



Nipah Virus

Last update: 2025-07-03

Key facts

- Nipah virus is a zoonotic pathogen that can cause severe disease in both animals and humans.
- It was first identified in Malaysia in 1998, where it caused an outbreak among pigs and subsequently spread to humans. Since then, there have been subsequent outbreaks in India and Bangladesh.
- Its natural host are fruit bats of the Pteropodidae family and pigs can serve as intermediate hosts.
- The virus can cause severe respiratory and neurological symptoms and death (fatality rate of 40% - 75%).
- There is no treatment or vaccine available for either people or animals. The primary treatment for humans is supportive care.

Transmission:

- Direct contact with infected animals or their secretions (urine, saliva)
- Close contact with infected patients, particularly through bodily fluids
- Consumption of food contaminated with bat urine or saliva

Most vulnerable to contracting the disease

- People living in regions with previous Nipah virus outbreaks including parts of Bangladesh and India.
- Farmers and people working with or handling pigs in endemic regions.
- Individuals in close contact with infected patients are at increased risk of acquiring the virus.

Most vulnerable to severe disease

- Children
- Elderly
- People with long-term health problems like diabetes, heart or lung disease
- People with a weakened immune system (e.g. due to HIV, poor nutrition, or certain medicines)

Symptoms

- Fever
- Cough
- Difficulty breathing
- Encephalitis (inflammation of the brain)
- Drowsiness
- Confusion
- Seizures
- Sore throat
- Muscle pain
- Vomiting
- Headache
- Abdominal pain
- Coma

What can you do to prevent and control an epidemic?

Reservoir control and prevention

- Identify and isolate suspected pigs
- Avoid direct contact with identified natural reservoir hosts such as fruit bats
- Pig feed and pig shed should be protected against bats when feasible.
- Establish an animal health/wildlife surveillance system, using a One Health approach, to detect Nipah cases and provide early warning for veterinary and human public health authorities.

Personal protection and hygiene

- Use appropriate Personal Protective Equipment (PPE) when caring for infected patients
- Gloves and other protective clothing should be worn while handling sick animals or their tissues, and during slaughtering and culling procedures.
- As much as possible, people should avoid being in contact with infected pigs.
- Regular hand washing should be carried out after caring for or visiting sick people.

Food hygiene and safety

- Keep date palm sap and other fresh food products away from bats
- Date palm juice should be boiled, and other fruits should be washed thoroughly and peeled before consumption
- Fruits with signs of bites should be discarded

Monitoring the community and identifying sick people

- Identify community members who have suspected Nipah virus infection based on the community case definition

Treatment and management

- Rapidly detect and refer severe cases to health facilities early
- Provide psychosocial support to the sick person and their family members

Social mobilisation and behaviour change

- Find out the specific advice being given by health and other relevant authorities
- Model following this advice and inform community members of current health practice advice
- Offer support and encouragement to follow the advice
 - Try to gain understanding about if and why health practice advice is not being followed
 - With the guidance of your supervisor and health authorities, work with communities to overcome barriers to following health advice and recommended practices

Immunization

- Currently, there are no vaccines for Nipah virus

Mapping and community assessment

- Make a map of the community.
- Mark the following information on the map:
 - How many people have fallen sick with Nipah virus disease? Where?
 - How many people have died? Where? When?
 - Who and where are the vulnerable people?
 - Where are the local health facilities and services? (include traditional healers)

- Record the following information on the back of the map:
 - When did people start to fall sick with Nipah virus disease?
 - How many people live in the affected community? How many are children under five years old?
 - What are the community's habits, practices and beliefs about food safety and hygiene?
 - What are the community's habits, practices and beliefs about caring for and feeding sick people? Consider any differences in roles and responsibilities between men and women.
 - When babies and infants are sick, do women continue to breastfeed them?
 - Are children badly affected by the Nipah virus? Are there other groups (specific ages, occupations, geographic areas, etc.) that are badly affected?
 - Is a social mobilization or health promotion programme in place?
 - Which sources do people use/trust the most for information?
 - Are there rumours or misinformation about Nipah virus? What are the rumours?

Other resources

- World Health Organization (WHO). [Nipah Virus](#); 2018
- World Organization for Animal Health (WOAH); [Nipah virus](#); 2024