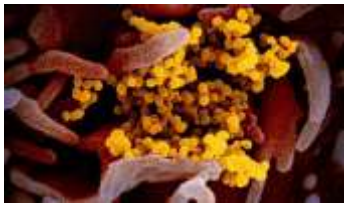
Press Briefing
IHR Programme, CDC, DGHS, MOHFW

Human metapneumovirus (HMPV) has been known for over 2 decades, like any other respiratory virus causes the common cold & flu-like symptoms.



Introduction: HMPV is a common respiratory virus that causes lower and upper respiratory infections (like a cold). It is a seasonal disease that usually occurs in the winter and early spring, similar to Respiratory Syncytial Virus (RSV) and the flu. HMPV is not a newly discovered virus, it was first discovered in 2001. It belongs to Metapneumo virus genus cause significant disease in humans and animals which spreads through respiratory droplets or contact with contaminated surfaces. It has been reported in most parts of the world and isolated from the respiratory tract of subjects from all age groups.
Most people recover from HMPV in about 7 to 10 days without any complications. However, certain groups face a higher risk of severe complications like viral pneumonia, requiring hospitalization and intensive care in severe cases.

CDC, DGHS is closely monitoring the news reports about the massive outbreak of viral fever and respiratory infection in China some other countries, there is no need to panic as of now. According to the International Health Regulations (IHR-2005), if a disease is widespread in a region, it must be reported to the World Health Organization (WHO), then the organization will determine whether or not a particular event constitutes a public health emergency of international concern (PHEIC). Till now, the WHO has not flagged the situation as a global health emergency. However, due to the rise in cases in some countries IHR Programme, CDC, DGHS has advised the concerned surveillance units to strengthen the Disease Surveillance monitoring systems.

KEY POINTS

- Human metapneumovirus (HMPV) can cause respiratory disease.
- HMPV spreads from person to person or surfaces to person.
- Symptoms include cough, fever, nasal congestion, and shortness of breath.
- Your health care provider can test, and the treatment is mainly symptomatic.
- Prevention measures include hand washing, cleaning surfaces, and staying home when sick.

Background: The Paramyxovirus family has several prime suspect pathogens that are known to cause a wide range of diseases in people and in animals. China is experiencing a surge in infections of a respiratory virus. The virus, identified as human metapneumovirus (HMPV), has seen cases spiking across northern Chinese provinces this winter, particularly among children. Health authorities in China are implementing emergency measures to monitor and manage the spread. However, they state the developments as an annual winter occurrence and said that “Respiratory infections tend to peak during the winter season” as usual.

Epidemiology: HMPV can cause both upper and lower respiratory diseases in people of all ages, with young children, older adults, and those with weakened immune systems being most vulnerable.
However, the risk of severe illness is higher for people who are younger than five or older than 65. There is no vaccine or specific antiviral treatment for HMPV; treatment primarily involves managing symptoms. Like other similar viruses, HMPV usually spreads from person to person through droplets from coughing and sneezing, through human contact such as hugging or kissing, and through touching surfaces and objects contaminated with the virus and then the mouth, nose or eyes. The spike in cases coincides with colder weather and increased indoor activity, conditions that typically fuel the spread of respiratory viruses. China’s National Disease Control and Prevention Administration emphasize that this surge is consistent with seasonal trends.

Current Update: Based on current data from IEDCR and other surveillance units there has been no unusual surge in Influenza-Like Illness (ILI) or Severe Acute Respiratory Illness (SARI) cases in Bangladesh. China is experiencing a surge in HMPV cases, particularly in children under 14 years of age.

Symptoms include cough, fever, and shortness of breath, with potential complications like bronchitis and pneumonia. The country has seen cases rise in its northern provinces. India hadn't registered any unusual spike in winter respiratory diseases. However, they confirmed three cases of Human Metapneumovirus (HMPV). Hongkong and Malaysia also reported cases of HMPV.

Sign Symptoms: HMPV usually causes symptoms similar to the common cold that last roughly 2-5 days and go away on their own. Its symptoms include cough, fever, nasal congestion, shortness of breath and fatigue, with an incubation period of 3to 6 days. Most children who get infected with HMPV are age 5 or younger. A small number of children (5-16%) infected will develop a lower respiratory tract infection such as pneumonia. Clinical symptoms of HMPV infection may progress to bronchitis or pneumonia and are similar to other viruses that cause upper and lower respiratory infections.

Treatment: There is no vaccine or specific antiviral treatment for HMPV; treatment primarily involves managing symptoms. Supportive treatment for patients varies with the severity of the illness but generally treatment consists of fever reducers, antihistamines, breathing treatments and other means of providing comfort to the patient until the illness resolves.

Testing and diagnosis: Infection with HMPV can be confirmed usually by

- direct detection of viral genome by nucleic acid amplification test (NAAT), and
- direct detection of viral antigens in respiratory secretions using immunofluorescence or enzyme immunoassay.

Prevention:

- Wash their hands often with soap and water for at least 20 seconds (Avoid touching eyes, nose, or mouth with unwashed hands.
- wearing masks
- Avoid close contact with people who are sick.
- Patients who have cold-like symptoms should cover their mouth and nose when coughing and sneezing
- avoid sharing their cups and eating utensils with others
- refrain from kissing others
- stay at home when sick
- cleaning possible contaminated surfaces (such as doorknobs and shared toys) may potentially help stop the spread of HMPV.

Response by CDC, DGHS:

- IHR Focal institute and cost center for Disease surveillance, IEDCR is requested to report any unusual surge in Influenza-Like Illness (ILI) or Severe Acute Respiratory Illness (SARI) cases, and regularly test for respiratory viruses, including HMPV, as part of their efforts to monitor and control respiratory illness.
- The National Respiratory Pathogen Genomic Surveillance (NRPGS) in Bangladesh conducted by Institute of Epidemiology, Disease Control and Research (IEDCR), International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b); and Institute for Developing Science and Health Initiatives (ideSHi) are requested to closely to monitor genomic variants of respiratory viruses and scale-up whole genome sequencing (WGS) capacity for respiratory pathogens including HMPV.
- All Health units are asked to enhance awareness programme for washing hands regularly with soap and water or use alcohol-based sanitizer, avoiding crowded places and keeping a safe distance among other precautions.
- Surveillance units are asked to track pneumonia of unknown origin, and report as per surveillance guideline.
- All POE including airports, land ports and Sea ports are advised to follow Standard Precautions and infection prevention practices applied for international passengers and personal safety and no travel restriction is required at this moment.

Fact Sheet: Human Metapneumovirus (hMPV) in Bangladesh

What is hMPV?

Human metapneumovirus (hMPV) belongs to the Pneumoviridae family. It was first discovered in 2001 and is known to cause respiratory infections in humans affecting the upper and lower respiratory tract.

Symptoms

- Mild to moderate symptoms similar to common cold
- Cough, fever, sore throat, nasal congestion, and shortness of breath
- In severe cases, bronchiolitis, pneumonia especially in people who are at risk

People at risk

- Infants and young children
- Elderly people
- Individuals with chronic respiratory illness (e.g., asthma, COPD)
- Immunocompromised patients
- Co-morbid patients

Transmission

hMPV is most likely transmitted from an infected person to others through:

- Secretions from coughing and sneezing
- Close contact, such as touching or shaking hands
- Touching contaminated objects or surfaces

Treatment

- There is no specific anti-viral drug or vaccine
- Only supportive treatment is needed
- Most people recover on their own within 7 to 10 days
- Contact health care provider if symptoms are severe

Prevention

For infected Individual

- Practice cough etiquette: cover mouth and nose when coughing and sneezing
- Maintain Hand Hygiene: Wash hands with soap and running water for at least 20 seconds after coughing and sneezing
- Stay at home to protect others

For uninfected Individual

- Use mask in hospital/gathering/crowded area
- Avoid touching eyes, nose, or mouth with unwashed hands after come in contact with infected person or contaminated surface or objects
- Maintain Hand Hygiene: Wash hands with soap and running water for at least 20 seconds after come in contact with infected person or contaminated surface or objects
- Avoid close contact with people who are sick

Bangladesh Situation

In Bangladesh, existence of hMPV has been identified since 2017 through IEDCR's Respiratory Event based Surveillance (REBS) platform. However, no casualty is yet reported.