

Hendra and Nipah Viruses Fact Sheet

- 1. What is Hendra and Nipah Viruses?** - Hendra and Nipah viruses are viral infections that cause respiratory and nervous system disease. They both belong to the same Paramyxoviridae family. The Nipah virus caused an encephalitis and respiratory disease outbreak (1998-99) in pigs and humans in Malaysia, while the Hendra virus caused a respiratory and neurologic disease outbreak (1994) in horses and humans in Australia. During the Hendra virus outbreak, two of the three human patients died. During the Nipah virus outbreak which involved more than 200 illnesses, about 40% of the patients with serious nervous disease who entered the hospital died from the illness. Since the original outbreak in Malaysia, Nipah Virus outbreaks have been repeatedly identified in Bangladesh and India. Hendra and Nipah viruses have only been reported in Southeast Asia and Australia, not in the United States.
- 2. How are Hendra and Nipah transmitted?** - Close contact with tissues or bodily fluids of infected animals is required for infection. While the Hendra virus is not very contagious, Nipah virus appears to be much more easily transmitted. In Malaysia, pigs were the primary source of Nipah infection. In south Asia, chains of person-to-person transmission have been clearly documented.
- 3. What are the animal reservoirs of these diseases?** - These diseases are carried by a family of very large bats called flying foxes (*Pteropus sp*). Infected flying foxes have been found in Southeast Asia, Australia, Papua New Guinea, and Bangladesh.
- 4. What are the risk factors?** - Persons at risk include those who come in contact with infected animals or bats, in the rural areas of Australia, southeast Asia, and south Asia.
- 5. What is the incubation period?** - Normally the incubation period is 4 to 18 days.
- 6. What are the common symptoms?** - Symptoms of Hendra and Nipah virus include flu-like symptoms, including fever and muscle soreness. The diseases can also cause headache, drowsiness, and disorientation. In some cases infection can lead to coma and death. In the India outbreak, the fatality rate approached 70%.
- 7. What are the symptoms in animals?** - Horses infected with Hendra virus usually have an acute fever and appear sick. The most common symptoms in dogs include a loss of appetite, vomiting, and fever. Pigs infected with Nipah virus develop a loud cough and appear sick with fever. Flying foxes do not appear to develop illness.
- 8. How are Hendra and Nipah virus infections diagnosed?** - A blood test can detect the body's immune response to infection. The virus can also be isolated from clinical samples.
- 9. How are Hendra and Nipah viruses treated?** - No specific treatment besides supportive care has been identified.



10. How can infection be prevented? - Because most infections require direct contact with infected tissues or bodily fluids, avoidance of these will prevent disease. If viral infection of an animal is suspected, precautions should be taken by wearing impermeable gloves, protective clothing, and face and eye shields. In areas where person-to-person spread has been seen, gowns, gloves and masks are recommended when caring for an infected patient.

11. For more information: <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/nipah.htm>

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.