

Hendra virus

Biosecurity information for horse owners



Hendra virus can cause serious disease and you have obligations under the Biosecurity Act 2014 to manage the risk.

Contact your veterinarian immediately if you suspect your horse may have Hendra virus infection.

Veterinarians that suspect Hendra virus infection should follow standard procedures to investigate the situation.

If you become aware of the presence of Hendra virus infection in any species of animal, you must report it to Biosecurity Queensland on 13 25 23 or contact the Emergency Animal Disease Watch Hotline on 1800 675 888.

What is Hendra virus?

Hendra virus is a zoonotic disease, which means it can transfer from animals to people.

Naturally occurring infection has only been observed in horses, flying foxes, humans and dogs.

Flying foxes are a natural host of Hendra virus, although they do not show any signs of illness when infected.

Understanding Hendra virus allows you to implement activities to reduce the risk of infection.

General biosecurity obligation

As a horse owner, you have a legal obligation (general biosecurity obligation (GBO)) to take all reasonable and practical measures to prevent or minimise the effects of a biosecurity risk.

Hendra virus poses a serious biosecurity risk. This means that you are legally required to reduce the risk of Hendra virus infection and limit the spread of Hendra virus when dealing with horses and other possible carriers (such as contaminated equipment).

Horse owners can meet their GBO by:

- having an understanding of Hendra virus including how it is transmitted
- reducing the risk of your horse becoming infected with Hendra virus
- preventing or limiting the spread of Hendra virus infection from your horse to humans or other animals.

A biosecurity plan can be used to record horse management activities and is a good way to show you are meeting your general biosecurity obligation.

More information on biosecurity planning is available at farmbiosecurity.com.au.

How is Hendra virus transmitted?

1. Transmission to horses

- Believed to occur by horses coming into contact with material contaminated with infected flying fox body fluids and/or excretions.
- Can potentially spread from horse to horse through direct contact with infectious body fluids, or indirect contact via equipment contaminated with infectious body fluids.

2. Transmission to humans

- Cases of Hendra virus infection in people have resulted from very close contact with respiratory secretions (e.g. mucus) and /or blood from an infected horse.
- There is no evidence of Hendra virus spreading from human to human or flying fox to human.

3. Transmission to dogs

- Believed to occur when dogs come into contact with infected horses, including infectious body fluids.



What are the clinical signs in horses?

Hendra virus can cause a broad range of signs in horses.

Hendra virus infection should be considered in any sick horse when the cause of illness is unknown, and particularly where signs progress quickly with rapid deterioration.

The following signs have all been associated with Hendra virus cases, but not all are found in any one infected horse:

- rapid onset of illness
- fever
- increased heart rate
- discomfort or weight shifting between legs
- depression
- colic signs
- rapid deterioration with either respiratory and/or nervous signs.

Respiratory signs include:

- difficulty breathing
- rapid breathing
- nasal discharge at death—can be initially clear, progressing to stable white froth and/or stable blood-stained froth.

Nervous signs include:

- wobbly gait
- apparent loss of vision in one or both eyes
- aimless walking in a dazed state
- head tilting and circling
- muscle twitching
- urinary incontinence
- inability to rise.

Reducing the risk of Hendra virus

Below are activities that you can implement to reduce the risk of Hendra virus infection.

1. Vaccination

A registered Hendra virus vaccine is available for horses. Vaccination of horses is the most effective way to help manage Hendra virus disease. Talk to your private veterinarian about vaccination.

Vaccination of horses provides a public health and workplace health and safety benefit by reducing the risk of Hendra virus transmission to humans and other susceptible animals.

Whenever Hendra virus infection is suspected, even in vaccinated horses, appropriate biosecurity precautions, including personal protective equipment (PPE), should be used as no vaccine can provide 100% guaranteed protection.

2. Reduce flying fox and horse interaction

The following are options to reduce the likelihood of horses coming into contact with flying foxes or their body fluids/excretions:

- Remove feed and water containers from under or near trees. If possible, place feed and water containers under shelter.
- Remove horses from paddocks where flowering/fruited trees may be attracting flying foxes. Return the horses only after the trees have stopped flowering/fruited and the flying foxes have gone.
- If horses cannot be removed from the paddock, consider fencing to restrict access to flowering/fruited trees. Or temporarily remove horses during times of peak flying fox activity (usually at dusk and during the night). Clean up any fruit debris underneath the trees before returning the horses.

Flying foxes should not be targeted for culling. For more information about flying foxes, contact the Department of Environment and Science on 1300 130 372 or visit des.qld.gov.au.

More information on reducing the risk of Hendra virus infection can be found at business.qld.gov.au.

Prevent or limit the spread of Hendra virus

The following activities may prevent or limit the risk of Hendra virus being transmitted to humans or other animals.

1. Hendra virus notification and testing

Early detection and management of Hendra virus is important to prevent or limit the spread of infection to people and other animals. If you suspect Hendra virus you should contact your veterinarian immediately.

Your veterinarian will make an assessment and determine whether samples need to be taken for testing at a government laboratory.

Test results to exclude Hendra virus are usually available one working day after the samples are received at the laboratory.

While waiting for Hendra virus test results, you should take the same level of precaution with suspect horses as you would an infected horse.

2. Isolate suspect or infected horses

All human and animal contact with suspect or confirmed infected horses should be strictly limited.

- Avoid close contact (coming within five metres) with suspect or infected horses (and any body fluids or excretions) and any other horses or animals that may have been in direct contact with the suspect horse.
- If you must have close contact, appropriate PPE should be used and ensure you handle unaffected animals first and *then* have contact with suspect or infected animals.
- Isolate any suspect or infected horses from other horses, people and animals. Ensure that there is a minimum distance of five metres or a barrier such as a full height wall that prevents direct contact.
- Observe all horses from a distance and notify your veterinarian immediately of any change in the health status.

If the horse is already deceased, or dies while you are waiting for your test results, you should:

- avoid contact with the carcass
- ensure it is isolated from other people and animals, including companion animals and feral animals
- get advice from your veterinarian or Biosecurity Queensland on carcass management and disposal.

Personal protective equipment and hygiene

If close contact with suspect or confirmed infected horses is essential, ensure that appropriate PPE is worn and a high level of personal hygiene is maintained.

The PPE suitable for use with suspect Hendra virus cases may not be used routinely by horse owners and it is recommended that PPE is sourced ahead of time and training in its correct use, storage and maintenance is undertaken.

Items for PPE kits include:

- hand cleanser, soap and water (preferably clean, running water)
- detergent
- disinfectant
- impermeable disposable gloves
- water resistant dressing (to cover open wounds)
- overalls (long sleeved and hooded)
- rubber boots
- face shield or safety glasses
- P2 respirator (particulate respirator), note this is not the same as a dust mask or surgical mask.

When you have finished having contact with the suspect or infected horse:

- Carefully clean any reusable items (e.g. halters, lead ropes, buckets) with detergent and disinfectant.
- Remove remaining PPE carefully to avoid contamination and dispose of it in a plastic bag and seal.
- Wash hands with soap and water after all activities.

For more information about PPE talk to your veterinarian or visit business.qld.gov.au.

Working with Biosecurity Queensland

If your horse is confirmed to be infected with Hendra virus, Biosecurity Queensland will work with you to manage the situation and

provide guidance and advice on actions that need to be taken.

It is important to understand that you have a legal obligation to ensure that Hendra virus infection is managed appropriately on your property.

Human health concerns

If you have concerns about a person's health at any time, seek medical advice. Contact your general practitioner, local hospital emergency department or local public health unit.

For general enquiries about Hendra virus infection in humans, call the Queensland Health hotline on 13 HEALTH (13 43 25 84).

Workplace health and safety

A person conducting a business or undertaking (PCBU) has a duty to ensure, so far as is reasonably practicable, the health and safety of themselves and workers (e.g. employees, students, trainees, contractors, sub-contractors and volunteers).

The same duty also applies to any other people who may be at risk from work carried out by the business or undertaking (e.g. clients, visitors).

For information call Workplace Health and Safety Queensland on 1300 362 218 or visit worksafe.qld.gov.au.

