Rabies and Australian Bat Lyssavirus (ABLV) Infection

What is Rabies and Australian Bat Lyssavirus?

Rabies and Australian Bat Lyssavirus (ABLV) are part of the same virus family and are closely related. Both can cause fatal disease in humans.

Rabies is primarily found in animals that bite and scratch and occurs in much of Asia, the Americas, Europe and Africa. Australia is currently rabies free.

ABLV is found in bats and was first identified in Australia in 1996. Only three cases of human ABLV infection have ever been reported in Australia, all of which resulted in death.

What are the symptoms?

Rabies and ABLV cause very similar symptoms. These include loss of appetite, nausea, vomiting, cough, sore throat, headache, fever, tiredness, tingling at the site of the bite or scratch, agitation, a dislike of fresh air and water, weakness, delirium, convulsions and coma. Death follows, almost invariably, within several days following the onset of symptoms.

Symptoms usually develop between three and eight weeks following exposure but can range from as short as one week to, on rare occasions, several years.

How do people become infected?

Human exposure to rabies or ABLV occurs when a person is exposed to saliva or nerve tissue of an infected animal. This usually occurs via a scratch or bite that has broken the skin, or less commonly via direct contact with a person’s mucosal surface such as the eyes, nose or mouth. Outside of Australia, animals that may carry rabies include: dogs, foxes, jackals, cats, bats, raccoons, skunks, monkeys and other animals that can bite and scratch. Infected dogs remain the highest risk for human transmission.

In Australia, the larger fruit bats (flying foxes) and the smaller insectivorous (micro) bats have been found to carry ABLV. While many infected animals will look sick, or behave abnormally, some may appear well.

How is it prevented?

It is recommended that people avoid all contact with animals overseas and all bats in Australia.
Vaccination

Rabies vaccine helps prevent both rabies and ABLV infection. Vaccination is recommended for anyone who handles bats in Australia (e.g. wildlife officers, vets, and laboratory personnel) or people who will be travelling in areas where rabies is found.

Rabies vaccination consists of three doses; given over one month and does not offer protection until after the third dose is given. It is available for purchase on private prescription from your doctor.

What if I have been exposed?

If you have had a potential exposure to rabies or ABLV, it is important to administer first aid and seek medical advice immediately, even if you have been vaccinated in the past.

If you are bitten or scratched by a bat in Australia, or by an animal overseas:

- Thoroughly wash the wound immediately with soap and water for at least five minutes. Proper cleansing of the wound is the single most effective way to reduce transmission of the virus.
- Apply an antiseptic solution (e.g. povidone-iodine) after washing if possible.
- Exposed mucous membranes such as eyes, nose or mouth should be flushed well with water.
- Seek medical attention as soon as possible to care for the wound, and to assess whether you might be at risk of infection.

Post exposure management will depend on the extent of the exposure, the animal source, the person’s immune system and their vaccination history. A post-exposure course of rabies vaccine and a one off dose of rabies immunoglobulin (RIG) may be recommended to prevent infection.

Medical advice and/or treatment is not always easily accessible in some remote areas overseas (particularly RIG). It is important that post-exposure management commence as soon as possible after exposure.

In the ACT, post-exposure vaccines and RIG are provided free by ACT Health via your GP because of the seriousness of the disease.

How is it treated?

There is no treatment for rabies or ABLV once the symptoms have developed.

Need more information?

For more information about rabies and ABLV, contact your doctor or call the Health Protection Service, Immunisation Information Line during business hours on 02 5124 9800 or after hours by paging the Communicable Disease Control on-call officer on 02 9962 4155.
Acknowledgements


**Communicable Disease Control Section at Health Protection Service**

*is responsible for the investigation and surveillance of notifiable or infectious conditions in the ACT in order to control or prevent their spread in the community. This includes the promotion of immunisation, education and other strategies that help to limit the spread of diseases.*

*Rabies and Australian Bat Lyssavirus are notifiable diseases.*