

UPSC Preparation

Omicron - Variant of Concern (VOC) by WHO

Latest context: Omicron is a new coronavirus variant that is recently recognised as a “variant of concern” by the World Health Organization (WHO). This variant was first reported on Nov. 24 in Southern Africa, where infections have risen steeply. It has since spread to more than a dozen countries.

What is Omicron?

Omicron is a new coronavirus variant B.1.1.529. It was identified in Southern Africa in November 2021. The number of new cases in South Africa has increased rapidly with the introduction of this variant. It has been categorized as a SARS-CoV-2 “variant of concern” by the [World Health Organization \(WHO\)](#). This variant has a large number of mutations, some of which are concerning. Preliminary evidence suggests an increased risk of reinfection with this variant, as compared to other VOCs. Aspirants would find this topic very helpful while preparing for the [IAS Exam](#).

Variants of concern listed by WHO:

The Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE) is an independent group of experts. It periodically monitors and evaluates the evolution of SARS-CoV-2 and assesses if specific mutations and combinations of mutations alter the behaviour of the virus.

WHO designated the variant B.1.1.529 a variant of concern, named Omicron, on the advice of WHO's Technical Advisory Group on Virus Evolution (TAG-VE). Other variants of concern(VOC) listed by WHO are:

- **Delta (B.1.617.2):** emerged in India in November 2020.
- **Gamma (P.1):** emerged in Brazil in October 2020.
- **Beta (B.1.351):** emerged in South Africa in May 2020.
- **Alpha (B.1.1.7):** emerged in Britain in September 2020.

What is Variant of concern(VOC)?

It is a SARS-CoV-2 variant that meets the definition of a VOI(Variant of Interest) and, associated with one or more of the following changes at a degree of global public health significance:

- Increase in transmissibility or detrimental change in COVID-19 epidemiology.
- Increase in virulence or change in clinical disease presentation.
- Decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.

What is Variant of Interest (VOI)?

Variant of Interest (VOI) is a SARS-CoV-2 variant :

- With genetic changes that are predicted or known to affect virus characteristics such as transmissibility, disease severity, immune escape, diagnostic or therapeutic escape.

- Identified to cause significant community transmission or multiple COVID-19 clusters, in multiple countries with increasing relative prevalence alongside an increasing number of cases over time, or other apparent epidemiological impacts to suggest an emerging risk to global public health.

Current variants of interests are Lambda(designated on 14-Jun-2021) and Mu designated on 30-Aug-2021).

Current knowledge about Omicron:

- **Transmissibility:** It is not yet clear whether Omicron is more transmissible.
- **Severity of disease:** It is not yet clear whether infection with Omicron causes more severe disease compared to infections with other variants, including Delta.
- **Effectiveness of prior SARS-CoV-2 infection:** Preliminary evidence suggests there may be an increased risk of reinfection with Omicron (i.e, people who have previously had COVID-19 could become reinfected more easily with Omicron), as compared to other variants of concern, but the information is limited.
- **Effectiveness of vaccines:** WHO is working with technical partners to understand the potential impact of this variant on our existing countermeasures, including vaccines.
- **Effectiveness of current tests:** The widely used PCR tests continue to detect infection, including infection with Omicron, as we have seen with other variants as well.
- **Effectiveness of current treatments:** Corticosteroids and IL6 Receptor Blockers will still be effective for managing patients with severe COVID-19.

Recommended actions for countries by WHO:

- Enhance surveillance and sequencing of cases.
- Share genome sequences on publicly available databases, such as GISAID.
- Report initial cases or clusters to WHO.
- Perform field investigations and laboratory assessments to better understand if Omicron has different transmission or disease characteristics, or impacts the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures.
- Increase some public health and medical capacities to manage an increase in cases.
- Implement effective public health measures to reduce COVID-19 circulation overall, using risk analysis and a science-based approach.