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Editorial Note

The Silent Surge of HMPV Infections: Lessons from Covid-19 And the Need for Global Preparedness Against Threat of Another Pandemic

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Dear Editor,

Five years after the COVID-19 pandemic, reports of rising cases of Human Metapneumovirus (HMPV) in China are concerning. In late 2024, Chinese authorities warned of a rise in HMPV cases, with outbreaks peaking during the Lunar New Year due to increased travel and gatherings. HMPV, a respiratory virus causing symptoms similar to the common cold (cough, wheezing, runny nose, sore throat), can lead to severe diseases like pneumonia or Chronic Obstructive Pulmonary Disease (COPD), especially in vulnerable populations. The average cases are mild and non-critical, however, infants, adults over 65, and immunocompromised people are at a higher risk for serious illness. Official Chinese data reports a steady rise in Human Metapneumovirus (HMPV) cases, both outpatient and emergency, from mid-December 2024 to early January 2025, according to Xinhua via The New York Times. After the reports of first case of HMPV by Centre for Disease Control USA in 2001 the recent resurgence of multiple outbreaks in China have declared emergency in the affected regions [1].

HMPV cases have sharply increased in northern China, with neighboring countries like India also reporting cases, raising concerns about regional spread [2]. The Director of the National Institute for Communicable Disease Control and Prevention (China CDC), Dr. Kan Biao, in a press conference, communicated that HMPV cases are predominant in children under the age of 14. Most cases were reported in northern China during the Lunar New Year holiday, when people travel and gather in large groups. HMPV cases are now being

reported in countries neighboring China, with India reporting 2 confirmed cases in the state of Karnataka. India's Health Ministry has stated that the HMPV can be a potential endemic that can spread across the world [3, 4]. The figure 1 represents the rising trends of the HMPV infection in recent years.

There are no vaccines or antiviral treatments for HMPV, and management relies on preventive measures like avoiding exposure, handwashing, mask usage, and good hygiene, especially for high-risk groups. Noncompliance with preventive measures can lead to severe health complications, similar to those caused by COVID-19, significantly impacting daily life, workforce productivity, and global economies. The COVID-19 pandemic caused an estimated economic loss of \$16 trillion, highlighting the importance of preparedness against emerging viral threats like HMPV. Raising awareness among healthcare workers about treating and managing HMPV cases is crucial to containing its spread [5].

To reduce the impact of HMPV, raising awareness among vulnerable populations and adhering to preventive measures are essential. The resurgence of HMPV underscores the critical importance of proactive global collaboration in healthcare. Vaccine development, public awareness, and strengthened diagnostic systems are essential to mitigate this emerging threat. Acting swiftly can prevent HMPV from escalating into a widespread health and economic crisis, echoing the hard-learned lessons of the COVID-19 pandemic.

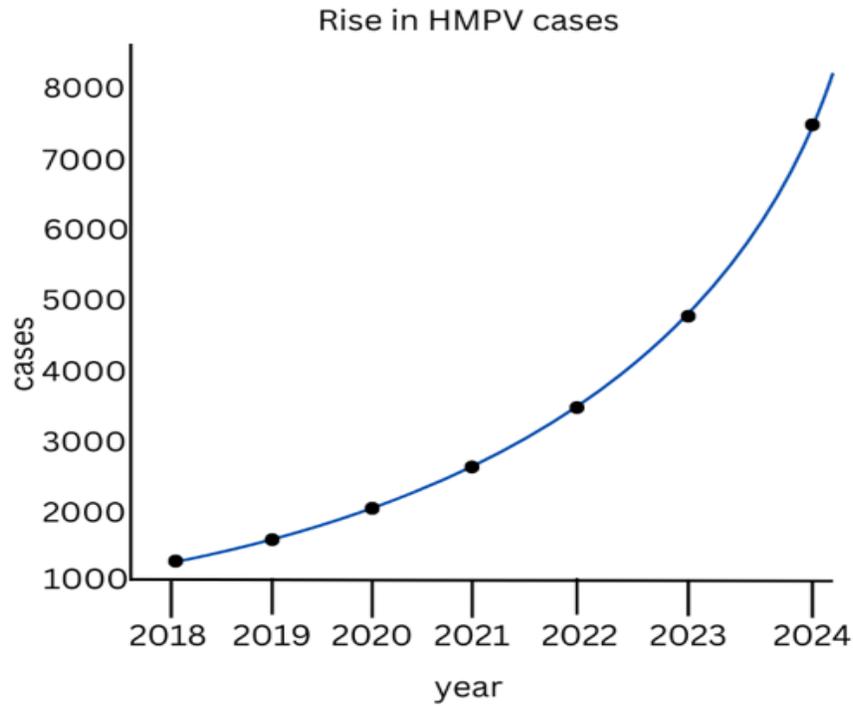


Figure 1: Trends in HMPV infections (2018–2024), showing a sharp increase in recent years, emphasizing the need for urgent attention

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