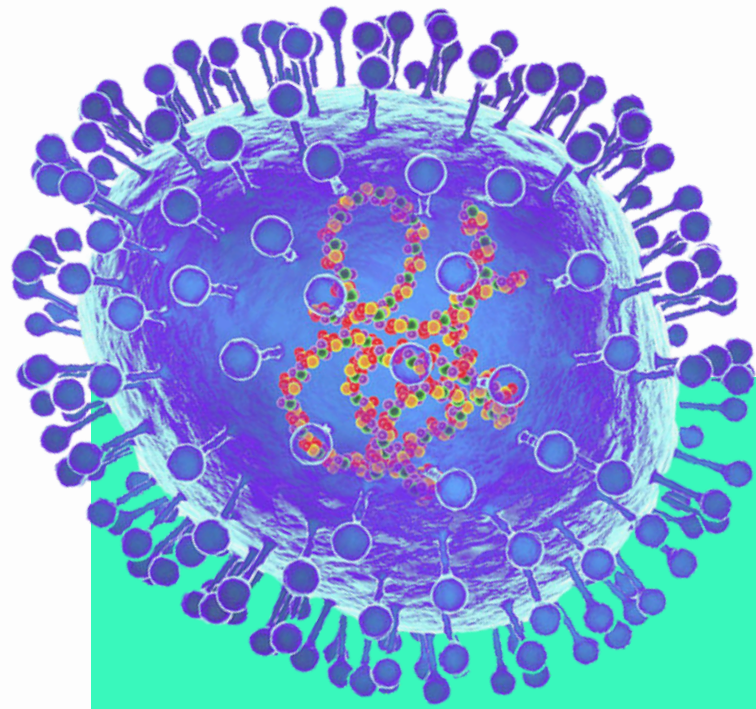


HMPV

Human Metapneumovirus

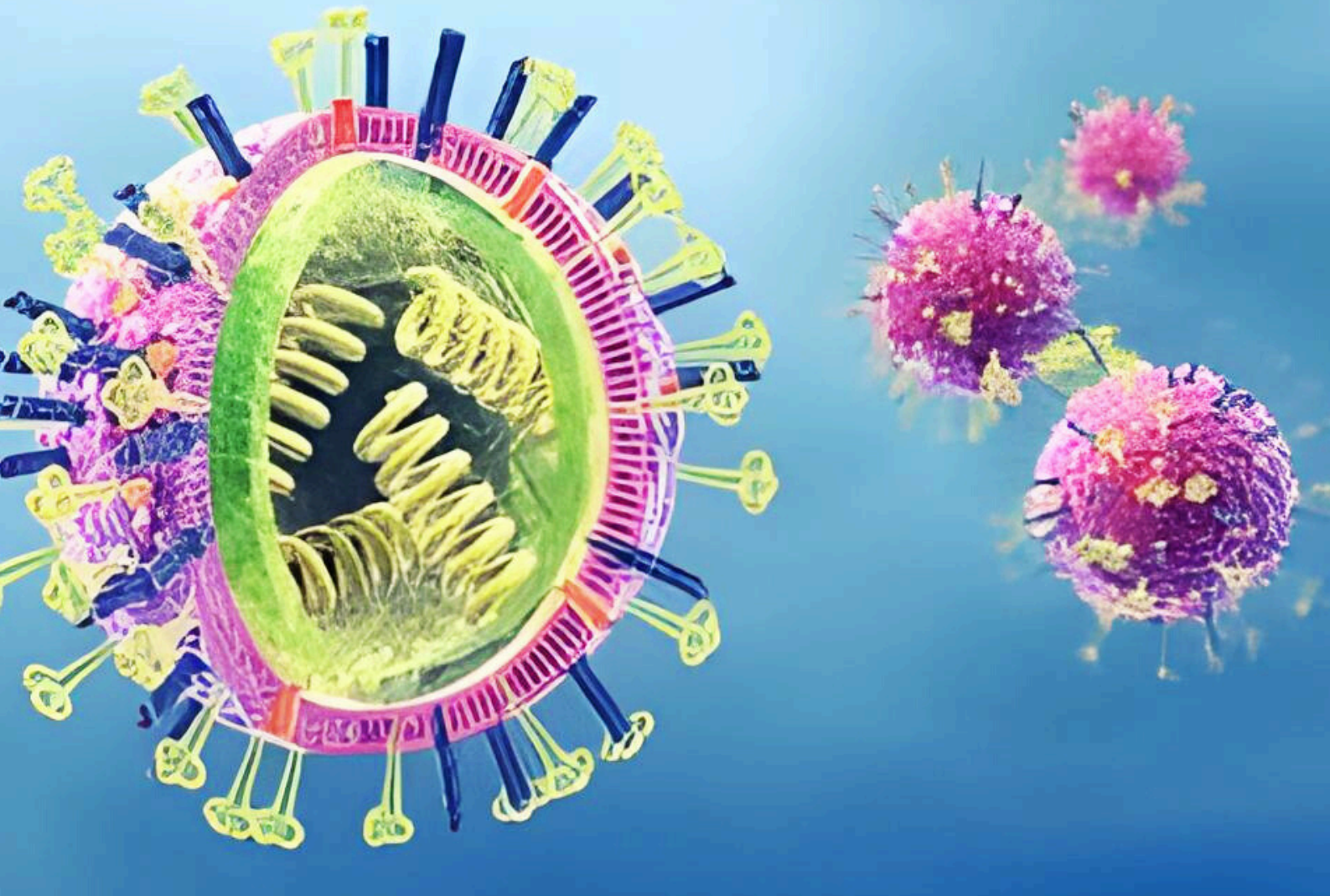
Human Metapneumovirus (HMPV), part of the Pneumoviridae family, is a respiratory virus that causes illnesses ranging from mild colds to severe lung infections such as pneumonia and bronchiolitis. HMPV is a significant cause of respiratory illnesses worldwide, particularly during winter and spring. The virus occurrence in India is not new. It was identified in 2001 by scientists in the Netherlands.



Understanding Risks, Symptoms & Preventions

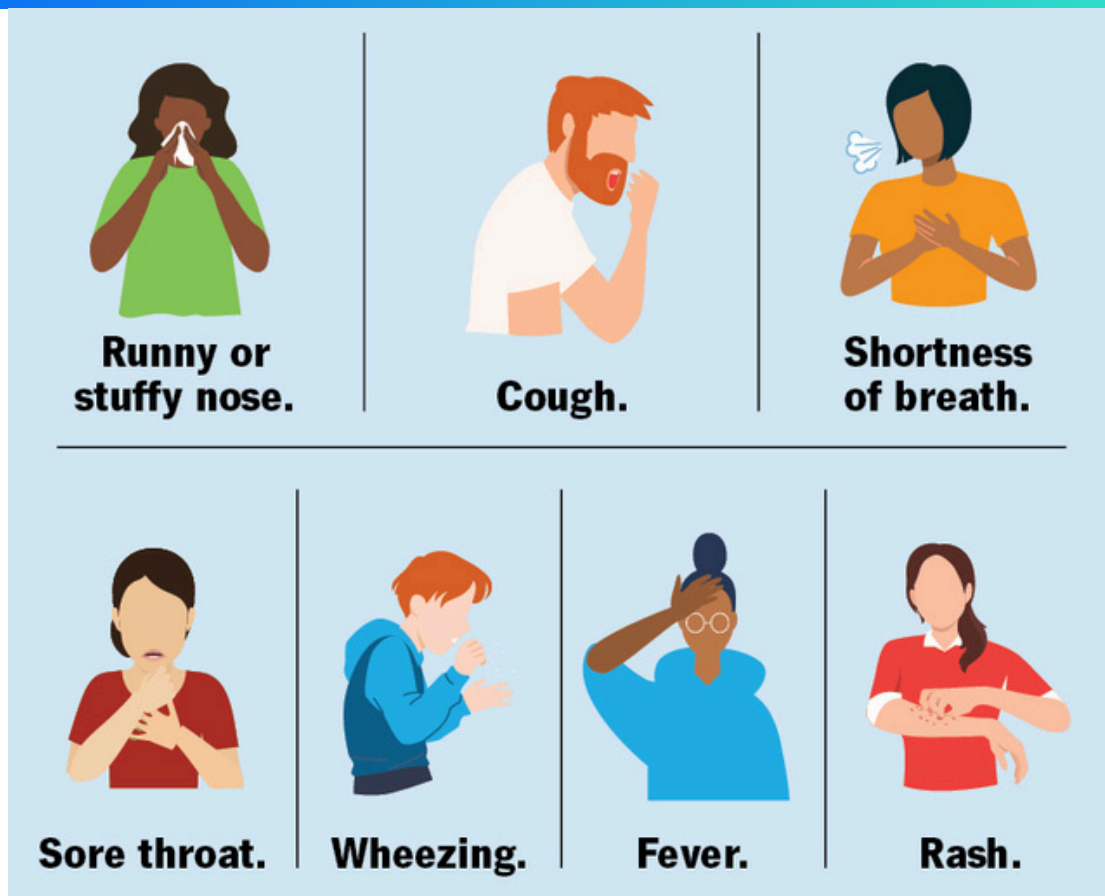
KEY FACTS

- Children, people with weakened immune systems and the elderly are most susceptible to developing complications from HMPV infection.
- HPMV is spread by close contact with an infected individual or by coming in contact with a contaminated area.
- HMPV usually causes symptoms similar to the common cold that last roughly 2-5 days and go away on their own.
- 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.



HIGH-RISK GROUPS FOR HMPV

- **Young Children:** Infants and toddlers (younger than 5 (especially premature infants) are vulnerable to serious respiratory conditions, such as bronchiolitis and pneumonia.
- **Older Adults:** Individuals aged 65 or above, as well as those with chronic health concerns such as asthma or COPD, are more likely to have complications.
- **Pregnant Women:** HMPV during pregnancy can result in respiratory issues, which may endanger both the mother's and the baby's health.
- **Immunocompromised Individuals:** Those with weakened immune systems, whether due to medical conditions or treatments like chemotherapy, are at a higher risk of experiencing severe symptoms.



SYMPTOMS IN ADULTS

The estimated incubation period is three to six days and the duration depends on the severity of the infection. HMPV symptoms in adults often resemble those of a common cold or flu. They include:

- Persistent cough, often accompanied by mucus production
- Nasal congestion or runny nose
- Fever, typically mild to moderate
- Fatigue and general body aches
- Sore throat
- Shortness of breath in severe cases

SYMPTOMS IN CHILDREN

Children are more likely to experience severe symptoms, including:

- Breathlessness
- Wheezing and persistent cough
- High fever
- Poor feeding and dehydration, especially in infants



HMPV IS HIGHLY
CONTAGIOUS AND
SPREADS THROUGH
VARIOUS MEANS

BEWARE, BE WELL

- 1. Respiratory Droplets:** The virus can spread when someone who is infected coughs, sneezes, or talks, releasing respiratory droplets into the air.
- 2. Direct Contact:** The virus can spread through physical contact with an infected person, especially if one touches their face, eyes or mouth.
- 3. Surface Contamination:** The virus can persist on surfaces, and touching contaminated objects such as doorknobs or mobile devices heightens the risk of infections.
- 4. Airborne Particles:** Small respiratory particles may remain suspended in the air, particularly in crowded or poorly ventilated spaces.

DIAGNOSIS

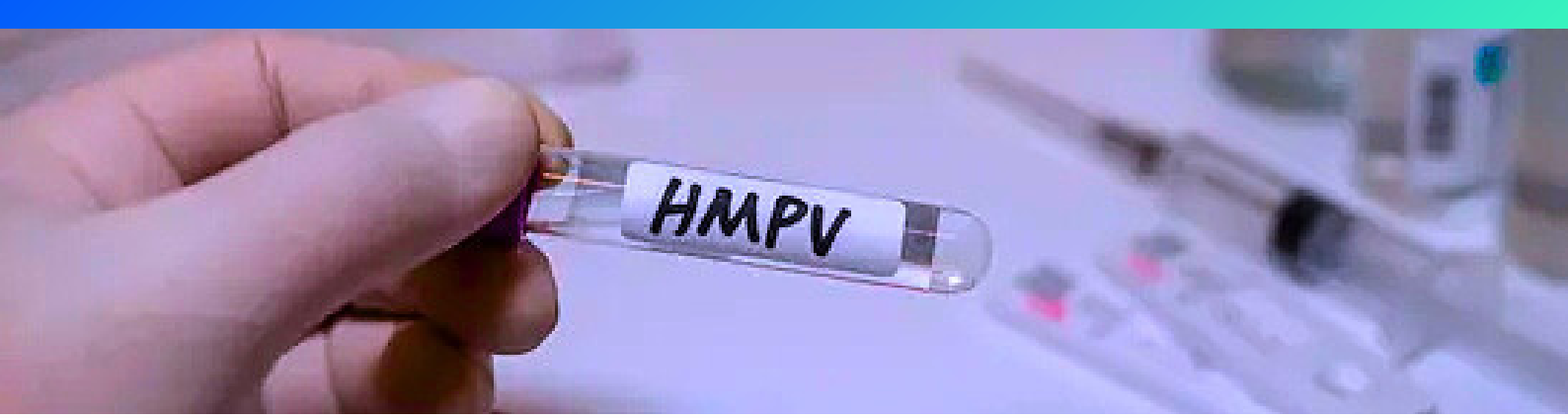
HMPV symptoms resemble those of other respiratory infections, making a precise diagnosis dependent on specific laboratory tests.

- **HMPV PCR Test:** This molecular test detects the virus's genetic material with high accuracy and is regarded as the gold standard for diagnosing HMPV.
- **Rapid Antigen Tests:** These provide quicker results but are less sensitive compared to PCR tests.
- **Bronchoscopy and chest X Ray:** To look for changes in the airways of the lungs.

COMPLICATIONS

Most people recover from HMPV in about 7 to 10 days without any complications. However, certain groups face a higher risk of severe complications:

- **Pneumonia:** HMPV can cause viral pneumonia, requiring hospitalisation and intensive care in severe cases.
- **Bronchiolitis:** Infants and young children often experience inflammation and blockage of airways, leading to difficulty breathing and wheezing.
- **Exacerbation of Chronic Conditions:** HMPV can worsen existing respiratory conditions like asthma or chronic obstructive pulmonary disease (COPD).
- **Secondary Bacterial Infections:** These infections, such as bacterial pneumonia, may develop as complications due to a weakened immune system.
- **Pregnancy Complications:** Respiratory issues caused by HMPV during pregnancy can lead to maternal and foetal health risks.
- **Ear infection** (otitis media).



TREATMENT OPTIONS

HMPV does not have a specific antiviral medication. Because HMPV commonly clears up on its own, treatment is mostly geared toward easing symptoms. Patients with more severe wheezing and coughing may require a temporary inhaler, which may include an inhaled corticosteroid.

- **Rest and Hydration:** Essential for recovery and maintaining strength.
- **Over-the-counter Medications:** Medications like acetaminophen or ibuprofen can manage fever and body aches.
- **Oxygen Therapy:** In severe cases, supplemental oxygen or mechanical ventilation may be required.
- **Hospitalization:** Patients with complications, such as pneumonia, may need close monitoring in a hospital setting.
- **Rest and hydration:** Essential for helping the body recover.
- **Nasal decongestants and saline sprays:** To ease congestion and improve breathing
- **Humidifiers:** To add moisture to the air, helping soothe irritated airways
- **Bronchodilators:** Medications to open up airways in patients experiencing wheezing or shortness of breath
- **Antibiotics:** Prescribed only if a secondary bacterial infection, such as an ear infection, develops

PREVENTION

To prevent HMPV, it is important to focus on preventive measures since no vaccine is currently available. To minimize the risk of infection, follow these measures

- **Practice Good Hygiene**-Wash hands with soap and water for at least 20 seconds or Use alcohol-based hand sanitizers.
- **Avoid Close Contact**-Stay away from individuals with symptoms of respiratory illness. Avoid crowded areas during outbreaks.
- **Disinfect Surfaces**-Make sure to regularly clean surfaces frequently touched, such as doorknobs, phones, and countertops.
- **Wear Masks**-Wearing masks during outbreaks or flu season can help reduce exposure to respiratory droplets.
- **Isolate When Sick**-If you have any symptoms, it is important to stay at home to stop the spread of the virus.
- **Don't share food or eating utensils** like spoons, cup with others
- **Respiratory etiquette:** Covering the mouth and nose when coughing or sneezing with a tissue or elbow prevents the spread of droplets.
- **Avoid touching the face:** Avoid touching eyes, nose, and mouth with unwashed hands to prevent transferring viruses from surfaces to mucous membranes.
- **Proper ventilation:** Ensuring good air circulation in indoor spaces by opening windows or using air purifiers can help reduce airborne virus concentrations.
- **Strengthening immune health:** Maintaining a healthy lifestyle with balanced nutrition, regular exercise, and sufficient sleep can help the body fight infections more effectively.
- **Vaccination:** While no specific vaccine exists for HMPV, staying current on other vaccines (such as for influenza and pneumococcal disease) helps reduce the overall burden of respiratory infections.