Nipah virus

Overview

Nipah virus is a zoonotic virus, usually transmitted from animals to humans, but can also be transmitted through contaminated food or directly between people.

Nipah virus was first identified in 1998 during an outbreak among pig farmers in Malaysia. In 1999, an outbreak was reported in Singapore following the importation of sick pigs from Malaysia. No new outbreaks have been reported from Malaysia or Singapore since 1999. In 2001, Nipah virus infection outbreaks were detected in India and Bangladesh. In Bangladesh, outbreaks have been reported almost every year since. In India, outbreaks are periodically reported in several parts of the country, including the latest one in 2026.

In 2014, an outbreak was reported in the Philippines with no new cases since then.

Transmission

Fruit bats from the *Pteropodidae* family are considered the natural host of Nipah virus and are present in different parts of Asia and in Australia

Infection with Nipah virus does not appear to cause disease in fruit bats.

Transmission of the virus to humans can occur from direct contact with infected animals like bats, pigs or horses, and by consuming fruits or fruit products, such as raw date palm juice, contaminated by infected fruit bats. The virus can also cause severe disease in farming animals such as pigs.

Nipah virus can also spread between people. It has been reported in health-care settings and among family and caregivers of sick people through close contact. In health facilities, the risk of spread can increase in overcrowded, poorly ventilated hospital environments with inadequate implementation of infection prevention and control measures (such as the use of personal protective equipment, cleaning and disinfection, and hand hygiene).

Signs and symptoms

The incubation period – that is the time from infection to the onset of symptoms – ranges from 3 to 14 days. In some rare cases incubation of up to 45 days has been reported.

For some people, Nipah virus infection may be asymptomatic. However, most people develop a fever, and symptoms involving the brain (such as headache or confusion), and/or the lungs (such as

difficulty breathing or cough). Other organs can also be affected. Frequent other symptoms include chills, fatigue, drowsiness, dizziness, vomiting and diarrhoea.

Severe disease can occur in any patient but is particularly associated with people presenting with neurological symptoms, with progression to brain swelling (encephalitis) and, frequently, death. Careful supportive care and monitoring during this period is critical.

Most people who survive make a full recovery, but long-term neurologic conditions have been reported in approximately 1 in 5 people who recovered from the disease.

Treatment

While there are no specific treatments for Nipah, early diagnosis will promote early supportive care. For all severe viral infections, high-quality supportive medical care can prevent deaths, and includes:

- identifying any complications (brain swelling, pneumonia, other organ damage);
- personalizing treatment to account for patients' other health conditions;
- treating with oxygen when required;
- applying specific organ support therapies as needed (such as ventilation, renal dialysis); and
- ensuring adequate rehydration and nutrition with frequent monitoring.

Prevention

- **Reducing the risk of infection in people**

Raising awareness of the risk factors for infection and on measures people can take to protect themselves and prevent transmission is critical. WHO recommends taking measures as noted below.

- **Reducing the risk of human-to-human transmission**

People experiencing Nipah-like symptoms should be referred to a health facility, as early supportive care is key in the absence of licensed treatment. Close unprotected physical contact with sick people should be avoided. Regular hand washing should be carried out after caring for or visiting sick people along other preventive measures.

Information from WHO