

# HUMAN METAPNEUMOVIRUS (HMPV) OUTBREAK IN CHINA : A COMPREHENSIVE OVERVIEW



Five years after the COVID-19 pandemic disrupted the world, a new health concern has emerged in China. Human Metapneumovirus (HMPV), a respiratory virus, is witnessing a surge in cases across several provinces. While the Chinese government has downplayed the severity of the outbreak, the situation has raised concerns globally due to its similarities with the early days of the COVID-19 pandemic. Here's everything you need to know about HMPV, its implications, and the global response.

### What is Human Metapneumovirus (HMPV)?

Discovered in 2001, Human Metapneumovirus belongs to the Paramyxoviridae family, which includes pathogens like respiratory syncytial virus (RSV) and parainfluenza. HMPV primarily affects the respiratory tract and is spread through close contact, respiratory droplets, or contaminated surfaces.

### **Common Symptoms:**

- Fever
- Runny nose and nasal congestion
- Sore throat
- Cough and wheezing
- Shortness of breath

While HMPV can cause mild symptoms in healthy individuals, it poses a significant risk to young children, the elderly, and people with compromised immune systems. Severe cases can lead to bronchitis, pneumonia, or respiratory failure, often requiring hospitalization.

### **Current Situation in China**

### The Surge in Cases:

In late December 2024, China reported a marked increase in respiratory infections, with HMPV accounting for 6.2% of positive tests and 5.4% of hospitalizations between December 16 and 22. Pediatric hospitals, especially in regions like Hunan Province, are overwhelmed with cases. Social media videos depict overcrowded waiting areas, reminiscent of the chaos seen during the early stages of the COVID-19 pandemic.

### **Government Response:**

The Chinese Center for Disease Control and Prevention (CCDC) has acknowledged the rise in HMPV cases but has emphasized that the numbers align with seasonal trends of respiratory illnesses. No formal public health emergency has been declared, but health officials are monitoring the situation closely.

## **Testing and Diagnostics:**

China has ramped up its diagnostic capabilities to identify HMPV cases accurately. The increased availability of molecular tests, such as PCR (Polymerase Chain Reaction), has helped identify the virus in patients exhibiting flulike symptoms.

# Global Implications and Response

### Neighboring Countries on Alert:

The spread of HMPV has sparked concerns in neighboring countries.

- India: The first cases of HMPV have been reported in Bengaluru, involving two infants. Health authorities have issued guidelines for hospitals to screen for the virus in patients with respiratory symptoms.
- **Malaysia:** Malaysia documented 327 cases of HMPV in 2024 and is maintaining surveillance to prevent further spread.

### **Expert Opinions:**

Global health experts stress that while the outbreak demands attention, it is not yet a cause for alarm. Dr. Sanjaya Senanayake, an infectious diseases specialist, pointed out that HMPV is a common respiratory virus and unlikely to cause a pandemic akin to COVID-19.

# How Does HMPV Compare to COVID-19?

While both viruses can cause respiratory illness, HMPV differs significantly from SARS-CoV-2, the virus responsible for COVID-19:

- 1. **Infectivity:** HMPV spreads more slowly and has a lower transmission rate compared to SARS-CoV-2.
- 2. Severity: HMPV generally causes milder symptoms in healthy individuals, with high-risk groups being more vulnerable to severe outcomes.
- 3. **Global Spread:** Unlike SARS-CoV-2, HMPV is not new; it has been present worldwide for decades.

#### **Preventive Measures**

Though there is no specific vaccine or antiviral treatment for HMPV, several preventive measures can help reduce its spread:

### **1. Hygiene Practices:**

- Regular handwashing with soap and water
- Using alcohol-based hand sanitizers

### 2. Respiratory Etiquette:

• Covering the mouth and nose with a tissue or elbow when coughing or sneezing. • Wearing masks in crowded places

### 3. Avoid Close Contact:

- Isolating individuals with respiratory symptoms
- Maintaining social distancing where possible

### 4. Disinfection:

• Regularly cleaning frequently touched surfaces

Parents and caregivers should be especially vigilant about children displaying symptoms of respiratory distress, as early medical intervention can prevent complications.

# Research and Medical Developments

Efforts are underway globally to study the genetic variations and transmissibility of HMPV. Advanced genomic sequencing techniques are helping scientists better understand the virus's behavior and potential mutations. Developing targeted antiviral therapies or vaccines remains a long-term goal.

### Conclusion

The outbreak of Human Metapneumovirus in China has sparked renewed concerns about the threat posed by respiratory viruses. While HMPV is not a new virus and its current surge appears to align with seasonal trends, its potential to overwhelm healthcare systems highlights the importance of vigilance and preparedness.

As the world watches China's response, the emphasis remains on adhering to preventive measures, strengthening healthcare systems, and fostering global cooperation to mitigate future outbreaks. While HMPV may not be as devastating as COVID-19, it serves as a stark reminder of the ongoing challenges in managing infectious diseases in an interconnected world.

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### EOSINOPHILIA

Eosinophilia is a general term for many respiratory disorders, including asthma, allergies, bronchitis, and mosquito-borne elephantiasis!

Like many diseases, it can also be caused by genetic factors. Eosinophilia can be prevented by adopting a healthy lifestyle.

Getting the flu vaccine provides some protection. If you have a cough for a month, taking an antibiotic every week and consulting a different doctor will not help.