

INSACOG BULLETIN

July 11, 2022

The INSACOG reports genomic surveillance of SARS-CoV-2 across the country through sequencing of samples from Sentinel sites and International passengers arriving in India. A summary of the cumulative data of INSACOG and other state sequencing initiatives can be found at the INSACOG data portal link along with other INSACOG information at <https://research.nibmg.ac.in/insacog/>

INSACOG:

- Total number of samples sequenced is 230,416
- Total number of sequences analyzed 229,411

Samples sequenced by IGSLs under State government MoUs: 34,763

Total number of samples sequenced: 265,179

The number of samples with pangolin lineage assigned are given below:

Table 1: Cumulative samples with pangolin lineage assigned (as on 08.07. 2022)				
Community sample	Travelers sample	Total pangolin lineage assigned	Total VOC/VOI	Proportion
155838	12285	168123	135121	80.4

Distribution of VOC and B.1.617.1 & B.1.617.3 (08-07-2022)																								
Alpha Variant			Beta Variant			Gamma Variant			Delta Variant			B.1.617.1 and B.1.617.3			AY Series			Omicron			XE	XM	XJ	Total VOC/VOI
Tr&Co	Com	Total	Tr&Co	Com	Total	Tr&Co	Com	Total	Tr&Co	Com	Total	Tr&Co	Com	Total	Tr&Co	Com	Total	Tr&Co	Com	Total	Variant	Variant	Variant	
577	3690	4267	117	104	221	1	2	3	387	43566	43953	84	5540	5624	227	20235	20462	5895	54368	60586	1	2	2	135121

Tr&Co= Travelers and contacts ; Com= Community samples

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Global Scenario

Globally, the number of weekly cases has increased for the fourth consecutive week, after a declining trend since the last peak in March 2022. The Omicron VOC continues to be the dominant variant circulating globally, accounting for 92% of sequences reported to GISAID. Among Omicron lineages, the proportions of BA.5 and BA.4 continue to increase. BA.5 has been detected in 83 countries, and the proportion of BA.5 has increased from 37% to 52%. Whereas, BA.4 has been detected in 73 countries, and now accounts for 12% of all sequences submitted during last week. BA.4 and BA.5 share similar mutations in SARS-CoV-2 spike but have different mutations in non-spike regions. Globally, the proportions of Omicron lineages BA.2 and BA.2.12.1 have decreased as compared to last week. In some countries, the rise in cases also resulted in a surge in hospitalizations, ICU admissions and deaths.

Indian Scenario

Omicron and its sub-lineages continue to be the dominant variant in India. Omicron sublineages BA.2 and BA.2.38 have mostly been found over the last few weeks. After reclassification, some BA.2.75 has been identified in India. BA.2.75 sub-variant has acquired more mutations in spike protein and other genes of the SARS-CoV-2. The spread and frequency of BA.2.75 subvariant is being closely monitored in every state. However, any surge in hospitalization or any disease severity has not been observed during this time-period.

