

RGRHBR504 Manage horse breeding operations

Modification history

Release	Comments
Release 1	This version released with RGR Racing and Breeding Training Package Version 3.0

RGRHBR504	Manage horse breeding operations
Application	<p>This unit of competency describes the skills and knowledge required to successfully manage all aspects of a performance-breeding horse stud. It covers assessing structural and human resource requirements, developing breeding programs, and managing operations, including caring for stallions and mares, and foaling operations.</p> <p>The unit applies to individuals who have managerial responsibilities for performance horse breeding operations. They work independently within organisational guidelines, applying extensive knowledge of breeding performance horses and industry skills to achieve outcomes.</p> <p>No occupational licensing or certification requirements apply to this unit at the time of publication.</p> <p>Work health and safety and animal welfare legislation relevant to interacting with horses applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users are advised to check with the relevant authority for specific requirements.</p>
Prerequisite Unit	Nil
Unit Sector	Performance horse (PHR)

Commented [SH1]: Is there too much overlap between RGRHBR502 and 504 - please advise. If so, which is the preferred 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. Apply reproductive anatomy and physiology principles to stud practice	1.1 Assess the reproductive anatomy of stallions on a regular basis during the breeding season to inform stallion management procedures 1.2 Assess the reproductive anatomy and physiological function of mares on a regular basis during the breeding season to inform mare management procedures 1.3 Monitor and report on the behavioural characteristics of oestrous, dioestrous and anoestrous according to industry standard procedures 1.4 Monitor and report the characteristics of pregnancy according to industry standard procedures
2. Assess stud requirements	2.1 Develop stud breeding program goals and strategies 2.2 Assess and document stud requirements according to workplace objectives 2.3 Identify resources required to support the breeding programs 2.4 Determine the optimal stud farm layout to facilitate ease of management and meet behavioural needs of horses 2.5 Select breeding options to maximise opportunities and meet stud objectives within industry guidelines 2.6 Develop strategies for compliance with work health and safety, animal welfare, biosecurity and environmental legislation and guidelines 2.7 Assess, control and review risks related to stud operations to ensure a safe workplace

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3. Manage the breeding calendar of operations	3.1 Document and communicate the calendar of operations to incorporate routine seasonal breeding practices 3.2 Identify and research potential stallions, mares and genetic material for use in the breeding operation 3.3 Develop and implement routine health management procedures 3.4 Determine appropriate breeding and horse management timelines according to annual calendar 3.5 Complete breeding documents according to workplace and industry requirements
4. Manage conception	4.1 Develop and implement a covering timetable for stallions 4.2 Monitor and report key milestones of conception and gestation according to industry procedures 4.3 Identify and select relevant pregnancy detection techniques suitable for use on the stud farm 4.4 Develop and implement a strategy for the timely and efficient detection of pregnancies
5. Manage subfertility	5.1 Identify the causes of subfertility and infertility in stallions 5.2 Develop and implement strategies to treat and minimise the impact of stallion subfertility or infertility 5.3 Identify the causes of subfertility and infertility in mares 5.4 Develop and implement management strategies to treat and minimise the impact of mare subfertility and infertility
6. Manage foaling operations	6.1 Implement plans to manage mares immediately prior to foaling 6.2 Oversee the foaling down of mares 6.3 Develop and implement a plan to manage foaling emergencies 6.4 Develop and implement plans for the treatment and management of neonatal illness and injury 6.5 Develop and implement post-foaling mare and foal care procedures
7. Manage foetal loss and abortion in mares	7.1 Identify the signs and causes of foetal loss and abortion, and develop procedures to routinely monitor mares for these conditions 7.2 Develop and implement a strategy to prevent or minimise the risk of abortion 7.3 Develop and implement a plan to respond to and manage abortion or suspected abortion 7.4 Identify mares that have aborted or are at risk of abortion, and implement industry standard management procedures
8. Evaluate the application of assisted reproductive technologies to the performance horse industry	8.1 Evaluate the potential benefits of assisted reproductive technologies to stud goals and operations <u>where appropriate for breed requirements and/or rules of racing for racehorses</u> 8.2 Evaluate the costs and implications of assisted reproductive technologies against stud goals and objectives

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"> Extract and interpret technical information relating to horse breeding from a range of sources
Writing	<ul style="list-style-type: none"> Prepare written breeding programs and schedules using clear language, accurate industry terminology and logical structure
Numeracy	<ul style="list-style-type: none"> Calculate fees and operational costs Calculate, sequence and adjust timelines in breeding schedules or plans
Navigate the world of work	<ul style="list-style-type: none"> Take responsibility for complying with regulatory requirements including work health and safety and animal welfare within own role and area of work Comply with safe, ethical and humane horse handling industry practices Ensure knowledge of performance horse breeding requirements is kept up-to-date in order to provide accurate information
Interact with others	<ul style="list-style-type: none"> Use accurate industry terminology, concepts and protocols for communicating with a variety of people in managing performance horse breeding operations
Get the work done	<ul style="list-style-type: none"> Organise and plan breeding programs and schedules for multiple horses; monitoring actions against stated goals and adjusting plans and resources in response to changing conditions

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
RGRHBR504 Manage horse breeding operations	ACMPHR506 Manage performance horse breeding operations	Code changed to reflect appropriate industry sector usage. Minor changes for clarity. Removal of points duplicating performance criteria in Performance Evidence.	Equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=5c4b8489-f7e1-463b-81c8-6ecce6c192a0
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TITLE	Assessment requirements for RGRHBR504 Manage horse breeding operations
Performance Evidence	
<p>An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.</p> <p>There must be evidence that the individual has:</p> <ul style="list-style-type: none"> • managed breeding operations for a commercial performance horse stud, over at least one annual breeding period, including: <ul style="list-style-type: none"> • assessed stud requirements • managed the breeding calendar of operations • managed conception and subfertility • managed foaling operations, including foetal loss and abortion in mares • evaluated the application of assisted reproductive technologies, where appropriate to industry sector. • handling horses safely, including mares, foals, young horses and stallions • evaluating the condition and identifying common faults of mare and stallion external genitalia • identifying, recording and managing general and breeding-related health problems, injuries and diseases • monitoring, recording and managing horse behaviour, including behaviour related to breeding and foaling • identifying all aspects of the reproductive cycle of the mare, including oestrous and dioestrus • implementing medical and veterinary procedures, including: <ul style="list-style-type: none"> • hygiene protocols • vaccination requirements • medications • treatments including intramuscular and subcutaneous injections • foaling down mares and responding to abnormal foaling and foaling emergencies • identifying and managing healthy and ill neonatal foals • fitting and using relevant equipment such as breeding hobbles, halters, bridles, lip twitchers • developing and implementing a range of breeding and reproductive schedules • accessing and analysing current research information on relevant breeding related topics, including emerging assisted reproduction technologies, infertility and dystocia • researching information and material suitable for use in the breeding program • identifying and implementing design requirements to facilitate the safe and effective management of the operations of the stud farm • complying with regulatory requirements and workplace and industry procedures and practices relevant to role and managing horse nutrition, including: <ul style="list-style-type: none"> • animal welfare and prevention of cruelty to animals • work health and safety • biosecurity • environmental sustainability. 	
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"> • stallion reproductive anatomy and physiology • mare reproductive anatomy and physiology • endogenous hormone cycles, functions, and methods to manipulate these to improve breeding efficiency and conception rates • signs of normal and abnormal breeding behaviour of mares and stallions • key features of conception, gestation and lactation • signs and stages of normal and abnormal foaling • signs and management of neonatal illness and injury • seasonal breeding practices, limitations and requirements of relevant breed societies • signs of injury and disease in breeding horses, foals and young horses, including diseases of fertility, infectious diseases impacting fertility and preventative management, including vaccination 	

Commented [SH2]: Streamlined the performance evidence to reduce duplication with performance criteria

Knowledge Evidence

- sources of information on potential sires, dams and genetic material for use in the breeding program
- veterinary and biosecurity procedures, including hygiene protocols and quarantine
- equine facility design principles, and infrastructure and equipment options
- staffing and scheduling of human resource requirements
- breed society rules, regulations and processes
- assisted reproductive technologies
- key requirements of work health and safety regulations and guidelines relating to:
 - risk assessment, control and review
 - safe horse handling techniques
 - personal protective equipment
- key requirements of animal welfare standards, policies and procedures relevant to the safe, humane and ethical care of horses
- key requirements of biosecurity standards, policies and procedures relevant to breeding horses
- key requirements of environmental management standards, policies and procedures relevant to breeding horses.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - various live mares and stallions in breeding program, and foals
 - breeding histories and relevant reproductive information about individual mares and stallions
 - workplace breeding program and schedules
 - equipment and materials required to manage breeding operations and monitor condition of horses.

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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