



Australian Racing Board Limited

Australian Racing Board (ARB) Hendra Virus Fact Sheet

Australia is the only country that has recorded any outbreaks of Hendra virus. There have been 14 clusters of Hendra virus infection recorded involving more than 40 horses since it was first identified in 1994. The cases have been in northern, central and southern coastal Queensland and one case in northern New South Wales. Hendra virus has been identified in fruit bats (flying foxes) in all areas of Australia and in bats in Papua New Guinea.

Horses affected by Hendra virus typically suffer acute onset of illness, with increased body temperature, increased heart rate, may appear depressed, show little appetite, and appear restless or colicky. This rapidly progresses to cardiovascular collapse and either respiratory or neurological signs with death occurring in 75% of cases.

People who have close contact with secretions from the infected horse, such as vets or handlers, are at risk of contracting the disease and dying. AAHL research (2009) suggests that the stronger the signs of Hendra virus, the more infectious the horse is likely to be.

The following clinical signs have been taken from *Hendra guidelines for vets* on the Biosecurity Queensland website (http://www.dpi.qld.gov.au/4790_13371.htm)

Visit the Biosecurity Queensland website for the most up-to-date information on Hendra virus.

Key signs:

- acute onset of illness
- increased body temperature
- increased heart rate
- discomfort/ weight shifting between legs
- depression
- rapid deterioration.

Other respiratory signs:

- pulmonary oedema and congestion
- respiratory distress—increased respiratory rates
- terminal nasal discharge—can be initially clear, watery discharge progressing to stable white froth and/or stable blood-stained froth
- terminal weakness, loss of control of muscle movement and collapse.

Other neurological signs:

- 'wobbly gait' progressing to loss of control of muscle movement
- altered consciousness—apparent loss of vision in one or both eyes, aimless walking in a dazed state
- head tilting, circling
- muscle twitching
- urinary incontinence
- lying down with inability to get up.

Susceptible species:

The natural host of Hendra virus is the Pteropid bat (fruit bat or flying fox).

Occasionally horses become infected from exposure to bat secretions. Humans have become infected when exposed to infected horse secretions. Of the seven people infected to date, four have died.

Spread of the disease:

Because Hendra virus is so rare, the scientific information available is not complete and the research into how it is transmitted from fruit bats to horses, and from horses to humans is on-going. At this stage it is thought that infection in horses may occur from contact with items or feed contaminated by the body fluids of fruit bats.

The risk of horses becoming infected is low, and the few cases of infection in humans have occurred only in those with very close contact with horses infected with the virus. There is no evidence of human-to-human spread.

Protection of horses

Flying foxes often visit properties where native eucalypts, bottlebrushes, lilli-pillies, figs and melaleucas are flowering. Blossoms are their primary source of food. They will also feed on palm seeds and exotic fruits when native food is less abundant.

Horse owners should follow these steps to protect their horses:

- Place feed and water containers under cover if possible
- Do not place feed and water containers under trees, particularly if flying foxes are attracted to those trees.
- Do not use feed that might be attractive to flying foxes if they are known to be in the area. Fruit and vegetables (e.g. apples, carrots) or anything sweet (e.g. molasses) may attract flying foxes.
- If possible, remove horses from paddocks where flowering or fruiting trees have resulted in a temporary surge in flying fox numbers. Return the horses after the trees have stopped flowering or fruiting.
- If removal of horses from paddocks is not possible, restrict their access to the areas where the flying foxes are active and for the period of time they are present (e.g., by fencing off trees where the animals roost or where they gather while flowers and fruit are present).

Safety precautions as Hendra virus can be fatal to humans:

Human infection is thought to occur through contact with body fluids including mucus secretions of infected horses. As a precaution, persons in close contact with horses that have Hendra-like signs should wear protective face masks, goggles and gloves and take care with personal disinfection.

Dr Judith Medd, one of the ARB's veterinary advisors, indicated that the risk of infection can be greatly reduced by adopting good hygiene practices as a matter of routine and taking increased precautions around any sick horse. "It is also important to wash your hands with soap and water

regularly before, during and after handling horses and minimise contact with your horse if it is unwell”, Dr Medd advises. “Owners should contact their vet immediately if they notice health problems in their horses or suspect Hendra infection”.

For more general information about preventing Hendra virus, and personal protective equipment to wear if Hendra virus is suspected, visit the Biosecurity Queensland website at http://www.dpi.qld.gov.au/4790_2900.htm

To report suspicions of Hendra virus infection, ring the emergency animal disease hotline on 1800 675 888.
