Hendra virus: managing the risk in Western Australia

By Dr Sue Skirrow, Emergency Animal Disease Preparedness manager

No horses or people in Western Australia have been diagnosed with Hendra virus infection. The likelihood of Hendra virus infection occurring in WA is considered low, because of the low numbers of horses where flying foxes occur, and the relatively low concentrations of flying foxes. There needs to be close contact between flying foxes and horses for transmission of the virus.

Testing of flying foxes in northern WA has shown that some carry Hendra virus. Horses in close contact with flying foxes have some risk of becoming infected with Hendra virus. People in close contact with infected horses have some risk of contracting Hendra virus.

What is Hendra virus?
Hendra virus is carried by flying foxes (fruit bats) in Australia, Papua New Guinea, and surrounding islands. The virus does not appear to affect flying foxes but can occasionally spread to horses. Infected horses usually die.

Forty-one Hendra virus disease cases have occurred in Australia since 1994 involving 82 horses. All have been in either Queensland or northern New South Wales. These states are investigating the reasons for the increased number of cases in 2011 and 2012.

How do horses catch Hendra virus?
It is believed that horses catch the virus by having contact with feed, water or other items contaminated by the body fluids (urine, faeces) of flying foxes. In some cases horses have transmitted the virus to other horses.

How can I reduce the risk of my horse catching Hendra virus?
If horses are kept in areas where there are flying foxes, owners/handlers can reduce the risk of the horses becoming infected by:
• removing horses from paddocks with fruiting or flowering trees or trees where flying foxes roost
• placing feed bins and water troughs under cover away from trees
• not planting trees that attract flying foxes in or near horse paddocks
• vaccination.

Vaccination
Vaccination against Hendra virus in horses is now available. If moving horses to risk areas of eastern Australia, owners should consult their veterinarian about vaccination. No vaccine is 100 per cent effective, so veterinarians and owners should still maintain good biosecurity when handling vaccinated horses.

Information about the vaccine is available at health4horses.com.au.

What is the risk of horses bringing in Hendra virus from other areas?
Wherever flying foxes and horses have contact, there is a risk that horses could develop Hendra virus. Therefore, recently arrived horses from risk areas of eastern Australia could be incubating Hendra virus.

Signs of Hendra virus infection
Hendra virus can cause a range of signs in horses, including:
• rapid onset illness
• increased body temperature (more than 38.5°C) and heart rate
• dullness
• rapid deterioration
• respiratory distress; laboured breathing, frothy and/or blood-stained nasal discharge
• neurological (nervous) signs such as wobbly gait, lack of coordination.

If your horse shows these signs, and may have had exposure to flying foxes, call your veterinarian or the Emergency Animal Disease hotline on 1800 675 888 immediately. Minimise contact with the horse until you have received veterinary advice.
Horses travelling to and from northern WA may also have a risk of contracting Hendra virus if exposed to flying foxes.

The incubation period for Hendra virus is thought to be between five and 16 days, but could be up to 31 days.

It is advisable to isolate all new arrivals and horses that have been in risk areas for at least seven days and to follow good biosecurity principles. Visit agric.wa.gov.au for the Keep Horses Healthy Checklist, produced as part of the Horse Alert WA package, for a comprehensive guide to horse biosecurity.

**How do people catch Hendra virus?**
People have also been infected with Hendra virus after very close contact with infected or dead horses. To date, seven people have been infected with the virus, and four of them have died.

There is no evidence that people can catch the virus from other people or directly from flying foxes.

**How can I reduce the risk of catching Hendra virus from my horse?**
As infected horses can transmit Hendra virus to people, do not have close contact with any horse with:
- signs suspicious of Hendra virus, and which
- may have had contact with flying foxes, or
- has recently arrived from a risk area of eastern Australia.

Immediately isolate the horse from other horses, people and animals, and contact your veterinarian or the Emergency Animal Disease hotline on 1800 675 888.

Guidelines for handling horses suspected of Hendra virus and for personal protective equipment are available on the Queensland Department of Agriculture, Fisheries and Forestry website at daff.qld.gov.au.

**What should I do if my horse shows signs similar to Hendra virus?**
Hendra virus infection is a notifiable disease — a disease that must be reported to government veterinary officers.

If your horse has signs suspicious of Hendra virus infection and may have had contact with flying foxes, or has recently arrived from Queensland or NSW, contact your veterinarian or the Emergency Animal Disease hotline on 1800 675 888.

More information
For more information about Hendra virus, contact your local district veterinary officer or visit daff.qld.gov.au.

The Horse Alert WA biosecurity package contains comprehensive advice about general horse biosecurity. For copies of Horse Alert WA, contact your local Department of Agriculture and Food office or download the electronic version at agric.wa.gov.au.

**Personal protective equipment for veterinarians**
As Hendra virus signs vary considerably, veterinarians should always consider their safety first and assess the risks of Hendra virus before examining a horse and wear appropriate personal protective equipment (PPE).

If veterinarians see signs suspicious of Hendra virus, they should immediately ring the Animal Health Laboratories on 9368 3351 or the Emergency Animal Disease hotline on 1800 675 888 for advice on correct PPE.

The most recent ‘Guidelines for veterinarians handling potential Hendra virus infections in horses’ is available at daff.qld.gov.au. The Australian Veterinary Association also has a PPE video at ava.com.au/suit-up.