COVID-19 Cases, Testing, and Variants

Senate Committee on Health Care

April 28, 2021

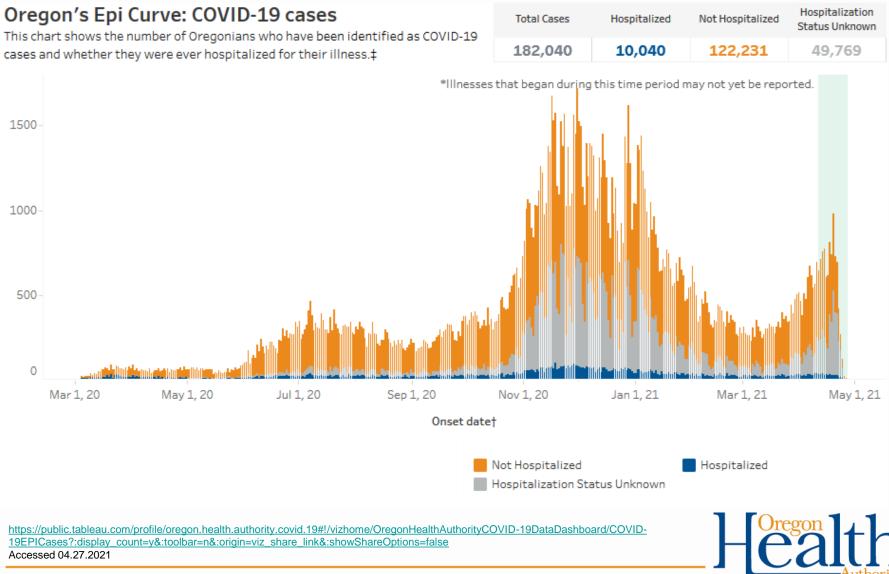
Dean Sidelinger, MD MSEd State Health Officer and State Epidemiologist



DATA UPDATE



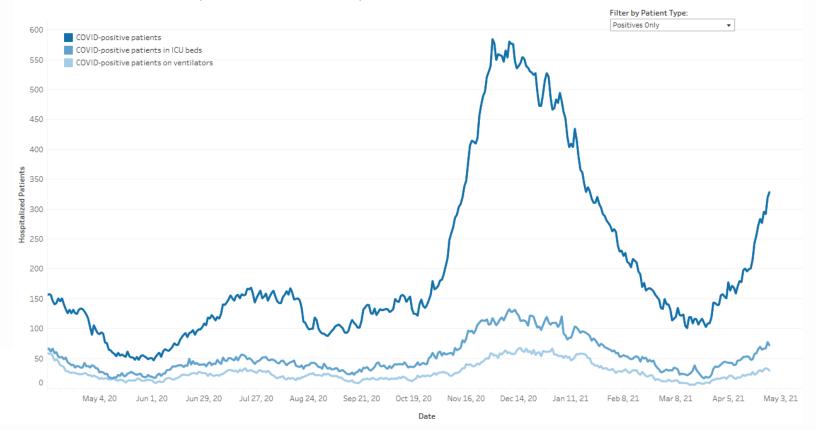
COVID-19 Cases in Oregon



Hospitalizations by Severity

Oregon's Hospitalization Trends by Severity

This chart shows daily COVID-19 hospitalizations and whether patients were in the ICU or on ventilators, as reported to Oregon's Hospital Capacity Web System (HOSCAP)¹. It initially displays only those who tested positive, but you can view all suspected or confirmed patients² using the dropdown menu below. Click on a legend item to highlight it in the chart (ctrl+click to select multiple items).



https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19HospitalCapacity/BedAvailabilitybyRegion Accessed 04.27.2021



Weekly Trends

ΔII

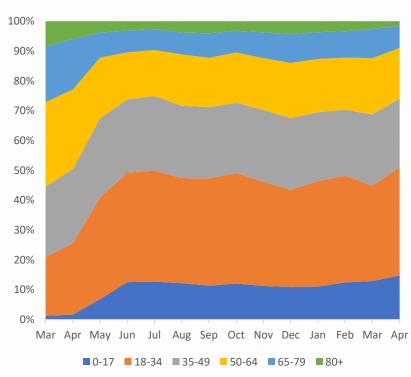
Summary Statistics For the Previous 6 MMWR Weeks -

Week of True Case Date	Total New Cases	Average New Cases Per Day	% Cases Not Traced to a Known Source					
3/14/21	1,966	281	50.8 %					
3/21/21	2,431	347	54.1 %					
3/28/21	2,920	417	52.3%					
4/4/21	3,673	525	55.9 %					
4/11/21	4,579	654	56.5%					
4/18/21	5,591	799	62.9 %					

https://tableau.dhsoha.state.or.us/t/OHA/views/InternalStakeholdersDashboardFinal/InternalDashboard?iframeSizedToWindow=true&:embed=y& :showAppBanner=false&:display_count=no&:showVizHome=no&:origin=viz_share_link#1 Accessed 04.27.2021



Statewide Cases & Hospitalizations by Age



Diagnosed cases by age and month, statewide

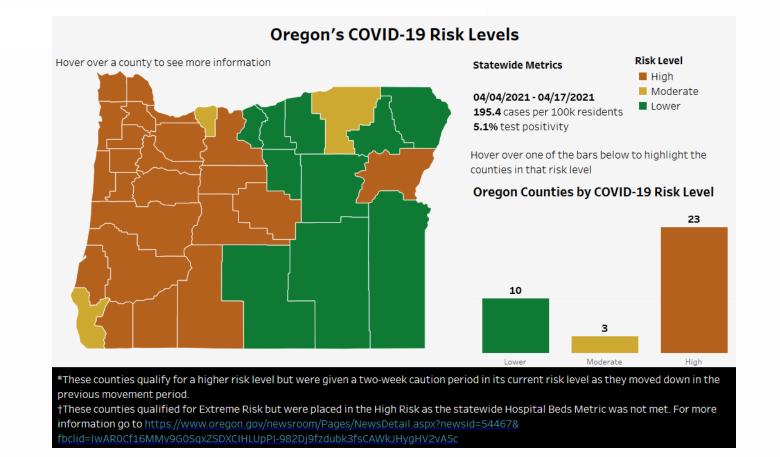
100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr ■ 0-17 ■ 18-34 ■ 35-49 ■ 50-64 ■ 65-79 ■ 80+

Hospitalized cases by age and month,

statewide



COVID-19 Risk Levels by County



https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19PublicHealthIndicators/Risk Accessed 04.26.2021



Hospital Census Metric

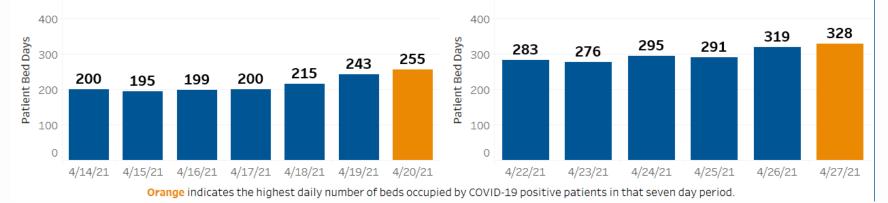
Seven Day Totals of COVID-19 Positive Patient Bed Days



If both the Percent Change and Current Period Daily Peak boxes are red, then the metric is met.



Current Seven Day Period COVID-19 Positive Patient Bed Days



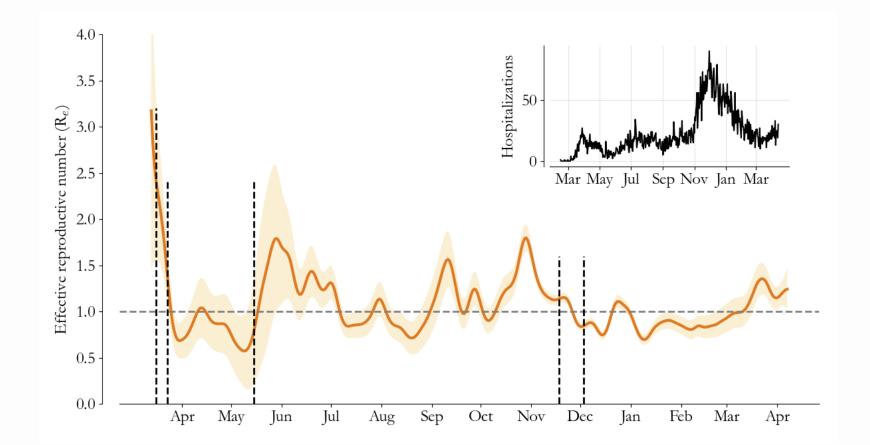
https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19HospitalCapacity/BedAvailabilitybyRegion Accessed 04.27.2021



LATEST PROJECTIONS

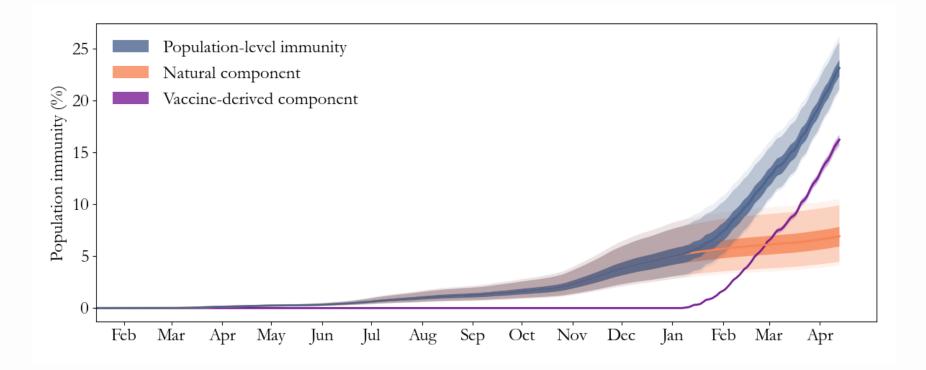


Re Estimates over Time with 95% Confidence Intervals



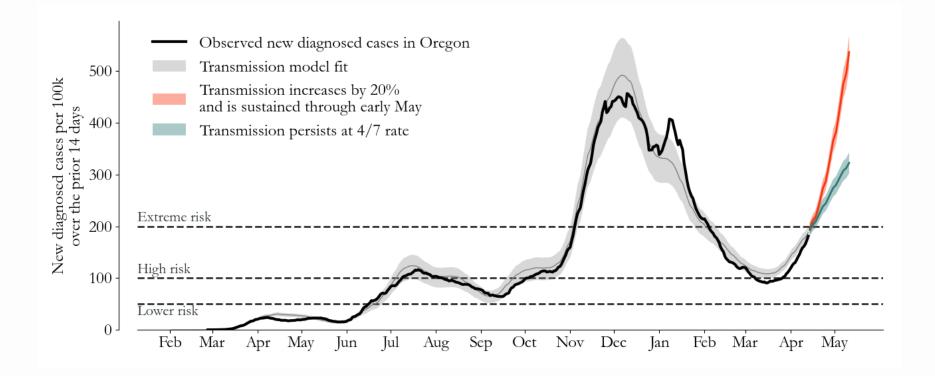


Population Level Immunity Estimates





Observed Diagnosed Cases with Projections



https://www.oregon.gov/oha/covid19/Documents/DataReports/Epidemic-Trends-and-Projections.pdf Accessed 04.23.2021



Acknowledgement: Melissa Sutton

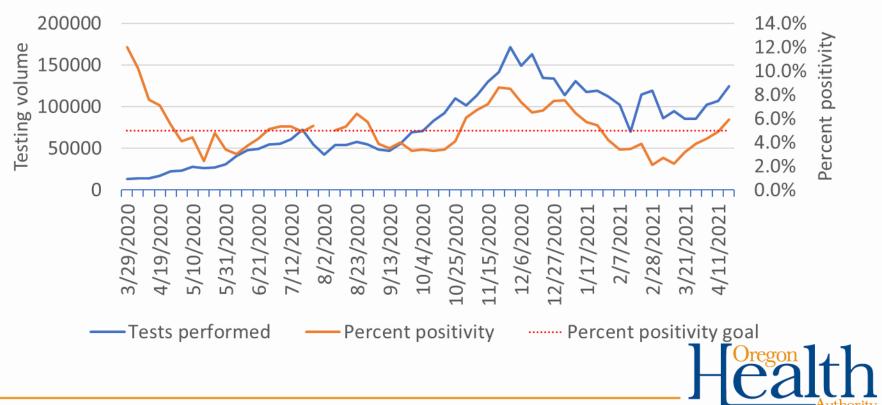
TESTING UPDATE



Testing volume trends

From 4/18-4/24, estimated testing volume was 124,577 and percent positivity was 5.9% (goal ≤ 5%)

Oregon COVID-19 testing volume and percent positivity over time



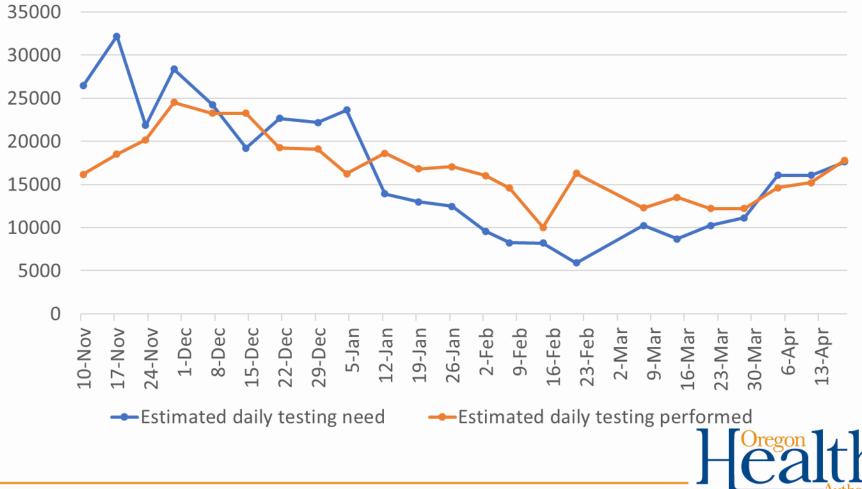
Testing needs and gap analysis

- The amount of COVID-19 in the community, screening and surveillance testing all determine testing needs
- As of April 17, we estimate that Oregon needed approximately 17,600 tests/day¹
 - Corresponding estimated testing volume: 17,800 tests/day
 - As case counts increase, there is a marginal testing gap emerging
 - We have seen testing capacity increase up to 2.5-fold since the surge began in October, and believe it can adapt again to meet demand
- Non-supply issues remain
 - Reallocation of resources from testing to vaccines is the greatest challenge to maintaining adequate testing
 - Within CRRU and in the larger community
 - Testing access
 - Testing acceptance



Testing needs and gap analysis

Oregon COVID-19 daily testing gap over time



Testing strategy updates

- K-12 Testing in Oregon's Schools project—1,169 registered
 - Testing offered to all public and private K-12 schools
 - Testing required if high community transmission or high-risk sports
- CDC ELC has awarded \$127 m to Oregon to support screening in schools
 - Screening of unvaccinated K-12 staff launched in partnership with Willamette Valley Toxicology
 - Confidential, by-mail PCR testing
 - Attempting to quickly adapt software platform to allow registration in Spanish as well as English
 - Screening will expand to students for the 2021-22 academic year



March Surge Testing Events Summary

- 26 events in 14 counties: Baker (1), Benton (1), Coos (2), Curry (2), Deschutes (1), Gilliam (1), Josephine (3), Linn (1), Marion (3), Multnomah (4), Umatilla (4), and Yamhill (3) counties
 - 717 tests conducted
 - 29 cases identified; 4.04% positivity rate overall
- Race and ethnicity of those tested (may choose more than one)
 - 59.6% White
 - 10.6% Hispanic
 - 5.6% Unknown
 - 1.8% Asian
 - 1.8% American Indian/Alaska Native
 - 1% Black/African American
 - <1% Pacific Islander



Acknowledgement: Melissa Sutton

ADVANCED MOLECULAR DETECTION: SEQUENCING SURVEILLANCE



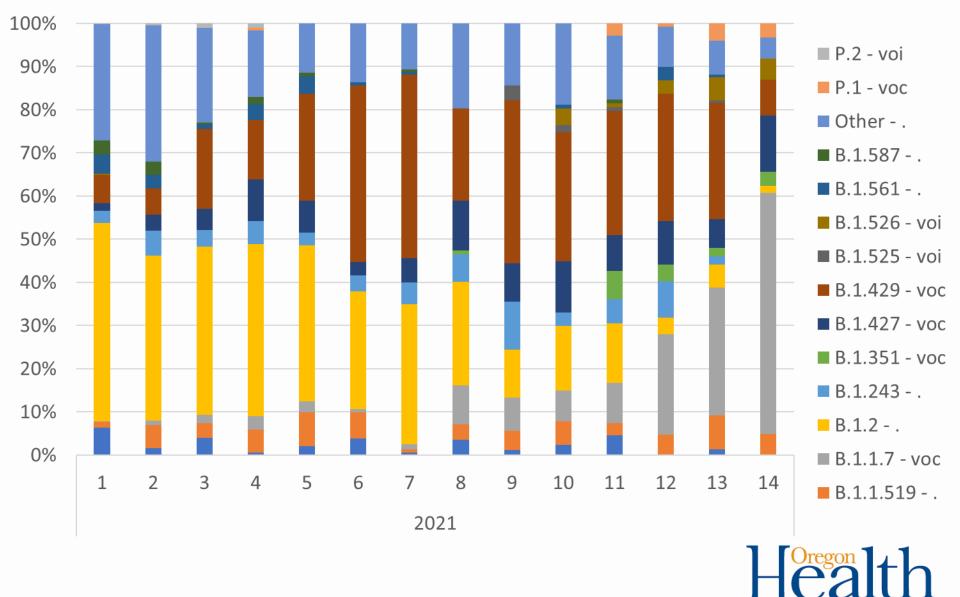
Situational overview: variants

B.1.429	B.1.427	B.1.1.7	B.1.351	P.1	B.1.525	B.1.526	P.2
519	159	168	18	13	7	22	6

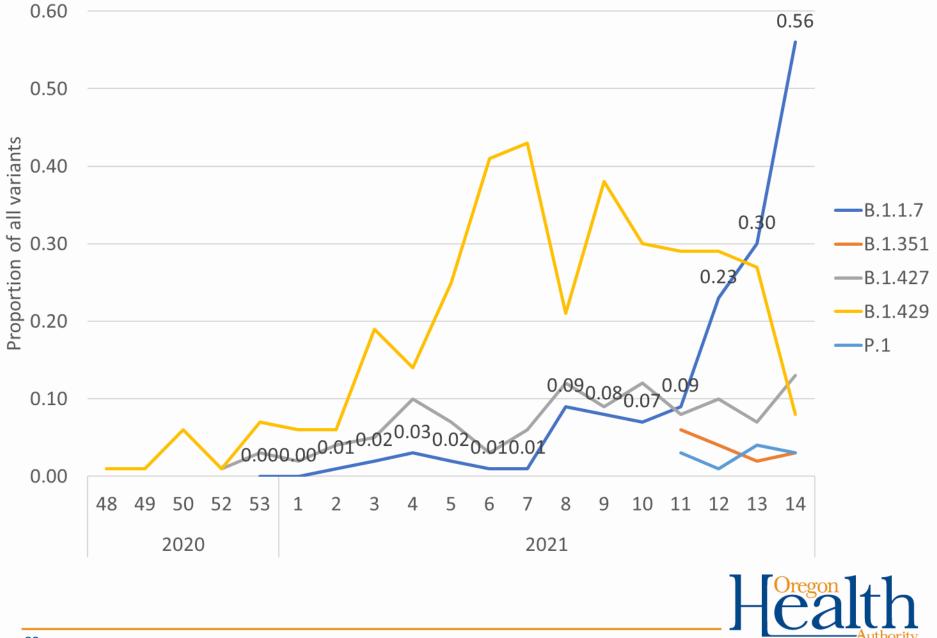
- Oregon has sequenced 5,152 specimens (3.07% of all specimens; rank 5th nationwide) since the beginning of the pandemic
- 877 variants of concern (VOCs) and 35 variants of interest (VOIs) have been identified
- B.1.1.7 (the "UK variant") has been identified in several communities
 - Approximately 50% more transmissible
 - Likely causes more severe illness (evidence mixed, but accumulating)
 - Quickly gaining momentum very recently
- B.1.427 and B.1.429 (the "California variants") have been identified statewide and represent the majority of VOCs
 - Approximately 20% more transmissible
 - Once introduced, these have slowly replaced other variants
- B.1.351 (the "South Africa" variant) and P.1 (the "Brazil" variant) have been identified in a few locations
 - Wastewater has identified B.1.351 circulation in two counties previously unknown to have cases indicating community transmission



SARS-CoV-2 Variants Circulating in Oregon 2021 by MMWR Week



SARS-CoV-2 Variants of Concern Circulating in Oregon



B.1.1.7 is now dominant

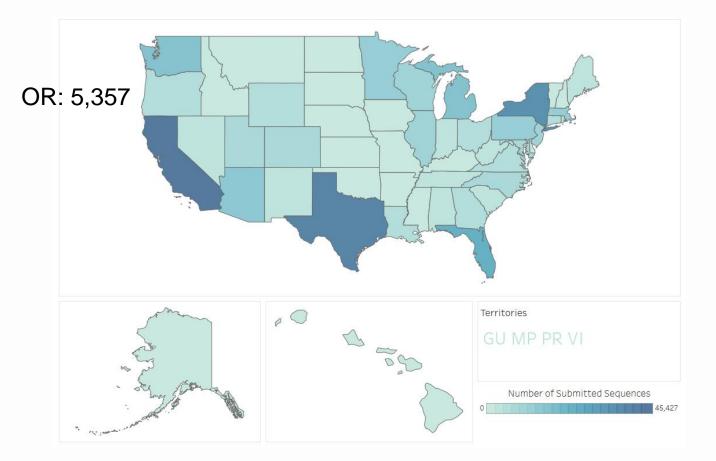
- B.1.1.7 (the "UK variant") has suddenly increased from a small fraction of all specimens sequenced to 56% of all specimens last week
- Approximately 50% more transmissible
- Likely causes more severe disease (i.e., more hospitalizations, deaths)
 - OHSU confirms younger and sicker patients than at any other time during the pandemic
- States with B.1.1.7 > 50% of all specimens are experiencing significant surges e.g., Minnesota and Michigan



VARIANT SEQUENCING: NATIONAL PICTURE

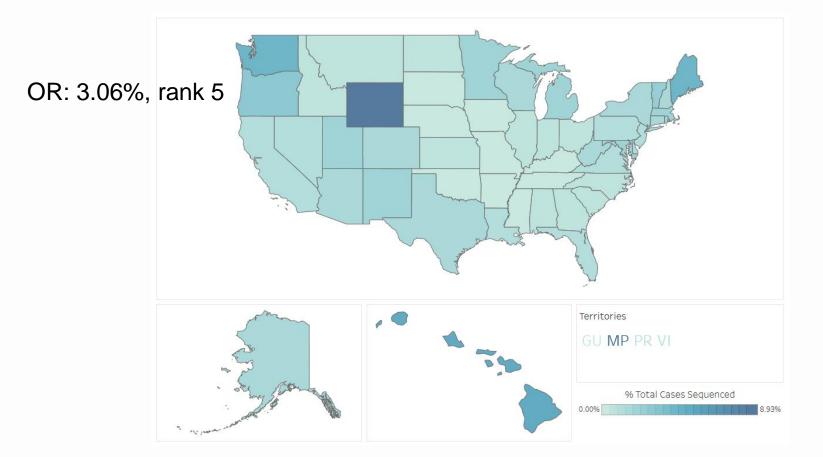


Total Sequences Submitted & Available



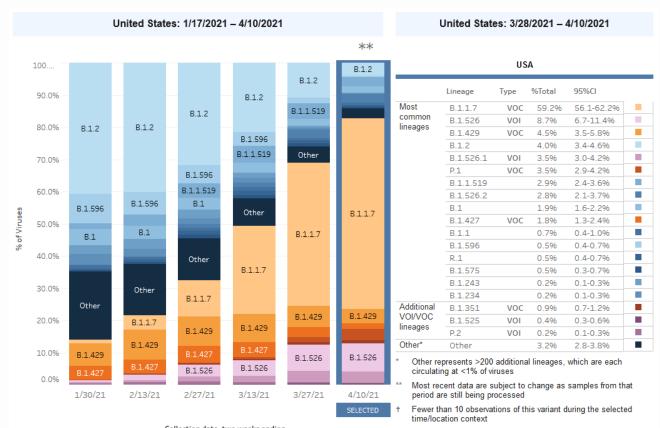


Percentage of Cumulative Cases Sequenced





Variants Circulating in the US

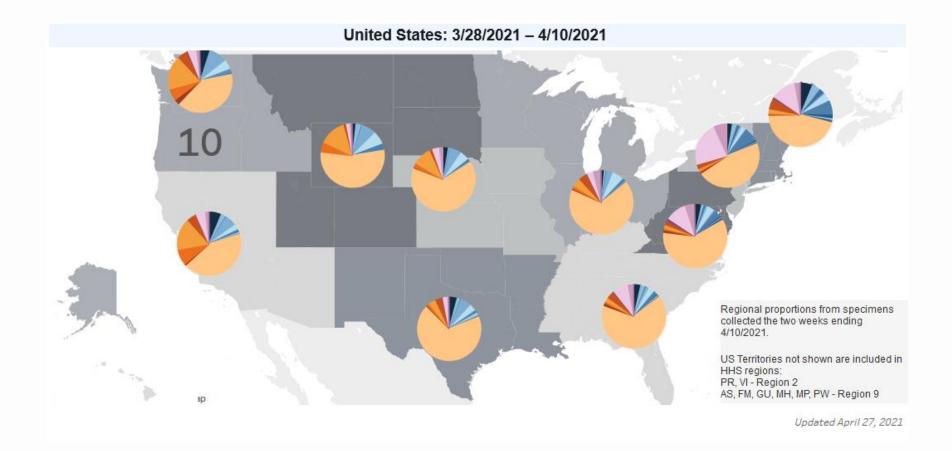


Collection date, two weeks ending

https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-proportions.html Accessed 04.27.2021



Weighted Estimates of Variants





https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-proportions.html Accessed 04.27.2021

Questions/ Discussion

