

# **Public Health and Perception**

Posted at: 03/06/2025

# Public Health and Perception: Lessons from the 2025 COVID Spike

#### Context

Since **mid-May 2025**, India has witnessed a gradual increase in daily COVID-19 cases. Though the numbers remain low, this rise has triggered renewed public and media attention, evoking memories of the 2020-21 pandemic waves.

With **200-300 cases reported daily** and an increase in **SARS-CoV-2 viral load in wastewater surveillance**, concerns have surfaced regarding the emergence of a new variant and its potential public health implications.

However, a closer look at the present epidemiological scenario reveals a more nuanced reality that requires a calm, data-driven response instead of alarm or panic.

## The Variant in Focus: JN.1 and Its Sub-Lineages

• The current uptick in cases is primarily associated with the JN.1 variant, a sub-lineage of the Omicron variant (BA.1.529).

• It was first detected in Luxembourg in August 2023 and subsequently in India by late 2023.

- **JN.1 is not classified as a new variant of concern**, and is already known to the global scientific community.
- Sub-lineages such as LF.7 and NB.1.8 have emerged but show no significant clinical differences from JN.1.

This undermines the fear of a novel and more dangerous variant driving the current situation.

**Understanding the Uptick: Key Epidemiological Factors** 

#### **1. Viral Persistence and Seasonality**

- Respiratory viruses, including SARS-CoV-2, typically follow seasonal trends.
- COVID-19 has shown a pattern of resurgence in India during:
  - Early 2023
  - $\circ\,$  December 2023 January 2024
  - July August 2024
- These trends indicate a **possible seasonal cycle every 8-10 months**, similar to influenza or the common cold.

#### 2. Viral Mutation

- SARS-CoV-2, being an RNA virus, mutates frequently.
- Although **JN.1 remains the dominant strain**, minor mutations may:
  - Slightly enhance transmissibility
  - Aid in immune evasion
  - Cause localized case spikes

#### 3. Enhanced Surveillance

- Intensified testing and wastewater monitoring have led to better detection.
- The increase in reported cases may be reflective of **improved surveillance**, not necessarily a true surge in disease severity.

#### Hybrid Immunity and the Role of Vaccination

- The Indian population has developed **hybrid immunity** through prior **natural infections** and **vaccination**.
- Although antibody levels may decline over time, **immune memory cells** continue to provide **protection against severe illness**.
- Reinfections are likely but are generally **mild or asymptomatic**.
- No significant rise in hospitalisations or deaths has been recorded in the current wave.
- There is no scientific evidence supporting the need for additional COVID-19 vaccine doses at this stage.
- Public health focus should shift towards:
  - Routine vaccinations for other preventable diseases
  - Protection of high-risk and vulnerable groups

#### Placing the Numbers in Perspective

Although the daily rise in COVID-19 cases appears concerning in isolation, it is relatively minor when compared to other public health burdens in India.

#### Approximate Daily Disease Burden in India:

- **COVID-19**: 200-300 cases, negligible deaths
- Tuberculosis: 8,000 new cases, 900 deaths
- Influenza: 390 deaths
- RSV (Respiratory Syncytial Virus): 310 deaths
- All-cause mortality: Nearly 30,000 deaths daily

The continued use of outdated metrics such as 'active cases' can misrepresent the actual threat and cause unnecessary panic.

### The Dangers of Panic and the Infodemic

- Public anxiety is being driven more by **outdated data interpretations** and **misinformation** than actual risk.
- The **infodemic**, or the widespread circulation of inaccurate and exaggerated information, can:

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- Undermine public trust
- Trigger avoidable panic
- $\circ~$  Overburden healthcare systems with false alarms
- Treating every seasonal rise as a crisis leads to:
  - Response fatigue
  - Healthcare worker burnout
  - Misallocation of resources

# **Conclusion: A Rational and Evolved Response**

India's COVID-19 response must now evolve beyond reactive panic towards sustained, evidencebased public health management.

- COVID-19, in its current form, resembles other mild respiratory infections.
- Public health responses must be grounded in data and scientific reasoning, not fear.
- Continued vigilant monitoring, scientific research, and clear public communication are key.
- The focus should remain on strengthening healthcare systems and ensuring **routine immunisation coverage**, especially for the vulnerable population.