



## **Hendra Virus**

### **What is Hendra Virus?**

- Hendra virus is a zoonotic disease, which means that it can transfer from animals to people. It is a fatal disease in horses and people.
- Hendra virus can be transmitted from flying fox to horse, horse to horse and horse to human
- Transmission is thought to occur through ingestion of material contaminated by infected flying fox body fluids and excretions. The absence of obvious bat activity in a particular area does not exclude the possibility of an equine Hendra virus infection
- Horse to horse through direct contact with body fluids of indirect contact via contaminated equipment
- Horse to human infection is through contact with respiratory secretions and blood and other body fluids from an infected horse. Veterinarians and their staff are at risk from Hendra virus when treating an infected horse

### **How can I reduce the risk?**

- Vaccination is strongly recommended
  - A Hendra virus vaccination is available and is the single most effective way of reducing the risk of Hendra virus infection in horses and is an important measure to prevent this occurring and provides a public health and workplace health and safety benefit
  - In vaccine trials, viral shedding was not detected in immunised horses after Hendra virus challenge
  - No evidence of Hendra virus replication has been detected in any tissue of vaccinated horses
  - We need a permit to administer the vaccination and the permit requires vaccinated horses to be microchipped which allows vaccinated horses to be identified on the national Hendra vaccination database
  - Rate of complications is very low (0.28%) with the most common complication is a swelling at the injection site, or raised temperature or malaise (off food) for 24 hours
  - There have been no reported repercussions in breeding horses so the vaccine is regarded as safe for pregnant mares, and is safe for foals over 4 months of age
  - Hendra vaccinations are yearly vaccinations after a set of three initial doses
    - The two initial doses are to be administered 21 to 42 days apart and followed by a third dose to be administered 6 months later
    - Annual vaccine boosters thereafter
- Remove horse feed and water container from under trees
- Remove horses from paddocks where flowering/fruited trees may attract flying foxes during times of activity

- Clean and disinfect gear between horses including halters, lead ropes and twitches
- When cleaning contaminated equipment, wear gloves, cover any cuts or grazes and wash your hands thoroughly afterwards
- If your horse becomes sick, isolate from other horses and ring your veterinarian
- Handle healthy horses before handling sick horses and only handle after taking appropriate precautions
- Practice good biosecurity do not travel with, work on or take sick horses to other properties or equestrian events

### **Clinical signs of Hendra Virus**

- Hendra virus can cause a broad range of signs in horses which are often very vague
- Typically, it is acute in onset and rapidly progressive with death of most infected animals occurring with 2-3 days of the appearance of clinical signs
- Hendra virus infection should be considered in any sick horse where the cause of illness is unknown and particularly where there is rapid onset of illness, fever, increased heart rate and rapid deterioration associated with respiratory and/or nervous signs
- Clinical signs
  - Rapid onset of illness
  - Increased body temperature/fever
  - Increased heart rate
  - Discomfort/weight shifting between legs
  - Depression
  - Rapid deterioration with respiratory and/or nervous signs
    - Respiratory signs
      - Respiratory distress
      - Increased respiratory rate
      - 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
- If you suspect your horse may be infected with Hendra virus, avoid close contact with the horse, and other horses that it has had contact with
- Isolate the sick horse
- Other contacts
  - Biosecurity Queensland
    - Phone 132523 (business hours) emergency animal disease watch hotline  
1800 675888 (anytime) website: [www.biosecurity.qld.gov.au](http://www.biosecurity.qld.gov.au)