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What to know about the Nipah virus

10 MIN AGO

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Two Nipah virus cases have been confirmed in eastern India, the World Health Organization says.  
(CK Thanseer/Reuters)

The World Health Organization reported two cases of a rare virus in an eastern Indian state on Thursday.

The virus — called Nipah — kills more than half of the people it infects. Nipah virus, which was named after the village in Malaysia where the first known patient lived, is part of the same family of viruses as measles. Despite that, it's not as infectious as measles, but it is significantly more deadly.

## How is it transmitted?

Nipah is a zoonotic virus, meaning it can be transmitted from animals to humans. Most commonly, that happens through direct contact with an infected pig or bat, according to the US Centers for Disease Control and Prevention. Eating fruits or fruit products — such as raw date palm juice — contaminated with urine or saliva from infected fruit bats also contributes to spread.

It can also spread directly from person to person. Transmission, however, occurs through very close contact with the infected individual.

## What are the signs of illness?

It can take four to 14 days for symptoms to appear after a person is infected, according to WHO, and asymptomatic cases are rare.

The first signs of infection are non-specific and include flu-like symptoms like fever, headaches, muscle pain, vomiting and sore throat. In about two-thirds of patients, the disease rapidly progresses, and coma can strike within five to seven days. Some infections also lead to respiratory symptoms like cough and abnormal chest X-rays.

Most patients show changes in the fluid that surrounds the brain, commonly seen in other viral brain infections. Changes caused by tissue death can be seen on brain imaging, and electrical activity of the brain predicts the severity of the disease.

## How dangerous is it?

The virus is classified by the CDC as biosafety level four — the highest category, with the most dangerous pathogens like Ebola — and it has the potential to serve as an agent for bioterrorism.

Though there have been only a few outbreaks, Nipah is considered a public health threat because of its high case fatality rate, potential for human-to-human transmission, capacity to cause outbreaks and lack of approved vaccines or treatment.

In severe cases, the virus can attack parts of the brain that control basic life functions like eye movement, heart rate and blood pressure, causing permanent damage.

Those who survive often experience fatigue and changes in how their nervous system works. These effects often persist for years.

## How is it diagnosed?

Testing is often done using a sample of blood to detect and quantify specific proteins.

## How is it treated?

There is no vaccine or drug specifically for Nipah. Doctors provide supportive care, and patients who develop severe neurological symptoms may need help breathing.

A drug called ribavirin — which is approved to be used with other drugs to treat chronic hepatitis C — may offer some benefit, though results are mixed.

The upshot is that doctors focus on prevention by reducing the risk of animal-to-human transmission and implementing infection control measures when working with infected people.

## Where do outbreaks occur?

Nipah outbreaks happen nearly every year in parts of Asia, often in Bangladesh, India, Malaysia, the Philippines and Singapore, with Bangladesh recording the highest number of infections. That's because the fruit bats that transmit the virus — among the largest bats in the world — are native to these regions.

The virus typically spreads from December to May, during bat breeding season and date palm sap harvesting season.

Nipah virus has also been found in bats from China, Cambodia, Thailand, Madagascar and Ghana. A Nipah case has never been reported in the US.

## How common is it?

It's very rare. As of 2024, about 754 cases have been reported globally, though that figure is probably underestimated.

