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Broadly speaking, biosecurity is a set of measures for protecting a population from infectious diseases at the national, regional and farm level. It is about managing risks to meet the goals stated above.

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 infectious diseases, as well as for reducing the incidence of existing diseases.

By taking up the biosecurity practices recommended in this manual, industries (via their members) can contribute directly to their ability to cope with a potential disease outbreak, and minimise the cost of its control and eradication at the farm and industry levels.

Supporting this manual is a formal agreement, known as 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 outbreak.

Goals
> To prevent the introduction of infectious diseases to grazing livestock production properties
> To prevent the spread of diseases from an infected property to an uninfected property

What the manual IS:
- Voluntary
- A broad set of guidelines addressing disease prevention and/or reduction on farm
- Practical and cost effective
- Developed through consultation using a science-based approach to reducing disease spread
- For industry bodies to use as a reference document in designing their sector-specific on-farm plans

What the 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
About this manual

The National Farm Biosecurity Reference Manual – Grazing Livestock Production is an important tool for meeting our shared responsibility for biosecurity. It has been developed to help reduce the risk to farming operations of disease entering a property, spreading through the livestock population, and/or being passed to surrounding livestock operations.

This manual sets out biosecurity practices for all grazing livestock enterprises. It is a reference document designed for use by all extensive grazing industries that will set an agreed level of biosecurity for their members.

Using this manual will benefit the industry and associated enterprises. 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 with high economic importance and/or breeding/genetic importance (among others).

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 (alpaca, llama, camels).

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.
Implementation

This manual is the reference document for use in developing sector-specific 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 document. Developing sector-specific practices is fundamental to the success of improved biosecurity for all grazing industries and individual industries may provide more detailed guidance directly relevant to their producers.

The manual is also available as a resource for the education of farm staff and the development of training and awareness programs.
Main ways diseases are spread

Livestock (same and different species)
- transfer of livestock between different production groups/areas
- 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
- raw materials
- post-production contamination or spoilage during transport and storage
- faecal and urine contamination from the same species or other species

Pests and weeds
- poisonous/invasive plants
- feral animals
- domestic animals
- rodents
- insects

Air
- as aerosol or dust particles
Producers can achieve the following 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. diseases, plant poisonings, stress-handling and nutritional) will be avoided and the risk of transmission between operations will be minimised.

It is important to remember that in the event of an emergency animal disease 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 Emergency Animal Diseases**

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 emergency animal disease 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 Emergency Animal Disease Action Plan, along with other useful documents, can be found at: www.farmbiosecurity.com.au/records

**EMERGENCY ANIMAL DISEASE WATCH HOTLINE**

1800 675 888
**PRINCIPLE 1: Livestock**

Manage the introduction and movement of livestock in a way that minimises the risk of introducing or spreading infectious disease.

**Recommended practices:**

1.1 Check animals for health status before purchasing.

1.2 Purchase livestock from suppliers who have a food safety or quality assurance program and can provide information about animal treatments and the health status of their animals – such as a National Vendor Declaration (NVD) and/or Animal Health Statement.

1.3 Segregate, observe and treat (as required) newly introduced animals.

1.4 Ensure introduced livestock have had time to empty out prior to release from the yards.

1.5 For livestock that leave and return to the property (e.g. following shows, agistment, contract joining) assess their vulnerability to infection, hygiene arrangements and contact with other livestock while away. If risky, separate. Observe and treat (if needed) the animals before returning them to companions.

1.6 Inspect and maintain adequate boundary fences.

1.7 Keep vulnerable stock away from livestock of unknown health status.

1.8 Follow the NLIS requirements specific to species and jurisdiction.

1.9 Take additional precautions if buying through saleyards as these represent a high biosecurity risk.
People, equipment and vehicles

**PRINCIPLE 2: People, equipment and vehicles**

*People, equipment and vehicles entering the property are controlled to minimise the potential for property contamination.*

**Recommended practices:**

2.1 Limit the unnecessary movement of people and vehicles onto and around the property.

2.2 Where possible minimise the number of entry points and restrict access to the farm.

2.3 Define and where appropriate signpost ‘permitted access areas’ for farm contractors (e.g. veterinarians, livestock agents, AI 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.

2.4 Clean vehicles and equipment if moving from a high-risk area to a lower-risk area.

2.5 Encourage the use of protective clothing and personal cleanliness when visitors move onto your property.

2.6 Provide facilities in ‘permitted access areas’ for farm contractors and visitors to clean boots and equipment on arrival and before departure.

2.7 Ensure appropriate signage is available to inform visitors of your biosecurity requirements and what you want them to do on arrival.

2.8 Use a Visitor Register to record and monitor the management of visitor activity (See www.farmbiosecurity.com.au for examples of templates).

2.9 Minimise the lending and borrowing of equipment between properties. If lent, ensure it is cleaned before and after use.
Feed and water

PRINCIPLE 3: Feed and water

Quality of stockfeed and water is fit for purpose including:

- **Ruminant stockfeed is free from contaminants and restricted animal material (RAM)**\(^1\).
- **Ruminant livestock have no access to feeds that contain RAM** (poultry, pig and pet feed may contain RAM).
- **Water (and other farm inputs) is managed to reduce risks of transmitting disease agents or weeds.**

Recommended practices:

3.1 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.

3.2 Purchase stock feed from suppliers who can provide assurances consistent with Commodity Vendor Declarations.

3.3 Inspect stockfeed on delivery for evidence of pests, damage and contaminants and manage appropriately.

3.4 Manage effluent dispersal to minimise disease spread through the contamination of pastures, stockfeed and water.

3.5 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).

3.6 Ensure the quantity and quality of water provided is suitable for the type of livestock.

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\(^1\) 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.
Pests and weeds

**PRINCIPLE 4: Feral animals/wildlife/weed control**

*Minimise the potential for wildlife and domestic or feral animals to introduce diseases to livestock.*

**Recommended practices:**

4.1 Monitor and manage vermin, feral animal, weed and wildlife populations to prevent impact on stock.

4.2 Coordinate with neighbours and other local community members to maximise the effectiveness of actions to control weeds and pest animals.

4.3 Minimise access by feral and domestic animals and wildlife to waste in rubbish dumps (secure waste disposal).

4.4 Implement control programs for weeds and disease carrying vectors as required.

4.5 Regularly undertake property inspections to assess possible biosecurity breaches and/or potential for breaches. Correct where necessary.
PRINCIPLE 5: Animal health management

Prevent and control animal diseases on farm by regularly monitoring livestock health.

Recommended practices:

5.1 Assess the health status of your livestock and implement practices that will protect them from known diseases already in your region.

5.2 Ensure all personnel responsible for the management and husbandry of livestock are aware of the importance of early detection and reporting of animals exhibiting signs of sickness or deaths.

5.3 Increase the frequency of inspections of livestock during periods of higher risk, such as increased insect and wildlife activity or growing periods for weeds.

5.4 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.

5.5 Seek early advice from a veterinarian or government officer in relation to any unusual sickness or death.

5.6 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).

5.7 Isolate (as required) and treat diseased or vulnerable animals in the event of a disease outbreak.

5.8 Dispose of carcasses as soon as practical in a way that takes into account environmental and public considerations.

5.9 Inspect livestock regularly, including during regular management and husbandry procedures, to ensure the early detection of ill animals.
**Principle 6: Staff instruction**

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.

**Recommended practices:**

6.1 Ensure all staff understand their role in the implementation of biosecurity practices on your farm.

6.2 Ensure staff responsible for livestock husbandry know how to identify sick and injured livestock.

6.3 Ensure all staff know what to do in the event of a suspected emergency animal disease. If you spot anything unusual call the Emergency Animal Disease Watch Hotline on 1800 675 888.

6.4 Ensure all staff know where to find contact details for the local vet(s) and relevant government officers.

**Principle 7: Carcass, effluent and waste management**

Disposal of dead animals and waste is managed to minimise the spread of disease.

**Recommended practices:**

7.1 Secure and contain disposal areas where possible to prevent access by livestock, feral and domestic animals and wildlife.

7.2 Select disposal areas to avoid the potential spread of contaminants by water.

7.3 Dispose of carcasses and waste in a segregated area, where possible, taking into account environmental and public considerations.

7.4 Ensure controls for the potential spread of disease from effluent are in place.

7.5 Use vegetation in plantations or windbreaks to reduce effluent transfer.

7.6 Ensure government requirements for carcass, effluent and waste management are adhered to where applicable.
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 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.

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.

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.

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.

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.

SHEEPMEAT COUNCIL OF AUSTRALIA
The Sheepmeat Council of 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.