

National Farm Biosecurity Manual

Grazing Livestock Production

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- Dairy Australia
- Goat Industry Council of Australia
- Meat and Livestock Australia
- Sheep Producers Australia
- WoolProducers Australia
- Animal Health Australia

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National Biosecurity Manual for Grazing Livestock

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Biosecurity is like any other insurance policy and as such it is a prudent investment.

About this manual

The *National Farm Biosecurity Reference Manual for Grazing Livestock Production* is an important tool for meeting our shared responsibility for biosecurity. It has been developed to reduce the risk to farming operations of diseases, weeds and pests entering a property, spreading through the livestock population, and/or being passed to surrounding livestock operations, e.g. by utility companies.

This manual sets out biosecurity practices for all grazing livestock enterprises. It is a reference document designed by all grazing industries which sets an agreed level of biosecurity. It is a tool for the grazing industries to translate biosecurity practices into operating procedures and work instructions.

Using this manual will benefit the industry and associated enterprises by preserving animal health and reducing unnecessary production costs associated with the presence of diseases, pests and weeds. To help achieve a good level of biosecurity, recommended practices are suggested under each principle on the following pages. These are examples of what can be done to assist operators in implementing biosecurity practices.

While the principles set out in the manual can apply to any grazing enterprise, biosecurity measures may need to be stricter for operations where one or more of the following factors apply:

- high economic importance
- high breeding importance
- high genetic importance
- the operation is located in a high risk area.

Who does it apply to?

This manual is suitable for all livestock grazing enterprises, whether producing meat, milk or fibre. Specifically, it covers cattle (dairy and beef), sheep (wool and meat), farmed and rangeland goats (fibre, milk and meat) and camelids (alpacas, llamas and camels).¹

While most producers are already applying many of the recommended practices, there is always more that can be done. Management practices will vary from property to property, depending on such things as the nature and size of the livestock enterprise, the structure and management of the facilities and the type of operational management being used.

¹ This manual is not applicable to pastured pig producers who should refer to the *National Farm Biosecurity Manual for Pork Production*.





Implementation

This manual is the reference document for use in developing sector-specific farm biosecurity manuals. Each production system will have a different range of biosecurity threats, challenges and operating environments, which must be addressed with relevant approaches based on the principles identified in this manual.

Developing sector-specific practices is fundamental to the success of improved biosecurity for all grazing industries, and individual industries may use this manual as a resource when providing more detailed guidance directly relevant to their producers. However, producers from all grazing industries may apply the principles identified in this manual to guide and improve on-farm biosecurity practices.

The manual is also available as a resource for the education of staff and the development of training and awareness programs.





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Goals

- > To prevent the introduction of diseases, pests and weeds to grazing livestock production properties.
- > To prevent the spread of diseases, pests and weeds from an infected property to an uninfected property.

Broadly speaking, biosecurity is a set of measures for protecting a population from diseases, pests or weeds at the national, regional and farm level. It is about managing risks to meet the goals stated above. The focus of this manual is farm level biosecurity related to diseases, pests and weeds.

Owners, managers and handlers of livestock share a responsibility with governments, scientists, veterinarians and the community to help protect Australian livestock from the introduction and spread of diseases, pests and weeds as well as for reducing the incidence of existing diseases, pests and weeds.

The aim of this manual is to assist livestock industries to prevent a possible disease outbreak, the spread of pests or weeds and, minimise the cost of control and eradication at the farm and industry level.

This manual has been developed to support the implementation of the *Emergency Animal Disease Response Agreement* (EADRA). The EADRA binds the Australian, state and territory governments and livestock industries together to deal with emergency animal disease matters. It includes

arrangements for joint funding when an industry is affected by an emergency animal disease (EAD) outbreak.

This manual IS:

- voluntary
- a broad set of guidelines addressing the prevention and reduction of diseases, pests and weeds on-farm
- practical and cost effective
- developed through consultation using a science-based approach to reducing the spread of diseases, pests and weeds
- for industry bodies to use as a reference manual in designing their on-farm plans.

This manual is NOT:

- a list of 'must do's'
- a prescriptive set of practices
- taken from another sector and redesigned for this application
- idealistic – developed without consultation, impractical or hard to implement
- expensive to implement.

Potential biosecurity risks

Anything entering a property is a potential mechanism for spreading diseases or introducing pests and weeds

Livestock (same and different species)

- introduction of livestock
- transfer of livestock between different production groups/areas
- unintentionally introduced stock (i.e. stray livestock)
- dead livestock disposal
- dirt, manure or contaminants

People

- farm personnel and family members living on site
- contractors, maintenance personnel, neighbours, service personnel, visitors
- dirt/manure/contaminants carried on hands, boots, clothing, hair

Vehicles and Equipment

- dirt/manure/contaminants carried on cars, trucks, tractors, scales, husbandry equipment (plants, dips, drench & vaccination guns, etc.)

Feed and Water

- contamination or spoilage of raw materials
- contamination or spoilage of feed during transport and storage
- faecal and urine contamination from the same species or other species
- flooding events or runoff from yards and feeding areas and other properties

Pests and Weeds

- feral animals
- domestic animals
- rodents
- insects and other invertebrates (such as ticks or mites)
- poisonous/invasive plants

Air

- aerosol or dust particles

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Definitions of grazing livestock and property

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In this manual grazing livestock refers to: cattle (dairy and beef), sheep (meat and wool), farmed and rangeland goats (dairy, fibre and meat) and camelids (alpacas, llamas and camels).

In this manual the term 'property' refers to the land on which the livestock is located and may include other farm land used for livestock grazing or cultivation.



Deb Freeman

Principles of biosecurity

The following six principles of biosecurity provide guidelines for the ongoing management practices for:

- farm inputs – stock, water feed, bedding
- the movement of people vehicles and equipment
- production practices
- feral animals, pests and vermin
- outgoing products
- training, planning and recording.

Producers can achieve these biosecurity principles by adopting appropriate management practices, as recommended in this manual, on an ongoing basis. By doing this, a grazing enterprise can attain a high degree of assurance that biological threats (e.g. infectious agents, parasites, weeds, pests and contaminants) will be avoided and the risk of transmission between operations will be minimised.

It is important to remember that in the event of an EAD outbreak or serious spread of an endemic disease, more stringent on-farm practices will need to be implemented. The extent of this will be guided by state or territory governments, who are responsible for implementing standard operating procedures that are in line with the relevant AUSVETPLAN disease strategy (see www.animalhealthaustralia.com.au/ausvetplan).

Action plan for suspected EADs

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To assist owners in applying the principles described in this manual, it may help to have a recommended set of clear guidelines regarding on-farm responsibilities when an EAD alert is raised. Important information (like the Property Identification Code and relevant telephone numbers) should be kept in an obvious place for easy access by farm staff and others likely to be involved in case of an emergency.

An example of an EAD Action Plan, along with other useful documents, can be found at: www.farmbiosecurity.com.au/records.

**EMERGENCY ANIMAL
DISEASE WATCH HOTLINE
1800 675 888**



1.0 Manage farm inputs – stock, water, feed, bedding

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PRINCIPLE 1.1: Livestock

Objective: To manage the introduction and movement of livestock in a way that minimises the risk of introducing or spreading diseases, pests and weeds.

- 1.1.1 Check animals for health status before purchasing.
- 1.1.2 Purchase livestock from producers who have a livestock biosecurity plan, and can provide information about animal treatments and the health status of their animals – such as a National Vendor Declaration (NVD) and/or an Animal Health Declaration.
- 1.1.3 Ensure introduced livestock have had time to empty out prior to release from the yards.
- 1.1.4 Ensure livestock that leave and return to the property (e.g. following shows, agistment, contract joining) are segregated for a period of time to assess their vulnerability to infection, hygiene arrangements and contact with other livestock while away. If risky, keep separated for a longer period of time. Observe and treat (if needed) the animals before returning them to companions.
- 1.1.5 Inspect and maintain adequate boundary fences.
- 1.1.6 Keep vulnerable stock away from livestock of unknown health status.
- 1.1.7 Follow the National Livestock Identification System (NLIS) requirements specific to species and jurisdiction. Complete NLIS transfers on and off farm promptly to improve ease of tracing - this is especially important should an EAD outbreak occur.
- 1.1.8 Ensure all introduced animals are placed immediately into an on-farm health management program. It is advised that new animals be segregated, drenched and vaccinated on arrival – this will reduce the risk of introducing diseases, pests and weeds onto the property.
- 1.1.9 Only purchase semen and embryos from reputable sources.

PRINCIPLE 1.2: Feed and water

Objective: To ensure the quality of stockfeed and water is fit for purpose including:

- *Ruminant stockfeed is free from contaminants and restricted animal material² (RAM).*
- *Ruminant livestock have no access to feeds that contain RAM (poultry, pig and pet feed may contain RAM).*
- *Water and other farm inputs are managed to reduce risks of transmitting disease agents or weeds.*

- 1.2.1 Do not feed to ruminants any products made from vertebrate animals. There are only two exemptions to this rule: tallow and gelatine. This is a legal requirement in all Australian states and territories.
- 1.2.2 Only purchase stock feed from suppliers who can provide assurances consistent with Commodity Vendor Declarations.
- 1.2.3 Ensure you only unload stockfeed after completing an inspection for evidence of pests, damage and contaminants.
- 1.2.4 Capture and contain effluent to prevent access by people and livestock.
- 1.2.5 Manage effluent and manure dispersal especially those from high risk species (i.e. those fed RAM) to minimise disease spread through the contamination of pastures, stockfeed and water.
- 1.2.6 Store stockfeed in a manner that prevents contamination by livestock, vermin, wildlife, feral and domestic animals and other feed types (e.g. those containing RAM).
- 1.2.7 Ensure the quantity and quality of water provided is suitable for the type of livestock.

PRINCIPLE 1.3: Bedding (when/where used)

Objective: To manage the introduction and movement of bedding in a way that minimises the risk of introducing or spreading diseases, pests and weeds.

- 1.3.1 Ensure bedding material is fit-for-purpose.
- 1.3.2 Ensure areas where bedding is stored are kept as dry and vermin free as is practically possible.
- 1.3.3 Ensure appropriate disposal of soiled bedding is carried out in order to prevent the spread of diseases.

² **Restricted Animal Material** is any material taken from a vertebrate animal, other than tallow, gelatine, milk products or oils. It includes rendered products such as blood meal, meat meal, meat and bone meal, fish meal, poultry meal, feather meal, and compounded feeds made from these products.

2.0 Manage the movement of people, vehicles and equipment

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PRINCIPLE 2.1: People, equipment and vehicles

Objective: To minimise the potential for property contamination by the movement of people, equipment and vehicles.

- 2.1.1 Minimise the movement of people and vehicles onto and around the property.
- 2.1.2 Where possible minimise the number of entry points and restrict access to the farm.
- 2.1.3 Define, and where appropriate signpost, 'permitted access areas' for farm contractors (e.g. veterinarians, livestock agents, artificial insemination technicians, hay contractors), delivery and pick-up vehicles (e.g. milk tankers, livestock and feed transporters) and service personnel (e.g. utility company technicians, government officers) and notify relevant operators prior to entry.
- 2.1.4 Provide facilities in 'permitted access areas' for farm contractors and visitors to clean boots and equipment on arrival and before departure.
- 2.1.5 Clean vehicles and equipment if moving from a high-risk area to a lower-risk area.
- 2.1.6 Encourage the use of protective clothing and personal cleanliness when visitors move onto your property.
- 2.1.7 Ensure appropriate signage and management contact details (e.g. phone number) is available to inform visitors of your biosecurity requirements and what you want them to do on arrival.
- 2.1.8 Use a Visitor Register to record and monitor the management of visitor activity (see www.farmbiosecurity.com.au/toolkit/records for examples of templates).
- 2.1.9 Minimise the lending and borrowing of equipment between properties. If lent, ensure it is cleaned before and after use.
- 2.1.10 Adopt a routine disease and weed management control plan for the designated 'permitted access areas'. This may include routine weed spraying and appropriate collection and disposal of waste water.



3.0 Manage production practices

PRINCIPLE 3.1: Animal health management

Objective: To manage the prevention and control of animal diseases on-farm by regularly monitoring livestock health.

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- 3.1.1 Inspect livestock regularly, including during regular management and husbandry procedures, to ensure the early detection of ill animals.
- 3.1.2 Assess the health status of your livestock and implement practices that will protect them from known diseases already in your region.
- 3.1.3 Ensure all personnel responsible for the management and husbandry of livestock are aware of the importance of early disease detection and reporting of animals exhibiting signs of sickness or deaths.
- 3.1.4 Increase the frequency of inspections of livestock during periods of higher risk, such as increased insect and wildlife activity or growing periods for weeds.
- 3.1.5 Record animal health activities and treatments to maintain herd/flock health history to identify changes, assist herd/flock management and develop effective herd/flock health strategies.
- 3.1.6 Seek early advice from a veterinarian or government officer in relation to any unusual sickness or death.
- 3.1.7 Ensure all personnel working on-farm are vaccinated for identified risk diseases (e.g. Q Fever and tetanus) and, where necessary, vaccinate livestock against zoonotic (animal to human) diseases (e.g. leptospirosis).
- 3.1.8 Isolate (as required) and treat diseased or vulnerable animals in the event of a disease outbreak.
- 3.1.9 Return stock to a clean paddock (disease, pest and weed free) after treatment.

PRINCIPLE 3.2: Carcass, effluent and waste management

Objective: To minimise the spread of disease and manage the disposal of dead animals and waste in a manner appropriate for the production system.

- 3.2.1 Secure and contain disposal areas where possible to prevent access by livestock, feral and domestic animals and wildlife.
- 3.2.2 Select disposal areas to avoid the potential spread of contaminants by water.
- 3.2.3 Dispose of carcasses and waste as soon as practical, where possible, taking into account environmental and public considerations. Ensure disposed carcasses are not eaten by pest animals which could then spread disease – e.g. Sarcocystis.
- 3.2.4 Ensure controls for the potential spread of disease from effluent are in place.
- 3.2.5 Use vegetation in plantations or windbreaks to reduce effluent transfer.
- 3.2.6 Ensure government requirements for carcase, effluent and waste management are being adhered to where applicable.
- 3.2.7 Have a disposal plan for potentially contaminated waste such as used bedding, syringes, dressings and unsaleable animal products.



4.0 Manage feral animals, pests and vermin

PRINCIPLE 4.1: Feral animals/wildlife/weed control

Objective: To minimise the potential for wildlife and domestic or feral animals to introduce diseases to livestock.

- 4.1.1 Monitor and manage vermin, feral animals, weeds and wildlife populations to prevent impact on stock.
- 4.1.2 Coordinate with neighbours and other local community members to maximise effectiveness of actions to control weeds and pest animals.
- 4.1.3 Minimise access by feral and domestic animals and wildlife to waste in rubbish dumps (secure waste disposal).
- 4.1.4 Implement an integrated management program that targets the control of weeds and disease carrying vectors as required.
- 4.1.5 Regularly undertake property inspections to assess possible biosecurity breaches and/or potential for breaches. Correct where necessary.



5.0 Manage outgoing products

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PRINCIPLE 5.1: Farm outputs

Objective: To manage the movement of livestock and animal products from a property in a way that minimises the risk of spreading diseases, pests and weeds.

- 5.1.1 Only animals that are in a condition fit to load are selected to minimise potential disease and/or contamination spread through transport (see Meat & Livestock Australia's *Is it Fit to Load?* guide for relevant information).
- 5.1.2 Ensure all livestock leaving the property are identified in accordance with the appropriate NLIS Standards, meeting government legislation and have accurate documentation such as a NVD and/or an Animal Health Declaration.
- 5.1.3 Ensure all animal products and/or by-products are fit-for-purpose when leaving the property.



Arthur Mostead





6.0 Train, plan and record

PRINCIPLE 6.1: Biosecurity planning and staff instruction

Objective: To ensure all staff and contractors understand the importance of the biosecurity requirements for the operation in which they work and can implement the agreed practices for which they are responsible.

- 6.1.1 Ensure a biosecurity plan has been developed for the property.
- 6.1.2 Ensure all staff understand their role in the implementation of biosecurity practices on your farm, through a developed biosecurity management plan induction, continued biosecurity education and regularly reviewing on-farm biosecurity protocol.
- 6.1.3 Ensure staff responsible for livestock husbandry know how to identify sick and injured livestock.
- 6.1.4 Ensure all staff know what to do in the event of a suspected emergency animal disease. If you spot anything unusual call the EAD Watch Hotline on 1800 675 888.
- 6.1.5 Ensure all staff know where to find contact details for the local vet(s) and relevant government officers.

Notes

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ANIMAL HEALTH AUSTRALIA

Animal Health Australia is an innovative partnership involving the Australian Government, state and territory governments, major livestock industries and other stakeholders. We work with our members and stakeholders to strengthen Australia's national animal health system and maximise confidence in the safety and quality of Australia's livestock products in domestic and overseas markets.



AUSTRALIAN DAIRY FARMERS LIMITED

Australian Dairy Farmers Limited is a not-for-profit organisation representing the interests of Australian dairy farmers. We are a strong collective voice to government and the community on national issues affecting dairy farmers.



GOAT INDUSTRY COUNCIL OF AUSTRALIA

The Goat Industry Council of Australia is the peak national body representing the interests of goat producers. The council's objective and purpose is to represent and promote the national interests of Australian goat meat, fibre and dairy producers.



SHEEP PRODUCERS AUSTRALIA

The Sheep Producers Australia is the nation's peak body representing and promoting the national and international interests of lamb and sheepmeat producers in Australia. Our goal is to deliver lobbying outcomes that enhance the integrity, profitability and sustainability of the Australian sheepmeat industry.



AUSTRALIAN ALPACA ASSOCIATION

The Australian Alpaca Association Ltd. represents owners at all levels and is the collective voice of over 2000 members in all states and territories. The association is the primary resource for breeding and promoting alpacas providing you with the tools, information and support you need to enjoy all the benefits associated with owning alpacas.



CATTLE COUNCIL OF AUSTRALIA

The objective of the council is to represent and progress the interests of Australian beef cattle producers through wide and regular consultation with, and policy advice to, key industry organisations, relevant federal government departments and other bodies regarding issues of national and international importance.



WOOLPRODUCERS AUSTRALIA

WoolProducers Australia is the peak national body for the wool producing industry in Australia, representing farmers whose primary business is growing wool, and is the national voice on behalf of producers. WPA advocates their interests to the federal government and internationally, and enables woolgrowers to determine policy and drive change in their industry.



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