

Hendra virus

Hendra virus is a virus that mainly infects large fruit bats (flying foxes) which can be passed on to horses. The infection has occasionally been passed onto people who have been in close contact with an infected horse.

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What is Hendra virus?

- Hendra virus is a virus that infects large fruit bats (flying foxes).
- Occasionally the virus can spread from flying foxes to horses and horses can then pass the infection on to humans. A small number of people who had very close contact with infected horses have developed Hendra virus infection.
- A single dog showed evidence of exposure to Hendra virus on a property where three horses developed infection in July 2011.
- There is no evidence of Hendra virus occurring naturally in any other species.
- Hendra virus was discovered following an outbreak of illness in a large racing stable in the suburb of Hendra, Brisbane in 1994.

What are the symptoms?

Hendra virus symptoms in horses

- Hendra virus can cause a range of symptoms in horses. Usually there is a rapid onset of illness, fever, increased heart rate and rapid deterioration with respiratory and/or neurological (nervous system) signs. For more information on Hendra virus infection in horses, refer to the NSW Department of Primary Industries (DPI) website at www.dpi.nsw.gov.au.

Hendra virus symptoms in people

- Symptoms typically develop between 5 and 21 days after contact with an infectious horse.
- Fever, cough, sore throat, headache and tiredness are common initial symptoms. Meningitis or encephalitis (inflammation of the brain) can develop, causing headache, high fever, and drowsiness, and sometimes convulsions and coma.
- Hendra virus infection can be fatal.

How is it spread?

- It is thought that horses may contract Hendra virus infection from eating food recently contaminated by flying fox urine, saliva or birth products.
- The spread of Hendra virus between horses is possible whenever horses have close contact with body fluids from an infected horse.
- All confirmed human cases to date became infected following high level exposures to body fluids of an infected horse, such as doing autopsies on horses without wearing appropriate personal protective equipment, or being extensively sprayed with respiratory secretions.
- There is no evidence of human to human, bat to human, bat to dog, or dog to human transmission.

Who is at risk?

People who have had close contact (particularly high level exposures as described above) with an infected horse, without wearing appropriate personal protective equipment, are most at risk.

How is it prevented?

Preventing horse infection

- Protect horse feed from contamination by flying fox fluids.
- Contact your local veterinarian if you notice unusual disease symptoms, abnormal behaviour or unexpected deaths in your horses. If you cannot contact your veterinarian, contact your animal health authority or the Emergency Animal Disease Watch Hotline on 1800 675 888 (24-hour hotline).
- Isolate sick horses from other horses.
- A vaccine for horses is available from veterinarians and is strongly encouraged as the single most effective way to reduce the risk of exposure to Hendra virus.

Preventing human infection

- While the greatest risk is with sick horses, infected horses can shed Hendra virus for a few days before they show any sign of illness so it is always important to use good hygiene practices when around horses.
- Don't kiss horses on the muzzle (especially if the horse is sick).
- Cover any cuts or abrasions on exposed skin before handling horses and wash your hands well with soap and water, especially after handling your horse's mouth or nose (e.g. fitting or removing a bridle) and before eating, smoking or touching your eyes, nose or mouth.
- If body fluids or manure from a horse gets on unprotected skin the area should be washed with soap and water as soon as possible.
- If a horse becomes unwell and Hendra virus infection may be a possibility, as few people as possible should care for the horse until the infection is ruled out.
- Appropriate personal protective equipment which prevents contamination of the skin, eyes, nose and mouth by the horse's body fluids should be worn if close contact with the sick horse is considered essential.
- Although there is no evidence of Hendra virus spreading from an infected person to another person or animal, health care workers will take a cautious approach and wear personal protective equipment when caring for people suspected or confirmed to be infected.
- If you have been exposed to Hendra virus, you should not donate blood or any other tissue until you are cleared of infection. Confirmed cases should never donate blood or any other tissue, even if they full recover.
- No human vaccine is currently available.

How is it diagnosed?

People with suspected Hendra virus infection will usually have blood and urine tests. Depending on their symptoms they may also have nose/throat swabs and/or other tests. People with high level exposures to horse body fluids may have blood samples collected over six weeks to check if they have developed antibodies to the infection. Testing for Hendra virus infection is generally not recommended for people who have had lower-level exposure.

How is it treated?

There is no specific treatment for Hendra virus infection and cases are treated supportively in hospital or in intensive care. Antiviral medications have not been found to be effective in treating Hendra virus infection. People who have had high exposures to the body fluids of an infected horse may be offered experimental treatment with a type of antibody that may prevent infection.

What is the public health response?

- When a horse is diagnosed with Hendra virus infection, the local public health unit will work closely with the state/territory animal health agency, horse and property owners, and veterinarians to identify people who may have been exposed.
- Public health unit staff will identify people who may be at risk and contact them to assess their exposure.
- People who may be at risk of infection will be given information about Hendra virus and asked to monitor their health. Where necessary, arrangements will be made for blood tests to be taken.

Further information

For further information on Hendra virus in humans:

[Qld health website](#)

For further information on Hendra virus in horses:

[Biosecurity Queensland](#)

[NSW Department of Primary Industry](#)

Further Information

- [Information for people who are being monitored for Hendra virus infection](#)
- [Response Protocol for contacts with moderate or high-level exposure \(NSW Health Staff Only\)](#)
- [Laboratory testing protocols](#)

For further information please call your local Public Health Unit on 1300 066 055