

COVID-19 Vaccine

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Oregon
Health
Authority

Objectives

- Introductions
- COVID-19 Vaccines
- Frequently Asked Questions
- Vaccine Sequencing
- Questions
- Thank you!

Media

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orCOVID19.media@dhsoha.state.or.us



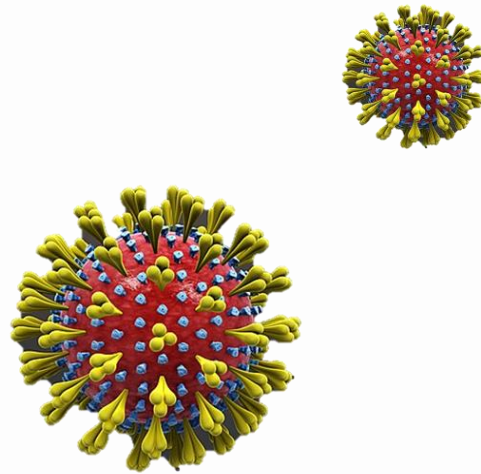
COVID-19 Virus

CO = Corona

VI = Virus

D = Disease

19 = 2019



Vaccines currently available in the US

1. Pfizer
 2. Moderna
 3. Johnson and Johnson
- Development of these vaccines happened quickly due to existing knowledge from prior research, urgency of the pandemic.

Vaccine approval through an EUA?

- COVID-19 vaccines in the United States were approved through Emergency Use Authorization
 - Global pandemic
 - Number of lives already lost



mRNA vaccines

- Made up of genetic material called mRNA (created naturally by the body to make other body proteins and chemicals)
- Covered by a bubble of fat/cholesterol
- New technology for vaccines but studied for 10 years in cancer treatments

Pfizer and Moderna mRNA vaccines

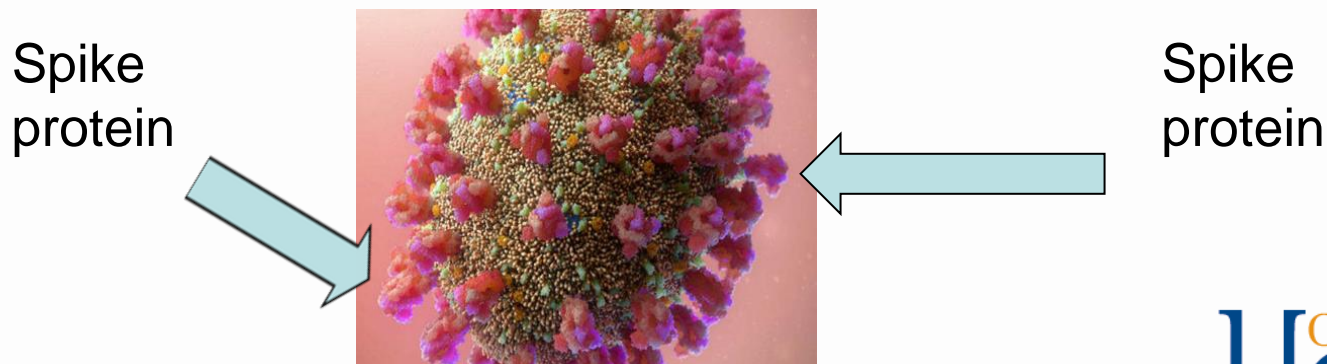
Vaccine	Number of doses for full protection	Time needed before second dose	Vaccine Effectiveness
Pfizer	2 doses	21 days	95%
Moderna	2 doses	28 days	94.10%

Johnson and Johnson (Janssen) vaccine

- Works similar to mRNA vaccines
- Transported in a harmless cold virus
- More traditional vaccine technology – used currently in Ebola vaccine

How do the vaccines work?

- There are no vaccines in the United States that use live viruses.
- They cannot change or modify your DNA.
- Both types of vaccines give our cells instructions to make a harmless spike protein found on surface of COVID-19 virus.
- Our bodies learn to recognize the spike protein and fight it so that we don't get sick.



For a full explanation from NY times

- <https://www.nytimes.com/interactive/2020/health/moderna-covid-19-vaccine.html>
- <https://www.nytimes.com/interactive/2020/health/pfizer-biontech-covid-19-vaccine.html>
- <https://www.nytimes.com/interactive/2020/health/johnson-johnson-covid-19-vaccine.html>

Who was included in the trials?

		Pfizer (US, Argentina, Brazil, and 2% South Africa)	Moderna (US)	Johnson and Johnson (US, Brazil, South Africa, smaller numbers Colombia, Peru and 3 others)
Number of people		43,000	30,000	40,000
Race of participants				
	Native American	1%	1%	9%
	Latino	26%	20%	45%
	Black	10%	10%	19%
	Asian	4.4%	4.7%	2.6%
Older adults over 65		21%	25%	20%

Effectiveness data Pfizer and Moderna

- Both vaccines were tested against symptomatic COVID-19. We don't have data on asymptomatic infection.
- They were both only tested against Wuhan strain, because they were done earlier in time – Summer 2020. We don't have definitive data against other variants for these vaccines.
- They are both highly effective at 94-95% 2 weeks after second dose of vaccine. We don't know much about the duration of immunity after vaccination.

Effectiveness of Johnson and Johnson vaccine

- One dose vaccine that was tested against three different strains of virus, later in time with much higher baseline COVID-19 incidence – Fall 2020.
- 93% protection against hospitalizations.
- Highly effective at preventing severe disease **85% against all strains of virus.**
- Including moderate and severe disease:
 - South Africa; 57% (95% of cases were South Africa variant)
 - United States: 72%
 - Central & South America: 66%
- Effectiveness starts 2 weeks after the dose and has been studied up to 1 month after. There is evidence that antibody production continues to increase at least until day 56.

Comparing vaccines?

- Unfortunately, we cannot compare the vaccines directly to each other:
 - They happened at different times
 - more COVID-19
 - More circulating variants
 - They happened in different geographies – US vs. US and South Africa and Brazil
 - Different types of vaccines

Pfizer and Moderna vaccine side effects

- Side effects vary from person to person
- Last 1-2 days at most, normal signs that your body is building protection

Side effects may include one or more

- Local side effects:
 - Sore arm
- Systemic side effects:
 - Joint pain
 - Headache
 - Fever (less common)
 - Muscle aches
 - Tiredness
 - Chills

Johnson and Johnson side effects

- Local reactions – about half.
 - Pain at the injection site
 - Redness
 - Swelling
- Systemic reactions – about half.
 - Headache
 - Fatigue
 - Body aches



Serious side effects

- No cases of anaphylaxis (serious allergic reactions that cause trouble breathing, swelling of lips and throat) reported across any of the trials
- For the mRNA vaccines, only 2-5 people in a million get these side effects
- So far for Johnson and Johnson, 200,000 people across trials have not gotten these, but we will have to see as more people get vaccinated.

Vaccination and Sars-CoV-2 variants

- Variants emerge from evolutionary change in the virus to evade the immune system
- They tend to replicate in human hosts who are:
 - Immunocompromised people
 - Transmission between people
 - Transmission from animals
 - Repeat infections in those who had prior infection
 - Partial immunity due to 1 dose mRNA, monoclonal antibodies, convalescent plasma
- Vaccination helps to reduce the emergence of variants by killing and neutralizing the virus **before** it has a chance to replicate
- Early and effective vaccination, reduces ongoing variant transmission

The best vaccine is the one that's in your arm!

Common Myths and Questions



Is there a microchip in the vaccine? Will I be tracked by the government?

- There is no microchip in the vaccines. There are only instructions for our body to produce the spike protein and be able to recognize the virus.

Can I get COVID-19 from the vaccines?

- No, the vaccines do not contain any live virus and so cannot give you COVID-19. You can still get COVID-19 from exposure in the community and especially after your 1st dose of a 2-dose vaccine so it's important to keep masking and physically distancing after your vaccine.

Can someone still carry and transmit COVID 19 after vaccine?

- The vaccines are safe and effective at preventing disease in the vaccinated person.
- We now have data from the Israeli experience showing that viral particles decrease in those who received vaccine and therefore they could transmit it less.
- Until we have more people vaccinated, we should continue to wear masks and watch our distance.

Will the vaccines change my DNA?

- No, they cannot. They do not have the technology needed to do that.
- They only contain instructions for our bodies to recognize and fight the virus.

When will children under age 16 get the vaccine?

- Children under age 16 were not enrolled in the current trials.
 - Pfizer is the only vaccine currently authorized for children 16-17.
 - Moderna and Johnson and Johnson were only tested in 18+ old's
- Studies enrolling children are currently underway. The data from these studies will inform when children under 16 can be vaccinated.

Is there any long term safety concern for the vaccines?

- We don't have any data currently to indicate any long-term safety issues.
- Most side effects after vaccination occur within 30 days of vaccination and the vaccines were considered to be safe within this timeframe before they were authorized. They were studied for a full two months before authorization.

Why do I need the vaccine if I already had COVID-19?

- Vaccination is stronger and longer immunity than natural infection
- This is because vaccination is scientifically studied to create **effective response**, as opposed to **any response**
- A lot of the antibodies created by natural infection are ineffective with a smaller proportion that kills the virus
- This makes it more likely to get repeat infection, after a natural disease.

What is the timing of vaccination for general public?

- General public will go after several priority groups
- The governor's office determined the priority groups at the recommendations of the 27-member vaccine advisory committee.
- These groups include:
 - Those in prisons and jails
 - Those who are ages 16-64 and with chronic conditions
 - Those in certain front-line occupations

Vaccine sequencing



What is sequencing?

- Sequencing is the order that people get vaccines
- Order based on increased risk of getting serious COVID-19 or death from COVID-19:
 - congregate care settings
 - pre-existing health conditions
 - age

Vaccine sequencing groups

Phase 1A Started on December 12, 2020

Everyone in Phase 1A, Groups 1,2,3 and 4 is eligible for the vaccine.

Group 1

- Hospital staff with patient care responsibilities
- Urgent care
- Skilled nursing and memory care facility healthcare personnel (HCP) and residents
- Tribal health programs
- Emergency medical services (EMS) providers and other first responders
- All health care interpreters and traditional health workers in any setting within Phase 1a

Group 2

- Other long-term care facilities, including all paid and unpaid HCP, all staff and contractors, including residents who meet the age requirements of:
 - » Residential care facilities
 - » Adult foster care
 - » Group homes for people with intellectual and developmental disabilities
 - » Other similar congregate care sites
- Hospice programs
- Mobile crisis care and related services

- Individuals working in a correctional setting
- Adults and youth in custody 16 years and older

Group 3

- HCPs in outpatient settings serving specific high-risk groups
- Day treatment services
- Non-emergency medical transport (NEMT)
- Paid or unpaid caregivers (including parents or foster parents) of medically fragile children or adults who live at home
- Adults and age-eligible children who have a medical condition or disability who receive services in their homes

Group 4

- All other outpatient HCPs
- Other HCP who provide direct service to people with I/DD and other high-risk populations.
- Other public health settings, such as HCP serving WIC, or CBO's with direct or indirect exposures

People eligible:
400,000 approximately

Phase 1B Started on January 25, 2021

Groups 1–4

- Childcare providers, early learning and K–12 educators and staff
- People 70 and older

Group 5

Eligible March 1, 2021

- People 65 and older

Group 6

Eligible no later than March 29, 2021

- Adults 45–64 with one or more underlying health conditions with increased risk*
- Migrant and seasonal farm workers
- Seafood and agricultural workers
- Food processing workers
- People living in low-income senior housing, senior congregate and independent living

Educators:

152,000 approximately

People over 65:

795,000 approximately

- Individuals experiencing homelessness (sheltered and unsheltered)
- People currently displaced by wildfires
- Wildland firefighters

Group 7

Eligible no later than May 1, 2021

- Frontline workers as defined by CDC**
- Multigenerational household members
- Adults 16–44 with one or more underlying health conditions with increased risk*

Phase 2

Group 1

Eligible no later than June 1, 2021

- People who are 45–64

Group 2

Eligible no later than July 1, 2021

- All Oregonians 16 and older eligible.

COVID-19 Vaccine information

Can I get a **COVID-19 vaccine**? Where do I go?



Visit covidvaccine.oregon.gov



Text ORCOVID to 898211



Email ORCOVID@211info.org



Call 211 or 1-866-698-6155
(TTY: dial 711 or call 1-866-698-6155)

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Different ways to schedule a vaccine?

- Through **getvaccinated.Oregon.gov** and **signing up for alerts**. OHA will notify a limited number of participants each week based on these lists to sign up for the Convention center slots.
- Through pharmacy websites such as Safeway, Walgreens etc.
- Through other vaccination events through your county webpage available under “Sequencing” section of covidvaccine.Oregon.gov

Questions with Senior Health Advisors



Thank you!

