

The recent H3N2 viral outbreak in India, 2023: Is it worrying?

Dear Editor,

We are writing to you today to draw attention to the recent outbreak of the H3N2 virus in India. This viral outbreak has been spreading rapidly, and it is crucial that people understand the severity of the situation and take the necessary precautions. As per the Centers for Disease Control and Prevention, the H3N2 virus is a subtype of the influenza A virus that has been associated with more severe illness and higher mortality rates, particularly among young children, older adults, and those with underlying health conditions.¹ The World Health Organization (WHO) reports that H3N2 is responsible for most influenza-related hospitalizations and deaths globally. However, the current outbreak in India is of particular concern as it has already claimed several lives and is spreading at an alarming rate (<https://pib.gov.in/PressReleasePage.aspx?PRID=1905602>).²

As per the Indian Council of Medical Research (ICMR), the H3N2 virus has been responsible for a significant increase in the number of flu cases in India over the past few months. Influenza surveillance data from the ICMR shows that the H3N2 virus has been the predominant strain circulating in India during the current flu season, with a high level of activity reported in several states. ICMR also stated that out of all the patient admissions in the hospital with Severe Acute Respiratory Infection (SARI), 50% was found to have H3N2.³

The WHO has also highlighted the potential impact of the H3N2 virus on public health, particularly in regions with high population density and limited healthcare resources. The organization has stressed the need for increased surveillance, timely diagnosis, and appropriate treatment to prevent the further spread of the virus and reduce its impact on vulnerable populations. It is very important to mention here that India is a big country with high population density and have limited availability of healthcare services. Further, it is overburdened due to the ongoing COVID-19 pandemic. The Indian government has taken several steps to address the H3N2 outbreak, including increasing surveillance and implementing vaccination campaigns. The Ministry of Health and Family Welfare has advised individuals to take personal responsibility and practice good hygiene to reduce the spread of the virus (<https://pib.gov.in/PressReleasePage.aspx?PRID=1905602>).³

The H3N2 virus is highly contagious and spreads through respiratory droplets when an infected person coughs or sneezes. The symptoms of H3N2 infection are similar to seasonal flu and

include fever, sore throat, cough, fatigue, and body aches. While most people recover from H3N2 infection within a week, in some cases it can lead to severe complications such as pneumonia, bronchitis, and even death. ICMR stated that in the current outbreak of H3N2 about 10% of the patients suffering from SARI caused by the virus required oxygen support and 7% required an ICU car.³

Antiviral medications, such as zanamivir and oseltamivir can be used to treat the flu, including H3N2. These medications work best when started within 48 h of symptom onset and can help to reduce the severity and duration of the illness. Over-the-counter medications, such as acetaminophen (Tylenol) and ibuprofen (Advil), may be used to reduce fever and alleviate other flu symptoms, such as headache and body aches. Resting and staying hydrated can also help the body fight off the virus and recover more quickly.^{4,5}

One of the best ways to prevent the flu, including H3N2, is to get vaccinated. The flu vaccine is safe, effective, and widely available. It is recommended that everyone over the age of 6 months gets vaccinated, especially those at higher risk of severe illness, such as young children, older adults, and individuals with underlying health conditions. Good hygiene can help to prevent the spread of the virus. This includes frequent hand washing with soap and water (hand sanitizer may be used when soap and water are not available), covering your mouth when you cough or sneeze, and avoiding close contact with sick individuals. Further, it is important to stay home to avoid spreading the virus to others if you have flu-like symptoms.³

In addition to these measures, individuals can also take steps to boost their immune systems, such as eating healthy diet, getting enough sleep, and exercising regularly. These lifestyle choices can help strengthen the body's natural defenses against viral infections and reduce the risk of getting sick.^{5,6} In conclusion, the H3N2 outbreak in India is a significant concern that requires immediate attention and action from both the government and individuals. By following recommended preventive measures and taking personal responsibility, we may reduce the spread of the virus and protect each other from its potentially severe consequences.

AUTHOR CONTRIBUTIONS

Harsha Boppana: Conceptualization; writing—original draft. **Kanishk K. Adhit:** Conceptualization; writing—original draft. **Lakshmi V. S. Kutikupala:** Writing—original draft. **Ranjan K. Mohapatra:** Writing—review and editing. **Kudrat E-Zahan:** Supervision; writing—review and editing.

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The authors declare no conflicts of interest.

ETHICS STATEMENT


The authors declare no involvement of animal studies or human participants in the study as it is a compiled letter article.

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