

Hendra virus – information for horse businesses

Hendra virus is a sporadic infectious disease of horses caused by spill over of virus from flying foxes.

Hendra virus can also spread to humans and other animals from infected horses.

Hendra virus infection of horses can cause a broad range of clinical signs. Typically there is acute illness with rapid deterioration and respiratory and/or neurological signs. Some infected horses have shown variable and vague clinical signs, including an absence of fever. Always take precautions with a sick horse and contact a veterinarian.

Hendra virus infection of humans is rare, but it is a serious disease that can be fatal. Human infection has occurred following close contact with the blood and body fluids of an infected horse. There is no evidence that Hendra virus has spread directly from flying foxes to humans.

Risk

Infected horses may shed Hendra virus in their nose and throat secretions for several days before becoming sick. Once an infected horse becomes sick, all blood and body fluids are considered infectious. The infection risk increases as the horse becomes increasingly sick and is highest at the time of the horse's death. Following death, the horse carcass should be considered infectious until its safe disposal.

Prevention

A registered Hendra virus vaccine is available to help prevent Hendra virus disease in

horses. Vaccination of horses is the most effective way to help manage Hendra virus disease. Vaccination of horses provides a work health and safety and public health benefit by reducing the risk of transmission to humans and other susceptible animals. Vaccination is an important part of horse health management and horse owners should discuss Hendra virus vaccination with their veterinarian.

Take steps to limit interaction between flying foxes and horses on your property, for example:

- Remove horse feed and water containers from under trees, and place these under shelter.
- Identify flowering and fruiting trees on the property, and remove horses from paddocks where flowering or fruiting trees are attracting flying foxes. Horses should be returned only after the trees have stopped flowering or fruiting and the flying foxes are gone.
- If it is not possible to remove horses from these paddocks, consider fencing (temporary or permanent) to restrict access to flowering or fruiting trees, or temporarily remove horses during peak flying fox activity (usually at dusk and during the night). Clear up any fruit debris underneath trees before returning horses.

Planning and preparation

Managing Hendra virus risks requires careful planning and preparation. Develop a plan for your property to manage potential Hendra

virus infection in horses and establish supporting policies and procedures. Train workers in the plan, including the use of hygiene and biosecurity measures and personal protective equipment (PPE).

Provide adequate facilities (e.g. washing facilities, isolation area for sick horses), PPE and other equipment (e.g. cleaning and decontamination equipment) necessary to safely manage Hendra virus risks.

Make up a kit with the recommended PPE and have this, as well as hand cleansers (e.g. soap, alcohol based hand rub and wipes), disinfectant and waste disposal bags, readily available.

Keep a first aid kit readily available so that cuts and abrasions can be covered before contact with a horse and its blood and body fluids.

General contact with all horses

It is important to adopt good hygiene and biosecurity measures for all contact with horses, regardless of the horse's health or vaccination status. These include the following measures:

- Cover cuts and abrasions with a water-resistant dressing.
- Wash hands regularly using soap and water followed by hand drying, or use alcohol-based hand rub if there is no visible soiling of hands. Hands should be washed after:
 - contact with a horse and before moving on to other activities
 - any exposure to a horse's blood and body fluids should this occur
 - removing PPE.
- Maintain yards and stables in a clean and hygienic condition.
- Clean and disinfect equipment that has been in contact with a horse's blood and body fluids using appropriate solutions (e.g. detergent and disinfectant).
- Handle sharps safely, never recap used needles and dispose of needles in a sharps container to prevent needlestick or sharps injuries.
- Avoid direct contact with a horse's blood and body fluids where possible.

Where direct contact with a horse's blood and body fluids is unavoidable, for example when

providing health care to horses, wear sufficient PPE to protect exposed skin, the face and clothing from contamination with blood and body fluids. After use, remove PPE carefully to avoid contamination, place disposable PPE in a plastic waste bag, clean and disinfect reusable PPE using appropriate solutions (e.g. detergent and disinfectant), and wash hands thoroughly. Examples of PPE include:

- gloves (e.g. disposable latex, nitrile or vinyl gloves) if contact with blood, body fluids, mucous membranes (e.g. the inside lining of the horse's nose and mouth) and non-intact skin (e.g. cuts and wounds) is likely
- face protection (e.g. safety glasses, safety goggles, face shield) if contamination of the face with blood and body fluids (e.g. splashes and spray) is likely
- protective clothing (e.g. overalls) if contamination of clothing with blood and body fluids is likely
- respiratory protective equipment (e.g. disposable P2 respirator) if exposure to aerosols is likely, especially aerosols involving the respiratory tract
- protective footwear (e.g. rubber boots) if contamination of footwear with blood and body fluids is likely.

If contamination with a horse's blood and body fluids occur, follow these measures:

- Wash the area with soap and water as soon as possible. Where water is not immediately available, wipe the area clean and use alcohol-based hand rub. Wash hands with soap and running water as soon as possible after the event.
- If the exposure involves a cut or puncture wound, gently encourage bleeding and then wash the area with soap and water.
- If eyes are contaminated, gently but thoroughly rinse open eyes with water or normal saline for at least 30 seconds.
- If body fluids get in the mouth, spit the fluid out and then rinse the mouth with water several times.

Contact with sick horses

Owners and handlers should always consider Hendra virus as a possible cause of illness in a sick horse and contact a veterinarian. Take

precautions to protect workers and other people from contact with the sick horse and its blood and body fluids. Whenever Hendra virus infection is suspected, even in vaccinated horses, appropriate infection prevention and control and biosecurity precautions including PPE should be used. No vaccine can provide 100 per cent guaranteed protection. This includes the following measures:

- Isolate the sick horse from other horses, domestic animals (e.g. dogs) and people (e.g. by moving other animals away from the sick horse).
- Where possible, avoid contact with the sick horse until a veterinary opinion has been sought.
- If contact is unavoidable, treat the horse and its blood and body fluids as potentially infectious. Use PPE including disposable gloves, disposable overalls, safety eyewear or face shield, rubber boots and a properly fitted disposable P2 respirator.
- After handling the horse, remove PPE carefully to avoid contamination. Place disposable PPE in a waste disposal bag, clean, disinfect reusable PPE using appropriate solutions (e.g. detergent and disinfectant), and wash hands thoroughly.
- Arrange activities so that contact with the sick horse is last.
- Avoid activities that could expose people to the horse's blood and body fluids or to a needlestick or other sharps injury (e.g. administering an injection, inserting a stomach tube).
- Do not allow visiting horse practitioners (e.g. farriers) to work on a sick horse.

If a veterinarian requires assistance with the veterinary examination, follow the veterinarian's instructions for health and safety, including instructions for hand washing and wearing PPE.

If the veterinarian suspects Hendra virus, continue to avoid contact with the sick horse and other animals that have come into contact with the sick horse, including domestic animals (e.g. dogs), until Hendra virus is excluded through testing carried out by the veterinarian. If contact is unavoidable, take infection prevention and control and biosecurity measures as described above. Children should not assist with the care of a

sick horse under investigation for Hendra virus.

Where possible and safe to do so, move horses under investigation for Hendra virus away from areas that can be accessed by the public. If this is not possible, warn the public to stay away from the horses (e.g. by displaying warning signs).

Observe horses under investigation for Hendra virus from a distance and notify the veterinarian of any change in the behaviour or health of any horse on the property.

If the horse dies or is euthanased, isolate the dead horse from all people, other horses and all other domestic animals on the premises, and inform the horse carcass disposal contractor of the Hendra virus risk.

Any person that may have come into contact with the sick horse and becomes unwell should seek medical advice.

Selection and use of PPE

When selected and used properly, PPE acts as a barrier to the transmission of infectious agents. PPE forms part of the risk management approach to managing Hendra virus risks, and should be used alongside other infection prevention and control and biosecurity measures. PPE alone should not be relied upon for protection.

Provide workers and other people at the workplace with PPE that is a suitable size and fit. Maintain, repair or replace PPE so that it continues to minimise risk and is clean, hygienic and in good working order.

Provide workers with information, training and instruction in the proper selection, use and wearing of PPE, its correct storage, maintenance and disposal, and what to do if a breach of PPE occurs.

Ensure that PPE is used or worn by workers and other people to protect against contact with blood and body fluids and when dealing with sick horses with potential Hendra virus infection. Workers and other people at the workplace must wear PPE in accordance with any information, training or reasonable instruction.

Consider trialling different models and brands of PPE to ensure suitable performance, fit, comfort and compatibility.

PPE may create health and safety risks for the user, especially when a complete set is worn. Risks include thermal discomfort, heat

stress, fatigue and being injured by the horse. Be aware of these risks and take all reasonably practicable steps to ensure health and safety.

Contact your local supplier for more information about PPE selection and use.

Notification

Work-related infectious diseases must be notified to Workplace Health and Safety Queensland. Information on reporting incidents is available at www.worksafe.qld.gov.au.

Further information

For more information on work health and safety, call 1300 362 128 or visit www.worksafe.qld.gov.au.

For more information on Hendra virus and animal health and biosecurity, contact Biosecurity Queensland on 13 25 23, visit www.biosecurity.qld.gov.au, or talk to your veterinarian.

For more information on Hendra virus and human health, contact Queensland Health on 13HEALTH (13 43 25 84) or visit www.health.qld.gov.au. Seek advice from a general practitioner, local hospital emergency department or local public health unit if you have concerns about possible exposure to Hendra virus.

For more information on flying foxes and horse carcass disposal, contact the Department of Environment and Science on 1300 130 372 or visit www.des.qld.gov.au.

- [*Hendra virus – information for veterinarians*](#)
- [*Hendra virus – information for businesses that dispose of horse carcasses.*](#)

[*Suit up! Personal protective equipment for veterinarians.*](#)