

Bats and human health

What is the risk to humans from bat diseases?

Bats and flying foxes may carry bacteria and viruses which can be harmful to humans but the risk of infection is low.

People who are not trained and vaccinated should not handle bats.

If you find an injured bat or flying fox, do not attempt to help the animal yourself or touch it in any way.

Contact the RSPCA (1300 ANIMAL) or your local wildlife care group/rescuer/carer, or the Department of Environment and Science (1300 130 372) for assistance.

What diseases do bats carry?

[Australian bat lyssavirus \(ABLV\)](http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/10/Australian-Bat-Lyssavirus) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/10/Australian-Bat-Lyssavirus>) is a virus that can be spread to humans by the saliva of infected bats when the saliva comes in contact with mucous membranes or broken skin, or through bat bites or scratches. Infection with ABLV causes a rabies-like disease in humans that is usually fatal. There have been only three documented cases of ABLV infection in humans. All three of these were in Queensland.

There are two simple steps to avoid ABLV disease:

- Don't handle bats unless you are trained in handling them, are using appropriate personal equipment and are vaccinated against rabies. Most bat bites and scratches in Queensland occur when people try to help sick or injured bats as they are difficult to handle, they become agitated and they have sharp teeth and claws.
- If you are bitten or scratched by a bat, wash the wound thoroughly, apply antiseptic and seek immediate medical advice about receiving injections to protect you against ABLV.

[Hendra virus](http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/363/Hendra-Virus-Infection) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/363/Hendra-Virus-Infection>) can be transmitted to humans via close contact with the body fluids of infected horses. The natural host for Hendra virus is the flying fox. Horses may be infected by eating food recently contaminated by flying fox urine, saliva or birth products. There is no evidence that the virus can be spread directly from flying foxes to humans or through the faeces of flying foxes to humans. Testing of bat carers who have frequent contact with flying foxes has shown no evidence of exposure to the virus. See the [Hendra virus fact sheet](#)

(<http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/363/Hendra-Virus-Infection>) for further information.

[Histoplasmosis](http://conditions.health.qld.gov.au/HealthCondition/condition/14/92/76/Histoplasmosis) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/92/76/Histoplasmosis>) is a very rare lung infection. Bats, dogs, cats, cattle, horses, rats and other animals can be infected and can excrete the organism in their droppings. People who have contact with bats or bat caves, for work or recreation, should avoid exposure to dust in environments likely to be contaminated with bat droppings. It is advisable to spray potentially contaminated areas with water before cleaning. People working in these areas should also use protective equipment such as face masks, gloves and overalls.

[Leptospirosis](http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/88/Leptospirosis) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/88/Leptospirosis>) is a bacterial disease transmitted via the urine of infected animals. In very rare cases, leptospirosis can be fatal to humans. Although rodents and cattle are the main carriers of this disease, bats may also be infected. Leptospirosis occurs most commonly in people who are exposed to the bacteria during their work, for example farmers, veterinarians and meat workers. The most effective way to avoid getting leptospirosis from bats is to prevent bat urine from coming into contact with broken skin or your eyes, nose or mouth. Hands should always be washed after caring for bats.

[Salmonella](http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/124/Salmonella-infection-salmonellosis) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/124/Salmonella-infection-salmonellosis>) and other bacteria that cause gastroenteritis may be found in animal faeces. Most cases of salmonella infection in Queensland are caused by eating undercooked or raw food contaminated with salmonella bacteria. The infection may also be acquired from close physical contact with animals such as dogs, poultry and cattle. It is assumed that some flying foxes may also carry the bacteria. Hands should always be washed after handling bats or their faeces or urine.

Rainwater tanks and swimming pools

The use of rainwater tanks for household use is an established and relatively common practice in Australia, particularly in rural and remote areas. There is little reported illness from rainwater consumption and rainwater tank risks can be easily managed. It's particularly important to manage the risks where there are people with significantly reduced immunity systems.

ABLV cannot be contracted from drinking or using water from rainwater tanks that is contaminated with bat faeces. For households using rainwater for food preparation and drinking, the risk of getting a gastro illness from bat faeces is no different than for other animals, including birds.

Health risk from domestic swimming pools affected by bat faeces can be appropriately managed by maintaining effective pool disinfection. This involves regular backwashing of your pool filter, keeping your pool filter running every day to keep the water clear, maintaining free chlorine levels of around 2 milligrams per litre (or parts per million) and keeping pH between 7.2 and 7.8. Advice on pool maintenance can be obtained from your

local pool store.

More information:

- [Fact sheet on roof-harvested rainwater](https://www.health.qld.gov.au/__data/assets/pdf_file/0020/444323/rainwatertanks.pdf) (https://www.health.qld.gov.au/__data/assets/pdf_file/0020/444323/rainwatertanks.pdf)
- [Guidance on use of rainwater tanks](http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-raintank-cnt.htm) (<http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-raintank-cnt.htm>)
- [Safe Water of Rural Properties](https://www.health.qld.gov.au/__data/assets/pdf_file/0025/444616/safe-water-rural-properties.pdf) (https://www.health.qld.gov.au/__data/assets/pdf_file/0025/444616/safe-water-rural-properties.pdf)

Teaching children about bats

Bats and flying foxes can carry bacteria and viruses which can be harmful to humans.

The best protection against being exposed to the virus is to avoid handling bats or flying foxes.

It is especially important to communicate this message to young children who may accidentally, or due to curiosity, disturb an injured bat or flying fox, causing it to scratch or bite them. Educate children to stay away from bats and flying foxes and to tell an adult immediately if they see or touch a bat. Teach children that it is very important to let a grown up know because they could become very sick if a bat bites or scratches them.

Parents, teachers and guardians also need to know the steps to take if a child in their care does come into contact with a bat or flying fox.

1. If you see a bat or flying fox that's hurt, don't touch the bat. Contact:
 - RSPCA—1300 ANIMAL (1300 264 625) or
 - [Department of Environment and Science](https://www.des.qld.gov.au/) (<https://www.des.qld.gov.au/>)—1300 130 372 or
 - Your local wildlife care group/rescuer/carer for assistance.
2. Take the child to see a doctor for treatment.
3. Ring your local Public Health Unit or ask your doctor to ring them for you. Public Health will provide advice and organise treatments as necessary.

To help educate children on the importance of staying away from bats, and what to do if they see one injured, we've put together the [Kids and bats don't mix](https://www.health.qld.gov.au/__data/assets/pdf_file/0021/437700/kidsandbats-poster.pdf) (https://www.health.qld.gov.au/__data/assets/pdf_file/0021/437700/kidsandbats-poster.pdf) poster.

We encourage parents, teachers and guardians to download and print this poster and make sure they, and the children in their care, know what to do around bats.

Help and assistance:

- Contact your local [public health unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units) (<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>)
- Call 13 HEALTH (13 43 25 84)

Other resources

- [What to do if you find a sick or injured bat](https://www.health.qld.gov.au/__data/assets/pdf_file/0022/436450/bat-injured-sick.pdf) (https://www.health.qld.gov.au/__data/assets/pdf_file/0022/436450/bat-injured-sick.pdf)
- [Workplace Health and Safety advice for horse industries and owners](https://www.worksafe.qld.gov.au/agriculture/workplace-hazards/diseases-from-animals) (<https://www.worksafe.qld.gov.au/agriculture/workplace-hazards/diseases-from-animals>)
- [Hendra virus in horses](https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/livestock/animal-welfare/pests-diseases-disorders/hendra-virus) (<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/livestock/animal-welfare/pests-diseases-disorders/hendra-virus>)
- [Veterinarian guidelines and assistance for handling Hendra virus in horses](https://www.business.qld.gov.au/industries/service-industries-professionals/service-industries/veterinary-surgeons/guidelines-hendra) (<https://www.business.qld.gov.au/industries/service-industries-professionals/service-industries/veterinary-surgeons/guidelines-hendra>)
- [Department of Environment and Science - Flying Foxes](https://environment.des.qld.gov.au/wildlife/animals/living-with/bats/flying-foxes) (<https://environment.des.qld.gov.au/wildlife/animals/living-with/bats/flying-foxes>)
- [Australasian Bat Society](http://ausbats.org.au/) (<http://ausbats.org.au/>)
- [Lubee Bat Conservancy](http://www.lubee.org/) (<http://www.lubee.org/>)
- [Australian Animal Health Laboratory](https://www.csiro.au/en/Research/Facilities/AAHL) (<https://www.csiro.au/en/Research/Facilities/AAHL>)
- [Ecohealth Alliance](https://www.ecohealthalliance.org/) (<https://www.ecohealthalliance.org/>)
- [Australian Wildlife Health Network](https://www.wildlifehealthaustralia.com.au/) (<https://www.wildlifehealthaustralia.com.au/>)

For more information

For further information about bats and human health, contact your local [public health unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units) (<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>) or the 13 HEALTH information line (13 43 25 84).