

INSACOG BULLETIN

19 December, 2022

The INSACOG reports genomic surveillance of SARS-CoV-2 by whole genome sequencing of samples from sentinel sites across the country and international passengers arriving in India. A summary of the cumulative data of INSACOG and other state sequencing initiatives can be found in the INSACOG data portal along with other INSACOG related information at <https://ibdc.rcb.res.in/>

INSACOG:

- Total number of samples sequenced is 269,541

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

Total number of samples sequenced: 304,304

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

Table 1: Cumulative samples with pangolin lineage assigned (as on 16.12.2022)

Community sample	Travelers sample	Total pangolin lineage assigned	Total VOC/VOI	Percentage
185301	12285	197586	162919	82.5

Distribution of VOC and B.1.617.1 & B.1.617.3 (as on 22-12-2022)

Alpha Variant			Beta Variant			Gamma Variant			Delta Variant			B.1.617.1 and B.1.617.3			AY Series			Omicron*			Recombinant														XE Variant	XM Variant	XU Variant	XJ Variant	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	XAR	XAH	XBB	XBB.1	XBB.1.1	XBB.1.3	XBB.2	XBB.3	XBB.3.1	XBB.4	XBB.5	XBD	OTHERS	Total					
577	3690	4267	117	105	222	1	2	3	387	43575	43962	84	5540	5624	227	20248	20475	5952	80846	87121	2	1	389	181	2	2	208	313	5	9	43	6	73	1234	1	2	6	2	162919

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

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Global Scenario

Globally, the number of new weekly cases remained stable (2%) during last week as compared to the previous week, with over 2.4 million new cases reported. The number of new weekly deaths increased by over 10% as compared to the previous week^[1]. During last week, BA.5 descendent lineages remained dominant, with a prevalence of 73.7%; followed by BA.2 descendent lineages, with a prevalence of 10.4%. BA.4 descendent lineages continued to decline in prevalence, going from 3.6% to 3.0% during the same reporting period. BA.2.75 and XBB emerged and increased in prevalence mainly in countries in the South-East Asia and Western Pacific regions. Both variants are rising slowly in prevalence, but current data do not suggest a consistent association with an increase in new infections. BQ.1 and BF.7 variants have emerged, risen in prevalence, and spread to many countries rapidly.

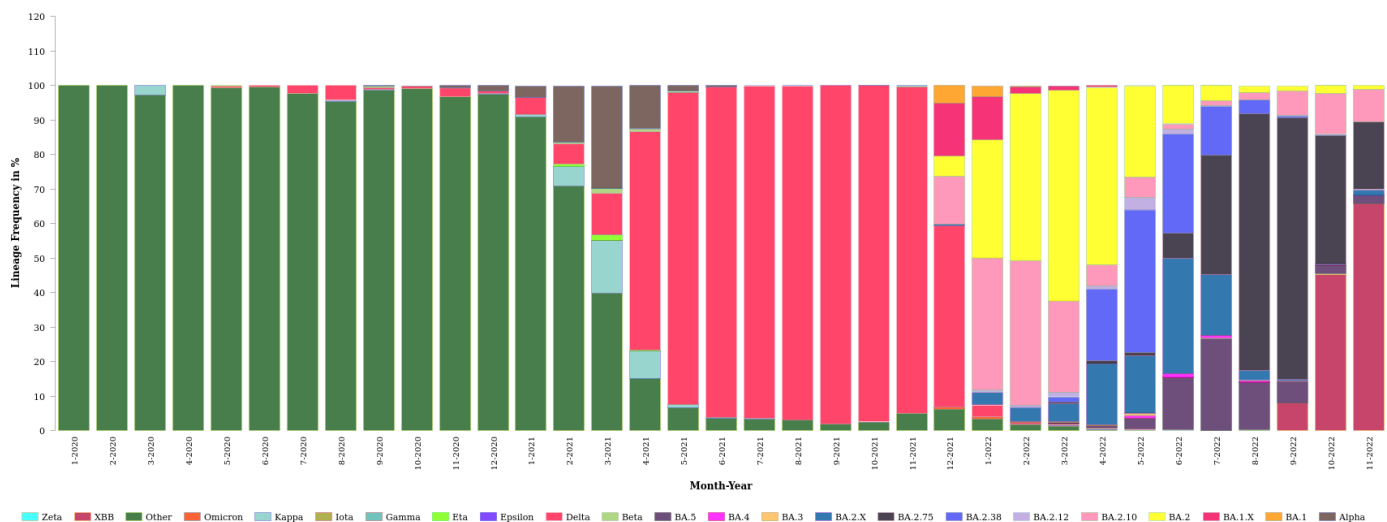
Indian Scenario

Omicron and its sub-lineages continue to be the dominant variant in India. Overall, the infection rate is below 500 per day. Among the samples collected till 3rd week of November 2022, XBB and its sub-lineages, BA.2.75, and BA.2.10 were continued to be the most commonly circulating Omicron sub-lineage. In Southern and central part of India, XBB was prevalent whereas in North-Eastern part, BA.2.75 was the prevalent sub lineages. BA.2.10 and other omicron sub lineage frequency was lower in last week. However, any increase in disease severity or hospitalization has not been observed over this period.

Country wide analysis:

Month wise lineage distribution

As on: 16-12-2022



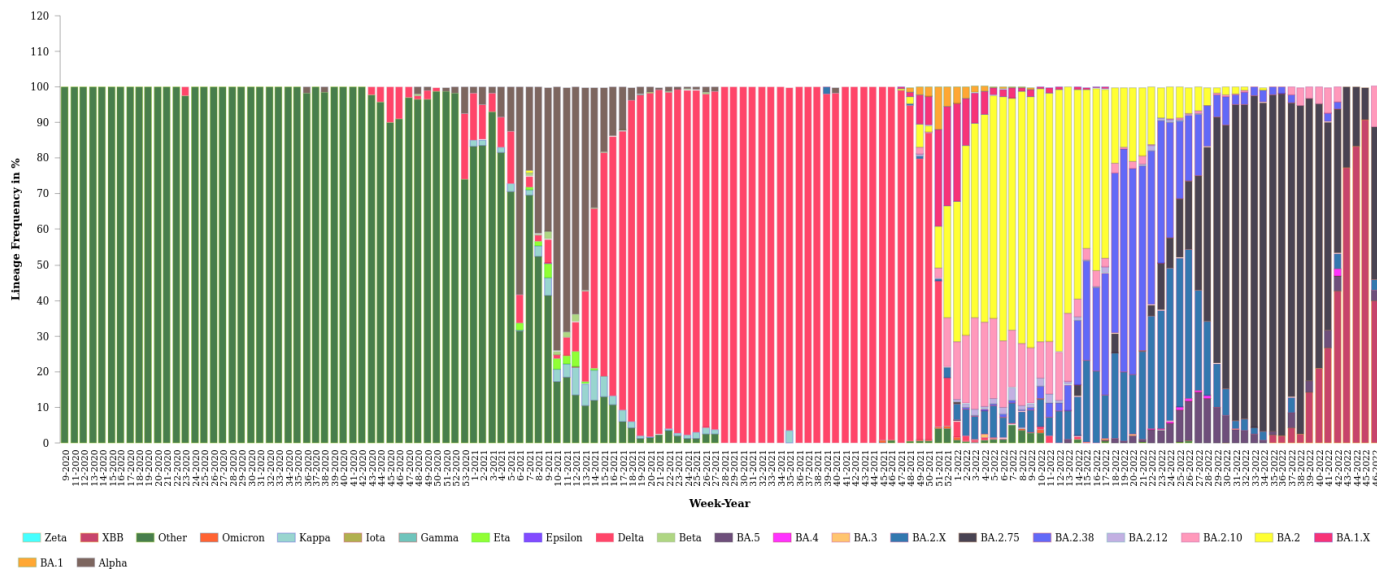
*BA.5 in the graph includes its sub-lineages also.

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Region-wise analysis:

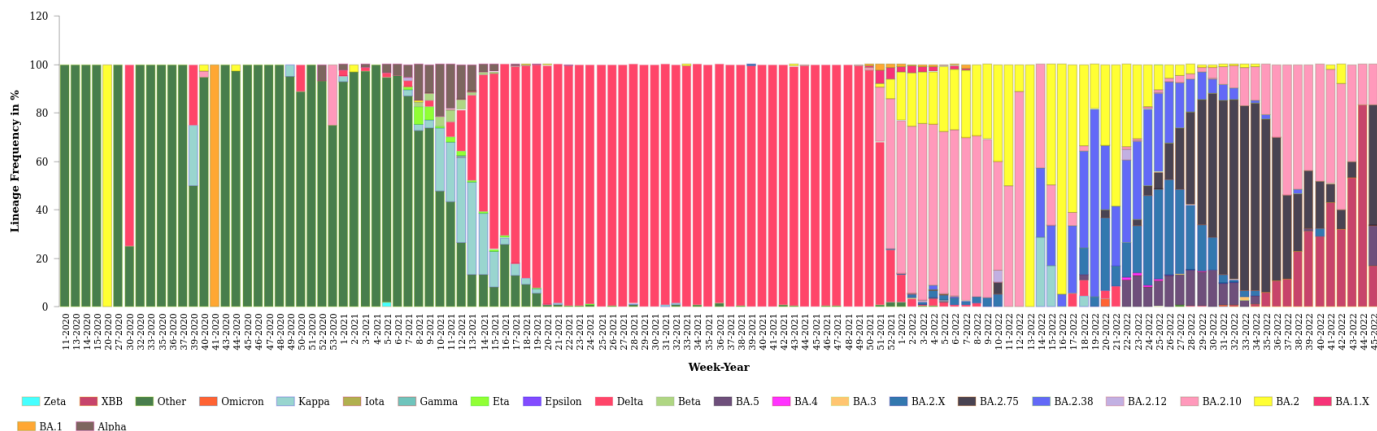
North India - Week wise lineage distribution

As on: 16-12-2022



East India - Week wise lineage distribution

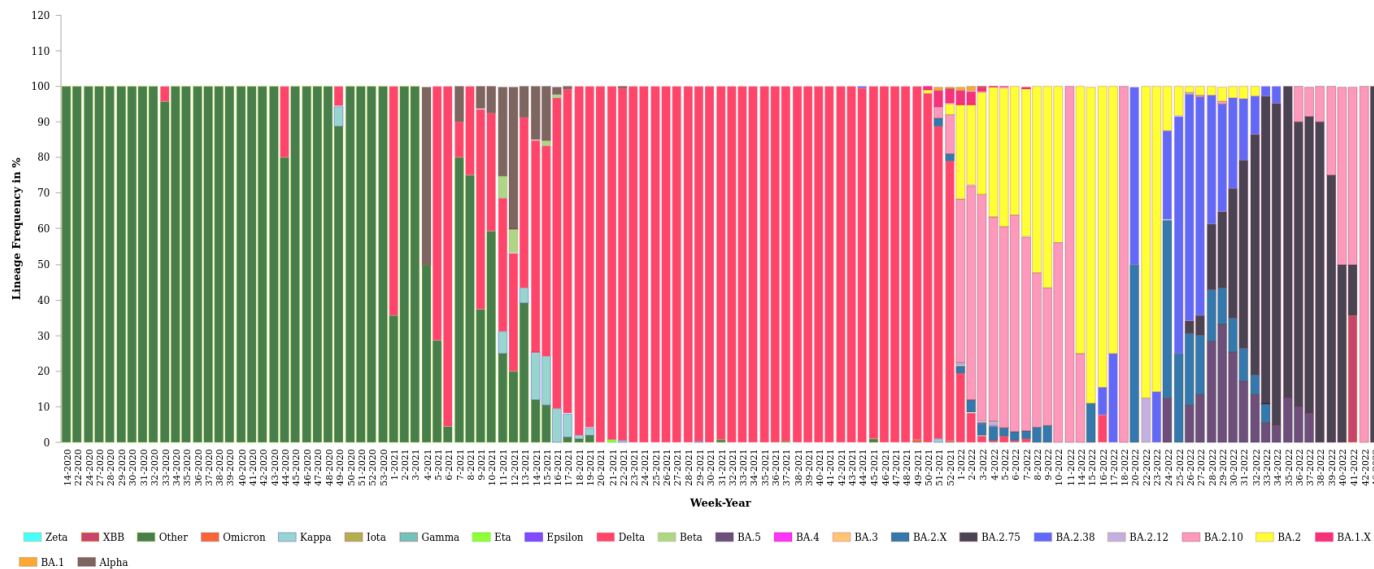
As on: 16-12-2022



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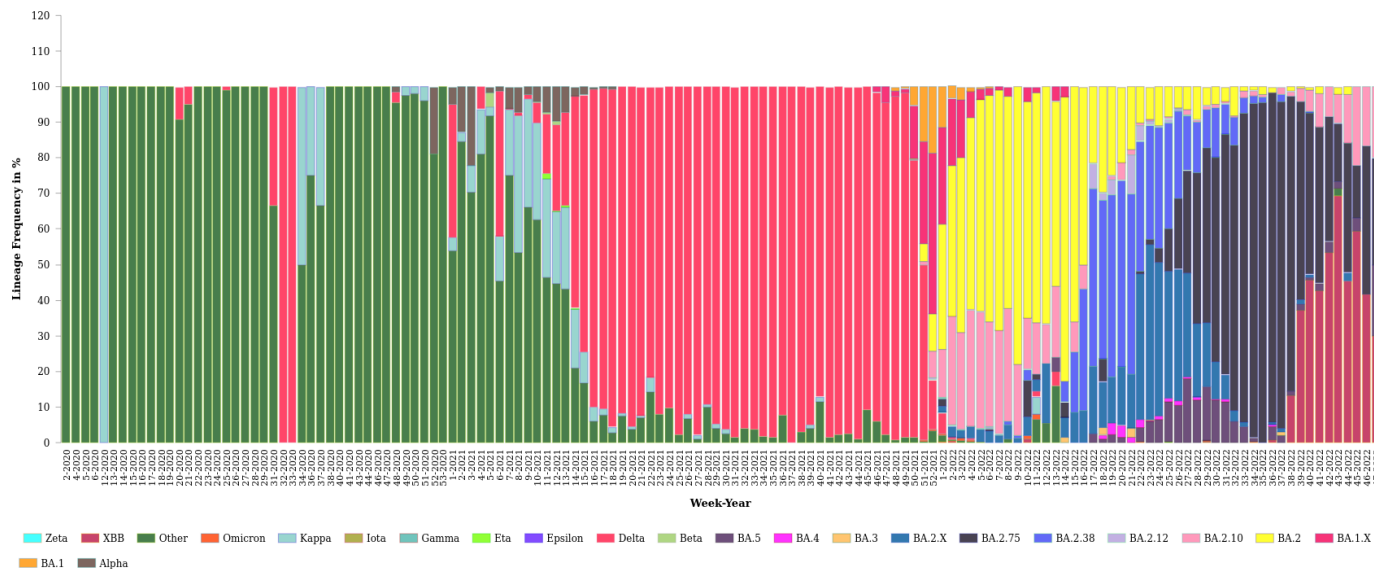
NorthEast India - Week wise lineage distribution

As on: 16-12-2022



West India - Week wise lineage distribution

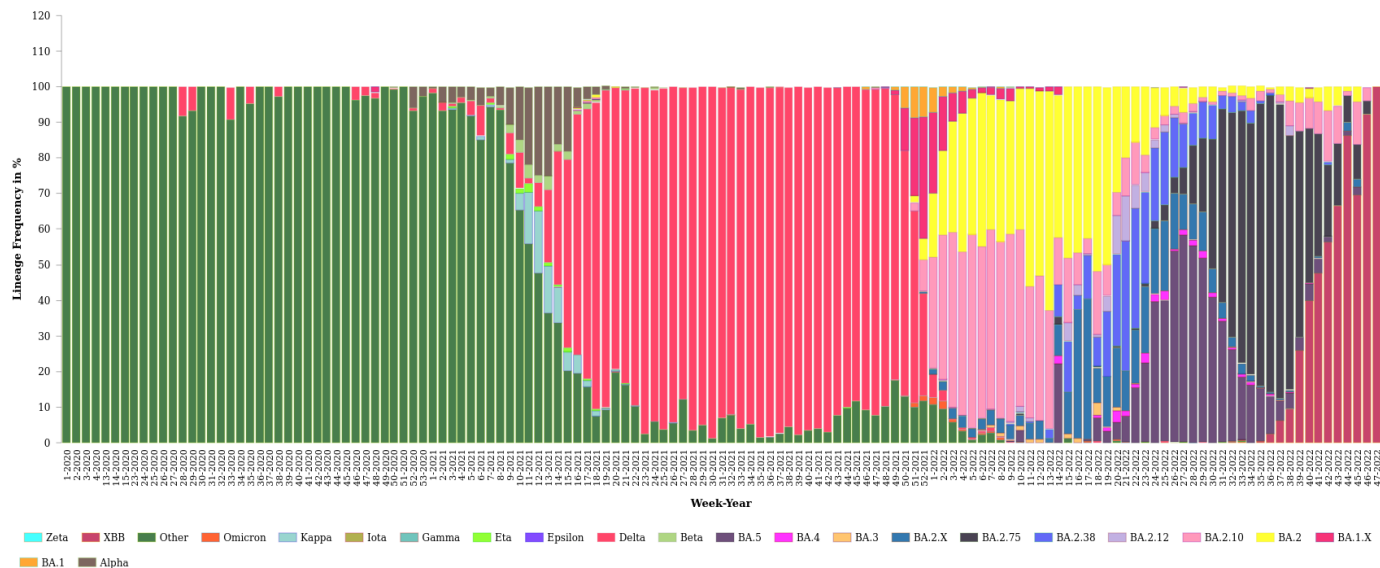
As on: 16-12-2022



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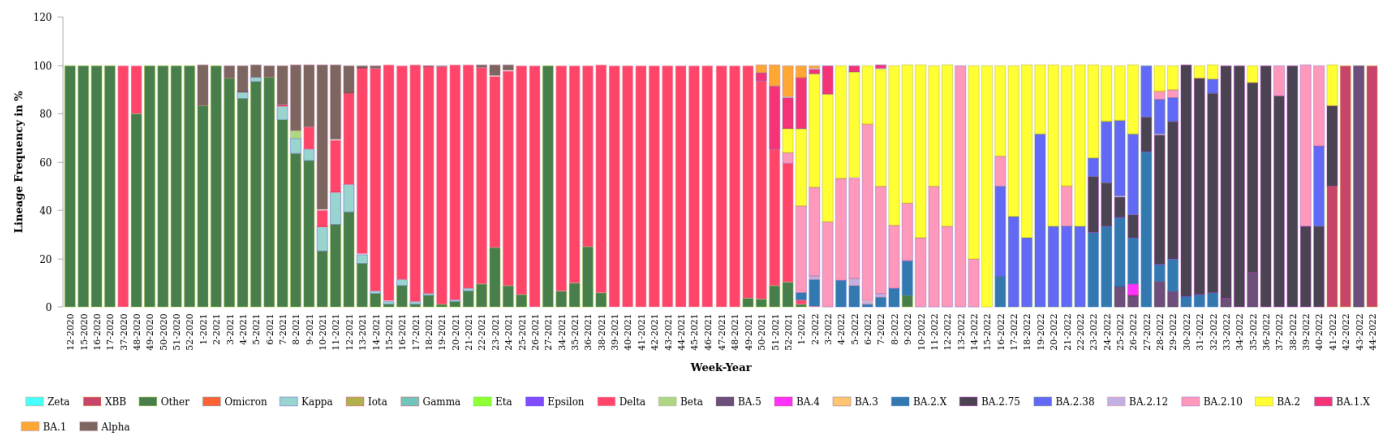
South India - Week wise lineage distribution

As on: 16-12-2022



Central India - Week wise lineage distribution

As on: 16-12-2022



Reference:

1. WHO weekly epidemiological report.