SCHOOLS, COVID-19 & SHARED UNDERSTANDINGS

PPS' DATA-INFORMED COVID-19 JOURNEY:

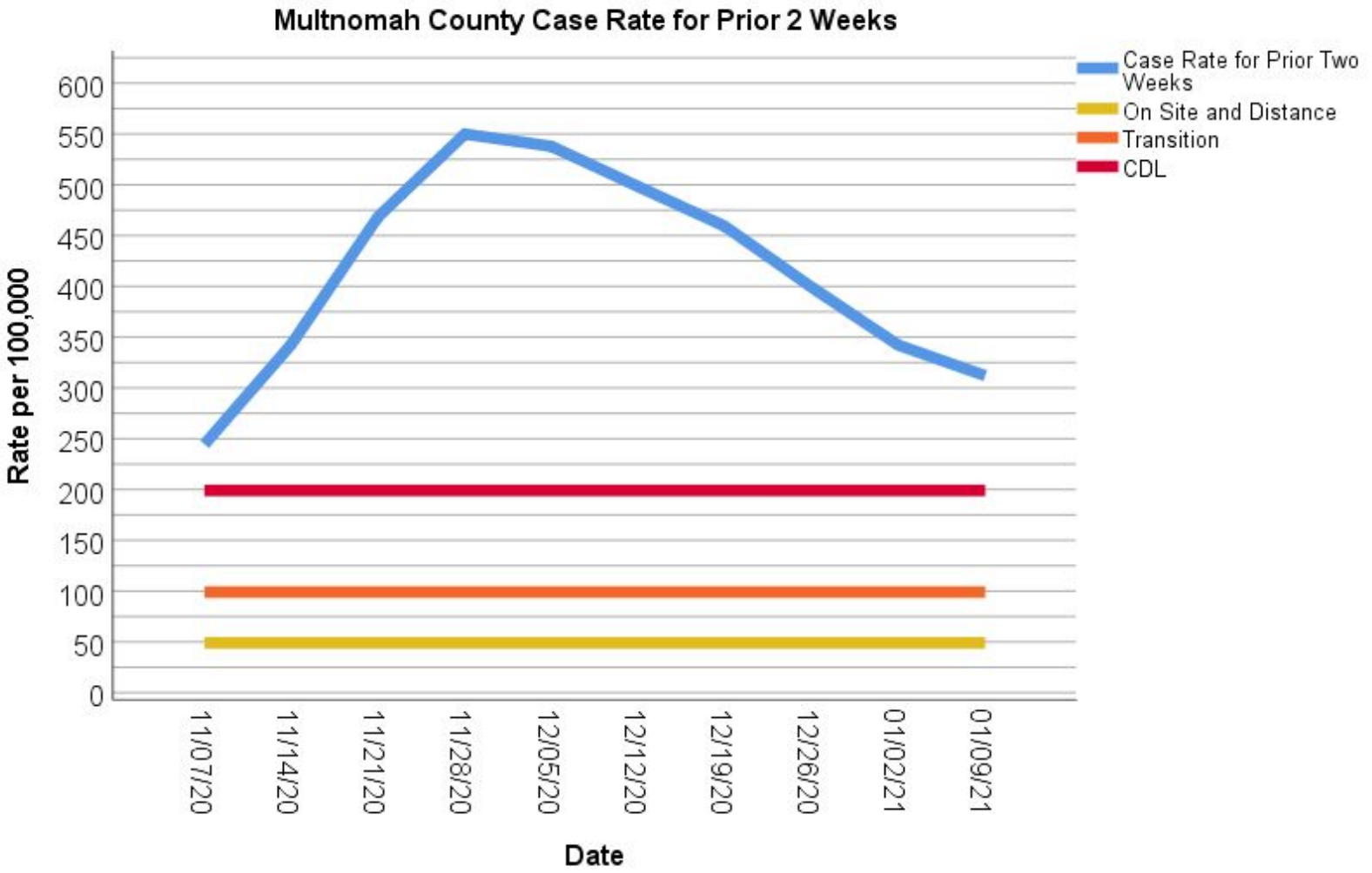
DR. RUSSELL BROWN
PPS CHIEF OF SYSTEMS PERFORMANCE

Guiding Principles for COVID Planning

System Shift: A Culture of Physical & Emotional Safety

Ensure Health & Wellness for Staff, Students & Buildings

- Center Racial Equity and Social Justice
- Ensure the Health and Wellness of our staff and students
- Cultivate Connection and Relationship
- Strengthen and Innovate the Instructional Core


Multnomah County Case Rate for Prior 2 Weeks
Rate per 100,000
600
550
500
450
400
350
300
250
200
150
100
50
0
11/07/20
11/14/20
11/21/20
11/28/20
12/05/20
12/12/20
12/19/20
12/26/20
01/02/21
01/09/21
Date
Case Rate for Prior Two Weeks
On Site and Distance
Transition
CDL

METRICS & MODELS	ON-SITE	ON-SITE AND DISTANCE LEARNING	TRANSITION	DISTANCE LEARNING
County Case Rate per 100,000 People Over 14 days	<50.0	50.0 to <100.0	100.0 to ≤200.0	>200.0

- As expected, our case remain high in comparison to October -
  - 10/18: 140 over 2 weeks
  - 01/09 312
- Test positivity has gone up to 6%

Complex Path to Return

- Multiple perspectives regarding opening
- The constraints of our physical settings
  - 35 Square Feet per Student
  - Cohorting
  - Air quality
- Timing
  - Post-holiday wave
  - Vaccination timelines
- Negotiations

PPS HEALTH ADVISORY PANEL

DR. PETER GRAVEN, PHD

Affiliate Assistant Professor
OHSU-PSU School of Public Health.

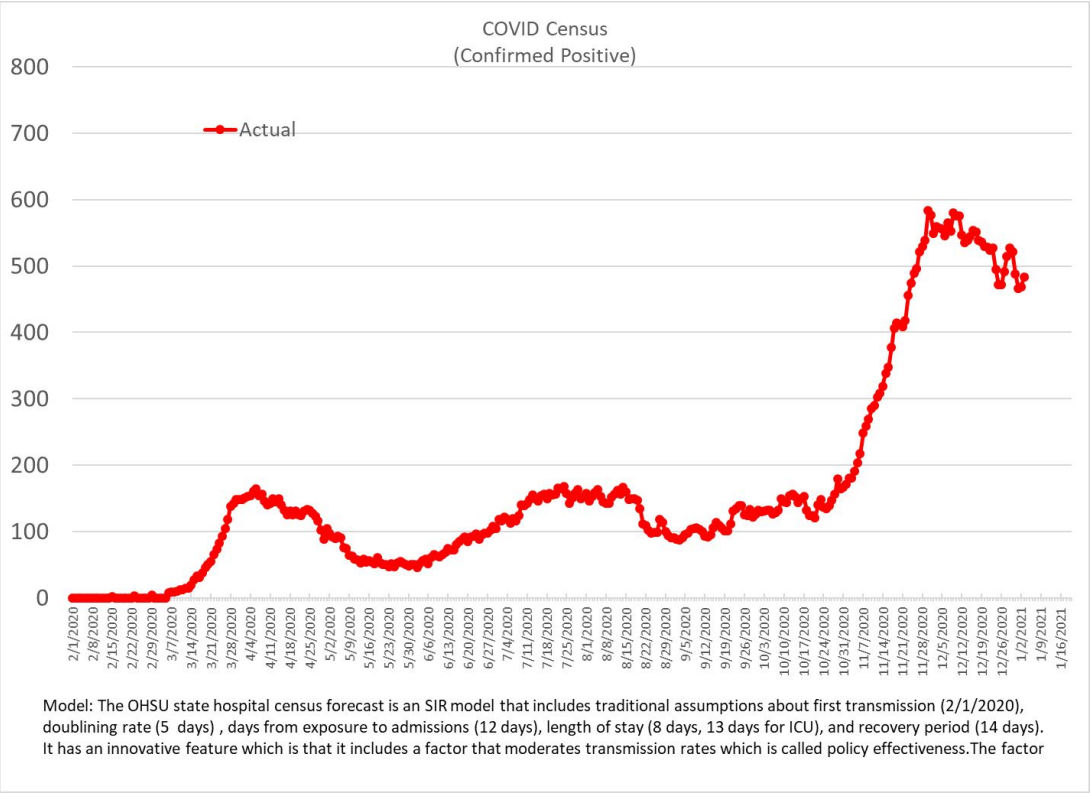
COVID Data Trends and Models

Edition: 1/12/2021

Peter Graven, PhD; OHSU

Hospitalized Patients

After peak of 584 on 11/30, census has only declined to 479 as of 1/4/2021.

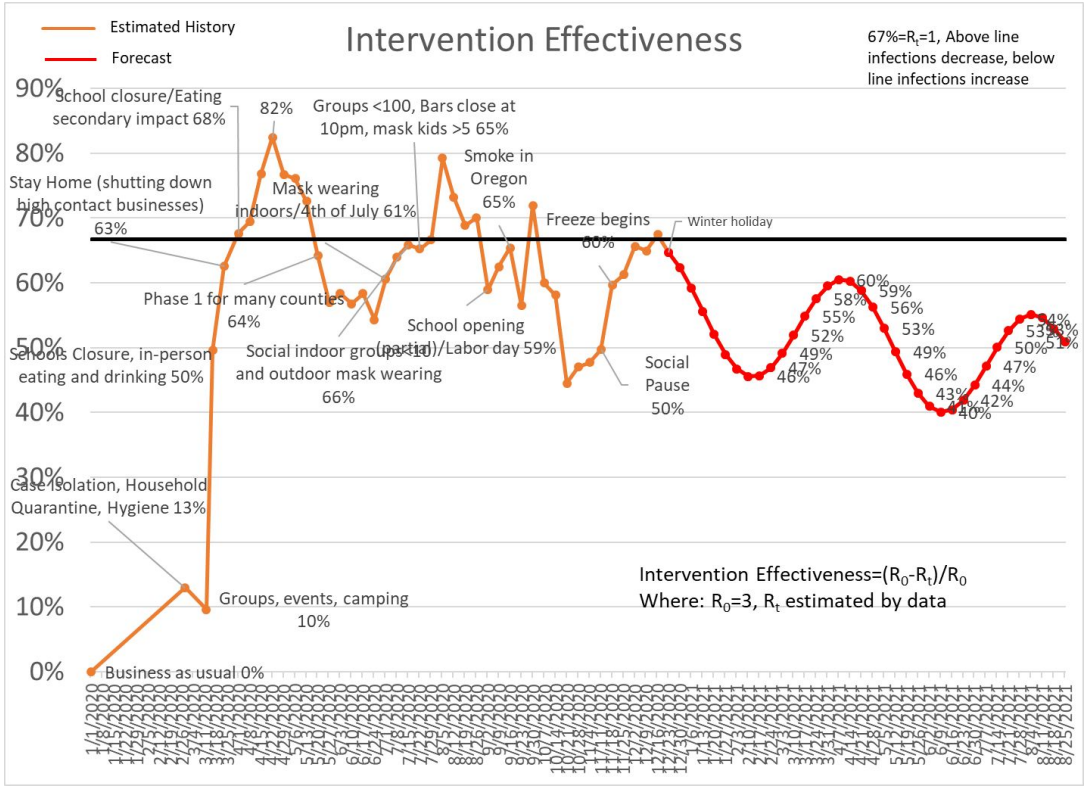


Source:
https://public.tableau.com/profile/oregon.health.authority.covid.19#!/vizhome/OregonCOVID-19HospitalCapacitySummary
Tables_15965754787060/HospitalizationbySeveritySummaryTable

Long Term Model-Intervention Schedule

The long term forecast shows the fear and fatigue cycles continuing.

It also includes a trend toward reduction in effectiveness over time.



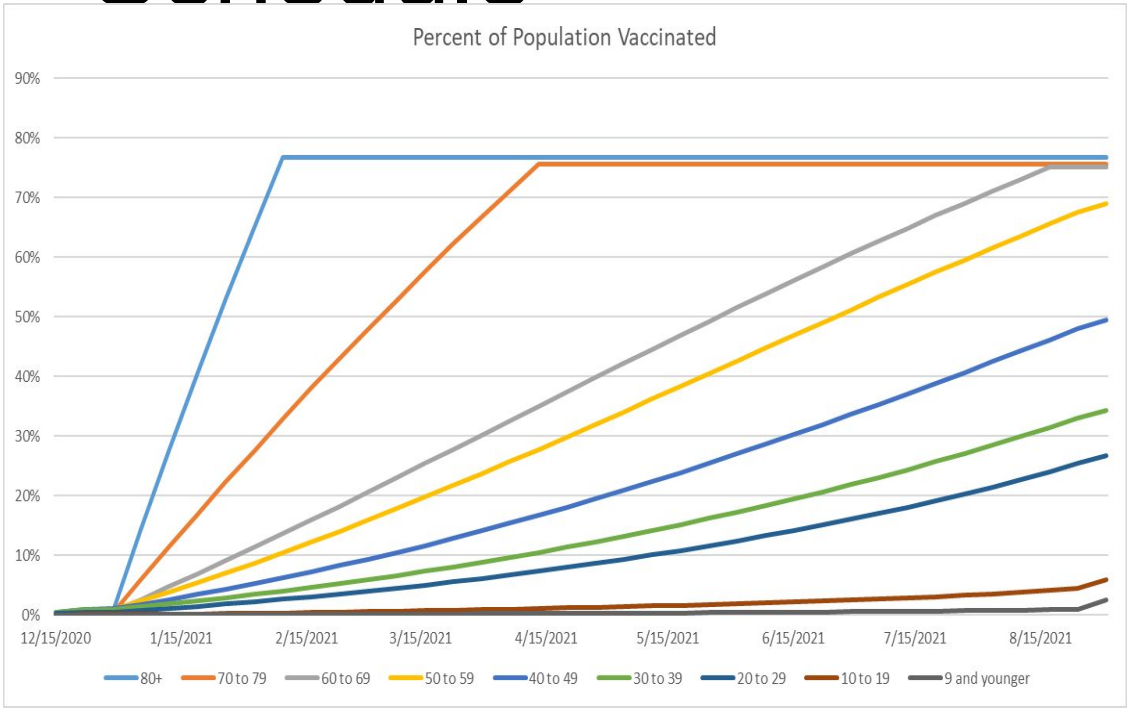
Source: OHSU COVID Forecast Model

Long Term Model-Vaccine Schedule

Schedule shows the percent of population vaccinated by date assuming 10k per week are possible.

Recent statement indicate the expectations should be 12k per day. So this may underestimate actuals.

The priority by age has not yet been observed as more workers are receiving the vaccine.



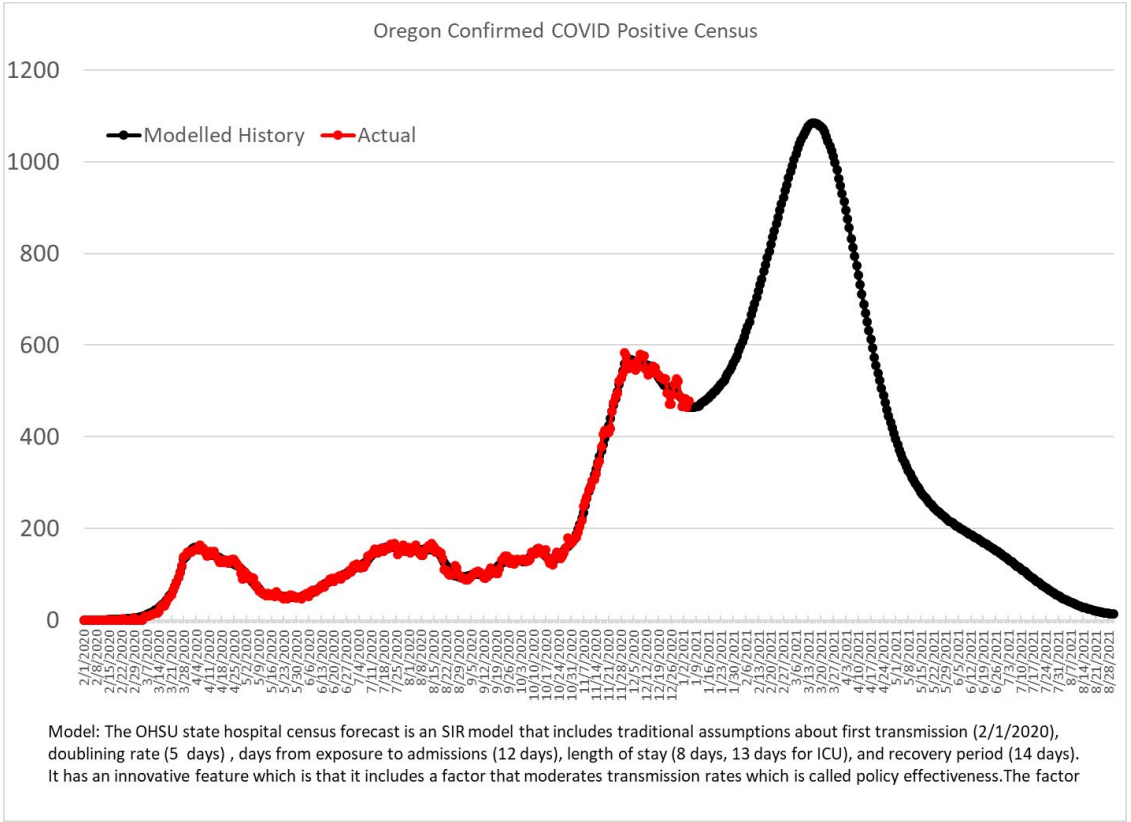
Source: OHSU COVID Forecast Model

Long Term Model-Census Forecast

Oregon is expected to have distinct second winter wave.

Impacts of vaccine bring to more manageable levels by April/May.

This does not include impact of Variant B.1.1.7 that is expected to increase transmissibility of COVID in Oregon.



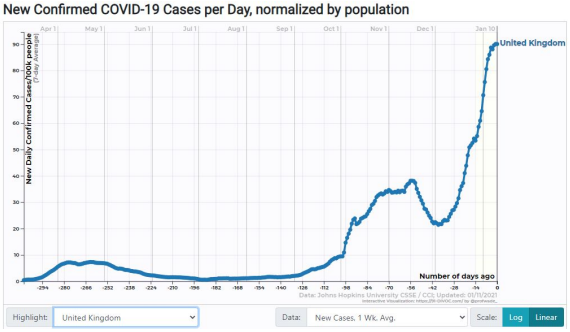
Model: The OHSU state hospital census forecast is an SIR model that includes traditional assumptions about first transmission (2/1/2020), doublining rate (5 days) , days from exposure to admissions (12 days), length of stay (8 days, 13 days for ICU), and recovery period (14 days). It has an innovative feature which is that it includes a factor that moderates transmission rates which is called policy effectiveness.The factor

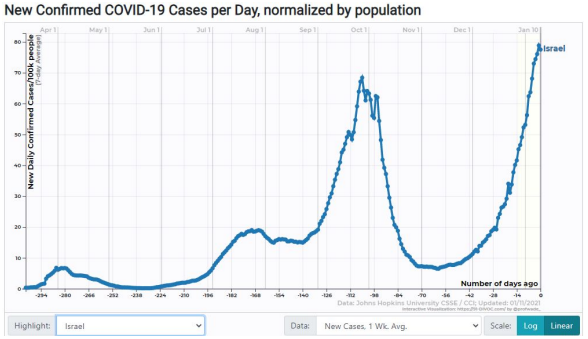
Source: OHSU COVID Forecast Model. Note: the “Modelled history” is not the fit of previous forecasts, it is the fit of the model that produces the points in the Intervention Schedule slide.

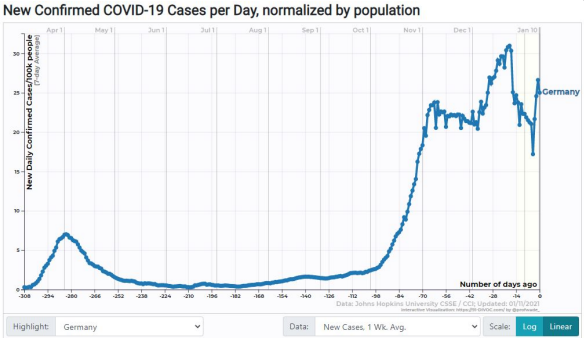
B.1.1.7 Variant Driven Spikes

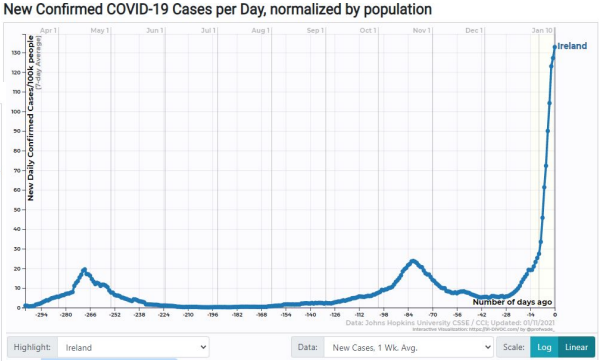
Countries with a large share of Variant (B.1.1.7) have experienced large winter surges.

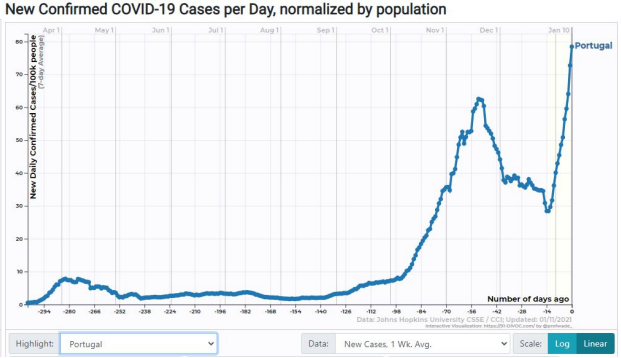
The charts show spikes in UK, Israel, Ireland and Portugal. Germany has low rate of variant and has not had similar spike.











Source: http://91-divoc.com/pages/covid-visualization/

Long Term Model-Specs

Assumptions

1) Vaccine schedule by week through 8/31/2021 (approx. 10k per day after start-up)
    - Project number replaced by actuals as they become known
2) Vaccine acceptance rate (75%)
3) Lagged affect on protection (2 weeks until vaccinated have protection)
4) Efficacy of vaccine (54% at first dose, 95% after second dose at 24 days)
5) Impact on hospitalization rate of new cases
    - Vaccine schedule prioritizes older individuals
6) Fear and Fatigue cycle of intervention effectiveness estimated with sinusoidal function (approx. 8 weeks/each)
7) Ascertainment rate- True infected are estimated to be 3.5 times larger than cases.
8) Vaccination of previously infected is possible based share of population infected.

Source: OHSU COVID Forecast Model

Long Term Model-Specs

Limitations

1) There are a lot of assumptions for a model like this to work. Rather than it being an expectation of the future it is more of an exercise to see what our best guess is given information we have. The assumptions will change over time.
2) Additional dynamics that are not included (yet):
    1) Impact of B.1.1.7 variant on transmission rate or vaccine efficacy
    2) Whether vaccine only prevents symptoms or also prevents transmission
    3) Efficacy differences by age group
3) It has not been resolved why the effectiveness appears to be declining over time. It may be an artefact of how the parameter is calculated.

Source: OHSU COVID Forecast Model

Local Response: Multnomah County Health Department

JESSICA GUERNSEY, DIRECTOR OF PUBLIC HEALTH

Ann Loeffler, MD

DR. ANN LOEFFLER, DEPUTY HEALTH OFFICER

Multnomah County Health Department

PPS Schools Reopening: Updates

Presenters:

Jessica Guernsey, Public Health Director

Ann M. Loeffler, MD Deputy Health Officer

January 7, 2020

Today's Briefing

- Vaccination Update

- Multnomah County role in schools reopening process

Vaccine Goals

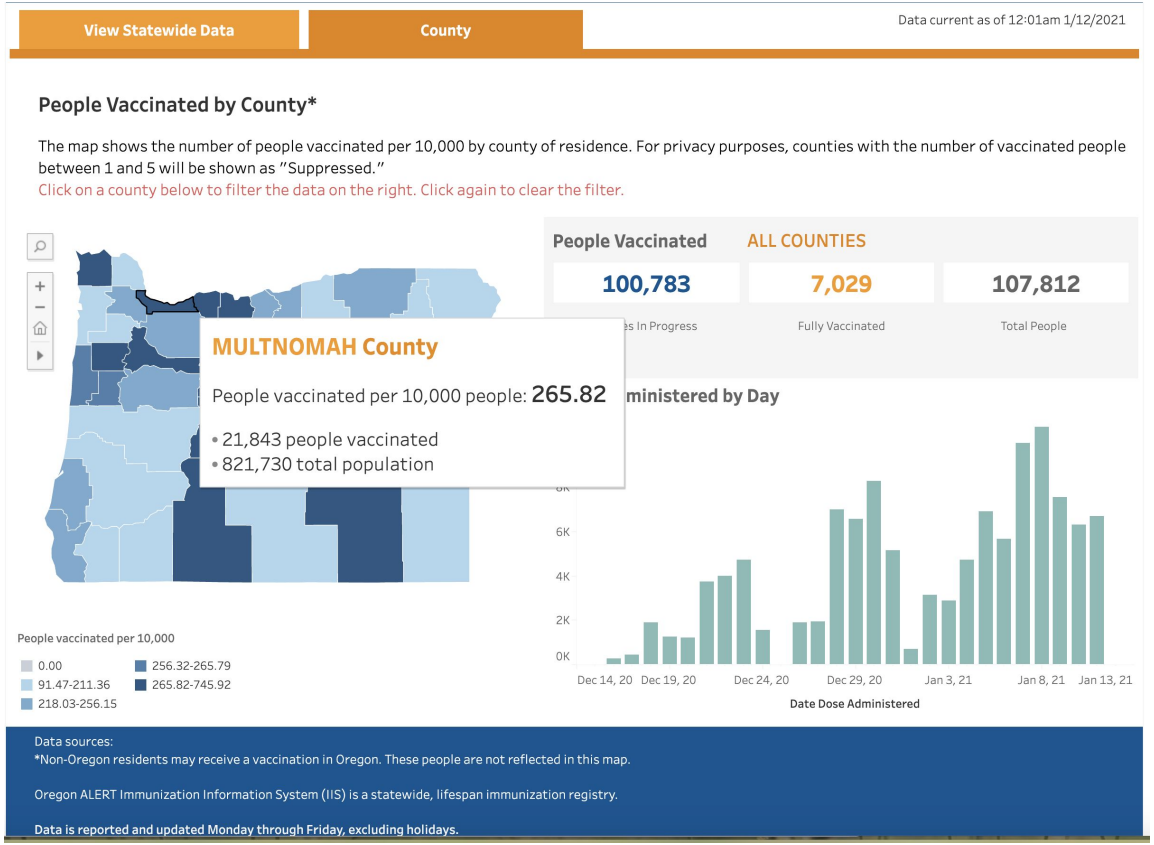
- Ensure safety and effectiveness
- Reduce transmission, morbidity, mortality
- Minimize disruption to society and the economy, including maintaining healthcare capacity
- Ensure equity

Vaccine Priorities-Phase 1a

There are four groups in Phase 1 a:

- **Group 1:** Hospitals; urgent care; skilled nursing and memory care facility Health Care Providers (HCPs) and residents; tribal health programs; Emergency Medical Services (EMS) providers and other first responders.
- **Group 2:** Other Long Term Care Facilities (LTCFs) and congregate care sites including HCP and residents; hospice programs; mobile crisis care and related services; secure transport; individuals working in a correctional setting.
- **Group 3:** Outpatient settings serving specific high-risk groups; in home care; day treatment services; non-emergency medical transport (NEMT).
- **Group 4:** HCP in other outpatient, public health and early learning settings; death care workers.

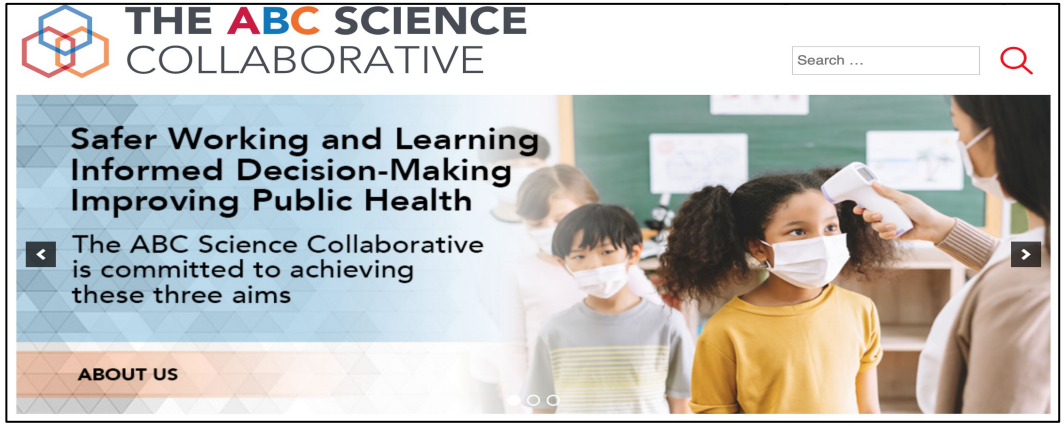
Multnomah County Vaccinations



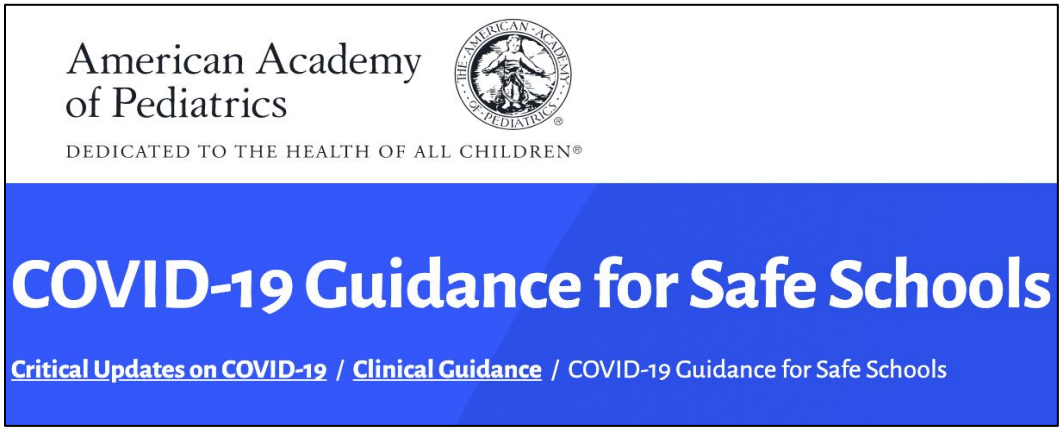
Governor's Advisory Metrics

Category	Case rate/100,000 2 wk average	Test positivity rate	Advisory RSSL Instructional Model
Lower risk	<50	< 5%	• On-site or hybrid • Cohorting & mask wearing
Moderate risk	50 to <100	5.0 to 8.0%	• On-site or hybrid • suggest starting with elementary • HS and MS phased in with LIPI after success at primary grades • Cohorting & mask wearing
High risk	100 to < 200	8.0 to ≤ 10%	• Plan for transition to CDL with LIPI • Cohorting & mask wearing
Extreme risk	≥ 200	> 10%	• CDL with LIPI • Cohorting & mask wearing

Resources



Released 1/5/21



Published their early experience last week

Questions?

MULTIPLE PERSPECTIVES: COALITION OF COMMUNITIES OF COLOR

MARCUS MUNDY, EXECUTIVE DIRECTOR

Coalition of Communities of Color

Advancing racial justice through cross-cultural collective action

Board Q & A