April 30, 2020

Oregon's Plan to Stop the Spread of COVID-19

I. Active Surveillance: Definition and objectives

To reopen Oregon, we must significantly slow the spread the virus that causes COVID-19 to protect the people who are at the highest risk of severe disease.

Public health surveillance allows us to:

1. identify groups of disease and
2. estimate the health status and behavior of the population.

Normally—for viruses like the seasonal flu—we use what's called passive surveillance. Passive surveillance means setting rules about disease reporting, tracking disease, and deciding when to take additional action.

To slow or stop the spread of the virus, **Oregon must start statewide active surveillance**, which means we need more public health staff, and to provide them with the tools they need.

Active surveillance involves staying in regular contact with people who have been diagnosed with COVID-19 and the people they come in close contact with. This way, we can make sure they do not spread the virus and that they have the health care they need.

Active surveillance for COVID-19 means we will follow the Required Actions outlined in Section II.

II. Required Actions

1. **Expand testing**: We want to identify as many cases of the COVID-19 as possible, so we can help slow the spread of the virus. Laboratories are increasing the number of tests they can process, so we need to increase the number of people we test.

    a. Test more Oregonians. Expand testing recommendations to include members of the following groups who have COVID-19 symptoms:

       i. Essential front-line service workers who have regular contact large numbers of people. (e.g., those working in grocery stores, pharmacies, food service, transportation, delivery, and other critical infrastructure)

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    ii. Members of group facility settings. We will remove the previous five-person testing limit per facility for staff, residents, children, or students in group facility settings (e.g., healthcare facility, residential care facility, school, migrant or seasonal farm work camp, childcare, or corrections)

    iii. Workers who provide direct care or service in more than one group facility or in client homes. (e.g. hospice care workers, physical or occupational therapists, in-home personal care workers, etc.)

    iv. Members of the following communities: Black, African American, Latino, Latina, Latinx, Hispanic, American Indian/Alaska Native, Pacific Islander, or as having a disability.

    v. Members of communities that speak multiple languages.

    Current data indicate that members of these communities are at higher risk for COVID-19 and the other illnesses it can cause due to longstanding social and health inequities.

    vi. Symptomatic contacts of all known cases

b. Improve how and where we test in Oregon

    i. Use new FDA-approved technology (e.g., rapid tests and tests for antibodies)

    ii. Work with hospitals and health systems to do more testing

    iii. Make sure testing is available in rural and frontier Oregon communities

c. Collect test samples outside the hospital or doctor's office (e.g., at home, self-collection, public health clinics), and help Oregonians who may not have health insurance get tested.

d. Work with medical providers and clinics to help them:

    i. Understand how to keep their patients and their patients' families safe through testing, isolation, and quarantine.

    ii. Teach their patients and their patients' families what to expect when it comes to tracing the virus.

More details on testing strategy are described in the document *COVID-19 Testing Strategies for Oregon*.

2. **Identify and investigate more cases**: To significantly slow the spread, we have to find as many people who have been exposed to the virus as possible. We can do this through something called "broad contact tracing." Broad contact tracing means tracking all the people who may have been in contact with someone has COVID-19.

To successfully trace these contacts, we must have enough staff to interview everyone who tests positive and talk to anyone they may have come in contact with. **This broad contact tracing must begin prior to easing physical distancing measures.**

Case Identification

Finding all cases of COVID-19 will require testing more people (see above) and reporting these test results to public health. Most laboratories (including Oregon State Public Health Laboratory, clinical laboratories, and commercial laboratories) submit test results through Electronic Laboratory Reports. Every case reported to public health will be assigned to a case investigator.

Case Investigation

Once a positive test result is received, a case investigator contacts the person who tested positive (ideally by phone) and interviews them to collect basic information, including demographics, when their symptoms started, how severe their illness is, other health conditions they may have (like diabetes or heart disease), and what they do for work.

Case investigators ask for a list of everyone who may have come in contact with the sick person while they were contagious. People who had contact with someone who is sick are called "contacts." Case investigators also gather contact information for these contacts, so public health can talk to them, too.

Contact Monitoring

Contact tracers (see Workforce section below) check in with contacts daily for 14 days to see whether the contact starts having COVID-19 symptoms. These check-ins can happen via phone, text, or email.

If a contact develops symptoms, local or state public health staff will facilitate testing for those individuals, which may involve coordinating sample collection. Staff will facilitate sample submission to the testing laboratory.

Data Management

Currently, all COVID-19 case investigation information and contact information are housed in Orpheus, the state reportable disease database. To accommodate the growing number of COVID-19 users, a separate COVID-19 active surveillance database will be developed. Information collected from each COVID-19 case and their contacts will be housed in a secure, central database such that all case investigators and contact tracers across Oregon can access the information. All communications with cases and contacts will also be documented.

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3. **Isolate people who test positive and quarantine the people who have been exposed:**

> Isolate means separating people who are ill from those who are not. When someone tests positive, they need to be isolated the whole time they are contagious, so they don't spread the virus.

> "Quarantine" means separating people who have been exposed to the virus to see whether they get sick. People quarantine in case they are sick but don't have symptoms yet because the virus can spread before symptoms begin.

Isolation and quarantine are completely voluntary and non-punitive. For anyone asked to isolate or quarantine, public health will:

- explain how COVID-19 spreads and why isolation or quarantine will help keep their community safe.
- ask them to sign an agreement to stay at home. This agreement is meant to encourage people to complete their isolation or quarantine to help keep their communities safe.
- provide a resource packet that will include a way to document daily symptoms, if any, as well as a thermometer if needed.
- help people who cannot safely isolate at home and those who have other needs related to isolation or quarantine (see Case Management).

OHA might also want to give people who are in isolation or quarantine a tool called a "pulse oximeter." Pulse oximeters measure how much oxygen is in the blood. In order to provide these tools to the community, OHA would first need to get them.

Isolation

Public health will ask everyone who tests positive to isolate while they are contagious, even if they don't have symptoms.

> People who test positive <u>and have symptoms</u> should stay home for at least 72 hours after their symptoms have gone away without the help of medicine.

> People who test positive <u>but have no symptoms</u> need to stay in isolation for 7 days after their *last* positive test result.

Some people get better in a week or two while others may be sick for several weeks. This means that everyone who tests positive will be in isolation for a different length of time.

For this plan to work, public health must support people the entire time they are in insolation.

Quarantine

People who have been in contact with someone who tests positive for COVID-19 will be asked to stay home (quarantine) for 14 days after exposure. This means that if you saw someone on June 1 and they tested positive on June 9, you would need to quarantine until June 15 — two weeks after you last saw them.

Public health must support people the entire time they are in quarantine.

Case Management

For some people, it will be easy to isolate or quarantine. For other people it will be more difficult, especially if they can't work from home, or if they live alone, have disabilities, or take care of other people in their home.

Case managers will help make sure people in isolation or quarantine have food and shelter, as well as access to mental health care, social services, and other support.

The State also needs to protect the livelihoods of working Oregonians who need to isolate or quarantine. These protections might be similar to the Family and Medical Leave Act (FMLA) or expanding paid leave to include isolation and quarantine orders as deemed necessary by public health.

4. **Slow the spread in at-risk groups and step in when we see many people getting the virus from the same place.**

   Identifying at-risk groups
   Public health will use data to identify communities who are more likely to die from COVID-19. These communities might include racial or ethnic groups, certain occupations, or other groups.

   Epidemiologists, who are scientists who study how disease spreads, will work with health educators, risk communicators, and other community members to provide information and resources to stop the spread of COVID-19.

   Epidemiologists will also watch data to find clusters of COVID-19. They will continue to review the data and give public health intervention, including infection control assessments, health education, and testing to identify and reduce transmission.

III. Resource Needs for Active Surveillance

1. **Workforce**: Based on Oregon's population, we estimate we need 600 more team members to support active surveillance. This is because contact tracing involves daily one-on-one interaction between team members and Oregonians in isolation and quarantine. These team members will help with:

   - sample collection

- contact tracing and data management,
- connecting people in isolation and quarantine with social services

a. OHA will work with local, and regional public health authorities, as well as Tribes, to determine how much help they will need to meet their needs for contact tracing, interviewing, testing, and monitoring all known cases and their contacts.

b. Increase how much active surveillance regions can do by training and assigning existing staff and qualified volunteers. Call centers may also be able to help support interviewing, testing, isolation, and quarantine. Resources will go to the regions with the highest need.

c. Create several teams of public health workers who can deploy within communities. The state will provide these teams with the tools and skills they need to find cases, trace contacts, facilitate testing, monitor and support individuals who are isolated or quarantined. Team members could be volunteers, hired and/or contracted by state or local health authorities or tribal governments.

   The State understands how important it is to recruit community and traditional health workers who understand the cultures of the communities they work in. This cultural competency will help build trust with community members and their families to increase adherence to recommendations for isolation and quarantine.

d. The public health system will use existing public health modernization regions. Public health modernization regions have already supported cross-jurisdictional surge capacity and may share epidemiologist position(s).

Teams will either be deployed to 1) assist local public health authorities and Tribes with routine case investigation and contact tracing or 2) assist with investigating clusters of illness.

These teams will include the following team members:

- 1 team lead
- 1 case investigator
- 1 clinical case investigator
- 4 community contact tracers
- 1 research analyst
- 2 community social workers or health workers

The State also needs to bring on additional staff to support regional contact tracing efforts:

- Communicable disease epidemiologists
- Public health physicians
- Public health informatics experts

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- Oregon State Public Health Laboratory staff

2. **Training**: Some new team members may not have public health experience and will need training. OHA will help local public health authorities and Tribes train teams. Training will include:

   a. Case interviews and contact tracing

   b. Sample collection

   c. Data management

   d. Connecting community members to social services and resources

3. **IT capacity**: OHA will connect database systems to use for active surveillance and contact tracing.

   a. Early implementation: continue as normal

   b. Transitional phase: find and secure applications that are a good fit for Oregon (e.g., REDCap, Microsoft Dynamics or another cloud-based platform).

   c. Full implementation: harmonize existing IT capacity and newly identified applications to ensure data quality.

4. **Equipment, supplies, and space**: Staff will need computers, phones, and access to database software. Field staff and those deployed to regions will need local workspace.

5. **Needed support for people in isolation and quarantine**: The State must support people in isolation and quarantine with needs including food, shelter, and mental health and social services.

IV. Evaluation

Continual evaluation of the effectiveness and completeness of active surveillance in Oregon will be essential. This includes ongoing monitoring of the processes that underlie active surveillance as well as the outcomes that reflect successful suppression of COVID-19 in our population (i.e., process and outcome evaluation). The following indicators are general measures of success:

Indicators of success

1. Resource needs are met to allow rapid scaling up of case investigation, contact tracing, and support for those under isolation and quarantine. Barriers are addressed expediently.

2. Resources are equitably distributed and available statewide.

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3. LPHAs/tribes are keeping up with new case reports, conducting case investigations within 72 hours of report, identifying and interviewing contacts, and providing instructions and support for isolation and quarantine.

4. Almost all new cases can be traced to existing cases, indicating minimal community spread from unidentified cases.

5. Surveillance data consistently indicate a low or decreasing burden of COVID-19 in Oregon

    a. Percentage of ED visits for COVID-19-like illness (CLI) is below regional baseline percentage of ED visits for ILI

    b. Hospital admissions for suspected or confirmed COVID-19 down trending over 14 days

    c. Percentage positivity of COVID-19 testing stable or declining

Specific criteria for easing social restrictions are addressed elsewhere.

V. Next Steps

1. By April 30, assess current case identification and contact tracing capacity with a detailed plan for rapidly scaling up the required actions.

2. By April 30, identify a data system to handle expanded contact tracing, whether an adaptation of an existing system or a new system. Stand up and integrate such a data system into the contact tracing process.

3. By May 7, develop a staffing plan to support immediate work on contact tracing and case management. LPHA/tribe recruitment of community health workers and other local personnel should be prioritized and supplemented with resources identified and recruited by OHA.

4. By May 18, develop contact tracing training modules for the expanded contact tracing workforce.

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