



**Lewis County Public Health & Social Services**

# **Health Beat**

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## **COVID-19 Vaccine Update**

*by Rachel Wood, M.D., MPH, Lewis County Health Officer*

Modern medicine has been reducing suffering from disease for generations using a tried and true, four-pronged approach: research, prevention, symptom relief, and cure. For nearly a year now, scientists have been attacking the novel coronavirus called COVID-19, with these same methods.

As prevention and symptom relief recommendations change, they can give rise to widespread confusion. However, new recommendations should really be viewed as proof that we're learning more about this brand-new disease every day. This is good news. If you look back in history, you will find similar changes, confusions, and challenges with other now-controlled diseases such as smallpox, pneumonia, tuberculosis, and others.

While everyone waits for a sure-fired cure for COVID-19, the next greatest desire is a vaccine to prevent us from even getting the disease. This is a good time to pause and talk about prevention (vaccine) versus cure (treatment to eliminate). We have been hearing the terms used as if they mean the same, but they are different things. To help prevent getting sick in the first place, a vaccine helps people develop immunity to a disease. A cure (treatment) helps people with a disease get well.

This month's Health Beat offers a short primer on vaccine development, along with links to more information for the vaccine-curious among you.

### **Development**

The development cycle of a vaccine is well established, consisting of these stages:

- Exploratory stage
- Pre-clinical stage
- Clinical development – 3 phases of vaccine trials
- Regulatory review and approval
- Manufacturing
- Quality control

COVID-19 vaccine development is now in phased vaccine trials of the clinical development stage. Thousands of people are volunteering to generate scientific data on the safety and effectiveness of vaccine candidates. This all takes time to monitor for short- and long-term positive or negative effects. Does the vaccine work? What are the side effects, and how bad are they? Do the benefits outweigh the risks for people who get the vaccine?

In addition to being safe, vaccines must be effective over time. At this point, we don't know enough about whether someone builds natural immunity after getting COVID-19, or how long that immunity lasts. Early evidence suggests natural immunity from COVID-19 may not last very long, which can complicate vaccine development.

### **Distribution Planning**

While vaccines are being developed, teams at national, state, and local levels are planning how to distribute the approved vaccine to people throughout the country. Interim planning guidance to states from the Centers for Disease Control (CDC) can be downloaded at:

[https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim\\_Playbook.pdf](https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim_Playbook.pdf).

The Washington State Department of Health (DOH) has used the CDC guidance to help it develop its own distribution plan to cover Washington state. The current DOH draft can be downloaded at: <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/WA-COVID-19-Vaccination-Plan.pdf>.

Locally, Providence Health & Services, Lewis County Public Health & Social Services (LCPHSS), and other members of our healthcare community are working to identify locations and staffing to distribute the vaccine to Lewis County residents.

While nobody knows exactly when a vaccine will be ready, it is certain that at first there will not be enough vaccine supply for everyone. Therefore, a phased approach is being developed for vaccine distribution. Recommendations for who receives the first supply of vaccine will be based on Advisory Committee on Immunization Practices recommendations, the National Academies' Framework for Equitable Allocation, and state allocation frameworks.

As of this writing, Phase 1a recipients have been tentatively identified as high-risk workers in healthcare settings and high-risk first responders in EMS, law enforcement, firefighting, and ambulances. Phase 1b recipients would include essential workers (to be further defined), persons with high-risk medical conditions, and adults age 65 and over.

**As we learn more . . .**

LCPHSS will issue updates as vaccine development and testing proceeds, and distribution planning continues. In the meantime, until a vaccine is available, we all have the means at our disposal to prevent getting sick – the 3 Ws: Wear a mask; Wash your hands; and Watch your distance.

For more information on vaccine testing and the approval process, visit

<https://www.cdc.gov/vaccines/basics/test-approve.html>.

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