Deschutes County Health Services

COVID-19 Public Health Update

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BoCC meeting | December 16, 2020
Deschutes County Cases (Cumulative)

3,293 Cases
18 deaths

Data are shown based on the date a case first became identified as a case.

Data as of 12/15/20
Deschutes County Cases by Age Group – Week of 12/6-12/12 (403 cases)

Includes cases from 12/6/2020-12/12/20
Deschutes County COVID Electronic Laboratory Reports (ELRs) by Week

Beginning 12/3/20, Oregon Health Authority transitioned to reporting total COVID Electronic Laboratory Reports (ELRs) rather than reporting total persons tested for COVID. Electronic Laboratory Reports better reflect the total volume of COVID tests for a county and may include duplicate positive and/or duplicate negative test results for individuals.

Data as of 12/14/20
School Metrics: Two-week Case Rates per 100,000 population

Data as of 12/14/20

Data are provisional and subject to change.
School Metrics: Two-week Percent Positivity

Data as of 12/14/20

Percent Positivity (Rolling 2-week period)
- 7.1% (11/15-11/28)
- 8.1% (11/22-12/5)
- 6.7% (11/29-12/12)

Implement comprehensive distance learning
Consider transition to/from comprehensive distance learning
On-site and distance learning
Prioritize on-site learning

Data are provisional and subject to change.
Risk-based Framework for Counties

Oregon’s COVID-19 Risk Levels

Hover over a county to see more information

Statewide Metrics

11/29/2020 - 12/12/2020
467.2 cases per 100k residents
7.8% test positivity

COVID-19 Risk Levels

- Lower
- Moderate
- High
- Extreme

Hover over one of the bars below to highlight the counties in that risk level

Oregon Counties by COVID-19 Risk Level

Notes:
COVID-19 data are provisional and subject to change.

Data as of 12/14/20
Daily Count of COVID-19 Patients Hospitalized (St. Charles Health System Data)

Data as of 12/15/20
Age distribution of Deschutes County cases who have been hospitalized

Denominator: 120 Deschutes County cases ever-hospitalized

Data as of 12/15/20
COVID-19 Vaccines
COVID-19 vaccine

• Pfizer/BioNTech (BNT162b2) – 95% efficacy rate received FDA Emergency Use Authorizations (EUA)
• It’s an mRNA vaccine with a 2-dose schedule
• Tested in diverse adult populations, including older adults and communities of color

Questions:
• Duration of protection is not yet known
• Disease versus transmission
Protein production
mRNA vaccines

Source: New York Times
1. mRNA formulated in LNP enters cell

2. mRNA is released

3. Spike protein is made and processed

4. APCs present S protein fragments

- CD4+ Helper T Cell
  - Activates T and B cells
  - Viruses Neutralizing Antibodies
    - Bind Spike proteins and prevent virus infection of human cells

- CD8+ Cytotoxic T Cell
  - Eliminates virus infected cells; potentially increases length of protection

- Memory T and B cells
  - Provide immune memory to ensure longer-term protection against SARS-CoV-2

Source: Pfizer
COVID-19 vaccine trials

Pfizer/BioNTech

- 43,931 enrolled
- 150 clinical sites
  - 39 U.S. states
- Racial/ethnic distribution
  - 13% - Hispanic
  - 10% - African American
  - 6% - Asian
  - 1% - Native American
- 45% ages 56-85

Source: CDC
The Vaccine Life Cycle: Safety at Every Phase

GUIDE
ACIP
ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES
BLA
BIOLIGICS LICENSE APPLICATION
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION
FDA
FOOD AND DRUG ADMINISTRATION
IND
INVESTIGATIONAL NEW DRUG APPLICATION

The Vaccine Life Cycle
Safety at every phase

VACCINE DEVELOPMENT

Phase 1
Safety

Phase 2
Effectiveness

Phase 3
Safety + Effectiveness

Phase 4
Safety monitoring for serious, unexpected adverse events

Safety is a priority during vaccine development + approval

Safety continues with CDC + FDA safety monitoring

Basic Research
Discovery
Pre-Clinical Studies
Clinical Studies/Trials
FDA Review
BLA Submitted
ACIP Review
ACIP Recommendation
Post-Approval Monitoring + Research

Post-Approval Monitoring + Research
Post-approval monitoring

1. The U.S. vaccine safety system is strong and robust
2. New safety systems are being added for COVID-19 vaccines
3. All of us can play an important role in helping CDC monitor the safety of COVID-19 vaccines

Active safety monitoring for COVID-19 vaccines
~200k doses in Oregon

**Phase 1c**
Adults with high-risk medical conditions
Adults 65+

**Phase 1b**
Essential workers
(examples: Education Sector, Food & Agriculture, Utilities, Police, Firefighters, Corrections Officers, Transportation)

**Phase 1a**
HCP
LTCF residents
Vaccines  Vaccination

- Build trust
- Empower healthcare personnel
- Engage communities and individual
Key messages
Hope on the horizon
In the meantime...

- Get your flu vaccine
- Wear a mask
- 6 feet apart
- Outdoors better than indoors
- Wash hands
- Physical activities and self care
- It could be worse...
The continuum of vaccine hesitancy

Source: WHO SAGE 2014
Percentage of US kindergarteners who received vaccination exemptions in the 2017-2018 school year, by state

Oregon kindergarten non-medical exemption rates, 1986-2019
