
- electrolytes
- water.

### Structures of the digestive system

Structures of the digestive system will include:
- mouth and teeth
- salivary ducts and glands
- stomach
- small and large intestine
- hepatic structures.

### Impact of an unbalanced or deficient diet

Impact of an unbalanced or deficient diet may include:
- health problems related to feeding:
  - orthopaedic problems including laminitis
  - gastrointestinal problems
  - developing a dull or rough coat
  - exertional rhabdomyolysis (typing up)
  - parasite burdens
  - poor appetite/eating (anorexia versus dysphagia)
- predisposition to infectious conditions
- vitamin and mineral deficiencies
- behaviour problems including wood chewing, crib biting and coprophagy
- condition of horse:
  - losing or gaining weight
  - muscle wasting/atrophy.

### Health records

Health records should include:
- dates and times of:
  - arrival at stables
  - assessing vital signs
  - illness or injury
  - treatments and vaccinations
- features of horse identification
- name of horse
- name of person administering treatment
- prescribed treatments administered
- treatment instructions
- vital signs at rest.
### Health care and management

Health care and management may include:
- administration of treatments
- communication procedures when horses are treated
- disease prevention and control
- programmes for vaccination, worming and hoof and dental care
- emergency care
- emergency phone numbers, for example veterinarian or fire department
- permissible treatments
- procedure for recording treatments
- procedure for recording and reporting vital signs
- routine health checks
- replenishing supplies of first aid kits
- system of referral for injury treatment
- staff access to first aid treatments and materials.

### Common illnesses or injuries

Common illnesses or injuries may include:
- illnesses:
  - circulatory disorders
  - gastrointestinal disorders
  - metabolic disorders
  - musculoskeletal disorders
  - neurological disorders
  - respiratory disorders
  - skin disorders
- injuries:
  - bruises
  - falls
  - girth galls
  - joint injuries
  - sprained ligaments or tendons
  - strained muscles
  - tack rubs
  - wounds.

### Professionals

Professionals may include:
- chiropractors
- veterinary dentists
- farriers
### Veterinary assistance

Need for veterinary assistance may include:
- diagnosis and advice on treatment and management of the problem
- horse may:
  - be insured
  - have to be treated with competition prohibited substances
  - have to be withdrawn from competition
  - require prescription medication
  - require stitching or specialist injury management or treatment
- illness may be:
  - contagious condition
  - notifiable disease
  - passed on to humans
- illness or injury may be:
  - life threatening or have consequences to ongoing career of horse
  - result of neglect or non-compliance with duty of care.

### Pharmaceutical and therapeutic treatments

Pharmaceutical treatments may include:
- antibiotics and other anti-infective agents
- anthelminthics
- prescribed medications
- inhalants
- injectibles
- oral medications and pastes
- poultices
- topical medications
- vaccines

Therapeutic treatments may include:
- acupuncture
- chiropractic
- electromagnetic
- exercise
- hydrotherapy
- ice and heat
- laser
- massage
Unit Sector(s)

Equine

- rest
- ultrasound.