



INSACOG WEEKLY BULLETIN

No. 9 | August 23, 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.

INSACOG:

- Total number of samples processed so far is 67,699
- Total number of samples sequenced is 67,699
- Total number of sequences analysed are 50, 869

Samples from MoUs with state governments:

- Number of samples sequenced is 11,016

Total number of samples sequenced: 78, 865

The number of samples with pangolin lineage assigned are

Community sample	Travelers sample	Total pangolin lineage assigned	Total VOC/VOI	Proportion
45, 691	5,178	50, 869	31,124	61.2



INSACOG WEEKLY BULLETIN

Table 2: Distribution of VOCs & B.1.617.1 and B.1.617.3 (as on 18-08-2021)

Alpha variant			Beta Variant			Gamma Variant			Delta variant			B.1.1617.1 and B.1.617.3			Delta Plus	Total VOC/ VOI
Tr& Co	Com	Total	Tr& Co	Com	Total	Tr& Co	Com	Total	Tr&Co	Com	Total	Tr& Co	Com	Total		
577	3650	4227	117	102	219	1	1	2	74	21118	21192	85	533 2	5417	67	31124

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

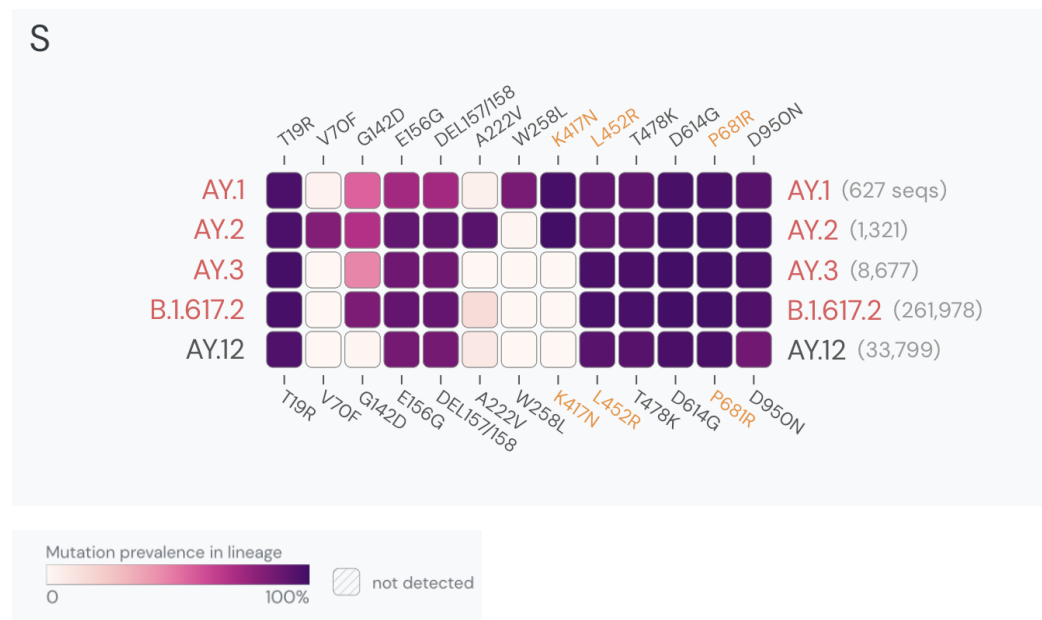


INSACOG WEEKLY BULLETIN

Variants reported during the period

Global

Delta continues to expand around the world with Israel seeing new cases rising to near previous highs despite about 60% of the population being fully vaccinated. AY.12 is the dominant lineage in Israel as per outbreak.info and is one of the reclassified Delta sub-lineages, as described in the previous bulletin (1). The reclassification is primarily to assist micro-epidemiology and is not based on acquisition of significant mutations. Thus, it is not currently known whether AY.4-AY.12 are clinically different from Delta. AY.12 has lost some of the mutations seen in Delta parent lineage, including G142D in spike protein. No new mutations of concern are noted in the spike protein (S). The figure below from Outbreak.info illustrates the point. However, its rapid growth in Israel means that it should be examined further.



National

Many cases in India, earlier classified as Delta, are now reclassified as AY.12. However, since the AY.12 definition is inconsistent, final numbers will take some time. AY.12 analysis will be added to the portal, along with other new PANGO lineages, once there is greater consensus.



DEPARTMENT OF BIOTECHNOLOGY
MINISTRY OF SCIENCE & TECHNOLOGY, GOVERNMENT OF INDIA



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
(विद्यार एवं औद्योगिकी संशोधन, भारत सरकार)
MINISTRY OF SCIENCE & TECHNOLOGY, GOVT. OF INDIA



icmr भारतीय अणुविज्ञान
अनुसंधान परिषद
INDIAN COUNCIL OF
MEDICAL RESEARCH
Bharat Ka Swasthya Rakshak



Ministry of Health
and Family Welfare
Government of India



THE INDIAN SARS-COV-2 GENOMIC CONSORTIA

INSACOG WEEKLY BULLETIN

In summary, Delta variant is the major VOC in India at this time. AY.12, a reassigned sub-lineage of Delta is being seen in many states, but the numbers need closer examination. The functional impact of the changes between Delta and AY.12 is not known but the two appear to be very similar at a molecular level.

- 1) Report for Israel. <https://outbreak.info/location-reports?loc=ISR>
- 2) Comparison of mutations in AY.12 versus Delta and current Delta+ lineages
<https://outbreak.info/compare-lineages?pango=AY.1&pango=AY.2&pango=AY.3&pango=B.1.617.2&pango=AY.12&gene=ORF1a&gene=ORF1b&gene=S&threshold=75&dark=false>