



Rabies and Lyssavirus

What is Rabies?

Rabies virus and Australian bat lyssavirus (ABLV) belong to a group of viruses called lyssaviruses.

These viruses can have serious complications including death. The viruses affect the central nervous system and are usually fatal. The World Health Organization estimates that more than 55 000 people die each year worldwide from infection with the rabies virus.

What are the symptoms?

The early symptoms of rabies are

- flu-like symptoms, including
- headache,
- fever and fatigue.

The illness progresses rapidly to paralysis, delirium, convulsion. Death can occur within a week or two of the onset of illness.

There is a wide variability in the time it takes for symptoms to appear following exposure to an infected animal e.g. dog, cat (from several days to several years).

How is it spread?

- The Rabies virus is spread from infected animals to people through bites or scratches, or by being exposed to infected animals' saliva through the eyes, nose or mouth.
- Only mammals can be infected. Overseas, dogs are the main transmitter of rabies. Other animals that transmit rabies

overseas include bats, monkeys, foxes, cats, raccoons, skunks, jackals and mongooses.

- In Australia, evidence of ABLV infection has been found in various species of flying foxes/fruit bats and insect-eating micro bats. It is assumed that any bat in Australia could potentially carry ABLV. The behaviour or appearance of a bat is not an accurate guide as to whether it is carrying the virus.
- Contact or exposure to bat (or other animal) faeces, urine or blood does not pose a risk of exposure to lyssaviruses, nor does living, playing or walking near bat roosting areas. Apart from two horses, no wild or domestic animals in Australia have ever been found to be infected with ABLV.

Who is at risk?

People who handle bats in Australia or overseas, and people who come into contact with wild or domestic land dwelling mammals (e.g. dogs) in a country where there is a rabies risk, are at increased risk of contracting rabies.

How is it prevented?

The best protection against being exposed to rabies or other lyssaviruses (including ABLV) is to avoid:

- handling any bat in Australia or overseas, or
- any wild or domestic land dwelling mammal (e.g. dogs, cats) in a country where there is a rabies risk.

Only people who have been vaccinated against rabies and who have been trained in the care of bats should ever handle bats or flying foxes.



Anyone who comes across an injured bat should contact the relevant state government authority or a local wildlife care group or rescuer for assistance.

Do not touch the bat and avoid direct contact with any bat saliva.

A Rabies vaccine is available and used to protect against the rabies virus and other lyssaviruses (including ABLV).

A course of three injections, given over 1 month, is recommended for people whose job or other activities place them at increased risk of being bitten or scratched by bats in Australia or overseas, or land dwelling mammals in countries where there is a rabies virus risk.

Periodic vaccine booster doses may also be required.

What to do if you are bitten or scratched

If you are bitten or scratched by a bat anywhere in the world or by a land dwelling mammal overseas, you should:

- Immediately wash the wound thoroughly with soap and water for at least 5 minutes – proper cleansing of the wound reduces the risk of infection.
- Apply an antiseptic with antiviral action such as povidone-iodine, iodine tincture, aqueous iodine solution or alcohol (ethanol) after washing.
- Seek medical attention as soon as possible to care for the wound and to assess whether you are at risk of infection.

How is it diagnosed?

Diagnosis requires confirmation by laboratory tests for the presence of lyssaviruses in skin,

blood, spinal fluid and nervous tissue.

How is it treated?

There is no available treatment for rabies once symptoms have started. If you are at risk of infection and have not been vaccinated previously, you will require an injection of rabies immunoglobulin as soon as possible.

Rabies immunoglobulin is often difficult to obtain in overseas countries but vaccine is usually available.

Vaccination includes a series of either 4 or 5 rabies vaccine injections over 1 month.

Even if you have been vaccinated before, you will require 2 further doses of vaccine.

Where to get help

- See your doctor.
- Visit a GP after hours.
- Ring Healthdirect Australia on 1800 022 222.

Remember

- If you have been exposed, that is, you have been bitten or scratched, see a doctor.
- Early symptoms of rabies include headache, fever and fatigue.
- A Rabies vaccine is available and used to protect against the rabies virus and other lyssaviruses (including ABLV).
- There is no available treatment for rabies once symptoms have started.

See also

- [Risks to your health when overseas.](#)
- [What diseases do vaccines protect against?](#)



Acknowledgements

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