

Operational guidance on the decontamination of wool and wool facilities

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DISEASE WATCH HOTLINE: 1800 675 888

The Disease Watch Hotline is a toll-free telephone number that connects callers to the relevant State or Territory officer to report concerns about any potential emergency disease situation. Anyone suspecting an emergency disease outbreak should use this number to get immediate advice and assistance.

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Open bale of wool.



1

Introduction

1.1 This manual

1.1.1 Purpose

As part of AUSVETPLAN (the Australian Veterinary Emergency Plan), this resource document has been developed to guide decision-making and so support the implementation of an efficient, effective and coherent response.

The guidance in this document is intended to inform the decontamination plan for a premises in an outbreak and subsequent decontamination activities. The relevant response authority (jurisdictional government) is responsible for developing the decontamination plan and for overseeing its implementation.

1.1.2 Scope

This document contains operational guidance on the decontamination of wool and wool facilities.

1.1.3 Development

This resource document has been produced in accordance with the procedures described in the **AUSVETPLAN Overview**, and in consultation with Australian national, state and territory governments; the relevant livestock industries; nongovernment agencies; and public health authorities, where relevant.

In this resource document, text placed in square brackets [xxx] indicates that that aspect of the manual remains contentious or is under development; such text is not part of the official resource document. The issues will be worked on by experts and relevant text included at a future date.

1.2 Other documentation

This resource document should be read and implemented in conjunction with:

- Other AUSVETPLAN documents¹, including, in particular the:
 - *Operational manual: Decontamination*
 - *Enterprise manual: Wool industry*
 - disease-specific strategies and briefs.

¹ www.animalhealthaustralia.com.au/our-publications/ausvetplan-manuals-and-documents



Mob of sheep.

- Relevant nationally agreed standard operating procedures (NASOPs)². These procedures complement AUSVETPLAN and describe in detail specific actions undertaken during a response to an incident. NASOPs have been developed for use by jurisdictions during responses to emergency animal disease (EAD) incidents and emergencies.
- Relevant jurisdictional or industry policies, response plans, standard operating procedures and work instructions
- Relevant Commonwealth and jurisdictional legislation; and, legal agreements (such as the EADRA³) where applicable.

² www.animalhealthaustralia.com.au/what-we-do/emergency-animal-disease/nationally-agreed-standard-operating-procedures

³ www.animalhealthaustralia.com.au/what-we-do/emergency-animal-disease/ead-response-agreement

2

Decontamination of wool by isolation and storage

In an emergency animal disease (EAD) response, wool that is considered contaminated will require destruction or decontamination, as determined by the response authority.

Wool may be destroyed by burial or burning; however, both of these can be challenging as wool does not burn easily and it takes a long time to break down.

Decontamination may be accomplished through scouring but scouring capacity may be insufficient for a large outbreak. An alternative method for decontaminating wool that may be appropriate for certain disease agents is isolation and storage of wool bales for sufficient time to ensure the disease agent does not remain viable. The length of time needed will vary with the disease agent and the ambient temperature.

As wool is a valuable commodity, isolation and storage of wool may be the preferred decontamination technique for diseases where the survivability of the agent in wool has been determined and a significant volume of wool requires decontamination.

2.1 Aim

The aim of this procedure is to securely isolate and store all wool considered to be contaminated with a susceptible EAD agent for a prescribed period of time until the wool and the wool bales are considered to present an acceptably low risk of infectivity.

External bale surfaces may need to be decontaminated by washing and chemical disinfection prior to storage, in which case guidance on the decontamination of wool bales [under development] should also be referred to.

2.2 Work Health and Safety (WHS)

Existing business-specific WHS procedures and guidelines should be complied with at all times, including but not limited to the movement of bales, use of machinery, handling wool, staff movement around the facility and the use of personal protective equipment (PPE). Appropriate PPE may include boots, goggles, gloves, face protection and, in some instances, respiratory equipment.

Prior to the use of any chemical the manager should consult and have a copy of the most recent Safety Data Sheet (SDS) and ensure staff are adequately protected and trained in the hazards, PPE and appropriate indications and methods of use for the chemical/s to be used.

The business should develop a suitable first aid plan in case of accidental exposure (where appropriate) for the chemicals.

2.3 Environmental considerations

Forward planning will help to reduce the environmental impact of a decontamination procedure.

2.4 Authority

An EAD response will be managed by the appropriate response authority.

The response authority will develop a decontamination plan for premises, incorporating details of the items for decontamination and the methodology to be used. The response agency is also responsible for ensuring the process has been completed prior to any premises status change.

A facility must not work independently in responding to an EAD. Failure to comply with response authority directions could be in breach of the relevant legislation and could lead to prosecution.

2.5 Method

Wool that is heavily contaminated with organic matter is not appropriate for isolation and storage and should be destroyed or disposed of instead. Wool that is considered to be of no financial value (for example floor sweepings) may also be destroyed or disposed of instead. Destruction or disposal must be done in an approved manner as determined by the response authority.

All other wool present at the facility when it is quarantined must be baled into wool bales or, for small quantities, double bagged (sealed inside one plastic bag and then sealed inside a second). This includes, for example, grab samples, display samples, loose lots, core tube samples and retained sweepings from the floor. All of this wool must then be placed in an isolation area and stored for the prescribed period. All wool to be stored is henceforth referred to as baled whether in conventional wool bales or double bagged.

Washing the external surface of the bales prior to relocation may be necessary. Decontamination of the storage area may also be necessary to ensure it is of equivalent or less risk of contamination than the bales being stored there.

2.5.1 Isolation

Isolation area options

There are two main options for the location of an isolated area for contaminated wool: isolation on the infected premises or isolation on another property. The two options have different requirements and consequences in terms of permits and decontamination. Regardless which storage site is used, ongoing audit by the response authority will be required throughout the period of isolation.

Contaminated bales to be stored on the infected premises

The contaminated bales may be stored in the main wool facility OR another appropriate building on the infected premises. It would be preferable to use a different building to the main wool facility as this would make the process of decontamination of the main building easier and possibly even facilitate a return to trade once the contaminated wool is safely stored away (this would be a decision to be made by the response authority).

The aim is to move the wool into a secure, clean isolation area so that there will be no ongoing contamination of the bales once the isolation and storage time has begun. This refers specifically to the external surface of the bales as there will be no loose wool isolated and stored, and wool within a bale is considered to be protected from external contamination. Once the isolation area has been cleaned and decontaminated (see **Decontamination of wool facilities**), it will be inspected and, if approved by the response authority, it is ready for the bales to be moved in.

If the business chooses to use the main wool handling building for isolation and storage, a careful plan will need to be developed so that the facility is decontaminated prior to wool bale isolation and storage. Ideally, all the wool bales would be moved out of the facility to another area on the property while the decontamination is completed and then moved back in for isolation and storage.

Alternatively, the wool may be placed at one end of the facility while one half is decontaminated and then the process repeated at the other end of the facility (see **Decontamination of wool facilities**).

Contaminated bales to be stored on another property (within the control or restricted area)

Bales that are to be moved for storage onto another property will require a permit for movement from an infected premises from the response authority. It is likely that the authorities will require that the external surface of the bales be decontaminated prior to movement so that there is no risk of infection being spread en route. This can be completed following the guidance on [Decontamination of wool bales].

'Clean' (washed bale handling area) and 'dirty' (unwashed bale handling area) areas should be visually defined via tape. Staff and machinery similarly identified for instance via different coloured tabards.

The trucks to transport the washed wool bales should park outside the facility in the 'clean' loading area that has been decontaminated previously (see **Decontamination of wool facilities**). A designated grab lifter should be used for bales before washing and another grab lifter should be used for the bales after washing. The grab lifter moving the bales after washing would need to have been decontaminated prior to handling the washed bales (see **Decontamination of wool facilities**).

There should be separate designated drivers for the respective lifters, or a driver should undergo full decontamination prior to moving between the washed and unwashed areas (see **Decontamination of wool facilities**).

Isolation area criteria

The isolation area must:

- Not have housed infected or potentially infected livestock.
- Have no susceptible livestock on the property on which the isolation area is located.
- Not be another wool handling facility unless it is already an IP.
- Not be directly connected in any way to the main wool handling building or any other building at the location OR the isolation can be completely physically isolated from the wool area.
- Have no common/shared air flow between the isolation area and the working wool area or any other shed/facility (including drafts, heating/air-conditioning).
- Be totally enclosed (roof and walls) and with closable doors and windows.
- Be able to be locked up to ensure controlled access.
- Have a solid floor and be free from rising damp.

- Have sealed road access for vehicles from the nearest vehicle decontamination facility to the storage facility.
- Have an effective rodent control program in place.
- Have an effective companion animal control procedure in place.
- Have effective wild animal and bird controls procedures in place.

Preparation of isolation area

The following table provides a checklist for the preparation of the isolation area.

	Procedures	Tick on completion
1.	Check all external access points are locked.	
2.	Check for evidence of wild birds and respond accordingly.	
3.	Check for evidence of rodents and modify rodent control plan as necessary.	
4.	Check there is no access for domestic pets.	
5.	Apply signage on all access points: 'Emergency animal disease exclusion area. Do not enter' – or response authority signage as applicable – and provide a contact phone number.	
6.	Control personnel access to the facility with restrictions enforced from the beginning of preparation of the area.	
7.	Implement biosecurity risk assessments and procedures for entry and exit.	
8.	Record all activities at the isolation area (preparation, cleaning, attending staff, dates and times).	
9.	Record all movements of people onto and away from the area.	
10.	Clean the isolation storage area floor from gross contamination (dirt and dust).	
11.	Decontaminate with chemicals if the isolation area is on an infected property. Follow guidance on Decontamination of a wool handling facility.	

Moving bales into the isolation area

Movement of bales into the storage facility should progress with caution to avoid unnecessary creation of aerosols and contamination of the storage facility with dust and dirt. A designated grab lifter would operate in the area outside of the facility and another within the facility. The isolation time will be measured from the point when the movement of the bales into the storage facility is completed.

2.5.2 Storage

For disease agents for which isolation and storage of wool is an appropriate decontamination measure, the length of time required for isolation and storage will be determined by the response authority, based on relevant sources such as OIE guidelines and current scientific literature.



Stacked wool bales.

As the conditions of each bale cannot be tested or monitored, the principle of taking the worst-case scenario or the longest time that has been required to inactivate all the agent may be applied by responding authorities.

2.5.3 Recording and reporting

The ultimate decision on the validity and successful decontamination of wool will be made by the response authority.

Recording of all activities undertaken will form part of the evidence needed to demonstrate to the response authority that the conditions of isolation and storage have been met. This should include the name of the staff involved in each activity, the date, time and details of the activity, and in the case of chemical disinfection, the chemical name, concentration, contact time, environmental control measures, PPE, monitoring, and any WHS mishaps or near misses.

3

Decontamination of wool facilities

3.1 Aim

The aim of decontamination is to remove infectious material from a person, place or thing to manage disease spread, eliminating the infectious agent from Australia and to assist the facility in returning to business as normal. In an outdoor or vast area such as a farm or wool facility it is not realistic to think that all infectious material may be removed by cleaning and chemical disinfection alone. Time and exposure to environmental conditions such as drying and heat will contribute significantly to successful decontamination. Decontamination of a wool facility is a massive, labour-intensive operation that requires thorough planning, diligence, attention to detail and time.

3.2 Work Health and Safety (WHS)

The existing business-specific WHS procedures should be complied with at all times, including but not limited to the movement of bales, use of machinery, handling wool, staff movement around the facility and the use of personal protective equipment (PPE).

Disinfection usually involves the use of chemicals and these may be irritating to humans and require the use of additional PPE including boots, goggles, gloves, face protection and, in some instances, respiratory equipment. Prior to the use of any chemical the manager should consult and have a copy of the most recent Safety Data Sheet (SDS) and ensure staff are adequately protected and trained in the hazards, PPE and appropriate indications and methods of use for the chemical/s to be used. The business should develop a suitable first aid plan in case of accidental exposure (where appropriate) for the chemicals.

3.3 Environmental considerations

Forward planning will help to reduce the environmental impact of a decontamination procedure.

3.4 Authority

An emergency animal disease (EAD) response will be managed by the appropriate response authority.

The response authority will develop a decontamination plan for premises, incorporating details of the items for decontamination and the methodology to be used. The response agency is also responsible for ensuring the process has been completed prior to any premises status change.

A facility must not work independently in responding to an EAD. Failure to comply with response authority directions could be a breach of the relevant legislation and could lead to prosecution.

3.5 Method

The process of decontamination will vary depending on the disease agent and will be under the direction of the response authority.

For a contagious disease where stamping out is undertaken, decontamination should not begin until susceptible livestock on the premises have been removed.

Decontamination for some diseases (e.g. anthrax) may be undertaken while livestock are still on the premises.

Detailed decontamination information is available in the **AUSVETPLAN Decontamination Manual**.

3.5.1 Preliminary disinfection

Preliminary disinfection is particularly important for disease where infected animals produce and shed large amounts of infectious agent (for example through urine, faeces and saliva) that will survive in the environment for some time. Many infectious agents spread via the creation of large amounts of contaminated dust or aerosols. A disinfectant solution applied liberally onto areas that may have been contaminated and are suitable for wet disinfection reduces the amount of virus present on surfaces at the facility and the risk of producing contaminated dust or aerosol during the cleaning and disinfection process.

Decontamination planning for the facility should take into account the presence of susceptible animals in the vicinity of the facility at risk of exposure to contaminated aerosols and subsequent windborne spread if relevant to the disease agent.

Preliminary disinfection is therefore recommended for wool facilities that:

- a. have had infected animals present on the property
- b. are very dusty
- c. have susceptible stock on properties near the facility.

3.5.2 Preliminary tidy

The aim of this process is to reduce all clutter and rubbish from the facility and to expose all surfaces within the facility for cleaning and disinfection. The following list provides a guide to the activities that are required in this case.

- All wool at the facility should be baled or double bagged in plastic (sealed in one plastic bag which is then sealed inside a second).
- All rubbish should be bagged for destruction by a process approved by the response authority.
- It may be difficult to decontaminate old or damaged fittings and tools, so it may be determined by the response authority that they should be destroyed rather than attempting to decontaminate them.
- Goods should be disposed of only in a manner approved by the response authority.
- Before any property is destroyed, consultation with the response authority should occur to determine if it may be eligible for compensation.
- Property eligible for compensation should be valued (or, if this will be delayed, photographed and recorded) before it is destroyed so that it may be considered in a compensation claim.

3.5.3 Cleaning

Gross contamination such as dirt, debris, grease, and manure should be removed from all surfaces of the facility, fittings, tools and machines. Organic matter will reduce the efficacy of disinfection by deactivating the disinfectant and protecting the virus from exposure to the chemical. Cleaning usually includes physical (e.g. scraping and water blasting) and degreasing elements.

- Fittings may need to be disassembled to allow for adequate cleaning.
- Machines such as sampling machines and wool presses, will need to be decontaminated following specific advice to ensure that the physical cleaning and any chemicals used do not damage the machines.

3.5.4 Disinfection

Disinfection needs to be conducted in an orderly fashion to ensure that staff do not move from 'dirty' to 'clean' areas and thus cause recontamination. It is recommended that disinfection be completed in a unidirectional manner, for instance, from the top down, that is roof, then walls and then the floor.

For disinfection to be successful the appropriate disinfectant (as outlined in the **AUSVETPLAN Decontamination Manual**) for the specific disease agent must be used at the recommended concentration and appropriate contact time. Improper concentrations and insufficient contact times for disinfectants may lead to ineffective inactivation of the virus. It is vital that there is the appropriate attention to detail for these factors.

The presence of organic matter will reduce the efficacy of disinfectants. *It is vital, therefore, that all gross contamination such as dirt, debris, grease, and manure is removed from all surfaces before applying the appropriate disinfectant. If organic matter cannot be completely removed, adjustments may need to be made to the disinfectant concentration and procedure.*

3.5.5 Completion

On completion of this procedure, the response authority will review and assess the effectiveness of decontamination. The response authority will then determine if the facility may have its infected premises status replaced with a resolved premises status and if so the quarantine notice and imposed restrictions specific to the premises lifted. The facility may then apply to be considered for approved processing facility status which may include additional routine biosecurity measures.

Glossary

Disease-specific terms

Allele	One of the alternative forms of a specified gene. Different alleles usually have different effects on the phenotype.
Biological products	Agents of biological origin (eg sera, hormones) for therapeutic use in the diagnosis or treatment of certain diseases.
Iatrogenic disease	A case of disease caused by medical or veterinary procedures (eg an infection spread by surgical procedures).
Index flock	The first or original flock in which a case of the disease has been diagnosed. <i>See also</i> Index case, Index property in 'Standard AUSVETPLAN terms'
Mouflon	A species of wild sheep of the Caprinae family (goat-antelopes). Thought to be one of the two ancestors for all modern domestic sheep breeds.
Peyer's patches	Lymphoid organs in the small intestine.
Rendering	Processing by heat to inactivate infective agents. Rendered material may be used in various products according to particular disease circumstances.
Spongiform encephalopathies	A group of diseases affecting various animal species; all involve noninflammatory vacuolated (spongiform) degeneration of the grey matter areas of the brain and spinal cord.

Standard AUSVETPLAN terms

Animal byproducts	Products of animal origin that are not for consumption but are destined for industrial use (eg hides and skins, fur, wool, hair, feathers, hoofs, bones, fertiliser).
Animal Health Committee	<p>A committee whose members are the chief veterinary officers of the Commonwealth, states and territories, along with representatives from the CSIRO Australian Centre for Disease Preparedness (ACDP) and the Department of Agriculture, Water and the Environment. There are also observers from Animal Health Australia, Wildlife Health Australia, and the New Zealand Ministry for Primary Industries. The committee provides advice to the National Biosecurity Committee on animal health matters, focusing on technical issues and regulatory policy.</p> <p><i>See also</i> National Biosecurity Committee</p>
Animal products	Meat, meat products and other products of animal origin (eg eggs, milk) for human consumption or for use in animal feedstuff.
Approved disposal site	A premises that has zero susceptible livestock and has been approved as a disposal site for animal carcasses, or potentially contaminated animal products, wastes or things.
Approved processing facility	An abattoir, knackery, milk processing plant or other such facility that maintains increased biosecurity standards. Such a facility could have animals or animal products introduced from lower-risk premises under a permit for processing to an approved standard.
At-risk premises	A premises in a restricted area that contains a live susceptible animal(s) but is not considered at the time of classification to be an infected premises, dangerous contact premises, dangerous contact processing facility, suspect premises or trace premises.
Australian Chief Veterinary Officer	<p>The nominated senior veterinarian in the Australian Government Department of Agriculture, Water and the Environment who manages international animal health commitments and the Australian Government's response to an animal disease outbreak.</p> <p><i>See also</i> Chief veterinary officer</p>

Cont'd

AUSVETPLAN	Australian Veterinary Emergency Plan. Nationally agreed resources that guide decision making in the response to emergency animal diseases (EADs). It outlines Australia's preferred approach to responding to EADs of national significance, and supports efficient, effective and coherent responses to these diseases.
Carcase	The body of an animal slaughtered for food.
Carcass	The body of an animal that died in the field.
Chief veterinary officer (CVO)	The senior veterinarian of the animal health authority in each jurisdiction (national, state or territory) who has responsibility for animal disease control in that jurisdiction. <i>See also</i> Australian Chief Veterinary Officer
Compartmentalisation	The process of defining, implementing and maintaining one or more disease-free establishments under a common biosecurity management system in accordance with OIE guidelines, based on applied biosecurity measures and surveillance, to facilitate disease control and/or trade.
Compensation	The sum of money paid by government to an owner for livestock or property that are destroyed for the purpose of eradication or prevention of the spread of an emergency animal disease, and livestock that have died of the emergency animal disease. <i>See also</i> Cost-sharing arrangements, Emergency Animal Disease Response Agreement
Consultative Committee on Emergency Animal Diseases (CCEAD)	The key technical coordinating body for animal health emergencies. Members are state and territory chief veterinary officers, representatives of CSIRO-ACDP and the relevant industries, and the Australian Chief Veterinary Officer as chair.
Control area (CA)	A legally declared area where the disease controls, including surveillance and movement controls, applied are of lesser intensity than those in a restricted area (the limits of a control area and the conditions applying to it can be varied during an incident according to need).
Cost-sharing arrangements	Arrangements agreed between governments (national and state/territory) and livestock industries for sharing the costs of emergency animal disease responses. <i>See also</i> Compensation, Emergency Animal Disease Response Agreement

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Dangerous contact animal	A susceptible animal that has been designated as being exposed to other infected animals or potentially infectious products following tracing and epidemiological investigation.
Dangerous contact premises (DCP)	A premises, apart from an abattoir, knackery or milk processing plant (or other such facility) that, after investigation and based on a risk assessment, is considered to contain a susceptible animal(s) not showing clinical signs, but considered highly likely to contain an infected animal(s) and/or contaminated animal products, wastes or things that present an unacceptable risk to the response if the risk is not addressed, and that therefore requires action to address the risk.
Dangerous contact processing facility (DCPF)	An abattoir, knackery, milk processing plant or other such facility that, based on a risk assessment, appears highly likely to have received infected animals, or contaminated animal products, wastes or things, and that requires action to address the risk.
Declared area	A defined tract of land that is subjected to disease control restrictions under emergency animal disease legislation. There are two types of declared areas: restricted area and control area.
Decontamination	Includes all stages of cleaning and disinfection.
Depopulation	The removal of a host population from a particular area to control or prevent the spread of disease.
Destroy (animals)	To kill animals humanely.
Disease agent	A general term for a transmissible organism or other factor that causes an infectious disease.
Disease Watch Hotline	24-hour freecall service for reporting suspected incidences of exotic diseases – 1800 675 888.
Disinfectant	A chemical used to destroy disease agents outside a living animal.
Disinfection	The application, after thorough cleansing, of procedures intended to destroy the infectious or parasitic agents of animal diseases, including zoonoses; applies to premises, vehicles and different objects that may have been directly or indirectly contaminated.
Disinsectisation	The destruction of insect pests, usually with a chemical agent.

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Disposal	Sanitary removal of animal carcasses, animal products, materials and wastes by burial, burning or some other process so as to prevent the spread of disease.
Emergency animal disease	A disease that is (a) exotic to Australia or (b) a variant of an endemic disease or (c) a serious infectious disease of unknown or uncertain cause or (d) a severe outbreak of a known endemic disease, and that is considered to be of national significance with serious social or trade implications. <i>See also</i> Endemic animal disease, Exotic animal disease
Emergency Animal Disease Response Agreement	Agreement between the Australian and state/territory governments and livestock industries on the management of emergency animal disease responses. Provisions include participatory decision making, risk management, cost sharing, the use of appropriately trained personnel and existing standards such as AUSVETPLAN. <i>See also</i> Compensation, Cost-sharing arrangements
Endemic animal disease	A disease affecting animals (which may include humans) that is known to occur in Australia. <i>See also</i> Emergency animal disease, Exotic animal disease
Enterprise	<i>See</i> Risk enterprise
Enzyme-linked immunosorbent assay (ELISA)	A serological test designed to detect and measure the presence of antibody or antigen in a sample. The test uses an enzyme reaction with a substrate to produce a colour change when antigen–antibody binding occurs.
Epidemiological investigation	An investigation to identify and qualify the risk factors associated with the disease. <i>See also</i> Veterinary investigation
Epidemiology	The study of disease in populations and of factors that determine its occurrence.
Exotic animal disease	A disease affecting animals (which may include humans) that does not normally occur in Australia. <i>See also</i> Emergency animal disease, Endemic animal disease
Exotic fauna/feral animals	<i>See</i> Wild animals

Cont'd

Fomites	Inanimate objects (eg boots, clothing, equipment, instruments, vehicles, crates, packaging) that can carry an infectious disease agent and may spread the disease through mechanical transmission.
General permit	A legal document that describes the requirements for movement of an animal (or group of animals), commodity or thing, for which permission may be granted without the need for direct interaction between the person moving the animal(s), commodity or thing and a government veterinarian or inspector. The permit may be completed via a webpage or in an approved place (such as a government office or commercial premises). A printed version of the permit must accompany the movement. The permit may impose preconditions and/or restrictions on movements. <i>See also</i> Special permit
In-contact animals	Animals that have had close contact with infected animals, such as noninfected animals in the same group as infected animals.
Incubation period	The period that elapses between the introduction of a pathogen into an animal and the first clinical signs of the disease.
Index case	The first case of the disease to be diagnosed in a disease outbreak. <i>See also</i> Index property
Index property	The property on which the index case is found. <i>See also</i> Index case
Infected premises (IP)	A defined area (which may be all or part of a property) on which animals meeting the case definition are or were present, or the causative agent of the emergency animal disease is present, or there is a reasonable suspicion that either is present, and that the relevant chief veterinary officer or their delegate has declared to be an infected premises.
Local control centre	An emergency operations centre responsible for the command and control of field operations in a defined area.

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Monitoring	Routine collection of data for assessing the health status of a population or the level of contamination of a site for remediation purposes. <i>See also</i> Surveillance
Movement control	Restrictions placed on the movement of animals, people and other things to prevent the spread of disease.
National Biosecurity Committee	A committee that was formally established under the Intergovernmental Agreement on Biosecurity (IGAB). The IGAB was signed on 13 January 2012, and signatories include all states and territories except Tasmania. The committee provides advice to the Agriculture Senior Officials Committee and the Agriculture Ministers' Forum on national biosecurity issues, and on the IGAB.
National Management Group (NMG)	A group established to approve (or not approve) the invoking of cost sharing under the Emergency Animal Disease Response Agreement. NMG members are the Secretary of the Australian Government Department of Agriculture, Water and the Environment as chair; the chief executive officers of the state and territory government parties; and the president (or analogous officer) of each of the relevant industry parties.
Native wildlife	<i>See</i> Wild animals
OIE Terrestrial Code	OIE <i>Terrestrial Animal Health Code</i> . Describes standards for safe international trade in animals and animal products. Revised annually and published on the internet at: www.oie.int/international-standard-setting/terrestrial-code/access-online .
OIE Terrestrial Manual	OIE <i>Manual of diagnostic tests and vaccines for terrestrial animals</i> . Describes standards for laboratory diagnostic tests, and the production and control of biological products (principally vaccines). The current edition is published on the internet at: www.oie.int/en/standard-setting/terrestrial-manual/access-online .
Operational procedures	Detailed instructions for carrying out specific disease control activities, such as disposal, destruction, decontamination and valuation.
Outside area (OA)	The area of Australia outside the declared (control and restricted) areas.
Owner	Person responsible for a premises (includes an agent of the owner, such as a manager or other controlling officer).

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Polymerase chain reaction (PCR)	A method of amplifying and analysing DNA sequences that can be used to detect the presence of viral DNA.
Premises	A tract of land including its buildings, or a separate farm or facility that is maintained by a single set of services and personnel.
Premises of relevance (POR)	A premises in a control area that contains a live susceptible animal(s) but is not considered at the time of classification to be an infected premises, suspect premises, trace premises, dangerous contact premises or dangerous contact processing facility.
Prevalence	The proportion (or percentage) of animals in a particular population affected by a particular disease (or infection or positive antibody titre) at a given point in time.
Proof of freedom	Reaching a point following an outbreak and post-outbreak surveillance when freedom from the disease can be claimed with a reasonable level of statistical confidence.
Quarantine	Legally enforceable requirement that prevents or minimises spread of pests and disease agents by controlling the movement of animals, persons or things.
Resolved premises (RP)	An infected premises, dangerous contact premises or dangerous contact processing facility that has completed the required control measures, and is subject to the procedures and restrictions appropriate to the area in which it is located.
Restricted area (RA)	A relatively small legally declared area around infected premises and dangerous contact premises that is subject to disease controls, including intense surveillance and movement controls.
Risk enterprise	A defined livestock or related enterprise that is potentially a major source of infection for many other premises. Includes intensive piggeries, feedlots, abattoirs, knackeries, saleyards, calf scales, milk factories, tanneries, skin sheds, game meat establishments, cold stores, artificial insemination centres, veterinary laboratories and hospitals, road and rail freight depots, showgrounds, field days, weighbridges and garbage depots.
Sensitivity	The proportion of truly positive units that are correctly identified as positive by a test. <i>See also</i> Specificity

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Sentinel animal	Animal of known health status that is monitored to detect the presence of a specific disease agent.
Seroconversion	The appearance in the blood serum of antibodies (as determined by a serology test) following vaccination or natural exposure to a disease agent.
Serosurveillance	Surveillance of an animal population by testing serum samples for the presence of antibodies to disease agents.
Serotype	A subgroup of microorganisms identified by the antigens carried (as determined by a serology test).
Serum neutralisation test	A serological test to detect and measure the presence of antibody in a sample. Antibody in serum is serially diluted to detect the highest dilution that neutralises a standard amount of antigen. The neutralising antibody titre is given as the reciprocal of this dilution.
Slaughter	The humane killing of an animal for meat for human consumption.
Special permit	A legal document that describes the requirements for movement of an animal (or group of animals), commodity or thing, for which the person moving the animal(s), commodity or thing must obtain prior written permission from the relevant government veterinarian or inspector. A printed version of the permit must accompany the movement. The permit may impose preconditions and/or restrictions on movements. <i>See also</i> General permit
Specificity	The proportion of truly negative units that are correctly identified as negative by a test. <i>See also</i> Sensitivity
Stamping out	The strategy of eliminating infection from premises through the destruction of animals in accordance with the particular AUSVETPLAN manual, and in a manner that permits appropriate disposal of carcasses and decontamination of the site.
State coordination centre	The emergency operations centre that directs the disease control operations to be undertaken in a state or territory.

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Surveillance A systematic program of investigation designed to establish the presence, extent or absence of a disease, or of infection or contamination with the causative organism. It includes the examination of animals for clinical signs, antibodies or the causative organism.

Susceptible animals Animals that can be infected with a particular disease.

Suspect animal An animal that may have been exposed to an emergency disease such that its quarantine and intensive surveillance, but not pre-emptive slaughter, is warranted.

or

An animal not known to have been exposed to a disease agent but showing clinical signs requiring differential diagnosis.

Suspect premises (SP) Temporary classification of a premises that contains a susceptible animal(s) not known to have been exposed to the disease agent but showing clinical signs similar to the case definition, and that therefore requires investigation(s).

Cont'd

Swill Also known as ‘prohibited pig feed’, material of mammalian origin, or any substance that has come in contact with this material; it does not include:

- milk, milk products or milk byproducts, either of Australian provenance or legally imported for stockfeed use into Australia
- material containing flesh, bones, blood, offal or mammal carcasses that is treated by an approved process¹
- a carcass or part of a domestic pig, born and raised on the property on which the pig or pigs that are administered the part are held, that is administered for therapeutic purposes in accordance with the written instructions of a veterinary practitioner
- material used under an individual and defined-period permit issued by a jurisdiction for the purposes of research or baiting.

Refer to jurisdictional legislation for approved processes. Jurisdictions may have approved processes that meet the following minimum standards:

- rendering in accordance with the Australian Standard for the Hygienic Rendering of Animal Products
- under jurisdictional permit, cooking processes subject to compliance verification that ensure that an internal temperature of at least 70 °C for a minimum of 30 minutes, or equivalent, has been reached
- treatment of cooking oil that has been used for cooking in Australia, in accordance with the National Standard for Recycling of Used Cooking Fats and Oils Intended for Animal Feeds
- under jurisdictional permit, any other nationally agreed process approved by the Animal Health Committee for which an acceptable risk assessment has been undertaken and that is subject to compliance verification.

This definition was endorsed by the Agriculture Ministers’ Council through AGMIN OOS 04/2014.

Cont’d

Swill feeding Also known as ‘feeding prohibited pig feed’, it includes:

- feeding, or allowing or directing another person to feed, prohibited pig feed to a pig
- allowing a pig to have access to prohibited pig feed
- the collection and storage or possession of prohibited pig feed on a premises where one or more pigs are kept
- supplying to another person prohibited pig feed that the supplier knows is for feeding to any pig.

This definition was endorsed by the Agriculture Ministers’ Council through AGMIN OOS 04/2014.

Trace premises (TP) Temporary classification of a premises that contains susceptible animal(s) that tracing indicates may have been exposed to the disease agent, or contains contaminated animal products, wastes or things, and that requires investigation(s).

Tracing The process of locating animals, people or other items that may be implicated in the spread of disease, so that appropriate action can be taken.

Unknown status premises (UP) A premises within a declared area where the current presence of susceptible animals and/or risk products, wastes or things is unknown.

Vaccination Inoculation of individuals with a vaccine to provide active immunity.

Vaccine A substance used to stimulate immunity against one or several disease-causing agents to provide protection or to reduce the effects of the disease. A vaccine is prepared from the causative agent of a disease, its products or a synthetic substitute, which is treated to act as an antigen without inducing the disease.

– adjuvanted A vaccine in which one or several disease-causing agents are combined with an adjuvant (a substance that increases the immune response).

– attenuated A vaccine prepared from infective or ‘live’ microbes that are less pathogenic but retain their ability to induce protective immunity.

– gene deleted An attenuated or inactivated vaccine in which genes for non-essential surface glycoproteins have been removed by genetic engineering. This provides a useful immunological marker for the vaccine virus compared with the wild virus.

Cont’d

- inactivated	A vaccine prepared from a virus that has been inactivated ('killed') by chemical or physical treatment.
- recombinant	A vaccine produced from virus that has been genetically engineered to contain only selected genes, including those causing the immunogenic effect.
Vector	A living organism (frequently an arthropod) that transmits an infectious agent from one host to another. A biological vector is one in which the infectious agent must develop or multiply before becoming infective to a recipient host. A mechanical vector is one that transmits an infectious agent from one host to another but is not essential to the lifecycle of the agent.
Veterinary investigation	An investigation of the diagnosis, pathology and epidemiology of the disease. <i>See also</i> Epidemiological investigation
Viraemia	The presence of viruses in the blood.
Wild animals - native wildlife - feral animals - exotic fauna	Animals that are indigenous to Australia and may be susceptible to emergency animal diseases (eg bats, dingoes, marsupials). Animals of domestic species that are not confined or under control (eg cats, horses, pigs). Nondomestic animal species that are not indigenous to Australia (eg foxes).
Wool	Sheep wool.
Zero susceptible species premises (ZP)	A premises that does not contain any susceptible animals or risk products, wastes or things.
Zoning	The process of defining, implementing and maintaining a disease-free or infected area in accordance with OIE guidelines, based on geopolitical and/or physical boundaries and surveillance, to facilitate disease control and/or trade.
Zoonosis	A disease of animals that can be transmitted to humans.

Abbreviations

Disease-specific terms

ADS approved disposal site

BSE bovine spongiform encephalopathy

CNS central nervous system

EU European Union

LCP lower-risk contact premises

NTSESP National Transmissible Spongiform Encephalopathies Surveillance Program

PRNP the gene encoding PrP in sheep

PrP prion protein

PrP^{Sc} protease-resistant isoform of PrP

TSE transmissible spongiform encephalopathy

Standard AUSVETPLAN abbreviations

ACDP Australian Centre for Disease Preparedness

AN assessed negative

ARP at-risk premises

AUSVETPLAN Australian Veterinary Emergency Plan

CA control area

CCEAD Consultative Committee on Emergency Animal Diseases

Cont'd

CSIRO	Commonwealth Scientific and Industrial Research Organisation
CVO	chief veterinary officer
DCP	dangerous contact premises
DCPF	dangerous contact processing facility
EAD	emergency animal disease
EADRA	Emergency Animal Disease Response Agreement
EADRP	Emergency Animal Disease Response Plan
EDTA	ethylenediaminetetraacetic acid (anticoagulant for whole blood)
ELISA	enzyme-linked immunosorbent assay
GP	general permit
IETS	International Embryo Transfer Society
IP	infected premises
LCC	local control centre
NMG	National Management Group
OA	outside area
OIE	World Organisation for Animal Health
PCR	polymerase chain reaction
POR	premises of relevance
RA	restricted area
RP	resolved premises
SCC	state coordination centre
SP	suspect premises
SpP	special permit
TP	trace premises
UP	unknown status premises
ZP	zero susceptible stock premises