

owner's property that has been declared a quarantine premises. Appropriate rabies postexposure treatments for the animal would be carried out. The animal would remain in quarantine until its status is determined – either the clinical signs are clearly not due to rabies and it has an adequate vaccinal titre, or it has rabies. However, the risks must be explained to the owners who are responsible for maintaining quarantine. This premises must be declared under appropriate legislation.

If infection in wildlife is considered likely or has occurred, farm animals – particularly working dogs – will be confined, so that contact with wildlife is minimised. Limitation of contact between other farm animals and wildlife may also be appropriate. Although farm animals, such as cattle and horses, are unlikely to transmit rabies to other animals, there is the possibility that humans handling these animals could be infected. Owners should be advised of the risk.

Animal gatherings will be minimised during the outbreak. However, as animals become protected through vaccination programs and immunity develops, gatherings, such as dog shows, may be approved under permit.

See Section 4 for further details on declared areas, and quarantine and movement controls.

Transmission area

Where wildlife populations may be infected and there is a need to implement specific control measures (eg enhanced surveillance and movement controls), the affected jurisdiction's CVO could declare a transmission area (TA) within the declared RA (see Section 4.1.2).

Control area

A control area (CA) may need to be declared. This would consist of a buffer between the RA and other areas free from any controls.

Movement controls may be less restrictive, and animals in the CA may be subject to a vaccination program.

3.3.3 Tracing and surveillance

The rabies virus biotype will be determined as soon as possible (to determine the likely maintenance host). This information will inform tracing and surveillance.

All animals likely to have been exposed to the infected animal during the previous 14 days will be traced (14 days is considered to be the maximum period of virus excretion before clinical signs). They will undergo risk assessment. Animal management will depend on outcomes of the risk assessment and may include destruction, vaccination or quarantine. Management may include an initial period of observation at home.

Susceptible animals within the RA will need to be surveyed. For domestic animals, this may involve visiting and mapping properties, and determining population densities in the RA. Surveillance will be directed towards the detection of clinical signs because there is no reliable method of excluding infection in live animals. Animal owners will need to be encouraged to report signs. Animals will probably

be vaccinated at property visits; this will encourage owner participation in surveillance programs.

A surveillance program will need to be developed for surveillance of wildlife and feral animals. Surveillance may involve spotlight, ground or aerial surveys. This will result in the capture or destruction of any animals exhibiting abnormal behaviour, and the collection of dead animals for laboratory examination. Because rabies is fatal within days of clinical onset, the number of detectably rabid animals in a wild population is always low.

Veterinary reports of animal exposures to suspect rabid animals will be investigated. Reports of human exposures will be reported to human health authorities. The exposed and suspect animals will be either examined and destroyed for laboratory testing, or placed under observation as considered necessary. Any animal showing a change of behaviour should be given a suspect status.

Surveillance will target the maintenance-host species involved in the outbreak. Any species involved in spillover infection from the host species will be preferentially targeted for surveillance over other species.

A public awareness campaign will also be critical to enlisting the support of the public to report sick and dead animals so that relevant specimens can be obtained. Widespread destruction of animals to obtain surveillance samples is not a recommended approach. Further information about public awareness can be found in Section 3.3.11.

Guidelines for wildlife surveillance are further discussed in the **AUSVETPLAN Wild Animal Response Strategy**.

In the case of an infected imported animal confined in or released from official quarantine, the biotype of the infection will need to be quickly determined, initially by consideration of the country of origin and route of travel. Other animals still in the quarantine facility will remain in quarantine. All animals that have been released during the previous 14 days will be traced and undergo risk assessment. Appropriate management of the animals will be instigated. Management of these animals will depend on the risk assessment and may include destruction, vaccination or an extended quarantine period.

See Appendix 2 for further details on surveillance.

3.3.4 Vaccination

In most situations, vaccination is the cornerstone of any rabies-response program. The vaccination protocol will generally be in accordance with the manufacturer's schedule. Any variation to the vaccination protocol will be at the discretion of the state CVO, in consultation with the CCEAD. The vaccine(s) used will have met appropriate regulatory requirements for use in Australia.

The priority for vaccination is the maintenance-host species (eg foxes). Irrespective of the maintenance-host species, any pets that may be linked to the incident will be considered for vaccination to reduce the exposure to humans. Livestock and horses may be vaccinated if the virus begins to cycle in the wild animal populations and if

adequate supplies of vaccine are available. There may be a special need to protect susceptible zoo animals and other groups of animals.

All vaccinated animals will be identified.

An attempt will be made to vaccinate all targeted animals. Vaccination may occur at central points or by house-to-house vaccination, or by a combination of both.

Oral vaccination

Once it has been established that a particular wildlife species is the maintenance host, an oral vaccination program will need to be developed and implemented for the identified species. This will be based on the most recent information on vaccine types, baiting technology, vaccination strategies, host ecology and other relevant information.

Consideration needs to be given to the cost-effectiveness of different options, the efficacy of vaccines and bait types for the host in question, the safety of the vaccine in humans and other nontarget species (eg endangered native animals), the thermostability of the vaccine and bait, and the socioecological conditions that may influence options for vaccination strategies.

Trap-vaccinate-release

Trap-vaccinate-release (TVR) programs may have to be initiated (see Section 1.5.3). TVR may become the only option where an oral vaccine or an efficient bait has not been developed for a species. TVR can be used with a buffer perimeter zone of oral vaccination.

3.3.5 Treatment of infected animals

The treatment of infected animals is ineffective.

3.3.6 Treatment of animal products and byproducts

Because of the fragility of the virus, treatment is not usually necessary.

3.3.7 Disposal of animal products and byproducts

Products or byproducts from infected animals will not be permitted into the food chain. All products from infected animals will be destroyed. The rabies virus is readily destroyed by heat and normal rendering.

Although there is no evidence for transmission of rabies via semen and embryos, these products collected within 14 days before the onset of clinical signs will need to be considered for destruction.

For occupational health and safety considerations, see Section 3.2.

3.3.8 Decontamination

Housing, examination and postmortem areas, as well as hands and clothing, must be decontaminated regularly and kept clean. During decontamination, a high level of hygiene and safety measures for personnel is required.

Contamination with aerosols and saliva is a possibility. All at-risk personnel must take precautions, such as the use of gloves, suitable respiratory protection (eg a P2 respirator) and eye protection.

For further details, see the AUSVETPLAN **Decontamination Manual**.¹³

3.3.9 Wild animal control

Prevention of contact between wild and domestic animals during an outbreak is important to prevent spread. If the disease is detected in wildlife, the population of interest needs to be defined and included in the RA at the earliest possible time. The main concern will be feral dogs and cats, dingoes, and foxes.

Wildlife experts must be consulted in planning, monitoring, surveillance and control programs. Measures should not be introduced that are likely to disperse wildlife.

The priority is to identify the maintenance host(s), initiate vaccination and, as appropriate, monitor other susceptible species.

The extent of wildlife control areas will be determined on the basis of:

- epidemiological features of the index case;
- biology of the maintenance host(s); and
- known or acquired information on the population densities of susceptible species in the risk areas.

The following methods will be considered to control rabies in wildlife:

- oral vaccination;
- TVR programs;
- limited and cautious use of population reduction after careful consideration of case-by-case circumstances (note that population reduction is considered to be ineffective and may be counterproductive); and
- combinations of the above.

Population reduction

If there has been a decision to reduce wildlife or feral animal populations in the RA, and the outbreak has been detected early, population reduction needs to be managed concurrently with control measures in domestic animals. When developing population-reduction strategies, consideration needs to be given to the potential risks of rabies spread that can be associated with this strategy.

For further information on wildlife-control and baiting techniques, and other procedures, see the AUSVETPLAN **Wild Animal Response Strategy**.¹³

¹³ www.animalhealthaustralia.com.au/aahc/index.cfm?3C1A77F1-00BD-FCC2-2EAF-1808A3DD71FC

3.3.10 Vector control

Control of vectors is not necessary.

3.3.11 Public awareness and media

Declaration of a case of rabies in Australia is likely to lead to public concern. A public awareness and media campaign will be developed early in the response. The Primary Industries National Communication Network will need to be activated, as it will have a major input. Communication messages will need to be clear about the outbreak response strategy. Information should be provided about the public health aspects of rabies, what constitutes a risk, where to obtain advice, reporting of suspect animals, appropriate clinical management of animal-bite cases, the progress of eradication and events of public interest.

Campaigns to educate the public about rabies should be conducted at schools, community centres, health centres, workplaces and other places of mass gatherings, and through the available media. Any campaign should ensure a consistent public message from all relevant authorities.

To assist the response, the public should be encouraged to report any bites from dogs or other animals, stray dogs or unusual behaviour in wild animals. They will also be encouraged to effectively confine their animals. Guidelines on measures to be adopted by the public should be readily available at veterinary and medical clinics. Poor communication messages could lead to ineffective and unnecessary culling of some animals.

The roles and responsibilities of veterinary and medical practitioners, local government, and wildlife and public health authorities should be clearly identified in all communications and made known to all concerned. Veterinary practitioners are required to report all suspect cases of rabies in animals. Local government and public health authorities will be involved in rabies control measures.

All human exposures in the RA must be reported to allow for risk assessment of the person, and tracing, seizure, detention or destruction of the animal involved.

Education campaigns and other information should emphasise the almost invariably fatal course of the disease and the danger of handling rabid animals.

3.4 Funding and compensation

Rabies is classified as a Category 1 disease under the EAD Response Agreement (EADRA).

Category 1 diseases are EADs that predominantly have a serious effect on human health or the environment (eg depletion of native fauna). They may have only minimal direct consequences for the livestock industries. For this category, the

response costs will be borne 100% by governments, with no contribution from livestock industries (refer to the EADRA for details).¹⁴

Information on the cost-sharing arrangements can be found in the **Summary Document**¹⁵ and in the **Valuation and Compensation Manual**.¹⁶

¹⁴ Information about the EADRA can be found at

www.animalhealthaustralia.com.au/programs/eadp/eadra.cfm

¹⁵ www.animalhealthaustralia.com.au/programs/eadp/ausvetplan/ausvetplan_home.cfm

¹⁶ www.animalhealthaustralia.com.au/aahc/index.cfm?3C1A77F1-00BD-FCC2-2EAF-1808A3DD71FC

4 Recommended quarantine and movement controls

4.1 Guidelines for classifying declared areas and premises

4.1.1 Declared premises

Infected premises

An infected premises (IP) is a defined area (which may be all or part of a property) in which rabies exists or is believed to exist, or in which the rabies virus exists or is believed to exist.

Dangerous contact premises

A dangerous contact premises (DCP) is a premises that contains a susceptible animal(s) not showing clinical signs that, following a risk assessment, is considered highly likely to contain an infected animal(s) and present an unacceptable risk to the response if not addressed.

Suspect premises

Suspect premises (SP) is a temporary classification of a premises that contains a susceptible animal(s) not known to have been exposed to an infected animal(s), but showing clinical signs that require an investigation(s).

Trace premises

Trace premises (TP) is a temporary classification of a premises that contains a susceptible animal(s) that tracing indicates may have been exposed to an infected animal(s) and that requires an investigation(s).

4.1.2 Declared areas

Restricted area

Following a risk assessment that takes into account the history of animal movements, a restricted area (RA) will be declared. The RA may be as small as an individual IP or sufficiently large to include home ranges of wildlife or feral animals. The RA will be subject to intense surveillance and movement controls. Movement of susceptible animals out of the area will, in general, be prohibited, while movement into the area would only be by permit (see Section 4.2). Multiple RAs may exist within one control area (CA).

The size of the RA will depend on the ecology of the maintenance host(s). The boundary will take into account the distribution and density of susceptible animals.

Transmission area

The transmission area (TA) is a declared area option that could be implemented by the affected jurisdiction's chief veterinary officer (CVO). It is an area within the declared RA where there may be a need to implement specific control measures. A TA would be located around IPs and be subject to enhanced surveillance and movement controls. The TA would not need to be circular but could have an irregular perimeter, provided that the boundary is initially an appropriate distance from the nearest IP, DCP, SP or TP.

Control area

The CA is a buffer zone between the RA and the noninfected area.

The CA will be a larger declared area around the RA(s). The CA is subject to lesser surveillance than the RA. Movement controls may be less restrictive, and animals in the CA may be subject to a vaccination program. Initially, it may be the entire state or territory, to limit the risk of disease spreading from the RA(s). The boundary of the CA will be adjusted as confidence about the extent of the outbreak increases.

4.2 Movement controls for rabies

4.2.1 Declared premises

Movement of live, susceptible animals (eg dogs, cats, ferrets) from declared premises is prohibited until quarantine is lifted. (Note: the species directly affected will depend on the specific virus biotype of the outbreak.) Other movements will be subject to permit.

Products or byproducts from rabid animals will not be permitted into the food chain, but will be destroyed. Semen and embryos collected within 14 days before the onset of clinical signs may be destroyed.

Movement of people, vehicles and equipment is unrestricted.

4.2.2 Permit conditions

A specific permit (SpP) is jointly completed by the premises owner or farmer, and the relevant government veterinarian or inspector. A printed version must accompany the movement of the relevant animal(s). It may impose preconditions or restrictions on movements.

An SpP will contain the following:

- ownership or agent details;
- place of origin, place of destination and contact details for both;
- the planned route of travel;
- number, species, and identification or description of animals being moved;
- rabies vaccination status (if vaccinated, details provided, including dates of vaccination); and
- owner or agent declaration that

- the animal(s) is healthy, with normal appearance and behaviour
- the premises from which the animal is moved is not under quarantine during the movement, which must be direct to the destination
- the animal(s) will be under the direct control of the person making the declaration and to whom the permit is issued, and isolated from contact with other animals.

A general permit (GP) is completed via a web page by the premises owner or farmer, or their agent. A printed version must accompany the movement of the relevant animal(s). It may impose preconditions or restrictions on movements.

A GP will contain the following:

- ownership or agent details;
- place of origin, place of destination and contact details for both;
- the planned route of travel;
- number, species, and identification or description of animals being moved;
- rabies vaccination status (if vaccinated, details provided, including dates of vaccination); and
- owner or agent declaration that
 - the animal(s) is healthy, with normal appearance and behaviour
 - the premises is not under quarantine
 - during the movement, the animal(s) will be under the direct control of the person making the declaration and to whom the permit is issued, and isolated from contact with other animals.

Note: Where a susceptible animal has moved from the CA to the RA, it will not be permitted to return to the CA or to the outside area while restrictions are in place.

For animals transiting declared premises, permit conditions will include the stipulation that the shipment is not permitted to stop, load or unload anything within the declared premises until the final destination. If travel is from one RA to another RA, the animal(s) must not have been moved within the previous 14 days. Conditions on movement are described in Tables 4.1, 4.2 and 4.3.

Table 4.1 Movement controls for live susceptible animals^a

From \ To	Restricted area	Control area	Outside area
Restricted area	SpP1	Prohibited	Prohibited
Control area	SpP2	GP1	Prohibited
Outside area	Prohibited	GP2	Unrestricted

^a Refer to Table 4.3 for conditions on movement for each permit type

Table 4.2 Movement controls for vaccinated animals^a

From \ To	Restricted area	Control area	Outside area
Restricted area	SpP2	SpP2	Prohibited
Control area	SpP2	Unrestricted	Unrestricted
Outside area	Prohibited	GP3	Unrestricted

^a Refer to Table 4.3 for conditions on movement for each permit type

Note: The vaccinated animal(s) must demonstrate an adequate serological response as an indication that the animal has responded to vaccination.

Table 4.3 Specific and general permit conditions

Permit	Conditions
Specific permit 1 (SpP1)	Travel to be direct to destination and not through a control area or an outside area. Must not stop, load or unload anything during transit.
Specific permit 2 (SpP2)	Travel to be direct to destination and not through an outside area.
General permit 1 (GP1)	Must not stop, load or unload anything during transit. No travel through a restricted area is permitted.
General permit 2 (GP2)	No travel through a restricted area is permitted.
General permit 3 (GP3)	Travel to be direct to destination.

Appendix 1 Key features of rabies

Disease and cause

Rabies is a viral encephalitis (brain inflammation) of mammals (including humans), which is almost invariably fatal. It is usually transmitted by bites and has a variable incubation period of days to years. Globally, the disease is of great public health and animal health significance.

Rabies is caused by infection with any of the viruses of the genus *Lyssavirus*, family *Rhabdoviridae*. The genus *Lyssavirus* is classified phylogenetically into seven genotypes, one of which is called rabies virus (genotype 1). Although endemic lyssaviruses are present in bats in Australia and can cause a fatal encephalitis, which is indistinguishable from rabies in humans, Australia is free from rabies virus.

Distribution

Rabies virus occurs throughout most of the rest of the world except New Zealand, Papua New Guinea, Japan, Great Britain and Ireland, and most of the smaller islands of the world. Recently, there has been an outbreak of rabies in the Indonesian islands of Bali and Flores, which previously had been considered free from the disease.

Species affected

Although most, if not all, warm-blooded animals are susceptible to infection with rabies virus, the susceptibility of Australian native animals to rabies virus is unknown. Note that birds, although warm blooded, are not considered an important species in the rabies cycle.

Rabies disease is maintained in various hosts – such as dogs, foxes and other canines, skunks and bats – that are present in most of the world. Rabies virus biotypes are adapted to specific maintenance hosts such as foxes (fox biotype) and dogs (dog biotype). The maintenance host is highly susceptible to its own biotype but not to other biotypes. Therefore, the probability of establishing infection in a different maintenance host is lower and spread is less effective. For example, a fox biotype will spread more easily among foxes than to other animals.

Domestic dogs are a major maintenance host in much of the world, as they were in Europe and North America before the early decades of the 20th century. Dogs still cause the majority of human rabies in the world.

Spread

Rabies virus is transmitted by contamination of a fresh wound with infected saliva. This is usually from the bite of a rabid animal, but can also result from scratches, or licking of abraded skin or mucous membranes. The virus cannot penetrate intact skin.

The incubation period in animals and humans is highly variable. This is generally of the order of 3–8 weeks, but can vary from 2 days to 6 months or even longer.

Key signs

The clinical syndrome can also be highly variable. The clinical signs of rabies can, in many instances, be subtle and even unremarkable. Clinical signs may change as the disease progresses and may be intermittent. Clinical signs can include excitation; paralysis; loss of normal social and behavioural responses (eg domestic animals will often undergo a personality change and wild animals will often lose their natural fear of humans); unusual vocalisation, chewing and eating abnormal objects (eg dirt and stones); and coma leading to death. Unprovoked aggression leading to biting is a significant factor in transmission to people and other animals.

Specific laboratory diagnostic tests are necessary to confirm rabies infection, as neither clinical signs, nor gross or histological pathology are pathognomonic.

Safe and efficacious vaccines are available for human and animal use, both for pre-exposure and postexposure prophylaxis. Oral vaccination is an important tool to control the spread of rabies in wildlife populations.

Control strategy

Australia's policy is to eradicate rabies in animals and to prevent spread of infection to humans. Destruction of infected animals is necessary because infected animals are the source of spread. Rabies vaccination is an essential part of an eradication program and will be implemented early.

The eradication of an outbreak of rabies will require the collaborative efforts of animal and human health services. Wildlife and other relevant authorities will also be involved in the response.

Summary of policy

Rabies is a notifiable disease in all states and territories of Australia, and is listed by the World Organisation for Animal Health (OIE). The detection of rabies in terrestrial (including bat) hosts in Australia would have significant public health and social impacts, particularly if the disease became widespread, or established in stray or wild animal populations. There may also be ecological and conservation concerns.

Rabies is a Category 1 disease under the government–industry Emergency Animal Disease Response Agreement (EADRA) for cost-sharing arrangements. Category 1 diseases are those for which response costs will be borne 100% by governments.

The default policy is to quickly eradicate rabies to prevent spread to domestic and wild animals, and humans through a combination of strategies including:

- *quarantine and movement controls* on susceptible animals in declared areas to minimise the spread of infection;
- *destruction of infected animals* to remove the most dangerous source of viruses;
- *quarantine, vaccination or destruction* of exposed animals;
- *movement control, vaccination or quarantine* of suspect animals until their rabies status has been clarified;
- *vaccination* of domesticated carnivores (eg dogs, cats, ferrets), other selected species and targeted animal groups in declared areas to protect animals against infection and reduce exposure of humans;
- *monitoring* of wild animals and, if disease establishes in those populations, consideration of implementing a vaccination program;
- *tracing and surveillance* to determine the source and extent of infection, and to provide proof of freedom from the disease;
- *linkage and coordination* of public health and environmental authorities so that they are co-responders; and
- *a public awareness campaign* to facilitate public cooperation from animal owners and the community, including other government and nongovernment authorities.

Successful implementation of the policy will depend on community cooperation and compliance with all control and eradication measures. Advice about immunisation of humans would be provided by public health authorities.

Population reduction of susceptible species is not appropriate.

Appendix 2 Procedures for surveillance and proof of freedom

Surveillance

Surveillance will be necessary:

- when there is suspicion that rabies has entered Australia;
- during an outbreak to determine the extent of the affected area; and
- when the outbreak has been contained, to ensure freedom from further disease and associated quarantine restrictions.

Sampling to detect the limits of rabies is a very difficult matter. Because rabies is fatal within days of clinical onset, the number of detectably rabid animals in a wild population is always low. The best animals to acquire are those that have recently died or become sick. Road-killed and trapped animals are usually not a good source.

To help monitor the disease, members of the public should be encouraged and assisted to report the following:

- unusual behaviour in wildlife or feral animals;
- any animal bite incidents with details of the offending animal; and
- any deaths of dogs, cats and wildlife.

Wildlife experts must be engaged in the planning, monitoring and surveillance programs. The initial concern is to identify the respective hosts related to the specific biotype. This information will inform movement controls, vaccination strategies and surveillance.

Proof of freedom

Proof of freedom from rabies is not as important for trade as it is for many other emergency animal diseases. However, it does have very important social implications. In the case of urban rabies, declaration of freedom one year after the last case was identified would be reasonable.

With wildlife rabies, a longer period would be required because of the limited sampling ability, which essentially consists of examining dead animals or those with clinical signs. In this case, the time for declaration of freedom would depend on the vaccination regime used during the outbreak. Sufficient time must be allowed for vaccinal antibodies to wane and the designed surveillance to detect residual infection.

Glossary

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, hooves, bones, fertiliser).
Animal Health Committee	A committee comprising the CVOs of Australia and New Zealand, Australian state and territory CVOs, Animal Health Australia, and a CSIRO representative. The committee provides advice to PIMC on animal health matters, focusing on technical issues and regulatory policy (formerly called the Veterinary Committee). <i>See also</i> Chief veterinary officer (CVO), Primary Industries Ministerial Council (PIMC)
Animal products	Meat, meat products and other products of animal origin (eg eggs, milk) for human consumption or for use in animal feedstuff.
Australian Chief Veterinary Officer	The nominated senior veterinarian in the Australian Government Department of Agriculture, Fisheries and Forestry who manages international animal health commitments and the Australian Government's response to an animal disease outbreak. <i>See also</i> Chief veterinary officer (CVO)
AUSVETPLAN	<i>Australian Veterinary Emergency Plan.</i> A series of technical response plans that describe the proposed Australian approach to an emergency animal disease incident. The documents provide guidance based on sound analysis, linking policy, strategies, implementation, coordination and emergency-management plans.
Biotype	A designation of viral type, according to the principal maintenance-host species. There may be multiple variants within a biotype that affect a single species – for example, a skunk rabies biotype, which has three variants, and is found in skunks.
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
Compensation	The sum of money paid by government to an owner for stock that are destroyed and property that is compulsorily destroyed because of an emergency animal disease. <i>See also</i> Cost-sharing arrangements, Emergency Animal Disease Response Agreement.
Confirmed case	A laboratory-confirmed rabies-positive animal.

Consultative Committee on Emergency Animal Diseases (CCEAD)	A committee of state and territory CVOs, representatives of CSIRO Livestock Industries and the relevant industries, and chaired by the Australian CVO. CCEAD convenes and consults when there is an animal disease emergency due to the introduction of an emergency animal disease of livestock or other serious epizootic of Australian origin.
Control area	A declared area in which the conditions applying 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 outbreak according to need). <i>See</i> Section 4.1 for further details
Cost-sharing arrangements	Arrangements agreed between governments (national and states and territories) and livestock industries for sharing the costs of emergency animal disease responses. <i>See also</i> Compensation, Emergency Animal Disease Response Agreement.
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	A premises that contains a susceptible animal(s) not showing clinical signs but, following a risk assessment, is considered highly likely to contain an infected animal(s) and presents an unacceptable risk to the response if not addressed. <i>See</i> Section 4.1 for further details
Dead-end host	An infected animal that does not transmit the pathogen to susceptible hosts.
Declared area	A defined tract of land that is subjected to disease control restrictions under emergency animal disease legislation. Types of declared areas include <i>restricted area, control area, infected premises, dangerous contact premises and suspect premises</i> . <i>See</i> Section 4.1 for further details
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	A 24-hour toll-free 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.
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 funding mechanisms, 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	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
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
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 (GP)	A movement permit completed via a web page by the premises owner or farmer, or their agent. A printed version must accompany the movement of the relevant animal(s). It may impose preconditions or restrictions on movements.
Genotype	Designation of viral species according to gene sequence, as agreed by the International Committee on Taxonomy of Viruses (ICTV).
Incubation period	The period that elapses between the introduction of the pathogen into the animal and the first clinical signs of the disease.
Index case	The first or original case of the disease to be diagnosed in a disease outbreak on the index property. <i>See also</i> Index property
Index property	The property on which the first or original case (index case) in a disease outbreak is found to have occurred. <i>See also</i> Index case
Infected animal	A live animal that develops clinical signs consistent with the disease and is known to have an epidemiological link (eg in a known infected area or area of epidemiological interest).
Infected premises	A defined area (which may be all or part of a property) in which rabies exists or is believed to exist, or in which the rabies virus exists or is believed to exist. <i>See</i> Section 4.1 for further details
Local disease control centre (LDCC)	An emergency operations centre responsible for the command and control of field operations in a defined area.
Maintenance host	The species that principally sustains the virus cycle; it is highly susceptible to its biotype but less susceptible to other biotypes. Successful control of rabies in the maintenance host will lead to eradication of the virus cycle in the ecological community.
Monitoring	Routine collection of data for assessing the health status of a population. <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 management group (NMG)	A group established to direct and coordinate an animal disease emergency. NMGs may include the chief executive officers of the Australian Government, and state or territory governments where the emergency occurs, industry representatives, the Australian CVO (and chief medical officer, if applicable) and the chairman of Animal Health Australia.

Native wildlife	See Wild animals
Negri bodies	Intracytoplasmic inclusion bodies (intracellular structures that are formed by cells in response to viral infection) that are unique to lyssaviruses. They are found mainly in neurons and occur in 50–70% of rabies-infected brains.
OIE Terrestrial Code	OIE <i>Terrestrial Animal Health Code</i> . Reviewed annually at the OIE meeting in May and published on the internet at: www.oie.int/eng/normes/mcode/a_summry.htm
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/eng/normes/mmanual/a_summry.htm
Operational procedures	Detailed instructions for carrying out specific disease control activities, such as disposal, destruction, decontamination and valuation.
Owner	Person responsible for a premises (includes an agent of the owner, such as a manager or other controlling officer).
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.
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.
Primary Industries Ministerial Council (PIMC)	The council of Australian national, state and territory, and New Zealand ministers of agriculture that sets Australian and New Zealand agricultural policy (formerly the Agriculture and Resource Management Council of Australia and New Zealand). See also Animal Health Committee
Prodrome	An early sign of developing a disease. The prodrome usually starts before any of the usual symptoms of the disease start. An early or premonitory manifestation of impending disease before the specific symptoms begin.
Quarantine	Legal restrictions imposed on a place or a tract of land by the serving of a notice limiting access or egress of specified animals, persons or things.
Restricted area	A relatively small declared area (compared with a control area) around an infected premises that is subject to intense surveillance and movement controls. See Section 4.1 for further details

Risk enterprise	A defined livestock or related enterprise, which 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 affected individuals in the tested population that are correctly identified as positive by a diagnostic test (true positive rate). <i>See also</i> Specificity
Serotype	Designation of viral species according to serological reaction against reference lyssavirus antisera. Serotyping as a system of classification for lyssaviruses has been superseded by genotyping.
Specificity	The proportion of nonaffected individuals in the tested population that are correctly identified as negative by a diagnostic test (true negative rate). <i>See also</i> Sensitivity
Specific permit (SpP)	A movement permit jointly completed by the premises owner or farmer, and the relevant government veterinarian or inspector. A printed version must accompany the movement of the relevant animal(s). It may impose preconditions or restrictions on movements.
Spillover host	Infected hosts that belong to a species that do not normally maintain the virus biotype in question (eg a host that is not a maintenance host). Note that spillover host is not synonymous with dead-end host, as spillover hosts may transmit infection to other hosts (although such events are relatively uncommon). <i>See also</i> Dead-end host
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 or territory disease control headquarters	The emergency operations centre that directs the disease control operations to be undertaken in that state or territory.
Strain	Designation for a virus type derived from a single isolate. This definition is usually only applied to laboratory propagated viruses (eg Pasteur strain).