

# Information for people exposed to a horse infected with Hendra virus

***This fact sheet is designed mainly for people who have been exposed to a horse infected with Hendra virus, but also contains information relevant to other people involved in a Hendra virus incident. It should be read in conjunction with the Queensland Health Hendra virus infection fact sheet.***

## Why am I being followed up?

You have been identified as someone who may have been close to a horse that has been confirmed to have Hendra virus infection. If you were near enough to get blood, respiratory secretions or other material from the horse on you, you will be interviewed to decide what level of 'exposure' you might have had.

Hendra virus is difficult to catch. Most people exposed to an infected horse are unlikely to become sick.

## What does the follow-up involve?

Queensland Health public health unit staff work with the Department of Agriculture and Fisheries to identify people who may have been exposed to a horse infected with Hendra virus. This may involve talking to veterinarians, owners and carers of the horse and property, and people living on surrounding properties.

If you have been identified as possibly exposed to an infected horse, public health unit staff will assess your level of exposure by asking questions about when and how you interacted with the horse. They will also ask about any current illness or treatment.

People with any level of exposure to an infected horse are given information about Hendra virus. While public health unit staff will provide advice and support, people will also be told to see their GP for ongoing support, as exposure to Hendra virus can be stressful.

If you are assessed as having had a high level of exposure to the body fluids of an infected horse, you will be referred to an infectious diseases specialist doctor for care.

## What is the risk?

Most people exposed to a Hendra virus infected horse stay well and don't contract the infection. Human infection with Hendra virus is very rare. There have been only seven confirmed human cases, with the most recent in 2009. Four of these people died. All seven became sick following high level exposures to body fluids of an infected horse, such as:

- being extensively sprayed with respiratory secretions when not wearing appropriate personal protective equipment (PPE).
- doing post-mortems on horses (cutting open the horse's body to determine the cause of death) without wearing PPE.

Some people have had high level exposures to infected horses without wearing PPE, but remained well. People with lower level exposures (grooming, feeding, patting) are not considered to be at any significant risk. Hundreds of people have had lower level exposures but none have developed Hendra virus infection.

Infected horses are possibly infectious (able to pass the virus on) for a few days before they become sick, but are most infectious after they become sick.

Due to workplace health and safety requirements, Biosecurity Queensland staff wear full-body PPE to work with infected horses. This does not mean that you are at any significant risk, if you had a lower level exposure.

## What are the symptoms in humans?

Symptoms of Hendra virus infection in humans have developed between 5 and 21 days after exposure to an infectious horse. This is called the incubation period.

The few people with Hendra virus infection in the past had either:

- an influenza-like illness with symptoms such as fever, cough, sore throat, headache and tiredness (which led to pneumonia in one case) and/or
- encephalitis (inflammation of the brain) with symptoms such as headache, high fever and drowsiness, which progressed to convulsions and/or coma.

## What should I do if I become unwell?

If you develop symptoms such as those above, or any illness during the incubation period (5–21 days after exposure), you should seek medical advice quickly and tell your local public health unit. Public health staff may be able to help arrange medical assessment for you and provide advice to your doctor.

Any illness is much more likely to be due to something else, such as one of the many common viruses that cause colds or the 'flu'. But you may need to be tested for Hendra virus infection, as a precaution, particularly if you had a high level exposure.

## Am I a risk to others?

If you have been exposed to a Hendra virus infected horse but remain well, you are definitely not a risk to other people. You can continue to go to work or school and engage in all your usual activities.

There is no evidence that person to person spread of Hendra virus can occur – nobody has ever developed Hendra virus infection after exposure to an infected human.

If you do become unwell, you should take simple precautions, similar to those recommended for people with influenza, while you seek further medical advice:

- cover your mouth and nose when coughing or sneezing (or wear a surgical mask, if you have one)
- regularly wash your hands and dry them thoroughly
- maintain a distance of at least one metre from other people where possible.
- anyone caring for you should also wash their hands regularly.

If you develop symptoms, healthcare workers will take a cautious approach and wear personal protective equipment, similar to that used for influenza patients, when caring for you.

As a precaution, you should not donate blood or any other tissue until the incubation period has passed (21 days after last exposure) and either no symptoms have developed or you have been cleared of infection by any recommended testing.

## Testing and diagnosis

### If you are well

Testing for Hendra virus infection is only recommended if you have had a **high level exposure**. However, if you have had a lower level exposure and request testing then arrangements can be made.

If you are well and blood tests are performed on you following a Hendra virus exposure, a 'baseline' sample will be taken from you initially, then follow-up blood samples will be taken and tested at 21 days and 42 days after your last exposure. These tests look for antibodies to Hendra virus. Antibodies are substances that your body's immune system produces to help fight infections.

The first sample provides a baseline against which later tests are compared. The baseline test is expected to be negative if you are well, as it takes some days for infection to develop and for antibody tests to become positive. The baseline sample is not tested immediately, but is stored at the laboratory and examined at the same time as the second sample taken 21 days after exposure.

This provides a more accurate comparison of the antibody levels in both samples. This is important as it is possible with this type of antibody test to get what is called a 'false positive' result i.e. a positive result when you do not actually have the infection.

If you remain well, a negative result on the follow-up antibody test at 21 days after exposure will indicate it is highly unlikely that you have had Hendra virus infection. However a final test at 42 days after exposure is taken as an extra precaution. No humans are known to have developed Hendra virus antibodies without becoming unwell.

If you need to be tested, collection of the blood samples will usually be arranged by the public health staff managing your assessment. Options may include a local GP, pathology service, or hospital. If you have had a high level exposure, testing will usually be arranged by the infectious diseases specialist you are referred to.

### **If you develop symptoms**

Hendra virus infection in humans is very rare. If you become unwell after exposure to an infectious horse, it will usually be due to something else. However testing for Hendra virus may be required, depending on your level of exposure and symptoms. Tests will be requested by your treating doctor and could include samples of blood, urine, and nose/throat swabs. Tests may also be done for other more common viruses such as influenza.

These samples will be examined for genetic material of Hendra virus (nucleic acid testing). A negative result to this type of test will confirm that Hendra virus is not the cause of your symptoms, while a positive result would reliably confirm Hendra virus infection.

Further information about the testing process is available from your local Queensland Health public health unit.

## **How is it treated?**

There is currently no specific treatment for Hendra virus infection.

People who have had a high level exposure to the body fluids of an infected horse may be offered

experimental treatment with monoclonal antibodies.

Monoclonal antibodies against Hendra virus are a type of antibody developed in research laboratories to try to prevent or reduce the severity of Hendra virus infection. These antibodies have only been given to a small number of people who were at significant risk of contracting infection.

The use of monoclonal antibodies against Hendra virus is currently experimental; however further research is underway to determine their safety. At present only people with a high level exposure are considered for this treatment. If you are offered monoclonal antibodies you will be provided with medical counselling regarding their possible risks and benefits.

## **Dealing with concerns**

Exposure to Hendra virus may be stressful for you and your family. If you feel worried or concerned it's a good idea to talk over your concerns with your GP or your local public health unit staff.

Support for veterinarians is also available from the Australian Veterinary Association:

**Web:** [www.ava.com.au](http://www.ava.com.au)

**Tel:** 1800 337 068

## **Media**

Hendra virus incidents often attract media interest. While the identity of people involved is not disclosed by government agencies, the media often becomes aware of the location due to activities required to prevent further risk of infection, such as:

- signs put up on quarantined properties by Biosecurity Queensland
- government media announcements to reassure the public that appropriate responses are in place
- door knocking of adjoining properties by government agency staff.

If you would like advice and support to manage unwelcome media attention, please contact Queensland Health or Biosecurity Queensland on the numbers provided and request to speak to a media unit staff member.

## Further information

**Queensland Health:** for human health information contact your local Public Health Unit. Contact details are available at:

<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>

**Biosecurity Queensland:** for information about Hendra virus of the public, horse owners and handlers, and for guidelines on handling potential Hendra virus infections in horses for veterinarians.

**Web:** [www.biosecurity.qld.gov.au](http://www.biosecurity.qld.gov.au)

**Tel:** 13 25 23

**Workplace Health and Safety Queensland:** for workplace health and safety information about Hendra virus for horse businesses and workplaces.

**Web:** [www.worksafe.qld.gov.au/](http://www.worksafe.qld.gov.au/)

**Tel:** 1300 369 915.