

An important reminder to trainers concerning Hendra virus

Hendra virus and the potential for infection

NSW Department of Primary Industries has provided Racing NSW with advice that an isolated but confirmed case of Hendra virus has been identified on a property near Scone, in the Upper Hunter Valley of NSW.

A 25-year-old unvaccinated mare has now been euthanised and those people exposed to the mare are having their welfare managed by NSW Health. At this time, advice is that there appears to have been no contact with thoroughbred populations.

All industry participants are always reminded to be vigilant with regards to Hendra virus. There is a need for preventative measures, to minimise the risk of infection in horses, humans and companion animals.

Hendra virus infection is a zoonotic disease, meaning that it has the potential to affect both horses and humans. It has the potential to be life threatening. The natural hosts of Hendra virus are fruit bats (flying foxes), which have the potential to pass the infection to horses via their faeces and bodily fluids. Human infection can arise given exposure to the blood, bodily fluids and tissues of an infected horse. There is not evidence to date to support the spread of disease from human to human or bat to human. There is however evidence of spread from horse to horse, following the exposure to the secretions of an infected horse.

Hendra virus infection in horses is characterised by the rapid onset of illness, with increased temperature, increased heart rate, signs of discomfort or weight shifting between legs, depression, non-specific respiratory and neurological signs. Please note that not all of these clinical signs will be present in any one horse and the presentation can be quite variable between cases.

Key signs in horses:

- Acute onset of illness
- Increased body temperature
- Increased heart rate
- Discomfort/ weight shifting between legs
- Depression
- Rapid deterioration of well-being and clinical signs

Other respiratory signs:

- Respiratory distress—increased respiratory rate
- Terminal nasal discharge—this can be a clear, watery discharge initially, progressing to stable white froth and/or stable blood-stained fluid

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 and an inability to stand
- Terminal weakness, loss of control of muscle movement and collapse

Protection of horses

The risk for potential exposure to Hendra virus in horses is greatest where there is exposure to a resident population of Flying Foxes. That is, horses that are maintained outside, particularly with exposure to areas under trees (eucalypts, bottlebrushes, Lillie-pillies, fig trees and flowering melaleucas). Blossoms are the primary food source of the Flying Fox, however, they will also consume palm seeds and exotic fruits when native food is less abundant.

Horse owners/trainers should follow these steps to protect their horses:

- Where possible, place feed and water containers under shelter
- Do not place feed and water containers under trees, particularly if flying foxes are known to be present
- Do not use feed that might be attractive to flying foxes
 - Fruit and vegetables (e.g. apples, carrots) or anything sweet (e.g. molasses) has the potential to be attractive
- Where 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 producing fruit
- If the removal of horses from at-risk paddocks is not possible, restrict their access to those areas where the flying foxes are known to be active and for the duration of time they are present
- With particular reference to high risk areas, vaccination of horses must be considered
 - Vaccination of horses is the most effective way to help manage Hendra virus. Vaccination of horses against Hendra virus provides a work health and safety and public health benefit.

Racehorses returning from spelling properties

Horses returning to a racing stable from a spelling property, particularly any property located in coastal northern NSW or south east Queensland, potentially pose a greater Hendra infection risk than those horses already in the stable. Trainers should ascertain the level of risk of Hendra virus infection at the spelling properties from which their horses are returning to their racing stable and check their vaccination status.

As a precaution, horses arriving at a racing stable from a spelling property, particularly those in coastal northern NSW and south east Queensland, and from racing stables in northern coastal NSW and Queensland after the Brisbane, Grafton and Coffs Harbour carnivals, for example, should undergo a period of isolation in the stable. This allows for the physical separation of at-risk horses and should be maintained for a period no less than two weeks. During this period, the highest levels of basic hygiene should be maintained by stable staff. These horses should be closely monitored for all signs of illness, with assessment including at least daily recording of rectal temperature. It is important that any deviation in normal behaviour and demeanour is recognised immediately.

This should be maintained along with the already established protocols for biosecurity that all stables should have in place. This includes at least daily assessment of temperature, in the morning before the commencement of any work.

Under no circumstances should a horse displaying an elevated temperature, or showing signs of illness, be permitted to enter a training track or travel to a racetrack for the purpose of trialling or racing.

Trainers are reminded of Australian Rule of Racing 89 and the requirement to immediately notify the Stewards if a notifiable disease, such as Hendra virus, is suspected in a training establishment.

Safety precautions – Hendra virus can be fatal to humans

Human infection is thought to occur through exposure to bodily fluids of an infected horse.

As should be routine, Maintain a high level of stable hygiene, including covering any cuts or abrasions on exposed skin before handling horses, for example by using disposable gloves and washing hands well with soap and water. This is especially important after handling a horse's mouth or nose (eg fitting or removing a bridle), particularly before eating, smoking or touching your eyes, nose or mouth.

The risk of human infection can be greatly reduced by adopting good hygiene practices as a matter of routine and taking increased precautions around any sick horse, no matter the cause.

It is important to minimise contact with any horse if that is unwell. Trainers and owners should contact their veterinarian immediately if they identify any health or welfare concern in a horse in their care. As a precaution, if Hendra virus is a possibility, basic Personal Protective Equipment (PPE) should be implemented, including the availability of face masks, gloves and goggles.

Vaccination

While there is no current policy in NSW requiring the compulsory vaccination of thoroughbred racehorses against Hendra virus, it is acknowledged that thoroughbreds are vaccinated, particularly in susceptible areas of the state such as the north and mid-north coast.

According to animal health authorities, including the NSW DPI, vaccination is the single most effective way of reducing the risk of Hendra virus infection in horses and therefore human infection.

The Hendra virus vaccine is now fully registered with the APVMA and is available for administration by veterinarians.

Trainers are reminded that a horse that has been vaccinated against Hendra virus is not permitted to start in any race for five clear days from the day of the dose of vaccine. Further, trainers must ensure that a record of the Hendra virus vaccination is included in the trainer's record of treatment for such horse in accordance with the requirements of AR 104.

Further information and resources on Hendra virus are available at the NSW DPI website at:

<https://www.dpi.nsw.gov.au/about-us/services/laboratory-services/veterinary/hendra-virus>

To report any suspicion of Hendra virus infection, contact your veterinarian or ring the Emergency Animal Disease Hotline on 1800 675 888. Racing NSW Stewards should also be contacted on 02 9551 7500.

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