



# Omicron: New Corona Variant

## Why in News

The [World Health Organization](#) has declared the recently-discovered B.1.1.529 strain of [Covid-19](#), to be a variant of concern.

- The virus was first detected in **Southern Africa** and it is **renamed Omicron**.



## Key Points

- **About:**
  - Omicron is placed in the **most-troubling category of Covid-19 variants**, along with the [globally-dominant Delta plus](#) its weaker rivals Alpha, Beta and Gamma.
  - This variant has a **large number of mutations**. Some of them are cause for serious concern because they may allow the new variant to evade immunity obtained from a past infection or via a vaccine.
    - However, there are no reliable estimates of just how much more transmissible the Omicron variant is compared to previous strains of the virus
    - Apart from South Africa, Omicron has been detected in **Israel in people coming from Malawi, Botswana, Belgium and Hong Kong**.
- **Nomenclature:**

- The WHO has decided to name the variants **after the letters of the Greek alphabet**, to avoid the **countries that first detected them being stigmatised**.
- WHO selected the name Omicron, **instead of Nu or Xi**, the two letters between Mu and Omicron. This is because:
  - Xi happens to be a popular **surname in China** (avoiding 'causing offence to any cultural, social, national, regional, professional or ethnic groups).
  - Nu could have been confused with the **word 'new'**.

#### ▪ **Situation In India:**

- Seroprevalence studies indicate that a **large proportion of the population has already been exposed to the virus** providing some level of protection to subsequent infections.
  - Further, the immunisation campaign has gained momentum.
  - Approximately 44% of Indian adults have been fully vaccinated and 82% have received at least one dose.
- Scientists believe that prior infection followed by one or two doses of vaccination may have a **larger protective effect** than two doses of the vaccination alone.

### **Variants of Concern**

- A variant for which there is evidence of an **increase in transmissibility, more severe disease** (e.g., increased hospitalizations or deaths), **significant reduction in neutralization by antibodies** generated during previous infection or vaccination, **reduced effectiveness of treatments or vaccines**, or diagnostic detection failures.
- The new Variants could kick off **new wave(s) of epidemic transmission**.
- The WHO currently lists **5 variants of concern**:
  - **Omicron (B.1.1.529)**, identified in southern Africa in November 2021
  - **Delta (B.1.617.2)**, which emerged in India in late 2020 and spread around the world
  - **Gamma (P.1)**, which emerged in Brazil in late 2020
  - **Beta (B.1.351)**, which emerged in South Africa in early 2020
  - **Alpha (B.1.1.7)**, which merged in Britain in late 2020.

### **Variants of Interest**

- A variant **with specific genetic markers** that have been associated with changes to receptor binding, reduced neutralization by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential diagnostic impact, or predicted increase in transmissibility or disease severity.
- There are currently two:
  - **Mu (B.1.621)**, which emerged in Colombia in early 2021
  - **Lambda (C.37)**, which emerged in Peru in late 2020

### **Mutation, Variant and Strain**

- When a virus replicates it doesn't always manage to produce an exact copy of itself.
- This means that, over time, the virus may start to differ slightly in terms of its genetic sequence.
- Any changes to the viral genetic sequence during this process is known as a **Mutation**.
- Viruses with new mutations are sometimes called **Variants**. Variants can differ by one or multiple mutations.
- When a new variant has different functional properties to the original virus and becomes established in a population, it is sometimes referred to as a **New Strain of the virus**.
  - **All strains are variants, but not all variants are strains.**

## Way Forward

- **Scientific approach to Travel Ban:** India should take a **risk-based and scientific approach** when considering travel curbs in light of the variant.
- **Reinforcing Public Health Measures:** New emerging variants signify public health measures are still important.
  - For example, distancing, mask-wearing, avoiding crowded spaces, and good ventilation.
- **Lesson Learnt:** An important lesson the **pandemic** has taught us in India is the critical importance of biomedical research and capacity building – for saving lives and economic growth.

**Source: IE**

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