

INSACOG WEEKLY BULLETIN

No. 27 | Dec 27, 2021

The INSACOG reports genomic surveillance of SARS CoV -2 across the country through sequencing of samples from Sentinel sites and also detailed State wise district analysis for some states under State MoUs (Maharashtra, Kerala and some others) A summary of the cumulative data of INSACOG and other state sequencing initiatives can be found at the INSACOG data portal link (<http://clingen.igib.res.in/covid19genomes/>) along with other INSACOG information at <https://dbtindia.gov.in/insacog>. New web-based query tool is now available on the data portal. All data presented on the portal is organized by date of sample collection, state, assigned lineage and mutations found on analysis.

Variants reported during the period

Global

Global outbreaks of SARS CoV2 are increasingly shifting from Delta to Omicron. Omicron has a clear growth advantage over Delta, with the highest level of immune escape so far, as well as high intrinsic transmissibility, leading to larger outbreaks than seen with Delta. Estimates of severity of illness associated with Omicron are lower than seen in previous outbreaks (1-2). The difference in severity between Omicron and Delta measured over the same time period is smaller, suggesting that the majority of apparent reduction in severity, compared to previous outbreaks, is because of higher population immunity from previous infections and vaccination. Adjusted estimates of the hazard ratio (HR) for hospital attendance for Omicron vs Delta cases in UK suggest that risk for unvaccinated is only about 25% lower for the same period (2). Importantly, in UK, individuals who have received at least 2 doses of either AZ/Covishield or mRNA vaccines remained substantially protected against hospitalisation, even if protection against infection was largely lost against the Omicron variant.

It is importantly noted that based on all available data, older non-immune subjects are still likely to be at risk for severe disease, comparable to previous variants. In view of Omicron's explosive spread potential, the threat level is still very high, especially in regions with low population immunity.

National

582 cases of Omicron have been identified so far. Public health measures and investigations are being conducted.

1. Wolter et al, **Early assessment of the clinical severity of the SARS-CoV-2 Omicron variant in South Africa.** <https://www.medrxiv.org/content/10.1101/2021.12.21.21268116v1>
2. Report 50 - Hospitalisation risk for Omicron cases in England. <https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-50-Severity-Omicron/>