

Nanango Veterinary Surgery

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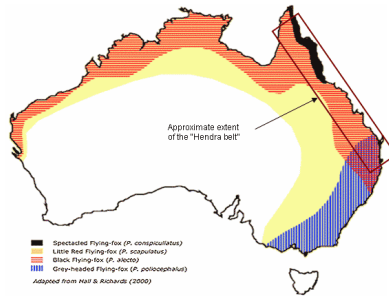
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Hendra Virus Vaccination

Hendra virus background

Hendra virus was first detected in horses in 1994. Up to 2012 there have been 35 outbreaks in Queensland and northern New South Wales, in what is termed the "Hendra belt", mainly on the coastal belt, but with one outbreak at Chinchilla, west of the Great Dividing Range.



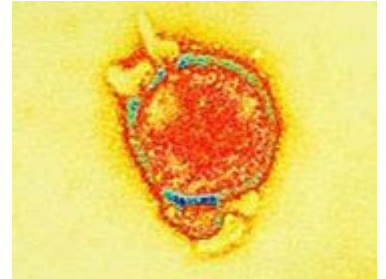
The natural host of Hendra virus are various species of flying foxes (or fruit bats) who don't show any signs of the disease. Horses become infected with Hendra virus by ingesting feed or water contaminated with flying fox urine, faeces or bodily fluids. Horses can transmit the virus to other horses in close contact by bodily fluids or blood. This can be as simple as sharing feed or water troughs or other equipment. Humans have been infected by close contact with infected bodily fluids or blood of infected horses. Hence the need for strict adherence to hand washing and cleaning procedures around horses. Sadly, nearly half of the infections in humans have been fatal, and half of the deaths have been veterinarians.



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Hendra virus vaccine

In November 2012, Pfizer released their breakthrough Equivac HeV vaccine for horses. The vaccine uses a protein that coats the Hendra virus to stimulate an immunity against the virus without using either live or killed virus in the vaccine. So vaccination has no risk of causing an infection in the horse.



How was the vaccine produced

- 1 Ovary cells taken from Chinese hamster in the 1950s.
- 2 Ovary cell line from the hamster established in the USA. Means cells keep regenerating for use in research.
- 3 Gene for Hendra-G protein is transferred to an ovary cell.
- 4 As cells grow and divide, they produce a pure Hendra-G protein, which is secreted in large volumes.
- 5 That protein is then harvested for use in the vaccine.

Vaccination procedure

Two doses of vaccine are administered by an accredited vet into the muscle of the horse 21 days apart. All vaccinated horses must be microchipped, and vaccination details are recorded on a Vaccination Database. Booster doses will be required but research is continuing as to frequency and need. Research is being conducted as to any risks of side effects or impacts on pregnant or breeding animals.



Vaccination costs

To reduce the cost of vaccination we try to make the vaccination process as streamlined as possible. Horse owners fill out a form with horse details for the database entry. Individual vaccinations at the surgery start from \$140. Group vaccinations are cheaper. On property vaccinations involve travelling fees. Microchipping is from \$20 per horse.

Common signs of Hendra virus infection in horses.

- Acute onset of illness
- Increased body temperature
- Increased heart rate
- Discomfort/weight shifting between legs
- Rapid deterioration with respiratory and/or nervous signs
- Depression



A range of other signs have been noted, including sudden deaths, jaw problems, muscle trembling, altered gait, off food, colic, straining to pass urine or faeces, hot hooves, halitosis and congested gums. With such a range of signs, you should note the unusual, practice good hygiene and seek help if concerned.



Horse name: **Owners name:**

Horse breed: Age: Sex: Address;

Microchip number: Ph: Email:

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