

Data Report: Monitoring SARS-CoV-2 Variants in Chicago

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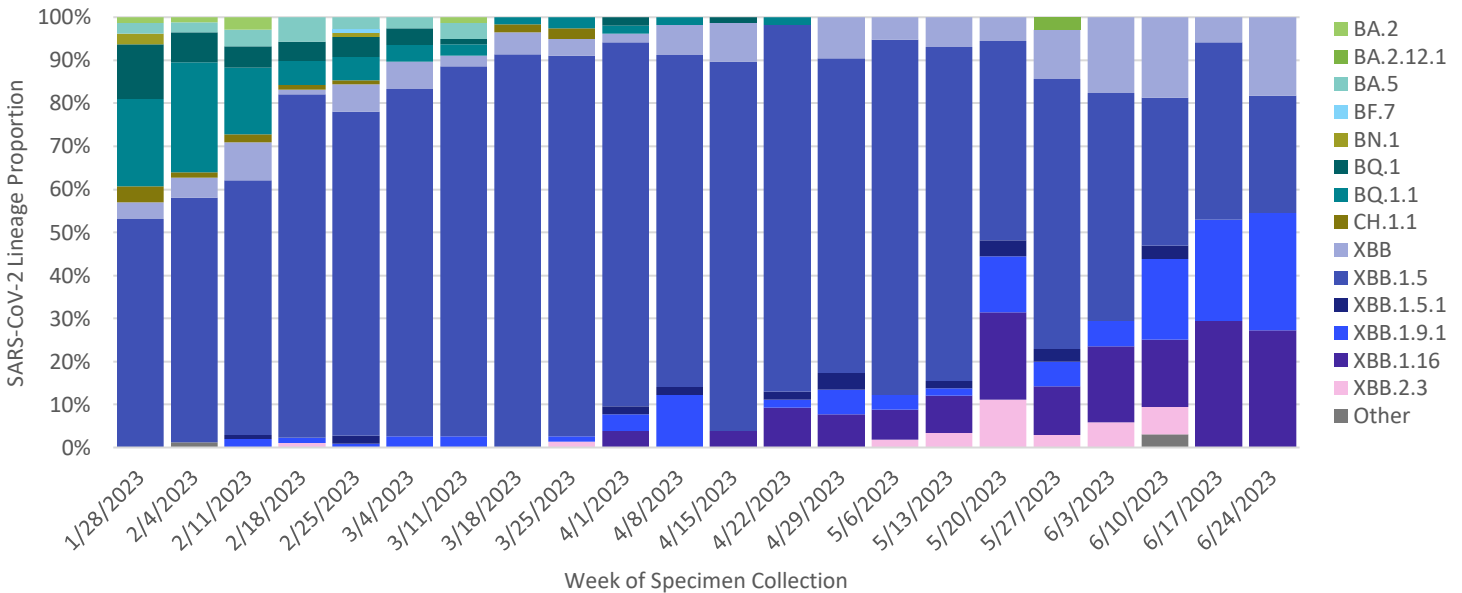
Background

The Chicago Department of Public Health (CDPH) monitors SARS-CoV-2 variants of concern like Omicron and its sublineages through the Regional Innovative Public Health Laboratory (RIPHL), a partnership with Rush University Medical Center. Like all viruses, SARS-CoV-2 – the virus that causes COVID-19 – constantly changes through genetic mutation. These genetic mutations can lead to the emergence of SARS-CoV-2 variants. In late 2021, the Omicron variant of concern emerged, and various sub-lineages of the Omicron variant have continued to emerge since. Monitoring SARS-CoV-2 variants helps public health officials gather important information and prepare to respond to any future change in COVID-19 transmission in Chicago.

Variant Prevalence in Chicago

Currently, Omicron is the only variant of concern being monitored by the Centers for Disease Control and Prevention (CDC). Although SARS-CoV-2 continues to evolve, the number of cases in the Chicago area remain low. Figure 1 displays RIPHL’s lineage breakdown in Chicago over a six-month period.

Figure 1. SARS-CoV-2 lineage proportions for surveillance specimens received by RIPHL, by week of specimen collection (January 28, 2023 to June 24, 2023).



Chicago Early Variant Alert Signal

CDPH also monitors the growth rate of new variants of concern (VOC) or variants of high concern (VOHC) as designated by the CDC. Logistic growth rate is used to measure how quickly a variant is growing in the population; quickly expanding variants likely have a large fitness advantage over existing variants.

This early alert signal also recognizes variants increasing in prevalence, displayed below in Table 1. RIPHL will continue to monitor these variants and provide updates as needed.

Table 1. SARS-CoV-2 variants currently increasing in prevalence in the Chicago area (as of June 26, 2023).

Sublineage	Parent Lineage	Date first detected in RIPHL
XBB.1.5	XBB (Omicron)	12/5/2022
XBB.1.5.1	XBB (Omicron)	2/11/2023
XBB.1.9.1	XBB (Omicron)	2/11/2023
XBB.2.3	XBB (Omicron)	4/1/2023
XBB.1.16	XBB (Omicron)	2/18/2023

Conclusions

SARS-CoV-2 continues to evolve. Getting vaccinated remains the best way to protect yourself and others from all variants of COVID-19, including Omicron and its sub-lineages. You can learn more about current vaccine recommendations and where to get vaccinated by visiting [COVID-19 Vaccine Recommendations \(chicago.gov\)](https://www.chicago.gov/city/en/departments/24/covid-19/vaccine-recommendations.html) and [COVID-19 Vaccine Finder \(chicago.gov\)](https://www.chicago.gov/city/en/departments/24/covid-19/vaccine-finder.html). As always, visit [SARS-CoV-2 Variants | COVID 19 \(chicago.gov\)](https://www.chicago.gov/city/en/departments/24/covid-19/sars-cov-2-variants.html) for updates about SARS-CoV-2 variants circulating in Chicago.