

PUBLIC HEALTH NEWSLETTER

COVID-19 Response Communication – April 22, 2020



Public Health

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<https://co.josephine.or.us/COVID19>

8:00 am – 6:00 pm M-Th
(Closed 12-12:30 for lunch)

8:00 am – 12:00 pm Fri

WIC: 8:00 am-5:45 pm M-Th
(Closed for lunch 12:00 - 1:00 pm)
8:00 - 11:45 am Fri

WIC Wolf Creek: 9:30 am - 4:00 pm
(Every 1st Wednesday of the month)

WIC Cave Junction: 9:30 am - 4:00 pm
(Every 1st & 3rd Thursday of the month)

How to prevent Coronavirus (COVID-19)



Wash your hands.

Wash thoroughly and often.
Use soap and warm water.



Don't touch your face.

Not as easy as it sounds, but
it's important to keep viruses
from getting into your eyes,
nose, or mouth.



Sick? Stay home.

And get plenty of rest.



Cover your cough.

Make sure to cough or sneeze
into a tissue or your elbow.

People who think they might have been
exposed to COVID-19 should **CALL** their
local primary care provider or urgent care.

If you are in need of **IMMEDIATE**
medical assistance, call 9-1-1.

Death Rates Explained

When determining a “death rate” for a disease, there are many different ways to record, track, and share the information. Depending on the method used in recording or estimating deaths attributed to the disease, the numbers you see can look vastly different.

First, it is important to understand the different terms that are used when discussing deaths associated with a spreading disease:

- **Case Fatality Rate:** A case fatality rate is determined by counting the deaths of people who have been tested and found to be positive for the disease compared to the total people who tested positive.
- **Infection Fatality Rate:** An infection fatality rate is determined when someone had the disease at some point and died, either from the disease itself or from another cause. This method tries to estimate the total population of those who have been infected, regardless of showing signs or being tested.
- **Mortality Rate:** This estimation is determined by counting the deaths of people who have been diagnosed with the disease. It then applies this number to the total population for a given time period. The final number is an estimation of deaths that could be expected within a region for a specific illness during a specific time period, based on 100,000 people.

For example, imagine that 100 people have been infected with COVID-19. Of those 100 people infected, 10 people show severe symptoms and go to the hospital for care. At the hospital, those 10 people are tested for COVID-19 and the other 90 people remain un-tested. Of the 10 patients who went to the hospital and were tested, one (1) of those people dies from complications caused by the COVID-19 virus. The other 99 people recover.

In the above example, the “case fatality rate” is one (1) out of ten (10) people, or 10%. The “infection fatality rate” would be one (1) in 100 people, or 1%. The “mortality rate” would apply the case fatality rate (10%) to look at the total population of the region during a specified time period – typically 1 year. For this example, we'll say that the region's population is 100,000 people. This would give us a mortality rate of 100 out of 1,000 people. That would mean that if everyone was exposed and contracted the virus, a total of 10,000 people would die from the virus in one (1) year.

Oregon's Case Fatality Rate

As of April 21, 2020

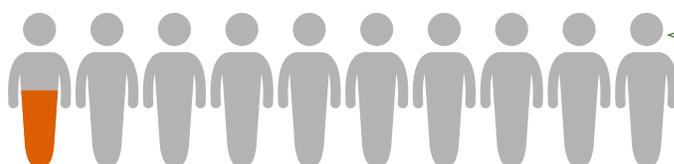


0.38 out of **10**

people who have tested positive have died from COVID-19 in Oregon

United State's Case Fatality Rate

As of April 21, 2020



0.523 out of **10**

people who have tested positive have died from COVID-19 in the United States

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Oregon's Epi Curve

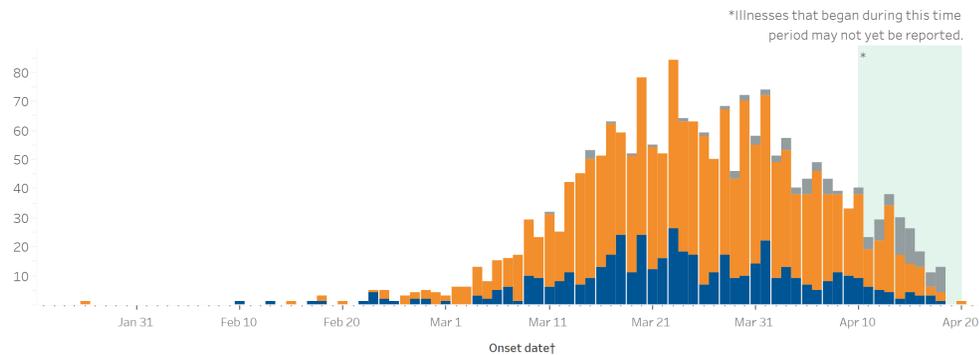
View total persons tested

Data current as of: 8:00am 4/21/2020

Oregon's Epi Curve: Positive COVID-19 cases

This chart shows the number of Oregonians who have tested positive for COVID-19 and whether they were ever hospitalized for their illness.

Total Positive Cases	Hospitalized	Not Hospitalized	Hospitalization Status Unknown
2,002	471	1,428	103



When people say we want to “flatten the curve,” this is the curve they are talking about.

We want to slow the number of new cases of COVID-19 so our healthcare system isn't overwhelmed and can provide care to everyone who needs it. Staying home except for essential needs and practicing social distancing are important ways we can flatten the curve.

Why Do Estimations and Forecasts Change?

It is difficult to forecast a disease outbreak such as COVID-19. However, forecasting plays an important role in helping communities find ways of preparing for and minimizing the spread of the disease. Epidemiologists play an important role in forecasting disease outbreaks. Sometimes referred to as “Disease Detectives,” epidemiologists look for the cause of a disease, identify people who are at risk, and help determine how to control, stop, or prevent the spread from happening again. Part of the process they use to analyze the disease and how it will spread is to use something known as “modeling.”

To build a model, epidemiologists look at many different data sources. They look at the current knowledge about the spreading virus, information from past outbreaks, human biology, healthcare capacity to provide care, and human behavior. These pieces of information help them to create a picture of how the outbreak may play out. But a model is based on currently known information. If one of those pieces of information changes, so does the outcome of the model.

There are many different approaches to creating models. One common modeling approach is called the “statistical model.” Currently, the state of Oregon is using this method of modeling to help determine how best we can reduce the strain caused by the virus on our health care system. You can see the most current model for Oregon, created by the IDM (Institute for Disease Modeling), here:

https://govsite-assets.s3.amazonaws.com/kncIBBtNu22ep2fYvZl_Oregon-COVID-19-Projections-Update-2020-04-16.pdf

The statistical model looks at current trends within the spread of the disease worldwide. It then applies those trends to a specific region. The goal is to determine an approximation of when the peak need for hospital care will occur and how many people the health care system as a whole may need to prepare to support over time.

The statistical model accounts for the current preventive actions occurring within that region. It also assumes that the disease will continue to behave the same way as in other regions and that current preventive measures (such as social distancing) will continue at the current levels. This model relies heavily on human behavior and our ability to maintain social distancing in order for the projections to be accurate.

Why is understanding how models are created important? Because it helps us understand that the infection rates and death rates that are projected by models can and will be impacted by each of us. Our behavior can change the outcome either for better or worse. Models only tell us what will happen if we maintain the same behavior. If we change our behavior as communities, we can change the outcome.

Because our actions change the spread of the virus and affect the result, that change doesn't mean that the previous models were wrong. It means that our collective actions are working and that we are changing the model. As Dr. Kelley Burnett stated in a recent press conference, “If we can look back on this pandemic and say it wasn't as bad as projected, then we have succeeded in changing the curve!”

The projections of models will change as our actions change. This means we can see dramatic changes in our projected infection and death rates from day to day and week to week. Lowering those numbers really is up to us.

On April 17, the Oregon Health Authority released an update to its epidemic modeling report, which helps Oregon's leaders understand the progression and the projections for the COVID-19 outbreak.

“Today's modeling update tells us that statewide mitigation efforts are keeping the caseload and hospitalizations well below the numbers we would have seen absent our efforts as a state,” said State Epidemiologist Dean Sidelinger, MD. *“We are encouraged by the continued success of our mitigation efforts, which are allowing us to begin planning for suppression strategies for when the statewide measure can begin to be lifted.”*

