

Pathogen Genomics Center of Excellence Situation Report

2024-04-26

Key Findings

- Current data reflects a mixture of JN.1 descendents as the likely near term variants.
- Globally no other variants with unusual characteristics have been identified as having unusual growth.
- Some other point

Please see Situation Updates for COE group updates

Situation Update Details

- Based on what - XYZ(?), JN.1 and descendents continue to dominate. Some recombinations from JN.1 and other BA.5 variants are being monitoredtracked, but have yet to show significant growth relative other variants.
- Together this diversity suggests steady evolution against general population immunity with no indications of a variant driven wave of COVID-19 infections.
- As of 2024-04-30, there were X samples from MM/DD/YYYY - MM/DD/YYYY, some comment on trend
- Some text here about image one. There is this variant that’s here
- Some text about image two
- Image 3 has this
- Findings from a site’s analysis of national data

Statewide COVID-19 Variants: Last 12 Weeks

Percent of genetic mutations (or variants) of the COVID-19 virus by lineage for the past 6 weeks.

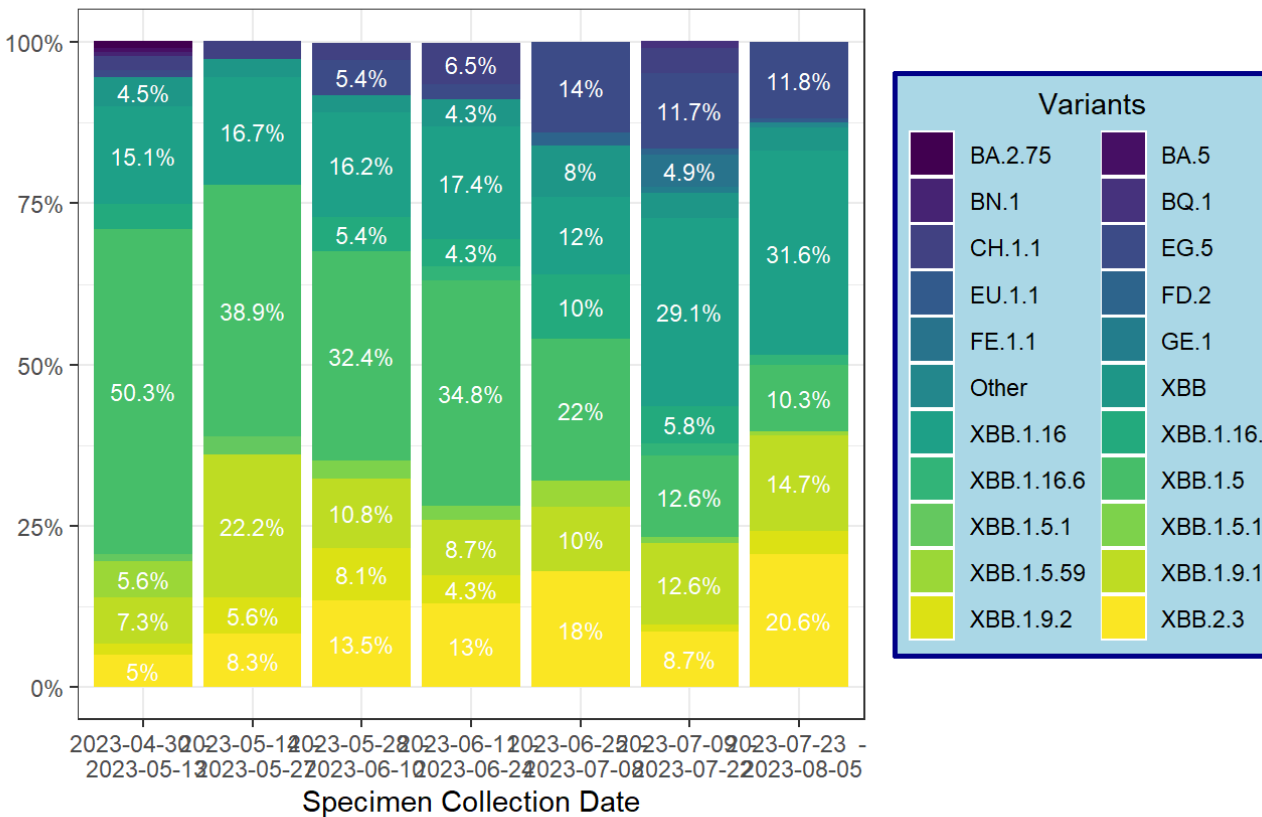
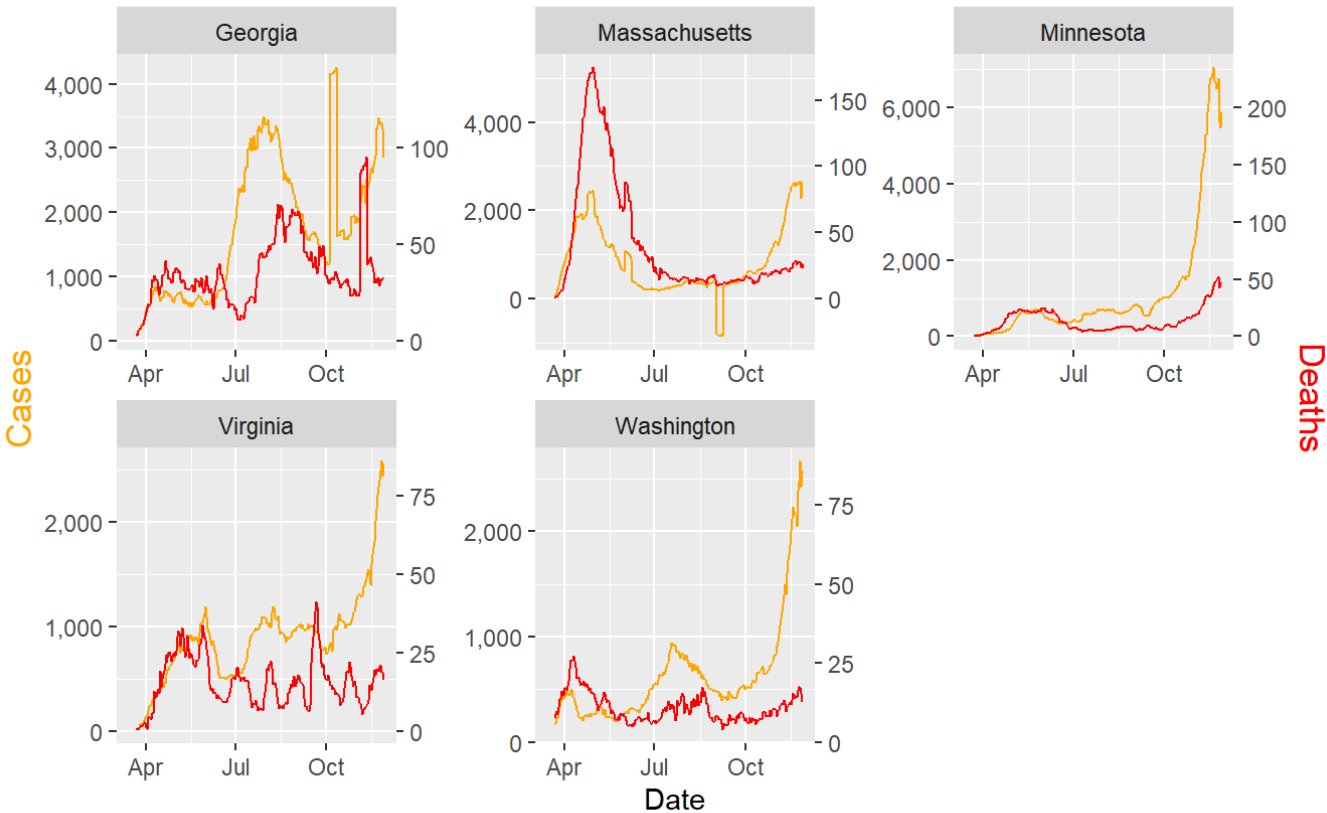


Figure 1: Proportion of variants by year.

Site Summaries

- Washington State Department of Health - highest variant proportion is 50%
- Georgia Department of Public Health probablity of detection: 60 and the consensus genomes are uploaded to public repositories like GISAID and GenBank.
- Massachusetts Department of Health prop - 50
- Virginia Department of Health - 60%

U.S. Cases vs. Deaths
7-Day Average

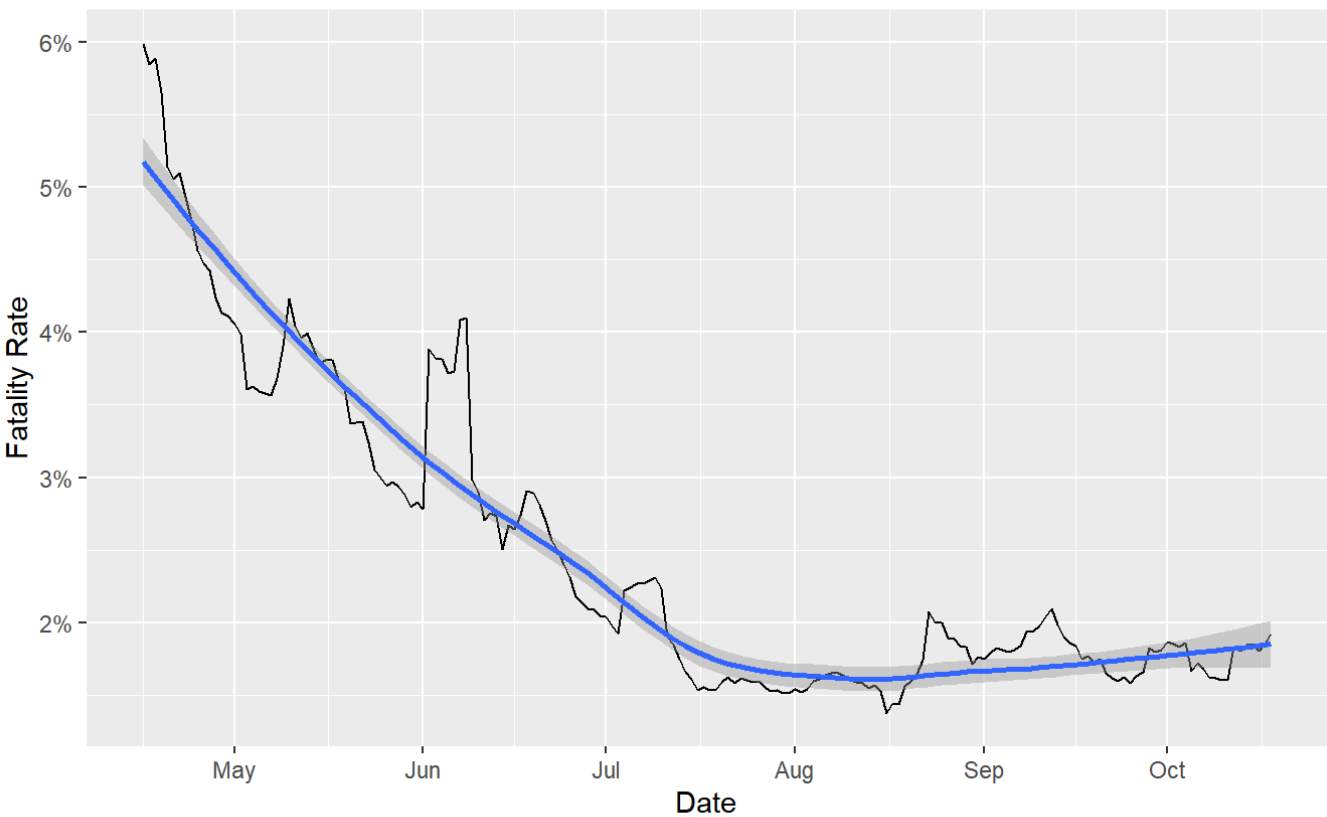


Source: NY Times, Arthur Steinmetz

Figure 2: From the New York Times: A couple of observations are obvious. First when cases start to rise, deaths follow with a lag. Second, we have had three spikes in cases so far and in each successive instance the mortality has risen by a smaller amount. This suggests that, thankfully, we are getting better at treating this disease. It is NOT a function of increased testing because positivity rates have not been falling.

Fatality Rates are Creeping Up

Fatality Rate as a Percentage of Lagged Cases



Source: NY Times, Arthur Steinmetz

Figure 3: COVID-19 fatalities, outputs from New York Times modeling.

Citations

This is a simple placeholder for the manuscript’s main document [1].

Figure 1 code source

Figure 2 code source

Figure 3 code source

main article code source

Bibliography

- [1] D. E. Knuth, “Literate Programming”, *Comput. J.*, vol. 27, no. 2, p. 97, May 1984, doi: 10.1093/comjnl/27.2.97.