NATIONAL SHEEP INDUSTRY BIOSECURITY STRATEGY

2019–2024

SHEEP PRODUCERS AUSTRALIA

WOOLPRODUCERS AUSTRALIA

animalhealth AUSTRALIA

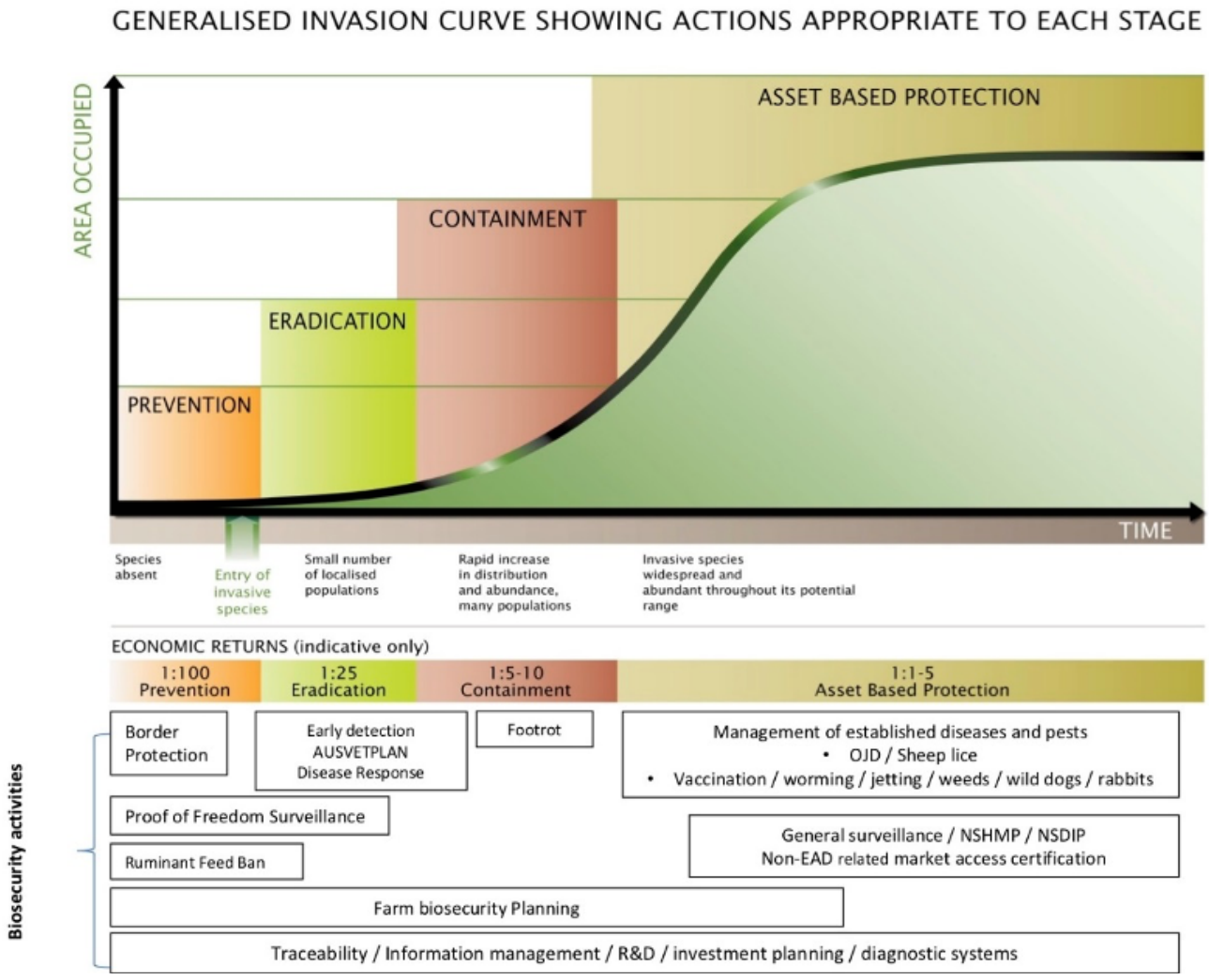
A MODERN APPROACH TO BIOSECURITY

This strategy has been developed by WoolProducers Australia and Sheep Producers Australia in collaboration with key stakeholders and sheep industry leaders from across Australia.

Biosecurity is the management of risks to the economy, the environment and the community, created by invasive species and diseases entering, emerging, establishing or spreading.

For the sheep industry this primarily means protecting producers, and the industry more widely, from the impacts of diseases and invasive species (pests and weeds) that may affect our animals' health and productivity, our markets and the quality and integrity of our products. Biosecurity is also important for protecting our farms and associated environments from the impacts of invasive plants and animals. Collectively these invasive species and their impacts are often referred to as biosecurity risks.

To achieve our desired level of protection[1], it is important that appropriate biosecurity practices are in place along the pre-border, border and post-border continuum, as well the full spectrum of the generalised invasion curve - prevention, early detection, preparedness, response and ongoing management.



1 For Australia this means reducing risk to a very low level, but not to zero.

WHY A SHEEP INDUSTRY BIOSECURITY STRATEGY?

The risk of incursions of invasive species and diseases into Australia is increasing. There are a number of reasons for this including: increased international travel and trade; changing demographics and patterns of land use; new and emerging diseases arising from changed interactions with animal populations; and climate change. International markets are also increasingly sensitive to the disease status and integrity of livestock products and production systems.

In recent decades the sheep industry has not been affected by such an event. A significant outbreak of an exotic disease could be as devastating, particularly for our market access and productivity. For example, the cumulative effect of the now established, but originally exotic, Lucilia fly has had huge impacts on productivity. A foot-and-mouth disease outbreak has been projected to cost the Australian economy in the vicinity of $50 billion and $12 billion in lost revenue for the sheep industry.

Biosecurity is a shared responsibility between governments, industry organisations, the community and individual animal and land owners. While this principle is generally accepted, there needs to be greater clarity regarding the part that industry needs to play in meeting these responsibilities.

In developing this biosecurity strategy, the national sheep industry has taken a lead in defining its roles, responsibilities and strategic priorities. The strategy seeks to outline a consistent approach to biosecurity risk management that allows industry to leverage existing resources, activities and investments, as well as to meet its obligations under legislation and national agreements. The sheep industry shares a number of biosecurity risks with other livestock industries, and having a transparent, structured and strategic approach to biosecurity risk management clearly positions the sheep industry strongly in the national arena. Improving the biosecurity status and reputation for integrity of the Australian sheep flock will bring greater peace of mind to all industry participants, and as a result a more productive, resilient and competitive industry.

Drivers for change

- Increasing biosecurity risks owing to a range of factors, including our increasingly interconnected world, changing demographics, climate change and changing global disease patterns.
- Potential costs of a disease outbreak. For example, ABARES recently estimated the cost of a scrapie outbreak to be at least $75 million, but potentially much more.
- Costs of established invasive species and potential costs of new incursions. Rabbits, wild dogs, foxes, feral pigs and other vertebrate pests already cost the agriculture industry around $800 million per year. Weeds are estimated to cost Australian livestock industries $2.1 billion per annum in control costs and lost production Serrated tussock is the worst perennial grass weed in Australia and dense infestations can reduce pasture productivity by up to 95% and are costly to eradicate.
- Endemic diseases continue to impact on the profitability of sheep growers and there is an opportunity for the industry to take the lead in this area, given that governments are increasingly focused on prevention and preparedness for exotic invasive species.
- A recent ABARES report estimated the overall farm gate value of biosecurity measures to farmers at up to $17,500 per farmer per annum.
- We now operate within a complex environment where responsibilities for biosecurity are shared but relative responsibilities may not always be clear between industries, individuals and governments.
- For some biosecurity issues there is an inconsistent policy approach between jurisdictions and/or sectors of the industry.
- Under the Emergency Animal Disease Response Agreement, parties have committed to an ongoing process of risk mitigation. We therefore need to maximise the uptake of on-farm biosecurity practices.
- New legislation in some jurisdictions places a greater obligation on people for managing biosecurity risks under their control.
- In a resource constrained environment, there is a need to better collaborate, maximise and leverage our investments and take advantage of new technologies.
- We need to better identify and prioritise the risks facing the industry, gaps in investment and opportunities to improve our biosecurity systems.

Photo credit: Taryn Mokotupu

OUR VISION

Market access and productivity is protected and improved through a unified, accountable and progressive biosecurity framework that has high integrity and is understood, valued and driven by all participants.

OUR GUIDING PRINCIPLES

Key to success will be motivating all participants in the industry to contribute and take action:

- Strong leadership and informed decision making
- A focus on the highest risks and demonstrating the value of taking action
- Ensuring that our way of operating is consistent with national and international standards
- Using a consistent approach in dealing with all biosecurity risks
- Improving effectiveness through use of modern technology
- A balanced biosecurity framework that considers disease and invasive species prevention, preparedness to deal with new incidents and ongoing management of established species
- Collaboration and partnerships
- Utilising industry expertise and knowledge to inform decision making
- Sharing intelligence and information around biosecurity risks to help industry make better decisions

OUR ROLES AND RESPONSIBILITIES IN BIOSECURITY

Within an environment of shared responsibility, the roles of the sheep industry[2] in biosecurity are to:

Peak Bodies / Industry Leaders	Producers and Landholders
Take a partnership approach to biosecurity management with governments and linked industries and agencies	Understand the importance of good biosecurity principles and the role they play in Australia's biosecurity system
Meet industry obligations as outlined by the Emergency Animal Disease Response Agreement to respond quickly, effectively and efficiently to an emergency animal disease incident	Cooperate with response activities to allow quick, effective and efficient response efforts to be carried out
Advocate biosecurity and show leadership in addressing biosecurity priorities for the industry	Take individual responsibility for biosecurity risk management
Lead collective action to manage invasive species and diseases	Manage declared invasive species on private land
Build risk mitigation measures into industry practices in an efficient and effective manner	Implement on-farm biosecurity programs
Maintain an industry capacity to respond to exotic invasive species and diseases	Report new or unusual invasive species and diseases
Promote reporting new or unusual invasive species and diseases to reduce the impact of the incursion	Participate in surveillance programs
Contribute to development of Australia's surveillance capability and systems	Comply with obligations and regulations within Australia's biosecurity system
Advocate for integration of biosecurity measures into the supply chain	Comply with industry systems and integrity programs and processes

2 For the role of government in biosecurity, please refer to the National Biosecurity Statement due to be published in 2019.

STRATEGY OBJECTIVES

- Foster a unified approach to biosecurity management within the sheep industry, through:
  - consistent national policies and approach
  - effective industry leadership and advocacy on biosecurity
  - a better understanding of on-farm and market access risks
  - informed decisions based on risk
  - a cohesive and engaged supply chain
- Encourage producers to take ownership and accountability for biosecurity risk management through:
  - promoting better understanding and awareness of biosecurity
  - encouraging participation through promoting the benefits, rather than through punitive measures
  - ensuring that producers understand their role
  - seeing value (return on investment through better market access and productivity)
  - adoption of integrated systems
- Ensure effective disease surveillance for the sheep industry through:
  - promoting the importance of early reporting of new pest, weeds and disease incidents
  - reducing the impediments and stigma associated with reporting
  - supporting appropriate market access surveillance systems based on risk
- Be better prepared for when we find a new invasive species or disease through:
  - maintaining an effective industry crisis management plan
  - fostering a partnership approach to biosecurity risk management
  - practising collaborative decision-making
  - developing better intelligence for managing biosecurity threats
  - ensuring a robust traceability system for the sheep industry
- More effectively manage existing invasive species and diseases through:
  - ensuring better access to resources and training
  - ensuring producers have the necessary tools to control invasive species and diseases
  - investment in a strong, evidence-based research and development program that focusses on invasive species and disease management as well as practice change.
- Prevent the introduction of invasive species and diseases at local as well as national levels through:
  - robust controls on risks from imports
  - general adoption of on-farm biosecurity plans

OUR THEMES

A progressive approach to biosecurity management, with better engagement of our internal and external stakeholders, will result in better on the ground biosecurity outcomes. To achieve this partnership, we have developed six priority themes to focus our efforts. We have also developed a separate Biosecurity Action Plan that will be updated regularly to put into effect this strategy. This will be published on the WoolProducers Australia and Sheep Producers Australia websites.

THEME 1 – COLLABORATION AND PARTNERSHIPS

Effective biosecurity management requires a collaborative partnership between industry leaders, all levels of government, other industry organisations and the supply chain.

Better strategies and decisions come when people are directly involved in the discussions where strategies are designed and decisions are made.

There are also significant opportunities to leverage industry investments to optimise our returns. We also recognise that we share biosecurity risks with other agricultural industries.

We will focus on:

- Sheep industry leaders having a strong advocacy role in relevant national and state biosecurity forums.
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- Partnering to achieve biosecurity outcomes, particularly with Animal Health Australia, Plant Health Australia, Integrity Systems Company, Centre for Invasive Species Solutions, other livestock industries, governments, our supply chains and R and D providers.
- Industry being properly engaged at all levels of a biosecurity response – strategic, tactical and operational.
- Making strategic investments in biosecurity initiatives, particularly where there are co-investment/leveraging opportunities.

THEME 2 – UNDERSTANDING PRIORITY RISKS (FOCUS ON RISKS)

Our limited resources need to be targeted where we can get our best return on investment. We also need to know which diseases, invasive species, issues or pathways should receive priority attention, for both species exotic to the region and those already present.

We will focus on:

- Maintain a watching brief on changes to the national biosecurity risk and gap analysis for the sheep industry.
- Ongoing assessment of priority invasive species and diseases and their potential risk to the sheep industry.
- Sharing our collective biosecurity intelligence through better networking within the sheep industry.
- Making strategic investments in biosecurity initiatives where there is a high risk for the industry in not investing, as well as reviewing existing investment.
- Taking a more flexible, innovative and responsive approach when addressing biosecurity issues and responses.
- Assessing and addressing the risks associated with lifestyle and non-English speaking farmers through education.

THEME 3 – A CONSISTENT NATIONAL APPROACH TO BIOSECURITY

The sheep industries largely operate as a national industry, with regional differences being of lesser importance. Diseases and invasive species generally do not respect jurisdictional boundaries.

We will work in partnership with jurisdictions and advocate for consistent policies and systems across Australia.

We will focus on:

- Sheep industry peak bodies taking a lead by developing consistent, national sheep industry plans and policies for biosecurity.
- Promoting consistent endemic or established invasive species and disease management policies across jurisdictions and sheep industry representative bodies.
- Showing policy leadership in national and state forums to influence government policy (both directly and through Animal Health Australia, Plant Health Australia and the Centre for Invasive Species Solutions).
- Engaging and partnering with the supply chain to help drive an integrated, market-based approach to biosecurity, including improved and accessible information flow.
- Developing a consistent funding and investment model for national sheep industry biosecurity programs.

THEME 4 – PROTECTING THE FARM

The sheep industry is comprised of around 40,000 independent farms and our collective biosecurity integrity is the sum of our parts. Good biosecurity risk management at the farm level protects the industry overall, as well as the profitability of individual operations.

Ongoing communication, awareness raising and training is essential so that people understand the importance of biosecurity to their own operation, as well as the industry overall; they understand their individual obligations; and to encourage participation.

This requires a significant culture change within the industry.

We will focus on:

- Commitment to promotion and general adoption of on-farm biosecurity programs.
- An enhanced education, training and awareness program that uses a multi-channel approach and is informed by relevant social research.
- Engaging the supply chain to promote and encourage modern biosecurity practices.
- Documenting and promoting case studies that demonstrate and quantify the benefits of good biosecurity practices.
- Developing better tools for endemic or established invasive species and disease
- Identifying priorities and investing in endemic or established invasive species and disease research and information sharing.

THEME 5 – IMPROVING BIOSECURITY SYSTEMS

Effective biosecurity risk management means:

- Preventing invasive species and disease incursions
- Early detection if they occur, thus giving us the best chance of a successful response
- Effective surveillance to support market access
- Dealing effectively with invasive species and diseases that are already here
- Efficient underpinning systems

We will focus on:

- Making the sheep industry traceability system robust and effective so that it meets market and disease/residue response requirements.
- Ensuring that sheep producers understand the critical importance of early reporting of potential invasive species and disease outbreaks, early management actions and reducing the stigma (impacts) of reporting
- Investing, in partnership with governments and other industries, in appropriate and integrated surveillance systems to ensure continued market access.
- Promoting effective compliance and integrity systems.
- Monitoring the ongoing integrity of our biosecurity risk management systems.
- Working with DAWR to ensure that our border controls and DAWE import protocols protect the sheep industry.

THEME 6 – IMPROVING CAPABILITY AND CAPACITY

Within an environment of shared responsibility, we must play our part in ensuring that the sheep industry has the capability and capacity to ensure new and existing biosecurity threats can be effectively managed. This means having a clear understanding of our role, as well as access to the resources and skills necessary to carry out that role.

We will focus on:

- Refining biosecurity plans and other industry programs to improve consistency and effectiveness.
- Strategic use of industry funds to drive change for the benefit of industry.
- Continually improving our sheep industry crisis communications plan and emergency animal disease response plan to ensure that we are ready to play our part in responding to a large biosecurity emergency, including systems and processes and having sufficient trained people to carry out liaison and policy roles.
- Integration and harmonization of existing programs, with elimination of duplication
- Ensuring that sufficient industry leaders and representatives are available and undertake training for emergency response, advocacy and strategy development roles.
- Maintain and continuously improve our national communications system, including an information portal, to ensure consistent messaging for routine business and also during disease emergencies.

What success will look like?

- There is effective industry leadership and advocacy on biosecurity matters that may impact on the industry.
- Industry leadership and advocacy results in increased joint industry-government investment in priority biosecurity risk management initiatives.
- The sheep industry works in partnership with other livestock industries, organisations and governments to achieve biosecurity outcomes.
- Co-investment and leveraging opportunities are utilised to maximize biosecurity investment return, particularly through long-term pipeline strategies.
- A unified sheep industry approach to biosecurity management with consistent, evidence based, national policies and approaches that focus on risk.
- Significant biosecurity risks have been identified and are being managed as appropriate by all industry participants along the supply chain.
- Farms are protected by the general and consistent adoption of effective, practical farm biosecurity plans.
- Biosecurity and integrity systems and programs are sound, user friendly and efficient, with high levels of compliance by industry participants.
- Effective disease and invasive species surveillance promotes early detection and reporting of unusual disease incidents, and provides information essential for securing and growing market access.
- The industry is well prepared to respond to new incursions.
- An effective traceability system supports market access, surveillance and emergency disease response needs and demands.
- The industry leads and promotes collective industry action for the management of endemic diseases and established invasive species and the mitigation of their impacts on industry assets, with support from government.

Photo credit: Taryn Mokotupu

Endemic disease example – why on-farm biosecurity is important

Sarah is producing superfine wool from her merino flock. Mostly Sarah breeds her own replacement ewes and hence introductions of sheep are relatively infrequent. She prides herself on having a healthy and highly productive flock (and farm business).

Traditionally Sarah has sourced new young ewes, when occasionally needed, from a known and trusted breeder and has had no problems with them. Good wool prices have prompted her to seriously consider expanding her flock. While attending a local saleyard for the sale of some of her old wethers, she bids on and buys a mob of young ewes on impulse. There is no sheep health declaration with the ewes (and Sarah didn't think to ask for one anyway).

The new ewes arrive later that day and she puts them straight out with other young ewes, keen to have them all joined as soon as possible.

It later becomes apparent that the new ewes were infested with sheep lice and Sarah has introduced an expensive and protracted problem. She also worries what else she may have introduced with this impulse buy. She remembers too late the information she read in the biosecurity module for the on-line LPA accreditation process.

Several simple actions, part of even a basic farm biosecurity plan, would have prevented Sarah's expensive problem:

- Using a known and trusted source for replacement ewes,
- Insisting on, or buying only sheep accompanied by, a Sheep Health Declaration and
- Inspecting newly purchased sheep on arrival and isolating them from the home flock for a period of observation.

Photo credit: Taryn Mokotupu

KEY SUCCESS INDICATORS

THEME 1 – COLLABORATION AND PARTNERSHIPS

- The sheep industry has a high national reputation of for biosecurity
- An increased number of biosecurity initiatives are operating in partnership
- A culture of collaboration is evident
- There is a high degree of leveraging within biosecurity programs

THEME 2 – UNDERSTANDING PRIORITY RISKS (FOCUS ON RISKS)

- Industry's biosecurity risk profile is kept up to date
- Investment and activity is focused on highest risks
- There is greater use of innovative approaches in addressing biosecurity risks
- A high level of understanding of biosecurity risks exists within the industry

THEME 3 – A CONSISTENT NATIONAL APPROACH TO BIOSECURITY

- There is a high level of consistency of policies & programs across Australia
- Greater number of market-based approaches to biosecurity
- There is an agreed investment model for the sheep industry
- Enhanced reputation of sheep industry leaders

THEME 4 – PROTECTING THE FARM

- A high level of adoption of on-farm biosecurity programs
- A high level of awareness of biosecurity within industry
- Industry is investing in tools for better endemic disease and established invasive species management
- The supply chain is engaged in biosecurity risk management

THEME 5 – IMPROVING BIOSECURITY SYSTEMS

- Sheep traceability systems are demonstrated to be effective
- General surveillance is enhanced, with incentives for producers
- There is high market confidence in sheep industry disease status
- High levels of compliance with industry integrity systems

THEME 6 – IMPROVING CAPABILITY AND CAPACITY

- Industry biosecurity plans are maintained up to date
- Industry communications systems are demonstrably effective
- Increased number of trained industry representatives for emergency response and advocacy leadership

Exotic disease example – why early reporting is important

Scene 1

John was checking a paddock of recently shorn sheep when he noticed a few animals that looked sick and were dribbling from the mouth. A few had sore eyes and red looking areas on the exposed skin. He was pretty busy that day, with a livestock transport due shortly to take a mob of wethers to the local saleyards, so he made a mental note to check the sheep again tomorrow.

The following day when he checked the paddock there were many more sheep affected, with a number already dead and dying. He immediately called his local vet who took samples and the next day a diagnosis of Sheep Pox was received. It was eventually revealed that John's son and wife had recently visited the middle east and they had brought home some local wool for spinning. John's son had also helped with the recent shearing. The Sheep Pox diagnosis prompted a very large emergency response, with 53 infected properties eventually identified as a result of the sale of wethers from John's property. Over 70,000 sheep needed to be destroyed to eradicate the outbreak and access to a number of markets was lost for around 18 months. Some cattle export markets were also affected. John became a pariah within the sheep industry.

Scene 2

John in the above scenario is checking his recently shorn sheep, recalls his on-line biosecurity training, becomes concerned that "something is not right", and immediately calls his local veterinarian. He also calls his agent and cancels the sale of his wethers. Sheep Pox is diagnosed the following day and eventually all of John's sheep are destroyed. Extensive tracing reveals no other pockets of infection and Australia gains its Sheep Pox free status after 6 months. John receives fair compensation for his destroyed sheep and, although his business is significantly impacted, he is able to get back on track within a few years. The sheep industry is consequentially affected by this outbreak, but it could have been a whole lot worse.

GLOSSARY

Term	Meaning
AHA	Animal Health Australia
AUSVETPLAN	The Australian Veterinary Emergency Plan
AWI	Australian Wool Innovation
Biosecurity	Management of risks to the economy, the environment and the community, created by invasive species and diseases entering, emerging, establishing or spreading
Biosecurity risks	Possibility of damage caused by invasive species or diseases.
Emergency animal disease (or invasive species)	One where urgent eradication or control measures are required to mitigate the potential damage caused by an organism (which may be exotic to Australia or there is an unusual manifestation of an organism already present in Australia).
Emergency Animal Disease Response Agreement	A formal contract is in place between livestock industries and the Australian and State governments for management and sharing of the costs associated with outbreaks of emergency animal diseases. A similar agreement (Emergency Plant Pest Response Deed) is in place for plant pests and diseases. There is also an intergovernmental agreement for environmental invasive species.
Endemic	A disease organism or invasive species generally present within Australia. May also be referred to as established.
Exotic disease or invasive species	A disease or invasive species not present in Australia.
Invasive species	Weeds or pest animals. However, some people also include the causative organisms for diseases.
MLA	Meat and Livestock Australia
On-farm biosecurity	A set of measures designed to protect a property (farm) from the entry and spread of pests and diseases.
Pre-border, border and post-border continuum	Biosecurity risk management measures taken either (a) before the Australian border to prevent invasive species reaching Australia; or (b) at the border to prevent entry; or (c) within Australia to prevent establishment, eradicate or control.
R D and E	Research Development and Extension.
Risk mitigation measures	Actions that either prevent a biosecurity risk occurring or minimise its impacts.
Surveillance	A process to determine the incidence (rate of occurrence), prevalence, and/or geographic distribution of a disease or invasive species. Surveillance may also aim for early detection of an incursion.
Traceability	The ability to identify animals, track their movements and determine where animals have come from (trace back) or have gone to (trace forward).

This strategy was prepared by Dr Ron Glanville and Dr Hugh Millar for WoolProducers Australia and Sheep Producers Australia in collaboration with key stakeholders and sheep industry leaders from across Australia, and funded by Animal Health Australia.