Key Outcomes

Update: The OHSU COVID Forecasting Brief will move to a every other week schedule. The next brief will be available the week ending Friday, July 22nd.
As of 7/6/2022, 423 people are hospitalized with COVID-19 in Oregon.

Source: https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19HospitalCapacitySummaryTables_15965754787060/HospitalizationbySeveritySummaryTable
Regional Hospital Census

Region 5 is showing rates moderately higher than the other regions. All regions are showing general increases over the last 3 weeks.

Source: https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19HospitalCapacity/BedAvailabilitybyRegion
Most regions are relatively flat in hospital census which likely represents some declines from previous strains and some increases from BA4/5.
Pediatric Census in Oregon

The pediatric census level is at 16 as of 7/5. This reflects the increase seen in adults relative to BA1. Similar to adults, most of these cases are likely to be incidental.

Source: https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capa/g62h-syeh/data
As of 7/6/22, 10% of occupied ICU beds are filled with COVID patients. This is an increase from 4% last report.
New Cases in Oregon

Oregon’s cases levels have been relatively flat since middle of May. At 33 per 100k per day, they are 18th highest in the US.

ED Visits for COVID

The number and percent of ED visits for COVID has increased during BA2.

The rate has increased modestly after a plateau.

Source: https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonCOVID-19PublicHealthIndicators-SummaryTable/SevereDiseaseIndicators-SummaryTable
Test Positivity

The most recent complete week (6/26-7/2) had a test positivity of 15.3%.

After a plateau, the testing rate has increased again. This is consistent with BA4/5 increasing transmission levels.

The number of tests has dropped from 104k the week of 5/15 to just 78k the week of 6/26.

Wastewater levels are showing signs of increase in many localities.

Data from Portland are highlighted in the chart over time.

Source: https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonsSARS-CoV-2WastewaterMonitoring/WastewaterDashboard
Review of Leading Indicators

Note: the survey data provided in this section is no longer being collected. This will be the last edition where the data are reported.
While the masking rate varies between regions, the levels is largely unchanged since beginning of April.

Source: https://covidcast.cmu.edu/
Time with Others Indoors

Time with others indoors is generally steady across regions in the US and Oregon.

Source: https://covidcast.cmu.edu/
The percent of people indicating going to a bar or restaurant indoors is relatively stable across regions.

Source: https://covidcast.cmu.edu/
Large Events Indoors

The percentage of people attending large events indoors is lower in Oregon than other regions. The trend is generally stable.

Source: https://covidcast.cmu.edu/
Symptoms appear to have peaked and begun a slight decline. Oregon, the Pacific region, and the Northeast region reached higher levels of symptoms than other areas. This is consistent with more potential due to higher masking rates during BA1.

Note: This question asks individuals if anyone in their household or community has symptoms of COVID.

Source: https://covidcast.cmu.edu/
Statewide Forecast
Behavior Effects

This value represents how effective the non-pharmaceutical interventions (NPIs) and individual behaviors have been at reducing the spread of the virus.

With the shorter recovery period of Omicron the weekly estimates are more noisy. In general the model is showing low levels of transmission prevention due to behavior or policy.
The primary forecast shows a slight increase in hospitalized patients as the impacts of BA2 and reduced COVID restrictions are experienced.

The peak is expected to reach 479 on 7/12.
The infections underlying the model are shown in the graph. Consistent with symptom and wastewater data, the model shows high rates of infection that are similar to the levels during the BA1 wave.
BA4/5 began growth in early May and is expected to peak in middle of July before declining. Strains prior to BA4/5 have already begun receding.
Due to the high prevalence of infections and low hospitalization rate per infection, a significant share of hospitalizations are expected to be incidental.

As part of the model rebuild for BA4/5, the rate of incidental hospitalizations was adjusted during the early BA1 wave to be higher than previously reported. This matches external estimates of incidental COVID more closely.

Notes: Incidental cases are estimated by using the population prevalence of the virus in relation to the number of beds in the state. The share is calibrated to match estimates from states and countries.
The introduction of BA4/5 has generated a new wave that had not been previously incorporated.
Some additional increase in deaths are expected as a result of the BA4/5 wave.
Ancillary Data
Scenarios from national modelers showed many possible paths for a new variant with more/less immune escape or more/less waning.

### CDC Scenario Modeling Hub

Source: [https://covid19scenariomodelinghub.org/viz.html](https://covid19scenariomodelinghub.org/viz.html)
Influenza cases have dropped quickly in recent weeks.

Over the next 3 weeks the forecasters reporting results to CDC are showing constant levels of hospitalizations.

Omicron Strains in Oregon

BA4 and BA5 together now account for about 50% of sequenced strains in Oregon as of June 19th.

Source: https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/GISAIDVariantDashboardUpdated/OregonVariantDashboard
After peaking on May 24th, cases have dropped quickly and hospitalizations are dropping more slowly.
Deaths have continued to increase in Portugal and have risen to rates nearly as high as during the BA1 wave.

Acknowledgments

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Thank you!
Specifications

- **Specifications:**
- Spread: Omicron is faster spreading due to shorter recovery period (12 days vs 9 days with R0 at 6.5). BA2 faster than BA1 by 39%.
- Immune Escape during Omicron: 72%, BA4/5=15%
- Behavior: Decreased NPI pattern.
- Hospitalization Rate: 30% of Delta
- ICU Rate of hospitalized: 80% of Delta
- Boosters: fitted with actuals and decline expected.
- Incidental: Estimated with community prevalence and calibrated with external estimates.
- Length of stay: shortening of stay over time. From 7 and 14 to 5 and 12 days for those with and without ICU.
- Days from exposure to admission= decreasing from 12 to 8 days.
- Recovery period=12 days prior to Omicron and 9 days for Omicron.