A summary of the cumulative data of INSACOG and other state sequencing initiatives can now 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

The proportion of known variants of concern that are in circulation in India remain unchanged from preceding week. Delta is the dominant lineage for new cases across all parts of India in recent samples and remains the most rapidly rising lineage globally. New data points to efficacy of vaccination against severe disease by Delta Variant. In the vaccine efficacy report from Public Health England, two doses of the AstraZeneca (Covishield) vaccine are estimated to provide 94% protection against death from COVID-19 in people aged 65 and over. Recently released vaccine efficacy report for Covaxin also show high efficacy against severe disease, but reduced efficacy against infection. There are recent reports from Israel about reduced efficacy of Pfizer vaccine in preventing infection.

Delta sub-lineages AY.1 and AY.2 are declining globally with near zero cases in the last week of June in either UK or US, where they were most frequently seen. They also continue to be below 1% in available sequences from June in India. It is likely that neither AY.1 nor AY.2 is more transmissible than Delta. There are no indications of rising trend in the four clusters (in Ratnagiri and Jalgaon in Maharashtra, Bhopal in MP and Chennai in TN). Meanwhile AY.3 has been identified as a new Delta sub-lineage, defined by ORF1a: I3731V common AY.1 mutations except for S: K417. It is primarily seen in the US with single reclassified cases in UK and India. There are no known significant properties of this mutation, but since it is a Delta VOC sub-lineage, INSACOG will continue to monitor it.

Alpha variant prevalence has declined further in India and globally. Beta is also at very low levels in India at this time. Gamma and Lambda are not seen in over 10,000 community samples sequenced by INSACOG since May. However, in view of possibly high immune escape properties they will continue to be specifically monitored. In summary, Delta variant and its sub-lineages are the only VOC in India at this time. Continuing outbreaks across India are attributable to Delta, susceptible population, and opportunities for transmission. Public health measures to reduce transmission and vaccination remain critical.