

Bats and health risks

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Animal Biosecurity, NSW DPI

Bats can pose a health risk to humans and animals. Any human and bat interaction should be reported immediately by the person involved to the NSW Public Health Unit (1300 066 055). If your pet has been bitten, scratched or exposed to bat body fluids, you should seek assistance from your private veterinarian.

If you notice multiple deaths or unusual symptoms in bats you should call the Animal Biosecurity Emergency Hotline on 1800 675 888.

Bats are thought to be the natural hosts and/or involved in the transmission of a range of infectious diseases around the world, including Nipah virus, Ebola virus, rabies and severe acute respiratory syndrome (SARS).

While Australian bats do not carry these diseases, several other viruses thought to be unique to Australia do occur in the Australian bat population.

As humans move into bat environments and bats adapt to sharing man-made environments, the opportunities for transmission of these infections increase.

Australian bats and flying foxes

Australia is home to four species of large fruit eating bats, also known as flying foxes, and many species of small insect eating bats sometimes known as microbats. All Australian bats are protected and play a vital role in our natural ecosystems.

Viruses found in Australian bats

Australian bats are the natural reservoirs for a range of viruses that may infect and sometimes even kill humans or other animals. They include: Hendra virus, Australian Bat Lyssavirus (ABLV), Menangle virus, Cedar virus and Nelson Bay virus.

Hendra virus

For more information on Hendra virus see the [NSW DPI website - Hendra virus](#)

Australian Bat Lyssavirus (ABLV)

For more information on ABLV see the NSW DPI [NSW DPI website - Australian bat lyssavirus and other bat health risks](#)

Menangle virus

Menangle virus was first detected after the investigation of an outbreak of reproductive disease in a piggery near Menangle, NSW in 1997. Extensive testing indicated that the infection had originated in a nearby colony of flying foxes.

Clinical signs in the infected pigs included decreased and delayed pregnancy rates and a marked increase in the number of mummified and stillborn piglets, some of which had severe deformities.

It is thought the virus was probably spread in faeces and urine, rather than by respiratory aerosols.

Two piggery workers who developed severe influenza-like illness after working with the sick pigs were found to have antibodies indicating they had also been infected with Menangle virus. Both recovered.

A control program implemented by the NSW Department of Primary Industries subsequently eradicated the virus from the piggery. A large serological survey failed to find any evidence of infection in other Australian pigs. No further outbreaks of Menangle virus have been reported.

Should you report a sick or dead bat?

Report multiple or unusual bat deaths. Call the Animal Biosecurity Emergency Hotline on 1800 675 888.

Report a sick or injured bat by calling wildlife care agency (e.g. Wildlife Information and Rescue Emergency Service (WIRES) on 1300 094 737).

How to handle a sick or injured bat

Do not attempt to touch or handle a live bat unless you have been vaccinated against rabies, trained to handle bats and are using appropriate protective equipment (long sleeves/trousers, puncture-resistant gloves/gauntlets and face protection). Contact your local wildlife care group for assistance (e.g. WIRES on 1300 094 737).

Wildlife carers and workers that handle bats should be vaccinated and trained to safely handle bats. Vaccinated handlers should be monitored by your doctor to ensure you have a protective vaccine titre.

How to handle a dead bat

You should always avoid directly handling any dead bat. You should use a shovel or wear thick gloves to pick up the dead bat and put it into a strong plastic bag or container. Alternatively you can pick the bat up and bag it using the plastic bag itself as the shield for your hand.

If the dead bat needs to be submitted for laboratory testing it should be stored in the sealed plastic bag or container at 4°C (fridge temperature) until it can be despatched to the laboratory.

Dead bats are generally only submitted for testing if:

- a person or animal has been scratched, bitten or exposed to bat body fluids, or
- there is evidence of multiple bat deaths and the cause is not known.

Dead bats that do not need to be tested should be disposed of by incineration or deep burial.

If you see a dead bat in a public area (gutter, road or local park), you can contact your local council and ask they dispose of it.

What is the risk to humans from infected bats?

ABLV

You could be exposed to ABLV from an infected bat through:

- bites or scratches from live bats
- skin pricks or wounds when handling dead bats
- contact with bat saliva or bat neural tissue (e.g. brain or spinal cord tissues).

Hendra virus

Hendra virus infection in people has only been recognised following exposure to an infected horse.

Hendra virus may be present in blood, urine, faeces and birth fluids of infected bats.

You could be exposed to Hendra virus from an infected bat through:

- bites or scratches from live bats
- contact with body fluids or
- eating or drinking food or water that is contaminated with bat body fluids.

Note: for information on risks to products destined for human consumption, contact the NSW Food Authority on 1300 552 406.

Managing bites, scratches and exposure to bat body fluids

If you have been bitten or scratched, or if an existing wound is splashed with any bat body fluids, immediately wash the affected area with soap and running water (for approximately 5 minutes). Then apply an iodine or alcohol based antiseptic. Important: do not scrub the area as this can increase the risk of infection.

Medical assistance

When the wound has been washed and disinfected seek immediate medical assistance from your local NSW [Public Health Unit](#) or General Practitioner. Vaccination and immunoglobulin treatment provide additional protection against ABLV.

For further information on first aid and treatment of people scratched or bitten by sick or injured bats contact NSW Health (phone: 1300 066 055).

Testing the bat

The bat to which you were exposed should be submitted for laboratory testing provided this can be done without further risk to humans. The public health unit or a veterinarian can contact Elizabeth Macarthur Agricultural Institute on 1800 675 623 during business hours to arrange submission.

Make sure you record all the details about the incident

If a person or animal is scratched or bitten by a sick or injured bat, the following information should be recorded:

- the name, address and phone number of the person submitting the bat for testing
- the name, address and phone number of any person bitten, scratched or exposed to bat fluids
- the name, address and phone number of any doctor that was consulted following the incident
- the type of bat (if known) and how it behaved (unwell, paralysed, docile, aggressive)
- the approximate time, date and type of exposure (bite, scratch, other)
- the sites of all wounds and how they were managed
- whether any exposed person had already been vaccinated against rabies.

What is the risk to horses?

There have been two reported cases of ABLV infection in horses and multiple confirmed cases of Hendra virus. **Horses with Hendra virus or ABLV infection are a real risk to humans.**

The early stages of Hendra virus infection are often hard to distinguish from other illnesses. Infected horses may even shed the virus before any signs of illness are apparent.

Always try to isolate a sick horse that may have Hendra. **Avoid handling it until it has been examined by a vet and test results are available.**

Anyone who handles a sick horse that is located in, or has recently come from, an area frequented by flying foxes, should routinely use protective equipment such as boots, overalls, gloves and a suitable face mask.

Horse owners and handlers whose horses may be exposed to Hendra virus should buy suitable protective equipment and have it ready to use if needed.

For more information on protecting yourself and your horse see [Hendra virus infection](#) on the NSW DPI website.

What is the risk to cats and dogs?

There have been two reported cases of Hendra virus in dogs after contact with infected horses and they were subsequently euthanased.

To date there are no known cases of cats or dogs being infected with ABLV despite many reported risky contacts. It is not known at this stage whether cats and dogs can be infected following contact with a bat infected with ABLV. Preliminary research indicates the likelihood is low.

However, it is theoretically possible that a pet which contacted an infected bat could become infected with ABLV and could then transmit that infection to a human.

Management of animals scratched, bitten or otherwise exposed to bats

You should take precautions if there is any likelihood that your pet has been bitten, scratched or exposed to bat body fluids from a bat.

- Seek veterinary assistance for your pet by contacting your private veterinary practitioner.
- Australian bat lyssavirus and other lyssaviruses are notifiable diseases in animals, however there is no requirement to notify a NSW DPI authorised officer of an interaction of a bat with another animal, such as a cat or a dog.
- Immediate verbal notification of suspected infection to an authorised officer is only required where you suspect, or are aware, that:
 - an animal (other than a bat) has clinical ABLV,
 - an animal has an exotic lyssavirus, such as rabies

In these circumstances call the Emergency Animal Disease Watch Hotline on 1800 675 888.

If the bat is either not available for testing, or tested positive for ABLV, there is a remote possibility that your pet could be infected with the virus. It is recommended that the pet is vaccinated with an inactivated rabies vaccine at day 0 and 7 after exposure. This may give some protection against ABLV. The pet should be regularly monitored by your veterinary practitioner and watch for any abnormal behaviour or other neurological signs. If you are concerned about any abnormality, try to isolate the animal and immediately contact your veterinary practitioner, advising them of the history of exposure to the bat.

Managing risks from indirect contact with bats

The potential risks from indirect contact with bats can be reduced by taking some simple precautions such as:

- avoid disturbing bat colonies unnecessarily
- fence off part of a paddock with trees where bats commonly roost
- avoid placing feed or water under bat roosts
- cover feed and water sites
- clean feed and water troughs and bowls regularly
- discard or thoroughly wash potentially contaminated food such as fruit
- 'bat proof' animal sheds and feed storage areas.
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More information

- NSW DPI [Prime Fact - Australian Bat Lyssavirus](#)
- NSW DPI [Primefact - Hendra virus](#)
- NSW DPI [Primefact – Australian Bat Lyssavirus: guidelines for veterinarians](#)
- [Wildlife Health Australia fact sheet on ABLV](#)
- [NSW Health Infectious Disease Factsheet - Rabies and Bat Lyssavirus Infection](#)
- [Australian Government Immunisation Handbook](#)

For general inquiries regarding biosecurity, phone 1800 680 244 or email animal.biosecurity@dpi.nsw.gov.au

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