

A REPORT TO RE-OPEN CLACKAMAS COUNTY COMBATTING COVID-19

By Tootie Smith, Clackamas County Commissioner, Ret
FEMA, Emergency Management Institute graduate
Oregon State Legislator, Ways and Means member
Management and Communications BS, cum laude graduate Concordia University

Combatting CoVid-19 in its tracks and returning society to normal is as important as caring for the people who have contracted the disease.

This is a report subject to change to account for future political decisions, anomalies for data collection, and human behavior, but presents a logical framework to build upon for reopening Clackamas County. This is an attempt to present ways to keep people healthy and safe during the Covid-19 Pandemic, while resuming economic activity that is so vital to societies' survival. Realizing that government assistance programs will soon extinguish, and a functional economy is integral to survival, it is vital that Oregon and Clackamas County specifically attempt to re-open its businesses, governments, schools, recreation and sporting events, outdoor activities and all medical facilities in a safe manner. This plan includes guidelines to keep people healthy while recognizing individual responsibility for people's own health and welfare and people's own behavior upon the health and welfare of others.

The timeline in this report can be implemented immediately as proven by the scientific data as waiting until mid to late summer is unnecessary and not recommended.

The information presented in this report, will show Clackamas County can plan to methodically and safely start to re-open with the benefit of medically accepted protocols. If cases increase after opening, behavioral trends should be addressed. Use a weekly evaluation to determine a rise in symptomatic individuals should be implemented as a containment measure. Many of the protocols listed in this report can be used to ward off future infections of known and unknown viruses. It cannot be stressed enough that a functional healthy economy is as vital to people as is their physical and mental health. Both economic health and physical bodily health can be attained at the same time and should become our goal.

LET'S BEGIN:

At this time, Figure 1 shows how many people have been tested in Oregon and the cumulative results. Oregon has a population of 4.2 million. As of May 3, 2020, 109 people have died, which yields a mortality rate of 0.04, which is close to the 0.03 mortality rate of the Hong Kong Flu (H3N2) and the Swine Flu (H1N1).

FIGURE 1. Cumulative CoVid-19 testing data for May 3, 2020 from OHA.

Cumulative COVID-19 Testing in Oregon	
Positive	2,680
Negative	59,374
Total Tested	62,054
Total Deaths	109

It should also be recognized that understanding and living with viral outbreaks in the future must be addressed and plans must be in place to combat them. Shutting down society for two to three months every year is not sustainable because of a possible viral infection. It should be assumed that living with and extinguishing viral outbreaks is the new normal. Suggestions for combating future viral outbreaks with proactive measures are also listed and are integral to America's engine of prosperity

The following draft report acknowledges the most current data from the Oregon Health Authority, OHA, showing Oregon and Clackamas County has not only "flattened the curve" but also illustrates by population we are well below predictions of an outbreak as assumed by university modeling. Centers for Disease Control, CDC, methodology was also used as well as Gov. Brown's suggestions for safe reopening. The timeline in this report can be implemented immediately as proven by the scientific data

as waiting until mid to late summer is unnecessary and not recommended.

Lastly, pages 5,6 and 7 show guidelines and goals to begin the process to reopen.

COVID-19 PANDEMIC:

Since the beginning of the CoVid-19 shut down on March 23, 2020, the Oregon Health Authority has been collecting valuable data that we can now use to safely re-open Clackamas County.

Here are some facts based on the Oregon Health Authority data that shows who needs to “Stay at Home” and who can go back to school and work. The data also shows that the criteria outlined by Governor Brown has been met.

DEMOGRAPHICS:

The demographics presented below show who we have to protect.

Figures 2 and 3 show that the people most impacted by COVID-19 are those over the age of 60. Those over the age of 80 account for most of the deaths. Dr. Katz in his New York Times publication and Fox news interview (click on the link to watch the interview) says; <https://video.foxnews.com/v/6150669450001#sp=show-clips>

“The damage to our economy from shutting down to protect those over 60 with underlying medical conditions is going to have long term impacts on the future of their children and grandchildren. Is that what they or we want?”

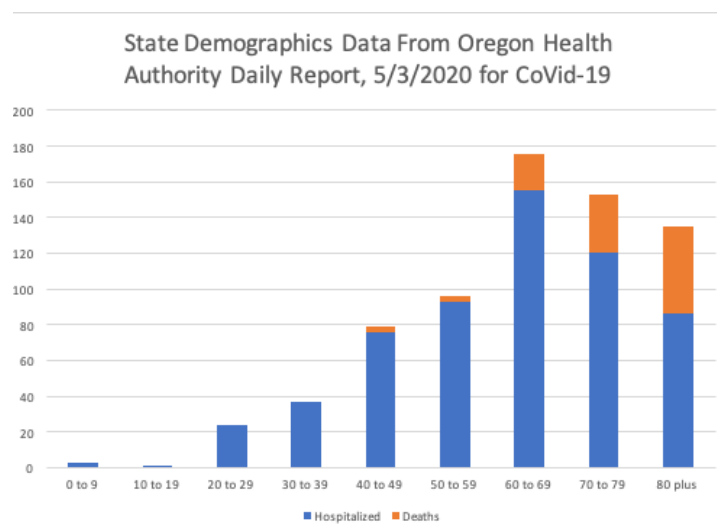
The daily reports were also reviewed to see how many people who died had underlying medical conditions. The review showed that all but one person had underlying medical conditions. Figure 2 from the Daily Report for May 3, 2020 and the bar graph of that data (Figure 3) shows that the population most sensitive to COVID-19 are people over the age of 60 with underlying medical conditions and younger people with underlying medical conditions. On May 3, 2020 there had been a total of 109 deaths, with 108 having underlying medical conditions and only one person has died with unknown medical condition. Oregon has a population of approximately 4.2 million people. People over the age of 65 and anyone with the underlying medical conditions of heart disease, chronic lung disease, high blood pressure, diabetes, immunocompromised, liver disease and severe obesity have been identified as high risk for CoVid-19 in publications from the New England Journal of Medicine and Center for Disease

Control. The data from Oregon is also showing that this is the same population who should be “Staying at Home” while children, most adults WITHOUT underlying medical conditions continue to go to school and work. Keep in mind that there are people who cannot afford child care and it is their parents and grandparents who are in the high-risk group who take care of the children while their parents are at work. Not opening schools actually places some high-risk people at risk who are just trying to help their families.

FIGURE 2. OHA demographic’s data through May 3, 2020.

Age group	Cases	Percent	Ever Hospitalized ⁺	Deaths ⁺
0-9	13	0%	3	0
10 to 19	65	2%	1	0
20 to 29	352	13%	24	0
30 to 39	438	16%	37	0
40 to 49	462	17%	76	3
50 to 59	483	18%	93	3
60 to 69	423	16%	155	21
70 to 79	264	10%	120	33
80 and over	175	7%	86	49
Not available	5	0%	3	0
Total	2,680	100%	598	109

FIGURE 3. OHA Bar Chart data for May 3, 2020 shown in Fig 2 above.

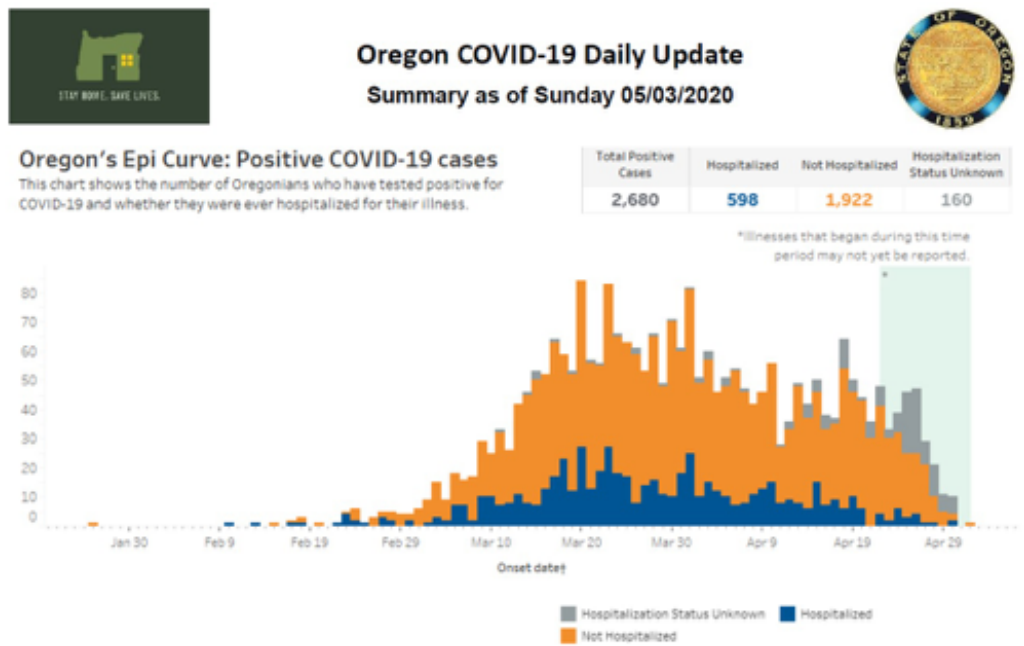


GOVERNOR BROWN’S OUTLINE FOR OPENING OREGON:

Governor Brown has laid out criteria for opening Oregon. Presented below are those criteria and the data that shows they have been met for most of the counties in Oregon. If new cases begin to appear, then the hot spots could be quarantined instead of the whole state.

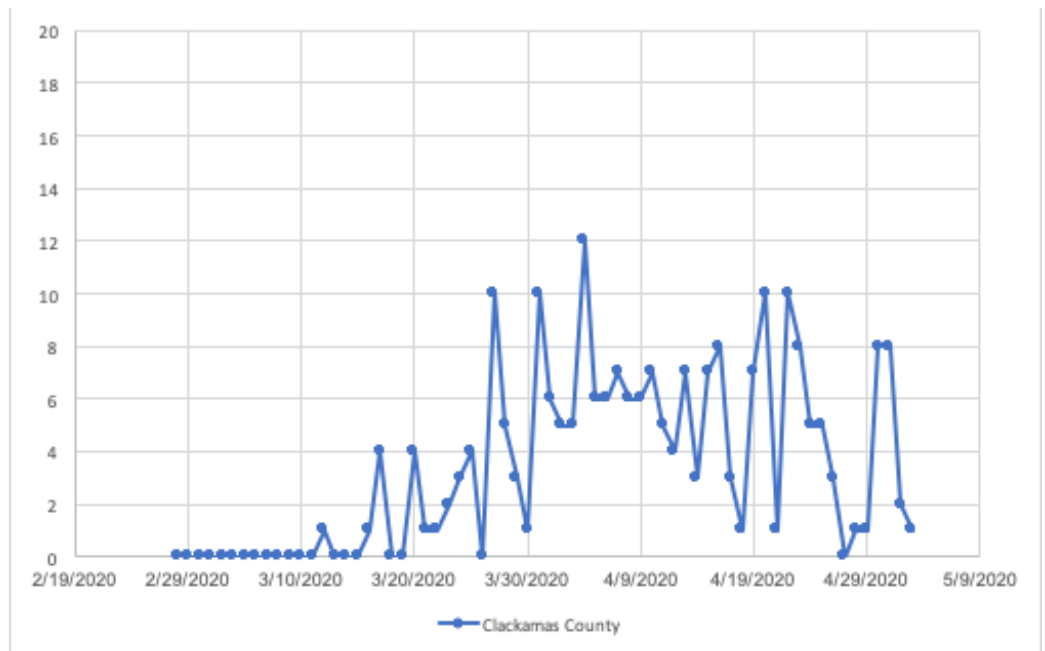
- 1. **Decline in growth rate.** There must be a decline in growth rate of cases. Figure 4 shows this criterion has been met. The peak occurred on April 4 for all of Oregon, and Clackamas County is well past the peak. This criterion has been met.

FIGURE 4. OHA curve of positive cases showing peak and current downward trend for May 3 2020.



Oregon COVID-19 Update Summary as of Sunday May 3, 2020

FIGURE 5. Plot of daily cases in Clackamas County through May 3, 2020 that shows peak and downward trend.



Clackamas County New COVID-19 Cases May 3, 2020 Data From Oregon Health Authority

2. Sufficient personal protective equipment (PPE). People are actively making cloth masks to provide for those who need them. The federal government has also supplied adequate masks for states as domestic manufacturers have increased production. There should be enough PPE in the more rural areas for protection at this time. Figure 6 shows the PPE inventory for May 3, 2020 which supports OHA's statements that we have sufficient PPE for an increase if Oregon goes back to work. This criterion has been met.

FIGURE 6. OHA Available PPE for May 2, 2020.

ECC Personal Protective Equipment (PPE) & Supply Inventory

May 2, 2010	Surgical Masks	N95	Gowns	Face Shields	Gloves	Ventilators
0800 Inventory yesterday	-	-	-	106,000	-	-
Shipments/Allocations past 24 hours	-	-	-	-	-	-
Received past 24 hours	-	-	-	24,000	5,000	-
0800 Inventory today	-	-	-	130,000	5,000	-
Scheduled Shipments/Allocations	-	-	-	-	-	-
Projected End of Day Inventory	-	-	-	130,000	5,000	-
Total Received Shipments	5,894,100	918,110	71,815	483,266	887,490	140
Total Shipments to Counties/Tribes	2,857,922	961,073	90,476	184,403	2,010,514	-

3. Hospital surge capacity. The daily reports by the OHA shows there is plenty of capacity in hospitals now if the counties who have been impacted the least are allowed to open up. Patients can be moved from a county that exceeds its capacity to other hospitals if needed. Figure 7 shows the hospital capacity on May 3rd. This criterion has been met for most counties.

FIGURE 7. OHA inventory of available hospital beds for May 3, 2020

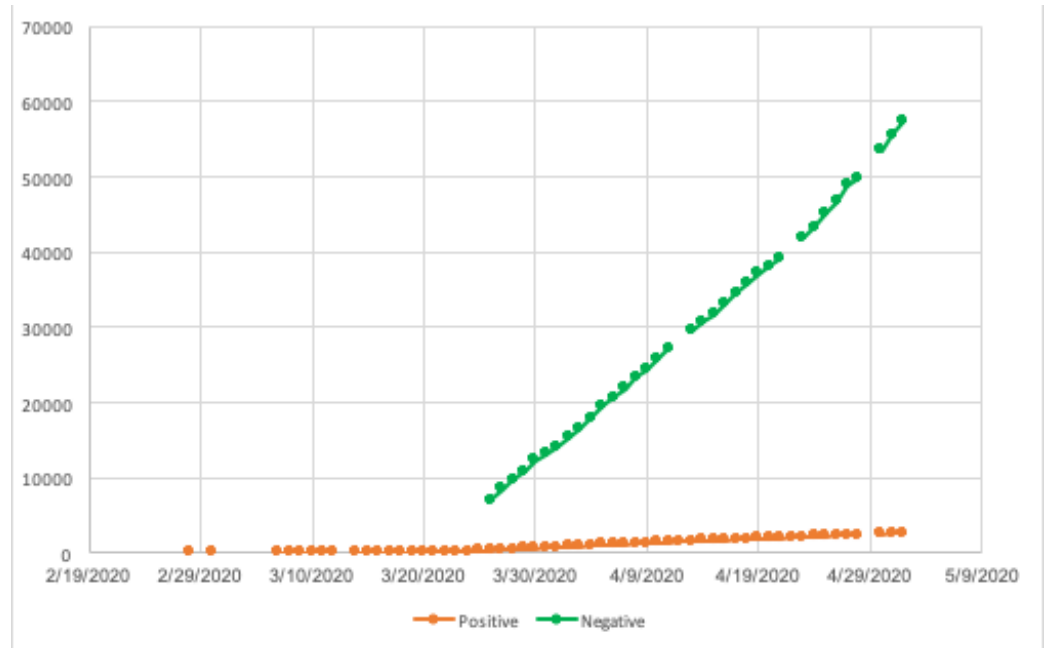
Hospital Capacity and Usage in Oregon as reported to HOSCAP*					
Overall Capacity	Available	Total	COVID-19 Details	Patients with Suspected or Confirmed COVID-19	Only Patients with Confirmed COVID-19
Adult ICU beds	295	827	Current hospitalized patients	205	92
Adult non-ICU beds	1,935	7,471	Current patients in ICU Beds	46	33
Pediatric NICU/PICU beds	72	292	Current patients on ventilators	21	18
Pediatric non-ICU beds	157	349			
Ventilators	800				

*Every hospital in Oregon is asked to submit data twice daily to Oregon's Hospital Capacity Web System (HOSCAP). Hospital staff are asked to enter bed capacity information, by type, as well as the number of patients with suspected or confirmed COVID-19 illness who are currently hospitalized at the time of data entry. These data may conflict with hospitalization status in Orpheus due to case reporting and investigation lags and temporary discrepancies in case classification.

4. Robust testing, tracing, and isolation. Water at wastewater treatment plants can also be tested for CoVid-19 to check for an increase in cases. This will help identify the asymptomatic cases and those who are mildly sick. County and Cities can start writing a sampling and analysis plan that includes quality assurance and quality control. By the time the plans are written we should have testing capabilities for CoVid-19. Data from the wastewater testing will be shared with OHSU's "You Are The Key" study. Individual testing and contact tracing can also continue with people keeping track of their own actives to facilitate identifying people who were potentially exposed. Anyone potentially exposed should self-quarantine for 14 days. Figure 8 shows the ratio of positive to negative tests. The data also shows the increase in the number of tests being conducted has not increased the number of positive cases at the same rate as the negative cases. This criterion has been met.

FIGURE 8. Cumulative test results for positive and negative cases through May 3, 2020

Cumulative COVID-19 Tests (May 3, 2020)
Data From Oregon Health Authority



5. Strategies for the hardest hit, vulnerable and homeless. The vulnerable who have been identified as those with certain underlying medical conditions and those over 60 with underlying medical conditions can continue to "Stay at Home" although may choose not to. Care-facilities and prisons will also remain in quarantine. Therefore, measures to protect them will continue. This criterion has been met.

GUIDELINES AND TESTING THAT MEET THE ABOVE REQUIREMENTS FOR OPENING UP ALL COUNTIES:

- First and most important is everyone should try to keep their immune system as strong as possible. Contact your doctor for a list of what can be done to strengthen your immune system.
- If you have been exposed to someone who tests positive to CoVid-19, then self-isolate for 14 days or until symptoms end. Have other people help you while you are isolated for groceries etc. If you absolutely have to go out, then wear a mask and minimize your exposure to anyone else.
- If you exhibit any of the symptoms for CoVid-19 then stay home for at least two to five days to see if your symptoms worsen. If you absolutely have to go out, then wear a mask and minimize your exposure to anyone else.
- Keep at risk people isolated or wear PPE if they have to go out into the public. Follow CDC guidelines. Church members, friends, family and neighbors can help deliver food to those who must remain isolated. Care facilities and prisons remain closed to visitors with employees quarantined in some way to limit their exposure.

- Test the wastewater at municipal treatment plants for increase in CoVid-19 virus loading. If the loading starts to climb rapidly then start to close that local area down again, but not the whole county or state.
- Social distancing should be maintained when possible and wear PPE if they are out in public can be optional depending upon distancing.
- Social gatherings can be allowed if social distancing can be maintained and either adequate air circulation with either UV or HEPA filters in the heating and air conditioning systems installed. Opening windows and energy recovery ventilation systems (ERV) also helps to reduce virus loading in the air. Small air purifiers with HEPA and UV can be purchased for around \$100, for instance. Larger buildings, hospitals and care facilities may find it more cost effective to install ultraviolet systems in HVAC systems duct work.
- Restaurants, which includes pubs, bars, taverns, brewpubs and wineries, will be encouraged to install some form of UV/HHEPA filtration system to reduce virus loading. They will be allowed to post a sign at the entrance that says "If you are feeling sick with a potential CoVid-19 symptom, then please call us and we will bring you a Take-Out."
 - Reduced restrictions will occur in 14-day increments with a check at seven days to see how the virus is trending. For the first 14 days the capacity will be limited to 50% of the original capacity and tables will be spaced six feet apart. People will be allowed to sit at a bar if six-foot spacing can be maintained or closer if they are a family. At the end of the first 14 days, if the trend is flat or declining, then capacity may be expanded to 75%, with reduced spacing between tables. Spacing at bars is maintained unless they are a family member. Again, the trend is checked at seven days for a strong upward spike. Given no strong upward spike, the remaining seven days will be continued to the 14-day review. At the end of the second 14 days, if the trend is flat or declining, then capacity may be expanded to 100%, with table spacing returning to pre-CoVid-19 conditions. People may sit at the bar with no spacing restrictions. If at any time a strong spike signal begins to occur, then the seating will be rolled back to the prior seating arrangement before the spike.
 - Menus will be posted on the internet and a few menus will be available on laminated sheets that are wiped down with disinfectant after use.
 - Staff wears masks.
 - Use portable UV lights to disinfect peoples' hands or hand sanitizer when people enter the establishment. People may use their own hand sanitizer.

GOALS:

A goal is to keep the most vulnerable population with underlying medical conditions isolated under the "Stay at Home" order.

A goal is to let the virus spread at a slow rate through the population with reducing the risk of overwhelming our hospitals. This maximizes the number of people with a natural immunity and will reduce the number of people who will be vulnerable during next winter's flu season. COVID-19 will become a seasonal flu like H1N1 in 2009 and the other influenzas before that.

1. Justification for kids returning to school not only assures continued education but allows parents to return to work where a workforce is essential for businesses opening. Day care facility capability has been decimated by closures and many may not re-open. Safety protocols for children returning to school must be met which includes rapid testing. Those could include but not limited to wearing masks, kids responsible for cleaning their own spaces and desks, each possess a zip lock bag with a washcloth sprayed with disinfectant. Teaches kids resourcefulness, responsibility and reduces the burden on the school for cleaning. Temperature monitoring twice daily with kids showing a fever will be isolated and sent home. Thermometers specified are forehead digital scanners. It is noted that an adjustment in the regular classroom schedule and resources will need to be made in order to carry out these activities.
2. Open retail stores. Businesses have the option of limiting the number of people in the store and try to maintain a six-foot social distance. Customers wear masks. Retail malls may choose to limit the number of people entering the mall to help maintain social distance if too many people are shopping.

3. Open hair salons, barbershops, nail salons, day spas, massage services, non-medical wellness spas, cosmetic stores, and tattoo parlors. However, the number of people in the building or room may be limited and providers should wear masks. After each visit the space used will be sanitized.
4. Open gyms, sports and fitness centers, health clubs, exercise studios, dance and yoga studios. These businesses may reopen if they can maintain a social distance and have everyone clean any equipment after using it. However, all saunas, hot tubs, and steam rooms will not be re-opened until a later time. People must shower at home.
5. Open state parks, museums, playgrounds, campgrounds, pools, and skate parks if people maintain a social distance and carrying or wearing a mask is voluntary.

A goal is to meet testing requirements by doing the following:

- The virus loading will be tested and tracked at municipal wastewater treatment plants. Wastewater testing should be performed for Corona Virus identification weekly or in midst of a rise, two times a week. There are published studies for monitoring the rise and fall of virus activity in general population see these publications: Nature Magazine, Vol 580, April 9, 2020, "How Sewage Could Reveal True Scale of Coronavirus Outbreak." Aquatech Paper, April 2, 2020, "Wastewater Sampling: A Barometer of Covid-19." Testing may be most effective at trunk lines from residential areas before entering the system. Can sample at schools, hospitals, care facilities, housing developments, municipal buildings or large public venues.
- Standard Pandemic Protocol Tracking should be used. Testing of anyone showing symptoms will continue and they shall be isolated until the results are obtained. If they are infected, then there will be an effort to track down everyone who could have been exposed. This allows the public to determine if they have the potential to be exposed and need to be quarantined to see if they get sick or get tested. Areas will be notified if a spike is detected.

CONCLUSION:

Based on the information presented above, it appears Clackamas County can plan to methodically and safely start to re-open with the benefit of medically accepted protocols. If cases increase after opening, behavioral trends should be addressed. Use a weekly evaluation to determine a rise in symptomatic individuals should be implemented as a containment measure. Many of the protocols listed in this report can be used to ward off future infections of known and unknown viruses. It cannot be stressed enough that a functional healthy economy is as vital to the human condition as is their physical and mental health. Both economic health and physical bodily health can be attained at the same time and should become our goal as we learn to live and prosper in a world where disease is present.