

# FAQ NIPAH VIRUS (NiV) INFECTION

## 1. What is NiV?

NiV is a zoonotic virus which can be transmitted to humans by infected animals that causes severe illness in both humans and animals.

NiV is a member of the family *Paramyxoviridae*, genus *Henipavirus*.

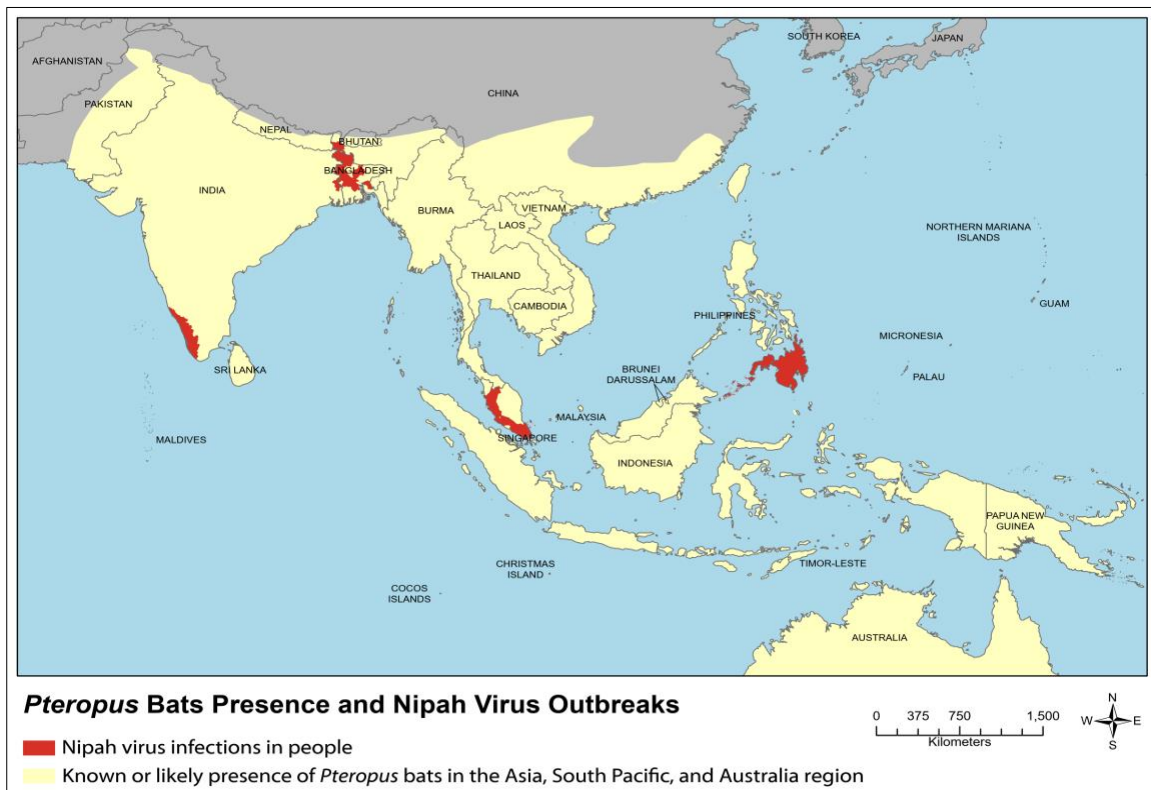
The virus was isolated and identified in 1998 during an outbreak of encephalitis and respiratory illness among pig farmers and people with close contact with infected pigs in Malaysia. The virus is named after the location where it was first detected in Malaysia.

While there have been no other known outbreaks of NiV infection in Malaysia since 1999, outbreaks have been recorded almost annually in Bangladesh and India.

NiV infection is a notifiable disease under the Prevention and Control of Infectious Disease Act 1988.

## 2. Who is at risk for NiV infection?

People of all ages are at risk for NiV infection in Asia. NiV is naturally harboured by reservoir host fruit bats (genus *Pteropus*), also known as the 'flying foxes' which infects other animals such as pigs and horses.



Last Reviewed: February 2, 2023

Source: Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of High-Consequence Pathogens and Pathology (DHCPP), Viral Special Pathogens Branch (VSPB)

In Malaysia and Singapore, infection has been associated with close contact with infected pigs which was transmitted initially from bats.

In Bangladesh and India, infection has been associated with the custom of drinking fresh toddy or sweet tree sap which may get contaminated by infected bats.

### **3. How long is the incubation period?**

Symptoms usually appear five (5) to 14 days after exposure to the virus. However, longer incubation periods up to two (2) months have also been observed.

### **4. What are the symptoms of NiV?**

Infection with NiV can cause mild to severe disease.

The symptoms may include one or several of the following:

- Fever
- Headache
- Cough
- Sore throat
- Difficulty breathing
- Vomiting
- Disorientation, drowsiness, or confusion
- Seizures

### **5. What are the complications?**

- Brain swelling (encephalitis)
- Acute respiratory distress (a life-threatening lung condition)
- Coma
- Death

Serious nervous disease with NiV encephalitis has been shown to cause long term complications in some patients that survived, including persistent convulsions and personality changes.

Case fatality rate for NiV infection can range from 40% to 75%.

## **6. How is NiV spread?**

Transmission may occur in humans through:

- a) Direct contact with discharges and body fluids (stool, urine and saliva) from infected bats and animals.
- b) Ingestion of fruits and tree sap (e.g. raw date palm/coconut/nipah sap) contaminated with bats discharges or body fluids.
- c) Human-to-human transmission through contact with body fluids and respiratory droplets produced when people infected with NiV cough or sneeze. This transmission occurs especially among families and caregivers of NiV-infected patients, and also in healthcare settings.

## **7. When and for how long is a person able to spread the disease?**

Infected person may transmit the NiV up to 21 days after onset of disease.

## **8. How is a person diagnosed?**

Diagnosis of NiV is through laboratory tests (i.e. serology and PCR test). These tests are available in the Institute of Medical Research (IMR) and the National Public Health Laboratory (NPHL).

## **9. What is the treatment?**

Currently, no drug or vaccine are available to treat the infection.

However, health care providers may offer supportive care, including rest, hydration, and treatment of symptoms as they occur.

## **10. What can be done to prevent from getting infected?**

- a) Practice handwashing regularly with soap and water
- b) Avoid contact with bats or pigs especially if they are sick
- c) Avoid areas where bats are known to roost
- d) Avoid eating or drinking products that could be contaminated by bats, such as tree sap (e.g. coconut and nipah sap), raw fruits, or fruits that are found on the ground
- e) Avoid visiting suspected cases of NiV
- f) Avoid contact with blood or body fluids of any person known to be infected with NiV
- g) If travelling to high-risk countries, make sure to practice points (a) to (f)

**11. What do you need to do once coming back from the affected countries?**

- a) To self-monitor health status (especially for the above symptoms) up to 14 days
- b) If you develop symptoms, avoid contact with others and seek immediate treatment at the nearest health facility

**12. Additional Information:**

Further information is available at;

- i. Portal MyHEALTH - <http://www.myhealth.gov.my/en/>
- ii. Info Sihat - <https://www.infosihat.gov.my/>

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## References:

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