Developing an on-farm biosecurity plan for your livestock grazing enterprise

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This document can be referenced as:

This guideline is designed to follow the 7 key principles and recommendations as set out in ‘The National Farm Biosecurity Reference Manual for grazing livestock production’ (Animal Health Australia, 2012).
**Introduction**

*What is farm biosecurity?*

Farm biosecurity is a set of measures or activities designed to protect a property from the entry and spread of pests, weeds and diseases. The responsibility for biosecurity is shared between livestock owners, managers and handlers, the people working on your farm and the visitors to your farm. Other organisations that play a role in helping to protect the Australian livestock industry from the introduction and spread of deleterious diseases, pests and weeds include Government (state and federal), the scientific community, veterinarians, animal health and welfare organisations and the local community (Farm Biosecurity, 2013a).

In this guideline, a broad range of general guidelines is provided to assist you in developing a practical biosecurity plan for addressing disease, pest and weed prevention and control on your farm. Use this manual with your ‘On-farm biosecurity plan template’ to document and implement your own farm plan.

**The essentials of farm biosecurity consider the following:**

- Farm inputs
- Farm outputs
- Feral animal, pest and weed control
- People, vehicle and equipment movements and hygiene
- Production practices
- Training, planning and monitoring

Almost anything moved onto your property can be a potential source of introduction for pests, weeds or disease for livestock and plants. An awareness of the biosecurity risks that may arise as a result of the introduction of stock, people, equipment or other farm inputs is the first step towards actions to mitigate these risks. Biosecurity practices and requirements continue through the supply chain, beyond when animals or products leave the farm gate. The ongoing commitment to these practices, keep the high level of industry biosecurity we have in Australia.

You have an important role to play in protecting your property, region and livestock industry from biosecurity threats. Protect your farm and protect your future.
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHA</td>
<td>Animal Health Australia</td>
</tr>
<tr>
<td>AHS</td>
<td>Animal Health Statement</td>
</tr>
<tr>
<td>AUSVETPLAN</td>
<td>Australian Veterinary Emergency Plan</td>
</tr>
<tr>
<td>CHS</td>
<td>Cattle Health Statement</td>
</tr>
<tr>
<td>EAD</td>
<td>Emergency Animal Disease</td>
</tr>
<tr>
<td>IPA</td>
<td>Invasive Pest and Animals</td>
</tr>
<tr>
<td>LBN</td>
<td>Livestock Biosecurity Network</td>
</tr>
<tr>
<td>LLS</td>
<td>Local Land Services (NSW)</td>
</tr>
<tr>
<td>MLA</td>
<td>Meat and Livestock Australia</td>
</tr>
<tr>
<td>MSDS</td>
<td>Material Safety Data Sheet</td>
</tr>
<tr>
<td>NLIS</td>
<td>National Livestock Identification System</td>
</tr>
<tr>
<td>NVD</td>
<td>National Vendor Declaration</td>
</tr>
<tr>
<td>PIC</td>
<td>Property Identification Code</td>
</tr>
<tr>
<td>RAM</td>
<td>Restricted Animal Matter</td>
</tr>
<tr>
<td>SHS</td>
<td>Sheep Health Statement</td>
</tr>
</tbody>
</table>
Explanatory Notes
How this manual can assist you in building a farm biosecurity plan:

Checklists
At the end of each priority area, a checklist is provided. Complete the checklist as you move through each section, to determine what biosecurity activities you are already undertaking. There is no need to duplicate any documents you may already be using. The checklist process may also help identify areas where you may consider changing or adapting your practices if there are gaps in your activities or practices.

What if I already have a system for paperwork and documents?
Great news! You are well on your way to a biosecurity plan. Please don’t duplicate any of these. Our process is designed to fit into your existing system, or if you don’t have a current system or are looking to change to a different framework, then we have a farm biosecurity plan template you can use.

Symbols

This symbol indicates you have alternatives or options for recording this information and you may already have a suitable system in place.

This symbol indicates an idea you might like to utilise in developing your plan.

Resources
For each section of the guide, an extensive list of electronic resources (such as templates, documents, articles, factsheets, plans or guidelines) can be found by navigating to the following link: https://www.dropbox.com/sh/giogs37d69s4u2i/AADmpfG2et6K85-_qtll9Kkba?dl=0

Dropbox is an online portal where documents are stored. You are able to access the LBN dropbox for biosecurity resources through the link above. When you open the link, you will have access to folders that relate to each of the priority area (see figure beside). Click on a folder to open it, and all the resources for that folder will be displayed – see example below.
These resources will assist you in building your farm biosecurity plan, in conjunction with the framework provided by the “Farm Biosecurity Plan Template” (if you need it!), which is also provided in the dropbox or on the website.

Many of the forms that you will use in your biosecurity plan can also be found and printed from www.farmbiosecurity.com.au.

The Livestock Biosecurity Network (LBN) is an independent industry initiative established by the Cattle Council of Australia, Sheepmeat Council of Australia and WoolProducers Australia. LBN provides producers with practical information about implementing on-farm animal health, welfare and biosecurity measures to deal with the many risks producers face.

LBN regional officers are working closely with existing farming networks, raising awareness of biosecurity risks and the need to be prepared for possible outbreaks of exotic or endemic diseases and harmful pests.

We have made the assumption most people will be able to access the internet. We sincerely apologise if this is not the case for you, and encourage you to contact your closest LBN Regional Officer, so we can provide hard copies of relevant information you may require.

**Contacts for your state**

**Queensland/Northern Territory:**
Dr Sarah-Jane Wilson, 0437 725 877

**Southern Queensland/ New South Wales:**
Corrie Grimmett, 0403 863 413

**South Australia:**
Dr Emma Rooke, 0488 400 878

**Western Australia:**
Northern: Dr Sarah-Jane Wilson, 0437 725 877
Southern: Carey Hobson, 0488 100 426

**Victoria:**
Dr Patrick Kluver, 0499 077 213

**Tasmania:**
Dr Jess Coad, 0488 400 209

Other supportive networks in your area that may be able to provide advice and guidance on biosecurity (including legislation and compliance issues), will include your local animal health authorities (such as Department of Agriculture, Department of Primary Industries and Local Land Services).
Important enterprise information
At the start of your biosecurity plan, be sure to include some enterprise information including your Property Identification Code (PIC), contact details and also a property and locality map.

Locality Map
You can create a Google map that will demonstrate your location relative to major towns, roads, rivers and infrastructure in your area. Print this map and insert it in this section of the document. Go to https://www.google.com.au/maps

Property Map/Diagram
Add a detailed map or diagram of your property that shows watering points (and water infrastructure), internal fence lines, boundary fences, roads, sheds, access routes and other structures of significance.

If you have known areas of weed infestation on your property, you may want to mark them on the map, particularly if the map will be used as document for visitors and contractors.

Stock inventory
You may also wish to include information in your biosecurity plan, on your stocking numbers and identifiers that are associated with your enterprise such as ear marks, brands and management tag colour code system (an examples is given below).

- 2013 B3 Yellow
- 2014 C1 Red
- 2015 A2 Blue
- 2016 A4 Black
- 2017 D5 White
- 2018 B1 Orange
- 2019 D2 Light Green
- 2020 C4 Purple

Recommended year colour guide (Leader Products, 2014).
This information may already exist in your financial records or tax return documents

<table>
<thead>
<tr>
<th>Stock</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grazing Livestock</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weaners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heifers</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sheep</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weathers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lambs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Horses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goats</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-grazing Livestock</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedlot cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pigs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Poultry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Stock identification

Cattle earmarks

Cattle Brands
Three-piece

Symbol

Sheep/Goat identifiers
Ear marks

Paint Brands

Other Stock identifiers
Horse brands

Pig slap brands/tattoo
Priority Area 1: Livestock movements
Sales, purchases, introductions to your farm and livestock movements

New livestock (purchased livestock, agistment stock and also unintentional stray livestock) entering your property present a high risk activity for the unintentional introduction of disease agents, weed seeds or pests. Contaminants, weed seeds and disease agents can also be spread in dirt and manure on livestock, in/on the vehicles they are transported in, and also brought in on boots or equipment with the people accompanying them.

The peak industry bodies for cattle and sheep highly recommend the use of Animal Health Statements in conjunction with your NVD/waybills when purchasing or moving new cattle or sheep onto your enterprise. These statements not only give a more detailed record of the prior health history of the livestock and any veterinary treatments received, they also provide information on the disease status of the regions they have been moved from. This is particularly important for cattle and/or sheep purchased from interstate (for example – livestock that may have been purchased from Bovine Johnes Disease (BJD) or Ovine Johnes Disease (OJD) infected areas).

A template of the Animal Health Statements (AHS) can be found at [www.farmbiosecurity.com.au](http://www.farmbiosecurity.com.au). These statements are species specific and will either be a Cattle Health Statement (CHS) or Sheep Health Statement (SHS). Asking for an AHS before you purchase or agist new livestock, will give you a better understanding of the prior animal health management picture. The regulated (compulsory vs. voluntary) use of AHSs varies between states. Be sure to check with your local animal health authority (such as State Government Department or Local Land Service (LLS)), for updates or further information.

All cattle moving from interstate to Tasmania and South Australia must be accompanied by a cattle health statement. In other states different certification may be required to enter the state. Your local animal health authority will advise on these requirements.

For movement of sheep between and within states, the following guidelines from [www.ojd.com.au](http://www.ojd.com.au) are provided.

<table>
<thead>
<tr>
<th>STATE</th>
<th>MOVING SHEEP INTO THE STATE</th>
<th>SHEEP MOVEMENTS WITHIN THE STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>SHS is mandatory</td>
<td>SHS is mandatory</td>
</tr>
<tr>
<td>TAS</td>
<td>SHS is mandatory</td>
<td>SHS is voluntary</td>
</tr>
<tr>
<td>NSW</td>
<td>SHS is mandatory as it is required as an approved vendor declaration for footrot</td>
<td>SHS is voluntary</td>
</tr>
<tr>
<td>WA</td>
<td>SHS is voluntary; LB1 form is mandatory</td>
<td>SHS is voluntary</td>
</tr>
<tr>
<td>QLD</td>
<td>SHS is voluntary; Certificate of Health and NVD/Waybill is mandatory</td>
<td>SHS is voluntary</td>
</tr>
<tr>
<td>NT</td>
<td>SHS is voluntary; Certificate/Waybill is mandatory</td>
<td>SHS is voluntary</td>
</tr>
<tr>
<td>VIC</td>
<td>SHS is voluntary</td>
<td>SHS is voluntary</td>
</tr>
</tbody>
</table>

For all sheep moving direct to slaughter a SHS is not required, but an NVD/Waybill is compulsory for ALL sheep movements.
Livestock movements

When buying, selling, moving or showing animals, the following recommendations from MLA (2014) and Farm Biosecurity (2013b) are made -

- Always request a NVD and AHS and any other records of the stock’s health status.
- Keep a record of where the livestock have come from. This may involve uploading information to the National Livestock Identification System (NLIS) database as well.
- Purchase stock from reputable and biosecurity conscious suppliers. Inspect before purchase if possible.
- Be aware of any screening tests for disease that may be required.
- Use an accredited livestock transport company.
- Be aware of the cleaning and hygiene practices of the transport provider/s.
- Inspect stock on arrival to make sure they are healthy and in the same condition as when you purchased them; seek advice from a vet if necessary.
- Treat incoming livestock with appropriate drenches and vaccinations and hold them for a period of no less than 24 hours in yards to empty out.
- Isolate new stock for a period of 14 days to allow any signs of disease to emerge, and to allow time for weed seeds to be excreted by the animals. Monitor and manage these areas for new pests and diseases. Quarantine periods can be longer but a minimum of 14 days is recommended.
- When taking animals to shows and sales, remember that your stock can be exposed to disease by mixing with other animals or coming into contact with contaminated pens, vehicles, people and equipment.
- Agisted livestock may have been exposed to several potential diseases sources (roadways, stray or resident livestock on the agistment property, trucks). Quarantine agisted animals on their return to the home property.
- Ensure records of stock transactions and movements are kept up-to-date.

The ability to trace the movements of livestock on and off your property is exceptionally important. Using NLIS means livestock can be tracked from property of birth, through to slaughter. This provides the livestock industry with a tracing tool that can be used for biosecurity, meat safety, product integrity and market access (MLA, 2014).

日后 If you use an LPA farm records book, this record relates to Section 5A.
Livestock transport

When moving livestock, it is strongly recommended you pre-emptively think about the logistics of your transport arrangements, particularly the animal health, welfare and biosecurity risks that may arise. Some elements to consider may include –

Who will transport the livestock? Will you transport them yourself or employ the services of a transport contractor? What biosecurity arrangements will you need to make if your transporter is carrying from multiple properties or has multiple pick-ups? Will the transport vehicles be coming from an area that has issues with weeds of concern?

Before the livestock leave your property, do you undertake a cross-check to ensure that all animals are fitted with an NLIS device? Have you agreed to how the transfer will be captured on the database? Are all staff trained in the proper completion of the NVD/Waybill forms or animal health statement or certifications? Do you have arrangements in place with your livestock agent or transport company if an animal is injured or unable to be loaded at the end of the journey?

If you are using an LPA records book, this relates to section 4.

Welfare of livestock during transport is a crucial part of managing animals in transit.

Land Transport Standards and Guidelines

The Land Transport Standards and Guidelines provide a code of practice to cover the transport of livestock by road and rail, and by livestock transport vehicle aboard a ship (Department of Agriculture, Fisheries and Forestry, 2012). The standards and guidelines were developed in consultation with industry and are considered to reflect the minimum acceptable industry standards. Information on these guidelines are available at: http://www.animalwelfarestandards.net.au/land-transport/

Fit-to-Load

Are the livestock you are about to transport fit-to-load? This may be of concern during poor seasons, or when incapacitated, injured or diseased livestock are in the loading yards. For more information on guidelines for suitability for transport, please refer to the MLA Fit-to-Load guide, which is available online at: http://www.mla.com.au/News-and-resources/Publication-details?pubid=5873

How long will the stock be off water during their journey? Do they need to be spelled on their journey? There are maximum time limits that different classes of sheep and cattle can be off water during transit as determined by the Land Transport of Livestock Standards and Guidelines (Animal Health Australia, 2012).
### Maximum time off water and spell duration for classes of cattle and sheep in transport

<table>
<thead>
<tr>
<th>Class of livestock</th>
<th>Maximum time off water (hours)</th>
<th>Minimum spell durations (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cattle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle between 24 and 37 weeks pregnant (inclusive)</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Cattle more than 37 weeks pregnant</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Lactating cattle travelling with dependent young</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Cattle more than 30 days old but less than 6 months old</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Any other cattle</td>
<td>48</td>
<td>36</td>
</tr>
<tr>
<td><strong>Sheep</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep between 14 and 19 weeks pregnant (inclusive)</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Sheep more than 19 weeks pregnant</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Lactating sheep travelling with dependent young</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>Sheep less than 4 months old</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>Any other sheep</td>
<td>48</td>
<td>36</td>
</tr>
</tbody>
</table>


In addition to the previous, the following considerations should be given to livestock in transit (Animal Health Australia, 2012).

Livestock can be transported more effectively and with lower risk to livestock welfare if:

- The preparation of livestock before transport is adequate for the intended journey.
- Competent selection of livestock is done before loading.
- Livestock are handled correctly at all times using well-designed and maintained facilities.
- Livestock are managed and handled by competent livestock handlers.
- Road and rail transport facilities and vehicles are designed and maintained for safe transport of livestock.
- The journey is planned to ensure prompt delivery of livestock, and undertaken to ensure appropriate timing of arrival with consideration of situations that may affect the welfare of the livestock.
- Consideration is given to feed and water requirements, provision of adequate shelter and protection from, or treatment of, injury and disease.
The risk of adverse livestock welfare outcomes is related to:

- competency of personnel involved in any phase of livestock transport
- selection and preparation of the livestock for the journey
- journey duration
- food and water-deprivation time
- timing of water, feed and rest before transport and at unloading
- species and class of the livestock being transported
- road conditions and terrain
- weather conditions
- vehicle and facility design and maintenance
- space allowance on the vehicle
- ability to observe the livestock en route and take action to remedy any problem.

**Livestock arrivals**
When new livestock arrive on your property, give them a thorough inspection and ideally document their arrival condition on a stock receival and inspection form (see below). Good biosecurity practices would include quarantine and segregation of these animals for a minimum period of 14 days (and up to 28 days or more for animals with no prior health history or animals that have been purchased through saleyards or a selling centre where livestock traffic is high, or when particular diseases require longer quarantine periods). Inspections of new arrivals (including a record of any injuries, deaths or abnormal clinical signs) should be undertaken. This can be recorded on the ‘Stock receival and inspection form’ demonstrated below.

If you use an LPA farm records book, this record relates to Section 5A.

A number of versions of the stock receival and inspection forms can be found in your resources or at [www.farmbiosecurity.com.au](http://www.farmbiosecurity.com.au). Select the version that is most suitable for your enterprise. These records should be kept along with any vendor declarations, waybills and animal health statements that accompany the livestock.

During the quarantine period, animals can be monitored and observed for any signs of disease or ill-health. Animals with unknown vaccination status can be vaccinated and parasite treatments applied, as required, to avoid infecting other livestock on the premises. The practice of quarantine and segregation during the induction of new livestock on your property, will also allow them to empty out and drop any mud, faeces or debris off their hooves and coats (which may contain weed seeds).
in a designated induction/quarantine area. This allows you to monitor a specific area for any weed or pest incursions that may occur and act upon any problems that arise quickly.

**Selling Livestock**
Providing an AHS for any livestock you wish to sell, will help to promote buyer confidence in the health of your livestock. AHSs are compulsory for livestock movements in some states, so if you are selling interstate, be sure to check the requirements for that state.

It is recommended that in addition to documenting your livestock arrivals, details of livestock consignments that move off the property (dispatches) should also be recorded.

ℹ️ If you use an LPA farm records book, this record relates to Section 5B.

**Priority Area 1 in your On-farm Biosecurity Plan**
If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 1.

| 1. **Cattle Health Statement** – request for purchased stock, supply with stock sold |
| 2. **NVD/Waybill or Livestock Waybill** – used with all livestock movements |
| 3. **Stock receival and inspection record** (3 example templates provided in resources) – ON-FARM movements |
| 4. **Arrivals Quarantine Record** (may also be recorded on Stock receival and inspection record) |
| 5. **Consignement/Dispatch Register or Livestock Sales and Movement records** – OFF-FARM movements |

Don’t forget there are multiple national, state and local resources provided for each priority area, in either the dropbox or your resource file. These resources supplement the training manual and your farm planning template.

Over the page is the checklist of activities and documents that relate to biosecurity in priority area 1.
<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist – Priority Area 1</th>
<th>Documents (examples)</th>
<th>On-farm activities or measures (examples)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Check animals for health status before purchasing/agisting</td>
<td>Animal Health Statement (AHS)</td>
<td>Pre-purchase inspection or veterinary inspection/certification</td>
<td></td>
</tr>
<tr>
<td>1.2 Purchase livestock from suppliers who have a QA/Food Safety program and can provide information about animal treatments and the health status of their animals – such as a NVD and/or AHS.</td>
<td>NVD/Waybill, Animal Health Statement</td>
<td>Request information on vendor QA or farm management system</td>
<td></td>
</tr>
<tr>
<td>1.3 Segregate, observe and treat (as required) newly introduced animals.</td>
<td>Arrivals quarantine record, Livestock receival and inspection form</td>
<td>Isolation and quarantine for up to 28 days (plus), Treatments/induction as required</td>
<td></td>
</tr>
<tr>
<td>1.4 Ensure introduced livestock have had time to empty out prior to release from the yards</td>
<td></td>
<td>24-48 hours holding for empty out</td>
<td></td>
</tr>
<tr>
<td>1.5 For livestock that leave and return to the property (e.g. following shows, agistment, contract joining). If risky, separate. Observe and treat (if needed) the animals before returning them to companions.</td>
<td>Animal Health Statements, Treatment records</td>
<td>Isolation and quarantine as above, Treatments as required</td>
<td></td>
</tr>
<tr>
<td>1.6 Inspect and maintain adequate boundary fences.</td>
<td></td>
<td>Maintain integrity of boundary fences</td>
<td></td>
</tr>
<tr>
<td>1.7 Keep vulnerable stock away from livestock of unknown health status.</td>
<td></td>
<td>Isolate and quarantine as above, Maintain integrity of boundary fences</td>
<td></td>
</tr>
<tr>
<td>1.8 Follow the NLIS requirements specific to species and jurisdiction.</td>
<td>NLIS database transfers, NLIS tagging requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9 Take additional precautions if buying through saleyards as these represent a high biosecurity risk.</td>
<td>Review NVD/Waybills</td>
<td>Isolation and quarantine as above</td>
<td></td>
</tr>
<tr>
<td>1.10 Undertake to handle livestock in a calm and low stress manner*</td>
<td></td>
<td>Low stress stock handling</td>
<td></td>
</tr>
<tr>
<td>1.11 Facilities for handling and transporting livestock are fit for purpose*</td>
<td>Follow guidelines as set in Land Transport of Livestock Standards</td>
<td>Audit of suitability for handling facilities including yards and trucks</td>
<td></td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012) - except where identified by *
Priority Area 2: People, equipment and vehicles

Vehicles and equipment are vital to farming and grazing operations. Unfortunately vehicular traffic, animals and visitors (personal, business, operational or uninvited) can carry and spread weeds seeds, disease agents and pests with them. To reduce the risk of spread of disease agents, weed seeds, and pests, on vehicles, equipment and people, a number of practical and simple strategies can be employed.

Limiting entry points for vehicular access, and designating driving lanes and parking areas for visitors to the property is achievable for most farms. Keeping restricted areas locked and placing high visibility instructional signage at entry points will direct drivers, either to a preferred entry point, or to receive entry details by phoning through to the owner or manager.

Keeping records of visitors that enter the premises, their prior transit locations, and clean-down activities undertaken, can help you assess their risk level. Providing facilities for cleaning personal gear such as boots and small pieces of equipment or tools can also help to control spread of disease agents or weed seeds by providing, in essence, a containment area. Providing clean-down facilities for larger equipment and vehicles is covered later in this chapter.

Visitor register
A visitor register can be a simple document describing who comes onto the property. A template for a visitors register can be found at www.farmbiosecurity.com.au. A number of versions of this form are provided in your resources.

Liaising with contractors and service providers before they arrive, will help them be prepared to meet your biosecurity requirements. In some states, a weed hygiene declaration or vehicles inspection certificate for vehicles entering your premises can be requested. A list of declared pest plants for your state can be found at – http://www.growmeinstead.com.au/declared-plants.aspx.

More resources on weeds and weed control are available in the resource list.

Public clean-down (or wash-down) facilities are available for use in many regions. It is recommended that you identify if a local clean-down or wash down facility is available.

Visitors and vehicles
Suppliers, service providers and contractors often bring vehicles and equipment onto your property. Consider what biosecurity practices that they (or their companies) are undertaking before they arrive on your property and what risks they may pose to your enterprise? Consideration of these points may also help you to ascertain who the best suppliers for your business are!

Your business may also have negotiated access arrangements with certain companies (such as utility companies, research organisations, and mining or exploration companies). These companies may utilise specialised equipment that requires specialised clean-down procedures. Do you have clean-down facilities available for these companies? Have you negotiated who is responsible for inspection of equipment and vehicles after clean-down?
Are the suppliers, contractors and visitors coming onto your property aware of what problem plants look like? They may be unfamiliar to the area, so we recommend you source good prints (either from a book or off the internet), that you copy and provide to these folk that may be entering your property. Add it to the back of your one-page document for entry procedures. Examples of weed photographs that may be of assistance to visitors unfamiliar with pest species in your area.

It is also recommended that you provide details of the closest local public wash-down or clean-down facility available if this is practical. Being able to recommend where contractors can clean or wash-down their vehicles and equipment may help with negotiating biosecurity requirements for entry to your property.

You may wish to pre-emptively identify who are the likely or frequent business visitors to your farm are – such as service providers (livestock agents, veterinarians, stock-feed suppliers), contractors and utility companies. It may be worthwhile to negotiate entry arrangements with these companies and have pre-agreed procedures for maintaining high standards of on-farm biosecurity.

You can take the step of conducting a risk assessment of these visitors, to determine who poses the greatest risk (these may be visitors who attend other livestock farms prior to visiting your farm, or companies that travel off-road through weed areas before reaching your property). Risk assessment can be a relatively simple process and we have provided documentation in your resources to help you undertake these steps.

The first step involves identifying what a visitor may have been exposed to (or where they have been/what they have been in contact with) prior to entering your property. An example of this process is provided below.

---

**farmbiosecurity**

**Visitor/Staff Risk Assessment**

www.farmbiosecurity.com.au

<table>
<thead>
<tr>
<th>Date:</th>
<th>Visitors Name:</th>
<th>Contact Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**[A] Exposure Assessment** (Please record relevant exposure (risk) for each activity. Note that the highest risk is the final result)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Low Risk</th>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other farm visits per day</td>
<td>One farm, little to no animal contact</td>
<td>Occasionally visits more than one farm/day, minimal animal contact</td>
<td>Visits many farms or livestock facilities, Min animal contact</td>
</tr>
<tr>
<td>Ownership of similar animals</td>
<td>Does not own similar species at home</td>
<td>Similar species at home, but different production type</td>
<td>Owns similar farms or similar species and production type at home</td>
</tr>
<tr>
<td>Contact with potentially sick or infectious animals</td>
<td>Minimal or no contact with potentially ill or infectious animals</td>
<td>Contact with healthy animals but avoids contact with potentially infectious animals</td>
<td>May own or be exposed to many animals of unknown or poor health status</td>
</tr>
<tr>
<td>Foreign Travel</td>
<td>Does not travel outside Australia or New Zealand</td>
<td>Limited travel outside Australia or New Zealand with minimal or no animal contact</td>
<td>Foreign visitor or travels to foreign countries with animal contact in those countries</td>
</tr>
</tbody>
</table>

For each category of risk (low, moderate or high), a risk mitigation strategy can be developed to reduce or control the risk as shown in the example below.
A number of different versions of the visitor risk assessment records and explanatory notes are provided in your resources. These can be printed and included in the farm biosecurity plan. If you need further information on risk assessment for visitors and staff, you will find it at http://www.farmbiosecurity.com.au/toolkit/records/


Vehicle clean-down facility guideline
Vehicle tyres, undercarriages, grills, floors and trays can carry pests, weeds and disease agents in soil, plant material and manure. The following are some suggestions for setting up your clean-down facility:

- Establish a vehicle high pressure wash down facility well away from livestock and crops to clean vehicles and equipment which need to enter the property.
- The wash down area should have a sump to collect any waste water.
- An air compressor or vacuum may also be of use for removed dry seeds, dirt and plant matter in some instances.
- Ensure any run off is directed away from livestock pens, paddocks, crops and waterways.
- Regularly check areas around the wash down facility for new pests or weeds.
- Keep an up-to-date equipment and vehicle cleaning record.
- Clean machinery from the top down and dismantle it as far as possible to gain access to internal spaces.
- Clean and disinfect all borrowed or second hand machinery before using it on your property.
- Follow any wash down with a broad spectrum disinfectant. This will further reduce the risk of introducing less visible threats like bacteria, viruses, and spores onto your property.
Suggested equipment required for vehicle clean-down on-farm
(From: Queensland checklist for clean-down procedures, 2000)

- A mobile water tanker or spray unit is ideal.
- Water may also be pumped from a dam or cattle trough/tank.
- High pressure water from a gurney or pump.
- An air compressor for removing dry material (radiators and grain headers).
- Broom/dust pan (cleaning cabins).
- A garden hose may be adequate for small clean-downs.

A useful guide for conducting wash-down procedures for different classes of vehicle and equipment can be found in the Vehicle and machinery checklists – Clean-down procedures 2014 - http://www.daff.qld.gov.au/__data/assets/pdf_file/0011/58178/IPACleandown-Procedures.pdf

Priority Area 2 in your On-farm Biosecurity Plan
If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 2

1. Visitor Register - to be completed when vehicles/people enter property
2. Visitor/staff Risk Assessment – to identify risk associated with visitors and their vehicles and equipment
3. Vehicle entry log
4. Vehicle contamination cleaning record
5. Weed hygiene declaration, Noxious weed declaration (or similar)
6. Vehicle inspection record
7. Supplier, service provider and contractor record
8. Property access arrangements for external companies
<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist</th>
<th>Documents (examples)</th>
<th>Check</th>
<th>On-farm activities or measures (examples)</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Area 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Limit the unnecessary movement of people and vehicles onto and around the property.</td>
<td>Contractor/visitor entry procedures</td>
<td></td>
<td>Lock all access gates that are not to be used for public/main entry.</td>
<td></td>
</tr>
<tr>
<td>2.2 Where possible minimise the number of entry points and restrict access to the property.</td>
<td></td>
<td></td>
<td>Entry signage such as farm biosecurity sign. Designated travel lanes and parking areas</td>
<td></td>
</tr>
<tr>
<td>2.3 Define and where appropriate signpost ‘permitted access areas’ for farm contractor vehicles and service personnel to notify relevant authority prior to entry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Clean vehicles and equipment if moving from a high-risk area to a lower-risk area of pest, disease or weeds.</td>
<td>Clean down inspection checklist</td>
<td></td>
<td>Provision of clean down equipment or facilities.</td>
<td></td>
</tr>
<tr>
<td>2.5 Encourage the use of protective clothing and personal cleanliness when visitors move onto your property.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6 Provide facilities in ‘permitted access areas’ for farm contractors and visitors to clean boots and equipment on arrival and before departure.</td>
<td>Designated travel lanes and parking areas</td>
<td></td>
<td>Provision of clean down facilities and equipment.</td>
<td></td>
</tr>
<tr>
<td>2.7 Ensure appropriate signage is available to inform visitors of your biosecurity requirements and what you want them to do on arrival.</td>
<td>Contractor/visitor entry procedures</td>
<td></td>
<td>Entry signage such as farm biosecurity sign</td>
<td></td>
</tr>
<tr>
<td>2.8 Use a Visitor Register to record and monitor the management of visitor activity</td>
<td>Visitor risk assessment tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.9 Minimise the lending and borrowing of equipment between properties. If lent, ensure it is cleaned before and after use.</td>
<td>Clean down inspection checklists</td>
<td></td>
<td>Clean down of equipment and vehicles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hygiene certificates where applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012)
Priority Area 3: Feed and water

Feed, bedding and water supplies, all have the potential to be a source of contamination, infection or infestation. They can carry/harbour disease agents, chemicals residues, weed seeds and/or pests (for example fire ants). Incorrectly stored feeds can also deteriorate, grow unwanted disease agents (such as mould) or become contaminated via pests and vermin.

When purchasing feed or bedding to bring onto your property, you can request a Commodity/By-product Vendor Declaration. These declarations are designed to protect livestock from exposure to feed or bedding materials that may be contaminated with unacceptable chemical residues or feedstuff that may contain animal products. When purchasing feed or bedding, it is also recommended to purchase a product that is feed fit-for-purpose.

It is essential that livestock have a supply of good quality, fresh water. Water sources should be inspected for cleanliness and monitored to ensure no contamination from material such as bones, faeces, plant matter or carcasses is occurring. Watering points should also be checked for freshness (including any signs of stagnation) and suitability for the livestock that are watering there (such as height of troughs, boggy edges and effectiveness of flow).

If you are using an LPA records book, this relates to Section 3D.

In Australia, we have strict regulations that control what can be fed to livestock. Restricted Animal Matter (RAM), ‘is any material taken from a vertebrate animal other than tallow, gelatin, 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’ (Animal Health Australia, 2013). RAM must NOT be fed to ruminants.

It is also forbidden to feed swill. ‘Swill is food (or food scraps) that contains animal matter, or vegetable waste that has been contaminated by animal matter (termed animal-contaminated matter). Animal matter is defined as any meat or meat product and any illegally imported dairy products. It also includes chicken meat. Swill cannot be fed to livestock, including pigs, poultry or ruminants. Dogs and cats are not considered livestock’ (DAFF, 2013).

Ruminant Feed Ban
As a producer, you can complete the following checklist (over the page) to ensure that you are compliant with the ruminant feed ban. It is recommended you include this checklist in your biosecurity plan.
If you are seeking some guidance on what you can and can’t feed to livestock and other animals in your state, please contact your local animal health authority. A general guideline is provided below from The Department of Agriculture, Fisheries and Forestry (2013a).  

What can I feed to my farm animals?

<table>
<thead>
<tr>
<th>Material</th>
<th>Is it swill?</th>
<th>Can it be fed to ruminants (cattle, sheep, goats etc.)?</th>
<th>Can it be fed to non-ruminants (pigs, poultry)?</th>
<th>Can it be fed to dogs and cats?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and meat products, including chicken meat</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Food material that has come in contact with meat or meat products collected from a shop, restaurant, home kitchen etc.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Bakery scraps or vegetable scraps that have had no contact with meat, meat products</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rendered animal fat, treated cooking oils, milk originating from Australia and processed in Australia or legally imported dairy products</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Grazing Management

Pasture
Understanding the relationships between stocking density, carrying capacity, the condition of your land and the health of your livestock is a worthwhile investment of time and learning. Consider including in your biosecurity plan, a description of when different areas of land (regional ecosystems) are spelled or grazed (i.e.) how you rotate your livestock through a grazing cycle. Your local beef or sheep extension officer can provide information on what is best practice for grazing in your local area.

If you use effluent or biological waste as fertilizer (such as blood and bone meal), you should consider the risks that may apply and describe your strategies to minimise the risks. Bone and bone meal is considered RAM and therefore cannot be fed to ruminants. Likewise using chicken litter as fertilizer, can present disease risks to livestock if not managed correctly.

Crop Waste, by-products and stubble feeding
It is not uncommon to utilise crop waste or stubble to feed livestock. Whether you are using this feed source for your own livestock or agisted livestock, you must be aware of the risk of chemical residues in these alternative feed sources. Even trace amounts of certain agriculture chemicals can create residues in meat and milk. The risk is greatest when livestock are fed plant or crop waste that was not specifically designed to be stockfeed. If you are planning to agist livestock on cropping areas or purchase in crop/plant waste, be sure to ask questions about any chemical treatments the products may have had. Please read the ‘Fodder and supplements” section on the following page for information on vendor declarations relating to alternative stock feeds.

Poisonous plants
Make a list of the poisonous plants that occur in your area. You may also need to talk with your neighbours about what they have seen or experienced on their properties (plants and weeds don’t respect property boundaries). Your local council or catchment group may also be able to provide you with more information on poisonous plants in your area.

A knowledge of local poisonous plants is vital to managing animal health and livestock production. Not only can some poisonous plants and noxious weeds reduce productivity and out-compete pasture, causing poor performance in livestock, some cases of plant poisonings can mimic the clinical signs of emergency animal diseases.

In combatting infestations of weeds on farms, chemicals that may have toxic effects on livestock are often used. These chemicals can also present a risk if they turn up as a residue in the human food chain. Such chemicals have with-holding periods associated with their use, to prevent them ending up in the food chain.

Fodder and supplements
It is possible to introduce weeds and weed seeds, as well as contaminants and disease agents with purchased stockfeed. A good way to monitor for any new or unusual areas of plant growth is to feed out in designated feeding areas. These areas can be more easily monitored and treated in a timely manner, if an introduced weed appears. A good biosecurity plan will include the details of where these designated feeding areas are, and how often they are monitored. These areas may change regularly, so noting which areas are being used, which animals were being fed, and the time period in which the feedstuff was used, will help you with monitoring for new plant/pest growth or disease outbreaks. If you also undertake cropping on your enterprise, introduced feedstuffs can also present
a risk of introduced plant diseases. In your resources, we have provided a number of templates to assist with biosecurity planning in this area.

It is recommended that for purchased feeds you request a vendor declaration form from the supplier. Fodder Vendor Declarations and Commodity Vendor Declarations can be downloaded from or completed electronically from http://www.mla.com.au/Meat-safety-and-traceability/On-farm-risk-management/Feed-and-fodder-declarations

There are a number of records that should be kept relating to livestock feeds and fodder including a record of what is purchased and when, how it is stored and where/how this is fed. Keeping these records helps to identify and mitigate risks that may arise such as animal disease, weed contamination, chemical residue issues or introduction of pest species (such as tramp ants).

🤔 If you use an LPA farm record book, these records relate to Section 3C and 3D.

LBN has also provided a template in the resources for tracking stock feed purchase, storage and usage (example below).

<table>
<thead>
<tr>
<th>Stock feed purchase, storage and feed-out record</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description of feedstuff</strong></td>
</tr>
<tr>
<td>(e.g.) Lucerne Hay x 20 bales</td>
</tr>
</tbody>
</table>

**Water**

**Water quality and testing**

Water quality can be an issue when dams or rivers get low, or when artesian systems become highly mineralised. In this section of your biosecurity plan, consider what the triggers for water testing on your property would be and where you would send the samples to. Do you have a contingency plan for what actions could be taken if water quality was not to standard?
Stock water consumption guidelines

<table>
<thead>
<tr>
<th>Type of livestock</th>
<th>Average daily consumption (litres/head)</th>
<th>Peak daily consumption (litres/head)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing ewes on dry feed</td>
<td>8</td>
<td>11.5</td>
</tr>
<tr>
<td>Mature sheep on dry pastures</td>
<td>7</td>
<td>8.5</td>
</tr>
<tr>
<td>Mature sheep on green pastures</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Fattening lambs on dry pasture</td>
<td>2.2</td>
<td>3</td>
</tr>
<tr>
<td>Fattening lambs on green pasture</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy cows in milk</td>
<td>70</td>
<td>85</td>
</tr>
<tr>
<td>Dairy cows, dry</td>
<td>45</td>
<td>60</td>
</tr>
<tr>
<td>Beef cattle</td>
<td>45</td>
<td>60</td>
</tr>
<tr>
<td>Calves</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>Grazing</td>
<td>35</td>
<td>45</td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breed sows</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Mature pigs</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Poultry</td>
<td>(litres/100 birds)</td>
<td></td>
</tr>
<tr>
<td>Laying hens</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Non-laying hens</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Turkeys</td>
<td>55</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Burton (1965)

Water infrastructure – map and reconnaissance plan

In this area (or if contained in the property map/diagram then refer to that section) of your biosecurity plan, it is recommended you document or map your water infrastructure. Include details that relate to the water infrastructure system used on your property, such as size of pipes, maintenance activities undertaken, dates of installation of new infrastructure, treatments or breakages and where they occurred (and how they were corrected!).

Priority Area 3 in your On-farm Biosecurity Plan

If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 3

Summary of documents that may assist in biosecurity planning for Priority Area 3

1. Stock feed/fodder purchase, storage and usage record
2. RAM checklist for producers
3. Commodity/By-product vendor declaration
4. Local Poisonous plants list
5. Water infrastructure map for your property (if not included in the Farm Map)
<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist</th>
<th>Documents (examples)</th>
<th>On-farm activities or measures (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority Area 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Do not feed to ruminants any products made from vertebrate animals. There are only two exemptions to this rule: tallow and gelatin. This is a legal requirement in all Australian states and territories.</td>
<td>Restricted Animal Matter Checklist</td>
<td>No Swill feeding – sort vegetables and animal product scraps or avoid feeding scraps to livestock.</td>
</tr>
<tr>
<td>3.2 Purchase stock feed from suppliers who can provide assurances consistent with Commodity Vendor Declarations.</td>
<td>Vendor Declarations (for fodder, feedstuff or by-product)</td>
<td></td>
</tr>
<tr>
<td>3.3 Inspect stockfeed on delivery for evidence of pests, damage and contaminants and manage appropriately.</td>
<td>Stock Feed purchase, storage and usage record</td>
<td></td>
</tr>
<tr>
<td>3.4 Manage effluent dispersal to minimise disease spread through the contamination of pastures, stockfeed and water.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td>Stock Feed purchase, storage and usage record</td>
<td>Vermin and pest control</td>
</tr>
<tr>
<td>3.6 Ensure the quantity and quality of water provided is suitable for the type of livestock.</td>
<td>Water requirement guidelines for livestock are available</td>
<td>Monitor water points and infrastructure regularly</td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012)
Priority Area 4: Feral/pest animal and weed control

Feral animals compete against your livestock for the resources on your property. Predation from wild dogs and foxes, birds of prey, feral pigs and other animals may also pose an issue for young, weak or incapacitated livestock. Pest species may also include cane toads, insects such as locusts and ants (e.g. fire ants and crazy ants), feral cats, carp and other ornamental fish, birds, goats, camels, deer and vermin. The [www.feral.org.au](http://www.feral.org.au) website is an excellent portal of information on pest animal species.

Pest animals can spread disease agents and parasites onto and around your property, contaminate your water sources and damage infrastructure such as fences. Mitigating these risks requires understanding of the ecology and lifecycle of these pest species. There may also be regulatory or legal requirements necessary for dealing with these species, such as mitigation permits or duty-of-care obligations.

Invasive weed spread can reduce the productivity of your land due to competition with native grasses and improved pastures. Poisonous plants can impact the productivity of your herd/flock through poor health or even death to livestock in some cases. Aim to develop a good knowledge of the noxious weeds and poisonous plants in your area, so you can identify them quickly and manage them (or the livestock) accordingly.

Your state government may provide services to help identify weed and pest distribution. Where available, they are provided in your resources. Pest distribution maps for all states can be found at [http://www.feral.org.au/pestmaps/](http://www.feral.org.au/pestmaps/)

An awareness of how pests and weeds can be spread will aid you in developing a mitigation plan. Some pests and weeds will be ‘carried’ between areas (such as on animals, vehicles or in hay or fodder), but others can be spread by water or wind and don’t recognise boundaries such as your property fences. If you are searching for a photographic guide to the Australian weeds of national significance, you can find some assistance on the following website. [http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html](http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html)

Controlling and combatting feral animals, pests and weeds requires a cooperative effort and is much more effective when you work in conjunction with your neighbours. Developing a community or regional plan to address feral animal, pest and weed issues is strongly recommended. A planned and integrative approach will have a higher level of success. If you are unsure of the community based action plans for dealing with feral animals, pests or weeds speak to your local catchment group, local council, neighbours or departmental representative.

Remember if you are using poison to manage weeds or pests, then you should keep a record of what chemicals are used, where they are used and other pertinent information relating to the products such as withholding periods (WHPs) and material safety data sheets (MSDS).
Weed control

Preventing the introduction of weeds on your property can be difficult if the plant reproductive material (seeds etc.) is spread by wind or water, or occurs during a climatic event such as a flood. However, precautions can be taken to reduce the risk of introduction of weed seeds on vehicles, livestock, people and equipment. This has been discussed in Priority Area two.

On your property, knowledge and understanding of the lifecycle can help you to manage and reduce the spread of the weed. Certain weeds may not be present on your property every year or in every season. They may out-compete pasture plants in some seasons, and conversely, may be out-competed by other plants in different seasons.

Having a baseline of the plant population location – such as a map or a documented record (such as photographs of weed populations in different seasons), can assist with monitoring how the infestation is responding to different management or treatment options. You can also pre-emptively assess where weed spread is occurring in your area, and whether you are high, medium or low risk for that weed arriving at your property. If you are aware of the emerging weed issues in the region, you can liaise with neighbours, catchment groups and local council to implement some measures to reduce your risk of weed spread. These groups may also be able to provide you with predictive weed maps.

Feral/pest animal control

Like dealing with weeds, coordinated programs for feral/pest animal control is most effective for many species. An example of a coordinated management plan for wild dog control is included in the resources as a reference and example of a successful management plan (Paroo model for wild dog control).

Control of different species will need to be tailored according to the location and environment, resources and facilities available and the regulations of the state you are working in. For guidelines on the most suitable practices in your area, contact your local invasive pest and animal officer or local government.


An example of working plan documents (also included in your resources) are the guidelines for preparing and developing working plans for wild dog control (also known as the brown book and the green book – shown below). The website also provides maps of known pest distributions that may assist you in developing control plans.

Priority Area 4 in your On-farm Biosecurity Plan

If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 4:

1. Poison Baits used for Pest Animal Control
2. Pest animal control plans
3. Weed control plan
4. Vehicle contamination cleaning record
5. Weed hygiene declaration or similar
6. Vehicle inspection record

<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist</th>
<th>Documents (examples)</th>
<th>On-farm activities or measures (examples)</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Area 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Identify and document current and where possible historical pest animal and weed populations on your property. An awareness of these populations within your local area and greater region is also advised.</td>
<td>Document on farm map areas of weeds or pests of concern.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 Monitor and manage vermin, feral animal, weeds and wildlife populations to prevent impact on stock.</td>
<td>Pest animal controlled baiting record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3 Coordinate with neighbours and other local community members and groups to maximise the effectiveness of actions to control weeds and pest animals.</td>
<td>Develop pest/weed management plans</td>
<td>Participate in community or neighbourhood/catchment pest/weed control programs</td>
<td></td>
</tr>
<tr>
<td>4.4 Minimise access by feral and domestic animals and wildlife to waste in rubbish dumps (secure waste disposal).</td>
<td>Complete rubbish dump risk assessment</td>
<td>Fence off rubbish dump Controlled baiting/trapping around dump areas</td>
<td></td>
</tr>
<tr>
<td>4.5 Implement control programs for weeds and disease carrying vectors as required.</td>
<td></td>
<td>Undertake pest and weed control activities</td>
<td></td>
</tr>
<tr>
<td>4.6 Regularly undertake property inspections to assess possible biosecurity breaches and/or potential for breaches. Correct where necessary.</td>
<td></td>
<td>Check boundary fences Monitor for weed outbreaks</td>
<td></td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012)
Priority Area 5: Animal Health Management

Improvements in animal health are one of the goals that can be achieved through implementing an on-farm biosecurity plan. Using biosecurity practices and activities on your farm, helps to protect the livelihood of your enterprise and the livestock industries. There are many simple actions that can be taken on-farm to prevent disease from occurring or limit the spread of disease to optimise the productivity and health of the herd/flock. Many of these you may already be undertaking.

Maintaining high standards of animal welfare, also assists in delivering husbandry and hygiene practices that align with good biosecurity and demonstrates a commitment from industry to manage risk related to animal welfare to our consumers and trading partners. By undertaking well-considered husbandry procedures and following best-practice industry guidelines on your farm will demonstrate this commitment.

Disease in animals can be caused by infectious agents (such as viruses, bacteria, fungi and prions), parasites (such as gastro-intestinal worms, ticks, lice, and flies), chemicals and poisons, nutritional issues, injuries and inherited genetic problems. For most of these causative classes of disease there are preventive measures that can be taken to minimise the impacts to livestock. Simple strategies such as improving hygiene and using vaccination (where available) can prove cost-effective in managing your herd/flock.

The concept of improving animal health, welfare and biosecurity on-farm, is all about managing risk. If we can identify the risks and implement mitigation strategies for the preventable issues, and be prepared for rapid action in the event of an emergency, it will reduce our recovery time and costs. The same strategies are commonly utilised in other emergency situations - such as natural disasters – preparedness, awareness and action-plans ready for response.

Husbandry

Beef and sheep producers routinely undertake many husbandry procedures. These include practices such as dehorning, tail docking, and castration, branding and ear-tagging. Other practices such as pregnancy testing, hoof trimming or artificial insemination can require the services of a contactor that may use specialised equipment. Don’t forget to check with these contractors or service providers, what their biosecurity practices are and complete a risk assessment with them. As these contractors will be dealing with large numbers of animals on different properties, they present a high risk activity to your enterprise.

In this section of your biosecurity plan, we recommend that you give a brief description of the practice and the hygiene protocols that you utilise in your enterprise (or that you require a contractor or staff member to undertake). The description should include the best practice steps towards minimizing stress, minimising or mitigating pain, minimising haemorrhaging (bleeding) and preventing infection.

**Disease control**

Are you familiar with the endemic (more prevalent or common) diseases in your region? Some of these diseases may be seasonal and/or climatic – such as those related to nutrition or poisonous plants, diseases spread by insects such as midges or flies and diseases that may be precipitated or spread by animal/bird movements or as a result of soil and water disturbances after floods or drought.

It is recommended you make a list of the diseases that are endemic to your area. Talk to your neighbours, local veterinarian, state government representative, LLS or biosecurity officers about other diseases that only occur sporadically in the area, so you are aware of the clinical signs of these diseases. Once you have made this list, you will be in a better position to determine what can be done to prevent, control or treat these disease or conditions. This is another step of risk management in your biosecurity plan. LBN has created a simple checklist to assist with this process which can be found in the resources.

<table>
<thead>
<tr>
<th>Disease/condition/ concern</th>
<th>How is it spread/ What causes it?</th>
<th>Other species affected (including humans)</th>
<th>Vaccine available? Or other treatment?</th>
<th>Management strategies</th>
<th>Importance ranking/risk (see over)</th>
</tr>
</thead>
</table>

If you wish to undertake a more rigorous process of risk assessment for the introduction of livestock disease, Animal Health Australia have a risk management template for individual diseases available.

**Steps to reduce the risk of introducing the disease**

<table>
<thead>
<tr>
<th>Disease:</th>
<th>How could it be introduced?</th>
<th>Likelihood of occurring</th>
<th>Is this risk acceptable to you?</th>
<th>How will you manage the risk?</th>
<th>Timing</th>
<th>Monitoring (effectiveness)</th>
<th>Who is responsible for managing the risk?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Route</td>
<td>High (H) Medium (M) Low (L)</td>
<td>(if no, fill out management measures)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduced sheep</td>
<td>Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other introduced animals/species</td>
<td>Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MLA provides guidelines on vaccination strategies and a tool for calculating the cost-benefit of implementing vaccination and disease prevention strategies. These tools can be found online at [http://www.mla.com.au/mbfp/Herd-health-and-welfare/1-Disease-prevention](http://www.mla.com.au/mbfp/Herd-health-and-welfare/1-Disease-prevention). A PDF of this document is also provided in your resources.

The timing of vaccinations and other preventative measures being used, should be recorded on your herd/flock management calendar and where necessary, matched to seasonal conditions or management operations. Information relating to the vaccine, such as batch numbers and expiry dates for your vaccines should also be recorded in your animal treatment records.
Do you routinely treat animals with certain conditions without consulting your veterinarian? Which Veterinary medicines are being used? Where are you recording the use of these products? Are you familiar with where to find the most current information on with-holding periods and export slaughter intervals? This information can be found at http://www.apvma.gov.au/residues/esi_whp/index.php.

If you use an LPA farm record book, these records relate to Section 2.

MLA (2013) has the following recommendations for managing the health of your herd or flock:

- Know the common diseases in your locality and whether they are likely to affect production.
- Map any historic areas or sites of old yards and stock routes for potential disease.
- Implement a disease management plan using veterinary advice.
- Vaccinate where possible, against specific diseases that can infect cattle, sheep and people.
- Seek veterinary advice for any unexplained health problem.
- Quarantine all introduced stock to prevent the transfer of infectious diseases.

Disease investigation

What practices do you undertake for investigating unusual disease symptoms or deaths in your herd/flock?

Consider what level of disease or number of deaths you would tolerate before calling a veterinarian or seeking advice from your local biosecurity officer? This time lag could result in further stock deaths, or allow a disease with a high potential for transmission to infect many other animals.

If you notice any of the following clinical signs in your livestock, you should immediately contact your nearest veterinarian or animal health authority.

- A lot of ill or dead animals including birds or aquatic animals
- Rapid spread of disease through a herd or flock
- Animals that are lame, drooling or salivating excessively
- Animals that have ulcers, erosions or blisters around the feet, muzzle, udder or teats and/or in the mouth
- Unusual nervous signs
- Profuse bloody diarrhoea
- Respiratory distress or persistent coughing in horses
- Deep smelly, fly struck wounds
- Any link to another country
- Any unusual or unfamiliar disease in animals or birds

Some animal diseases are notifiable – which means you have a legal responsibility to report them to animal health authorities. Your state government animal health authority will be able to advise on which diseases are notifiable in your area. Most states will have a list of notifiable diseases listed on Department of Agriculture or Primary Industries websites. Where possible, these have been included in your resources. There are no government charges for investigations into suspect notifiable diseases, including negative diagnoses.
Did you know that you may be eligible for financial incentives for submitting samples from certain disease investigations? For more information see the “Bucks for brains” flyer in the resources in Priority Area 5. Work with your local state/territory government animal health authority or your private veterinarian if you have animals that fit the following criteria:

**Bucks for Brains eligibility criteria**

<table>
<thead>
<tr>
<th>Species:</th>
<th>Cattle</th>
<th>Sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be eligible:</td>
<td>Must be 30 months or older Must be displaying signs compatible with BSE and have not responded to treatment</td>
<td>Must be 18 month or older Must be displaying signs compatible with scrapie and have not responded to treatment</td>
</tr>
<tr>
<td>Clinical signs can include:</td>
<td>- Changes in behaviour - Neurological signs - Excessive licking of nose and flanks - Poor coordination (staggering, circling, falling) - Muscle tremors - Abnormal posture (ear position or head carriage) - Difficulty in rising (downer cow) - Paralysis - Excitability - Increased or decreased sensitivity to sound, pain, heat, cold or touch</td>
<td>- Changes in temperament - Mild behavioural or neurological signs - Apprehension - Loss of wool on flank or hindquarters - Rubbing or scratching - Poor coordination (staggering, circling, falling) - Muscle tremors - Abnormal posture (abnormal head carriage) - Difficulty in rising - Paralysis - Agitation</td>
</tr>
</tbody>
</table>

Suitable cattle submissions can be rewarded with incentives of up to $300 per submission and suitable sheep submissions up to $100 (as at May 2014).

If you are seeking some good books or information portals on livestock health, the following are available:


**Hungerford’s diseases of livestock textbook.** (T.G. Hungerford). Can be sourced from Angus & Robertson online, Wheelers books online, Dymocks online, Rural Book Services. Good general text to have on the farm.

**Poisonous plants – a field guide** (Dowling and McKenzie 1993) is an absolute gem for identifying plants in Queensland, NT and Northern NSW.

**Animal health and disease investigation** (Cottam and Berry 2009).

**Livestock diseases in Australia** (T. Brightling). Another handy book for the farm
<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist</th>
<th>Documents (examples)</th>
<th>On-farm activities measures (examples)</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Area 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 Assess the health status of your livestock and implement practices that will protect them from known diseases already in your region.</td>
<td>Review best practice management for livestock health and welfare</td>
<td>Vaccination/Parasite treatments/disease surveillance</td>
<td></td>
</tr>
<tr>
<td>5.2 Ensure all personnel responsible for the management and husbandry of livestock are aware of the importance of early detection and reporting of unusual animal deaths or animals exhibiting signs of sickness.</td>
<td>Training and awareness activities for staff (see also area 7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>Routine stock inspections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>Animal treatment records</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemical inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animal health management calendars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5 Seek early advice from a veterinarian or government officer in relation to any unusual sickness or death</td>
<td>Display emergency contact numbers in a visible place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td>OHS risk assessment and where possible vaccination or preventative practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.7 Isolate (as required) and treat diseased or vulnerable animals in the event of a disease outbreak.</td>
<td>Animal treatment records</td>
<td>Quarantine, treatments</td>
<td></td>
</tr>
<tr>
<td>5.8 Dispose of carcasses as soon as practical in a way that takes into account environmental and public health considerations</td>
<td>Animal disposal plans (see also section 6)</td>
<td>May include burning, burial or composting measures</td>
<td></td>
</tr>
<tr>
<td>5.9 Inspect livestock regularly, including during regular management and husbandry procedures, to ensure the early detection of ill animals.</td>
<td>Report unusual signs of disease as soon as possible to your local animal health authority</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012)
**Priority Area 5 in your On-farm Biosecurity Plan**

If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 5

<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Animal Treatment Record</td>
</tr>
<tr>
<td>2. Herd Management Calendar</td>
</tr>
<tr>
<td>3. Endemic disease prevention and control strategy record</td>
</tr>
<tr>
<td>4. Disease risk management template</td>
</tr>
</tbody>
</table>

**Notes:**

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Priority Area 6: Carcass, effluent and waste management

Implementing waste control strategies for domestic waste, chemical and industrial waste, biological waste (such as effluent and carcasses) and waste water (grey water) are important steps in your biosecurity plan. There may be local, state or national regulatory requirements that relate to your on-farm waste management procedures.

Fencing off your domestic waste disposal areas (rubbish dumps), will assist in reducing scavenging by feral and domestic animals and prevent livestock, feral animal and wildlife access. You may even wish to trap or bait feral animals in the vicinity of your rubbish dump.

Spread of infectious disease agents are only one of the many hazards to livestock contained in rubbish dumps. Old containers, batteries, chemical drums, plastic food wrappers, baling twine and feed bags can present toxic and physical hazards to animal health such as entanglement (for example - in old wire), gastro-intestinal obstructions (such as after ingestion of baling twine) and chemical poisoning (for example - lead in batteries and chemical containers).

Animal carcasses should be disposed of in a manner suited to your environment. Please note that if more than 20 head of cattle or 100 head of sheep are to be disposed of, you must consult with your local biosecurity inspector so the guidelines in AUSVETPLAN can be followed.

If there are areas of grey water run-off, effluent or sewerage overflow on your property, these areas should also be fenced to prevent access by animals.

Household refuse
In your farm biosecurity plan, you should describe the actions and activities on your enterprise that you undertake to manage your on-farm rubbish. This may include rubbish sorting or recycling, burial, fencing to exclude livestock, wildlife and pest species. Include in the description, the location of the disposal site (and also include this on your property map/diagram), any infrastructure close by (such as yards, laneways or watering points) and access roads to the site. Your plan should also give the usual time-frame between waste management actions, for example, a layer of dirt is pushed over dump and compacted every 12 months or recycling is take to the council recycling point every week.

Farm/feed general refuse
Baling twine, feed bags and plastic wrappers can pose a large health risk to livestock. Often remnants of feed will be left upon these items, making them appetising to livestock. You may wish to consider a special strategy to dispose of them such as storage in inaccessible areas (such as inaccessible containers) prior to disposal.

Chemical and poisons disposal
Chemical and poison drums pose a risk to livestock and to the environment. These containers, if not stored properly, can disintegrate and contaminate soil and water supplies. Disposal of these items should take into account exposure, water catchment and run off and access for livestock and people. Many councils will run a drum muster to collect these.

Chemical and poisons disposal plan should also include items such as sump oil, old batteries, chemical containers and drums, out-of-date chemicals and any broken or unserviceable equipment used to handle the chemicals and poisons.
Effluent management
Manual management may be required if you have stud-stock that are stabled or where there is high utilisation of weaning yards or poddy/bobby calf (hand-feeding) yards.

Development of manure management plans may be complex and subject to regulatory requirements. Producers should confirm that their plan complies with authorities.

Whether composting or spreading of manure is undertaken, the plan should include information on the frequency of removal, location and capacity of storage area, and suitability of storage area (bunding, access by wildlife and pest species etc.).

Additional biosecurity considerations include:
- Sanitation of equipment used for manure management.
- Access of livestock to the location of the manure storage.
- Land use where manure is spread (crop versus pasture versus nursery etc.).

Wastewater disposal
If you have open grey-water or sewerage water areas, they should be fenced off to prevent access by wildlife or livestock. They can also harbor pests and act as a breeding ground for vectors such as mosquitos that can spread disease. Your management plan for wastewater, can also include any treatments such as spraying that you perform to reduce issues with pests, weeds or insects.

Carcass disposal
Consideration should be given to the methods you have available to dispose of animal carcasses or animal waste products (such as hide, gut or bones after home slaughter or wool that is not suitable for baling). There may be regulatory requirements associated with disposing of these products. If you are unsure of what these are, we recommend you contact your local council, or departmental staff. Some helpful information is provided in the Waste Management Guideline resource by the Department of Environment and Primary Industries in Victoria (DEPI, 2014) found at http://www.dpi.vic.gov.au/agriculture/about-agriculture/legislation-regulation/legal-information/waste-management-legal-booklet

More information on the risks to livestock that may be contained within your rubbish dump can be found at http://archive.agric.wa.gov.au/PC_95478.html?s=1001.

Other waste
You may also need to consider your plans for disposing of farm waste from machinery, equipment and other farming processes. The following is a list of other waste you may need to consider (DEPI, 2014):
- Tyres
- Oil and oil filters
- Treated timber
- Tree and plant waste
- Soil
- Asbestos
- Scrap metal and wire
- Masonry, bricks and building materials
Priority Area 6 in your On-farm Biosecurity Plan
If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 6

1. Carcass disposal plan
2. Farm Waste Management template

<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist Priority Area 6</th>
<th>Documents (examples)</th>
<th>On-farm activities or measures (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Secure and contain disposal areas where possible to prevent access by livestock, feral and domestic animals and wildlife.</td>
<td>Waste management plan</td>
<td>Fence off rubbish dump</td>
</tr>
<tr>
<td>6.2 Select disposal areas to avoid the potential spread of contaminants by water.</td>
<td></td>
<td>Site selection for dump to avoid water run-off</td>
</tr>
<tr>
<td>6.3 Dispose of carcasses and waste in a segregated area, where possible, taking into account environmental and public considerations</td>
<td>Carcase disposal plan</td>
<td>Burning, composting, burial</td>
</tr>
<tr>
<td>6.4 Ensure controls for the potential spread of disease from effluent are in place.</td>
<td>Grazing management calendar</td>
<td></td>
</tr>
<tr>
<td>6.5 Use vegetation in plantations or windbreaks to reduce effluent transfer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.6 Ensure government requirements for carcass, effluent and waste management are adhered to where applicable.</td>
<td>Seek current government guidelines on waste management and regulation</td>
<td></td>
</tr>
</tbody>
</table>

Source: Animal Health Australia (2012)
Priority Area 7: Staff instruction and training

The responsibility for biosecurity on your property, falls on the shoulders of all management and staff. When staff begin work at your enterprise, an induction process should educate and train them to the biosecurity requirements (and other farm process requirements) that you expect them to be aware of.

You should have a record of which staff are training or certified in what areas. For example, which members of your staff are trained and certified in first aid? Who is licenced to use a firearm? If you have a bolt gun, are staff trained to use it correctly?

Other areas where training may be needed include (and resources are provided):
- Recognition of sick livestock.
- Chemical usage.
- Familiarity with weeds or pests of concern.
- General hygiene of personal gear and equipment, hygiene and cleaning of farm equipment.
- Awareness of the symptoms of zoonotic disease in humans (zoonotic diseases are those that can spread from animals to humans e.g. leptospirosis).
- Documentation and keeping property records.
- Workplace health and safety.

Staff responsibilities
Different staff on your farm (including management) may hold different responsibilities for different components of your farm biosecurity operations. This may be due to certain qualifications or licencing requirements (such as firearms licence), or due to particular skills or prior experience. These will be especially important during an emergency, so the alternative to listing responsibilities in this section is to assign responsibilities to staff in the emergency action plans (see animal disease emergency action plan).

Record keeping for chemicals and poisons
Chances are you already have a system for record keeping information on the use of chemicals and poisons, but if not, we have provided templates and forms in your resources.

If you are using an LPA farm records book, this relates to section 3A, 3B and Section 6.

You may also have other records that you wish to store in this section of your farm biosecurity plan such as MSDS or information on with-holding periods.

Unwanted chemicals and veterinary products can be disposed of by contacting ChemClear www.chemclear.com.au (see also the section on waste disposal for information on chemical container disposal and drum-muster information).

Other templates for chemical and poisons use records can be found on the MLA website or the Victoria Department of Environment and Primary Industries website. Remember that use of agvet chemicals and poisons will also likely involve with-holding periods and export slaughter intervals. Take the time to make sure you are aware of what these are. Up-to-date information on these can be found at:
Keeping an inventory of your chemicals and poisons is also recommended. The LPA chemical inventory template can also be downloaded from the MLA website.

**Priority Area 7 in your On-farm Biosecurity Plan**
If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 7

1. **Staff training record** (Three versions provided – find whichever suits your needs best)
2. **Emergency Animal Disease Action Plan** (as well as in the planning section 8a)
3. **Staff responsibilities** (optional)
4. **Ag-vet chemical inventory record**
5. **Chemical usage record**
6. **Pest animal baiting record**

<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist</th>
<th>Documents (examples)</th>
<th>Check</th>
<th>On-farm activities measures (examples)</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority Area 7</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 7.1 Ensure all staff understand their roles and responsibilities in the implementation of biosecurity practices on your farm. | Staff responsibility log  
Staff training logs | | | |
| 7.2 Ensure staff responsible for livestock husbandry know how to identify sick and injured livestock and are competent livestock handlers* | | | | |
| 7.3 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. | | Place EAD 180 number in a common and visible location | | |
| 7.4 Ensure all staff know where to find contact details for the local vet(s) and relevant government officers. | | Display phone numbers in a clearly visible area | | |
| 7.5 Maintain a Staff training plan and/or qualification log* | Training or Qualification log | | | |

Source: Animal Health Australia (2012), except where indicated
Priority Area 8 – Contingency planning and monitoring for improvement

Owners, managers and staff should undertake proactive planning to improve on-farm preparedness for emergency and unexpected events. Having a contingency plan is vital in natural disasters. It is best to have thought through your contingency plans actions before needing to implement them in a time of crisis. Having contact numbers available for times of crisis (which may include alternatives to telephones such as UHF or VHF contact details for your neighbours) is valuable.

Managing animals during natural disasters can be complicated. There are many risks to both humans and animals occurring during a crisis and whilst caring for livestock will be in the front of your mind, protecting human life must be a priority. During the height of a natural disaster, assistance may not be readily available, so giving prior consideration to an action plan for crisis management is highly recommended.

Preparations for emergency events may include liaising with local council and other organisations.

The key considerations during emergency events are:
1. Human safety.
2. If safe to do so, move animals to an area where they can be managed effectively. If flooding is an issue, move livestock to higher ground. In the event of a bushfire, this may mean opening gates or cutting fences. Consider the repercussions of your actions – will cutting fences allow animals to wander on roads where they may inhibit or interfere with the operations of fire-fighting or emergency service operators? Will moving animals to higher ground prohibit landing of an evacuation aircraft or vessel? It is a good idea to make a contingency map of where you are likely to evacuate your animals, in case you need to direct others to them if you are unable to return.
3. Remove objects that may present a hazard, such as unsecured loose objects or flammable objects.
4. Have an emergency water access plan in place for livestock.
5. Purchase emergency fodder, if possible, and store in a suitable location.
6. Keep your stock register up to date and in an accessible place.

Planning for emergency animal disease events
We all hope that an emergency event will not occur on our enterprise, but if it ever did – are you prepared? Like being prepared for bushfire season, there are steps we can take to be prepared for an emergency animal disease event. Simple steps such as knowing who to call and what their phone number is can dramatically reduce to the time it takes to mount an effective response. This sheet is also provided in your farm plan template as a removable document for your use.

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY ANIMAL DISEASE HOTLINE</td>
<td><strong>1800 675 888</strong></td>
</tr>
<tr>
<td>LOCAL COUNCIL</td>
<td></td>
</tr>
<tr>
<td>ELECTRICITY PROVIDER</td>
<td></td>
</tr>
<tr>
<td>WATER SERVICES</td>
<td></td>
</tr>
<tr>
<td>ANIMAL HEALTH AUTHORITY</td>
<td></td>
</tr>
<tr>
<td>STOCK ROUTE SUPERVISOR</td>
<td></td>
</tr>
<tr>
<td>VETERINARIAN</td>
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</tbody>
</table>
Steps when an emergency animal disease is suspected.

The following 15 key steps is advice taken directly from Farm Biosecurity (2013). This document can be laminated and kept for distribution to staff in the event of an emergency.

1. Contact the relevant authority through your district veterinary officer of the emergency animal disease watch hotline.

2. Follow all instructions given by the relevant authority.

3. Do not dispatch any livestock from the farm until authorised by the relevant authority.

4. Ensure suspect livestock are isolated within the farm.

5. Ensure companion animals of the suspect livestock are segregated from the other livestock.

6. Ensure movements of all other livestock within the farm, and surrounds, are restricted.

7. Delay or halt the shipment of any livestock onto the farm.

8. Delay or halt the delivery of all non-essential commodities.

9. Secure the farm perimeter, limiting access to the farm and ensuring all vehicles and visitors only enter the farm under controlled conditions.

10. Remove unnecessary personnel and machinery from livestock feeding and holding areas.

11. Ensure that any personnel, equipment or machinery do not leave the farm until authorised by the relevant authority.

12. Compile a list of all livestock (number of head, identification and location), personnel and machinery movements over the past seven days. Prepare a site plan that details the current allocations of livestock.

13. Ensure all staff are made aware of the actions being undertaken and their individual responsibilities towards the action plan.

14. Ensure that customers are advised if they are immediately affected by the delay in the supply of livestock.

15. If an emergency disease is identified, the farm will follow the requirements of AUSVETPLAN and the directions from the relevant authority.
Planning for livestock care during natural disasters

On the following pages, a guide to key areas of consideration in natural disasters (floods, bushfires and drought) is provided. You will need to adapt the suggested key areas to suit your enterprise and region. Having identified issues that may trigger an action in your contingency plan is especially useful, particularly for drought preparedness.

If an action plan item needs to be implemented, consider the length of time for which you may need to perform these actions in either emergency or recovery situations. This template is also provided in your resources along with many documents to assist you in your planning and preparations for emergencies.

<table>
<thead>
<tr>
<th>Natural Disaster Action Planning</th>
<th>Key considerations</th>
<th>Flood</th>
<th>Bushfire</th>
<th>Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evacuation/Destocking plans</td>
<td>How many involved?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Where will they be moved?</td>
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<tr>
<td></td>
<td>What arrangements do you have to make (truck, muster, open gates, cut fences)</td>
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<tr>
<td>Water contingency plan</td>
<td>How will you provide fresh and safe drinking water for your livestock during an emergency event?</td>
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<tr>
<td>Feeding contingency plan</td>
<td>What are the triggers for purchasing or moving in feed?</td>
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<td></td>
<td>How much will you need?</td>
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<td></td>
<td>Where will it be stored?</td>
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</table>

There is some flexibility in the rules of NLIS during natural disasters, to allow producers to effectively deal with displaced cattle. Some situations have straightforward solutions in relation to NLIS tagging and database transfers and others may require approvals from biosecurity inspectors. It is essential to be able to trace cattle and sheep, because of the possibility of disease outbreaks in the aftermath of natural disasters. For more information contact your local Department of Primary Industries or Department of Agriculture.

More information on managing animals in natural disasters is available from:


Controlling a weed outbreak
If you notice a new or unfamiliar weed in an area of your property, there are steps that can be taken to limit the spread of the weed into other areas.

- Restrict the movement of people, animals, vehicles and machinery in the area.
- Wash/clean down vehicles which have been in known infested areas.
- If you have to enter the area - work the clean area first and the infested area last. Work from the outside in and clean down equipment prior to moving into a clean area.

Quarantine:
- Hold livestock that may be infested with seed from the infested area, in a single location until weed seeds have had the chance to pass through their digestive system or fallen from their coat or hooves.

Identify:
- Take steps to identify the weed of concern and investigate the best current control and management practices for that weed.

Control:
- Implement relevant control measures and management practices for the identified weed.

Monitor:
- Continually monitor weed infestations and use caution when admitting animal or vehicular traffic to that area.

Liaise:
- Speak with your local government pest and weed control representative, neighbours, and catchment or natural resource management groups about integrative management in the area.

Advise:
- Advise any other bodies or companies that may have land access agreements on your property about this issue and the steps that you are implementing to prevent further spread of the weed.
**Being prepared for an emergency – General**

Are you prepared for a human medical emergency or other emergency? Do you have list of emergency telephone numbers close to your telephone? Below is a general emergency preparedness checklist from Dairy Australia (2013)

**Emergency Response Checklist**

Check you have done the following to make sure your farm is prepared for dealing with an emergency:

- Identified the likely emergencies on your farm in conjunction with employees and contractors.
- Identified ways to eliminate or reduce the likelihood of these emergencies occurring.
- Established procedures for managing an emergency.
- Nominated someone (who is on the property most of the time) to be responsible for emergency co-ordination, and ensured they are formally trained in emergency control.
- Employees are trained in first aid.
- All personnel have been trained in emergency procedures. Everyone knows where the emergency response equipment is located.
- Labour hire workers, contractors, seasonal workers and visitors are aware of the procedures.
- The emergency facilities (e.g. deluge showers, eyewashes, firefighting equipment, portable spill containment devices, PPE, first aid equipment) are located where needed, installed correctly, regularly maintained, and access is kept clear.
- The correct equipment is available to handle any chemical or other dangerous material spills – refer to the chemical MSDS.
- There is a contact procedure for the local emergency services and hospital, ambulance and medical centre. The procedure and contact numbers are displayed on notice boards and at first aid stations.
- The local emergency services have been informed about any changes to the property that could affect emergency procedures.
- The local emergency services have been informed about dangerous substances used, where they are stored and used, and the quantities they may encounter in the case of an emergency.
- The evacuation routes in buildings are clearly marked and are always free from obstructions.
- Evacuation assembly points in safe locations have been nominated and sign posted and alternative assembly points nominated in case the first is affected by the emergency.
- First aid kits are maintained and easily accessible to all workers. Location of the kits is signed and kits contain a list of contents (usually on the back of the door or lid).
- Correct and adequate fire extinguishers are located strategically in major hazard areas (e.g. the dairy, workshop, feed sheds, chemical and fuel storage and all accommodation).
- Fire extinguishers are routinely checked and tagged.
- Smoke alarms fitted in accommodation and other areas, routinely tested and batteries replaced.
- All power outlets covered by a safety switch (include houses and accommodation, workshop and feed shed)
Monitoring for continuous improvement
It is always advisable to keep a record of how you monitor your progress. Biosecurity risks can change, which may require updates, amendments or new additions to your on-farm biosecurity plan.

One way to consider your risks each year, is to keep a register of the risks you have identified on your property, and how and when you will address them. Below is an example of how you might want to go about this. If you have completed a QA program, you may have already done this step.

Managing your animal health and biosecurity risks
Undertaking risk planning will help you identify biosecurity and animal health risks on farm, and the corrective actions that may be required to address these risks. This template is provided in the Priority Area 8 resources.

Priority Area 8 in your On-farm Biosecurity Plan
If you wish to build your biosecurity plan using the farm template provided on the LBN website, the following summary is a list of documentation that may be included in Priority Area 8

1. Emergency contact numbers
2. Emergency response checklist (general)
3. Emergency animal disease action plan
4. Livestock care during natural disasters planning template
5. Risk identification and correction action list

<table>
<thead>
<tr>
<th>Activities and documents recommended practices checklist Priority Area 8</th>
<th>Documents</th>
<th>Check</th>
<th>On-farm activities or measures (examples)</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 Identify emergency events that would have an impact on your usual operations</td>
<td>Pre-action plan for natural disasters</td>
<td></td>
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</tr>
<tr>
<td>8.2 Keep a list of emergency numbers in a location readily available to all staff</td>
<td>Emergency contact lists</td>
<td></td>
<td>1800 Fridge magnet displayed in an obvious place</td>
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<tr>
<td>8.3 Identify triggers for undertaking emergency/contingency action during drought</td>
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<tr>
<td>8.4 Develop an action plan to address activities that may be required in the event of an emergency</td>
<td>Action planning for disasters</td>
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<tr>
<td>8.5 Document and store records that are required to account for biosecurity activities on-farm</td>
<td></td>
<td></td>
<td>Effective documents storage system in place on farm</td>
<td></td>
</tr>
<tr>
<td>8.6 Conduct a yearly review of on-farm biosecurity plan and risk management procedure and make modifications and updates where required.</td>
<td>Undertake review checklist.</td>
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</tbody>
</table>
References


