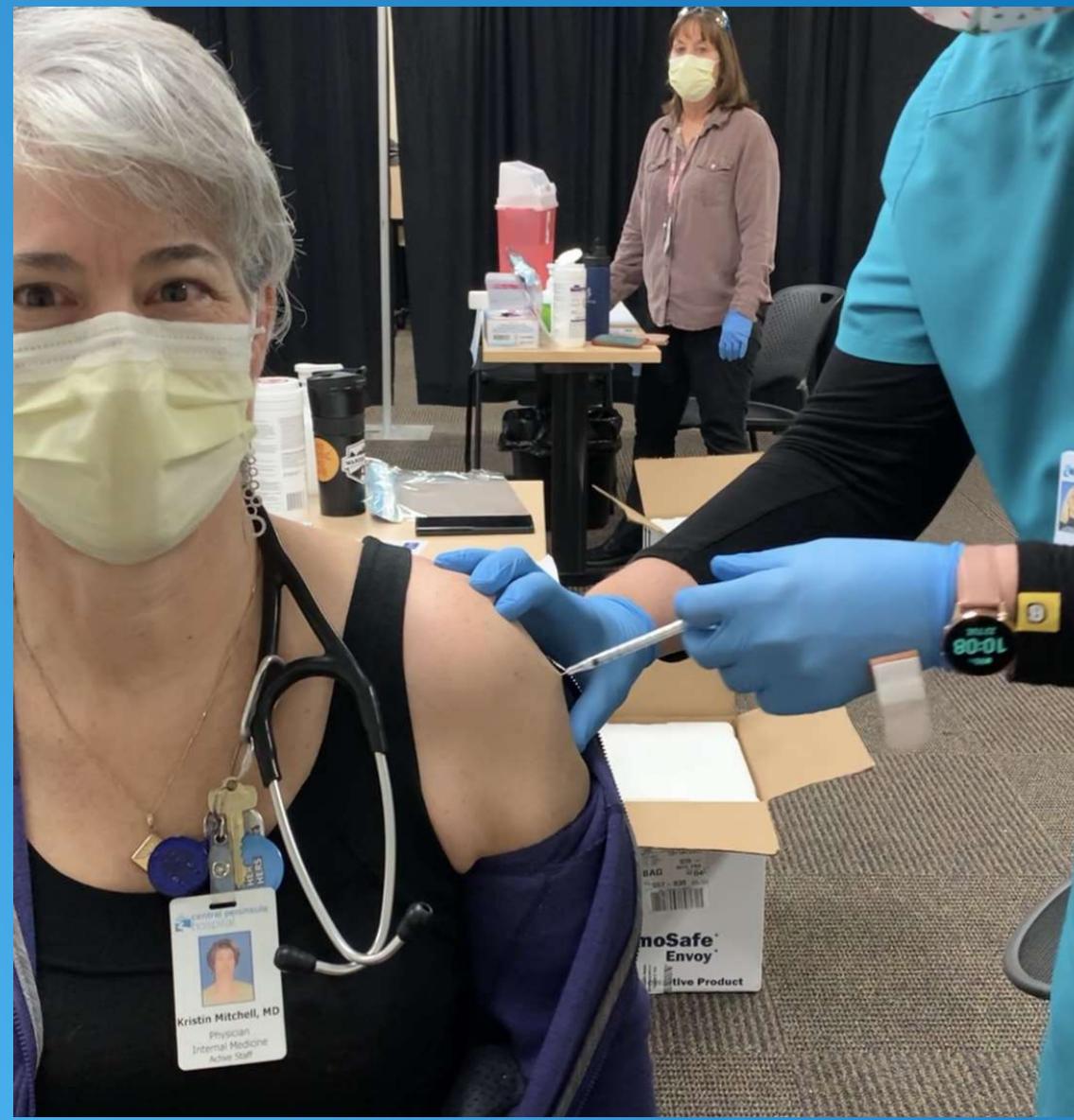
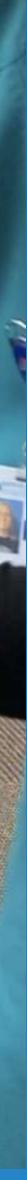
# **Covid-19 Vaccination Update** KPB Assembly Meeting 5 January 2021

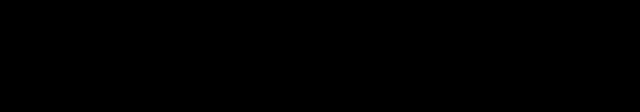
Kristin M Mitchell, MD, FACP



### Covid-19 Vaccination Soldotna, Alaska December 22, 2020

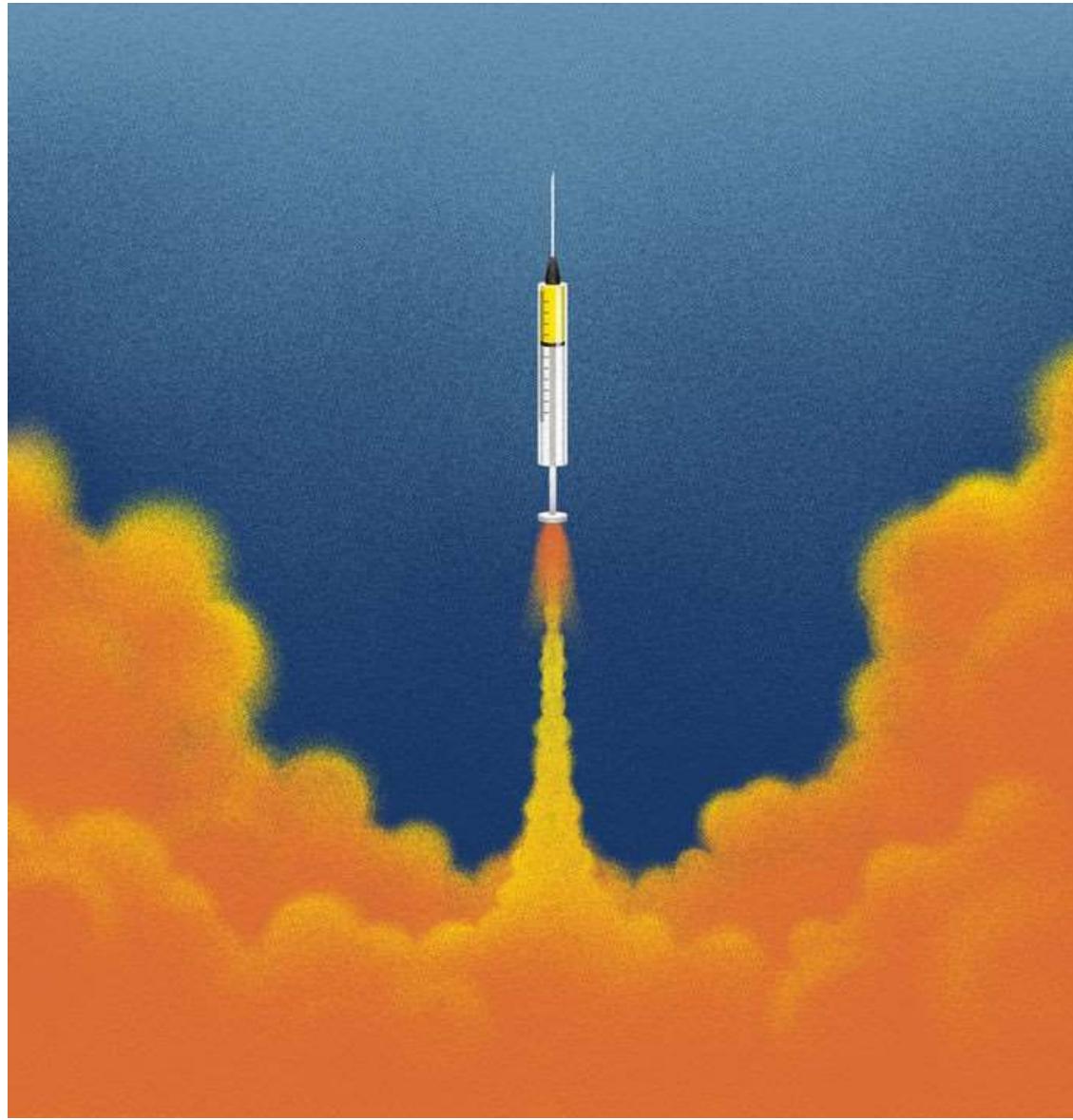






# This is the moonshot of our time

Photo credit: Luca D'Urbino *The Economist* 



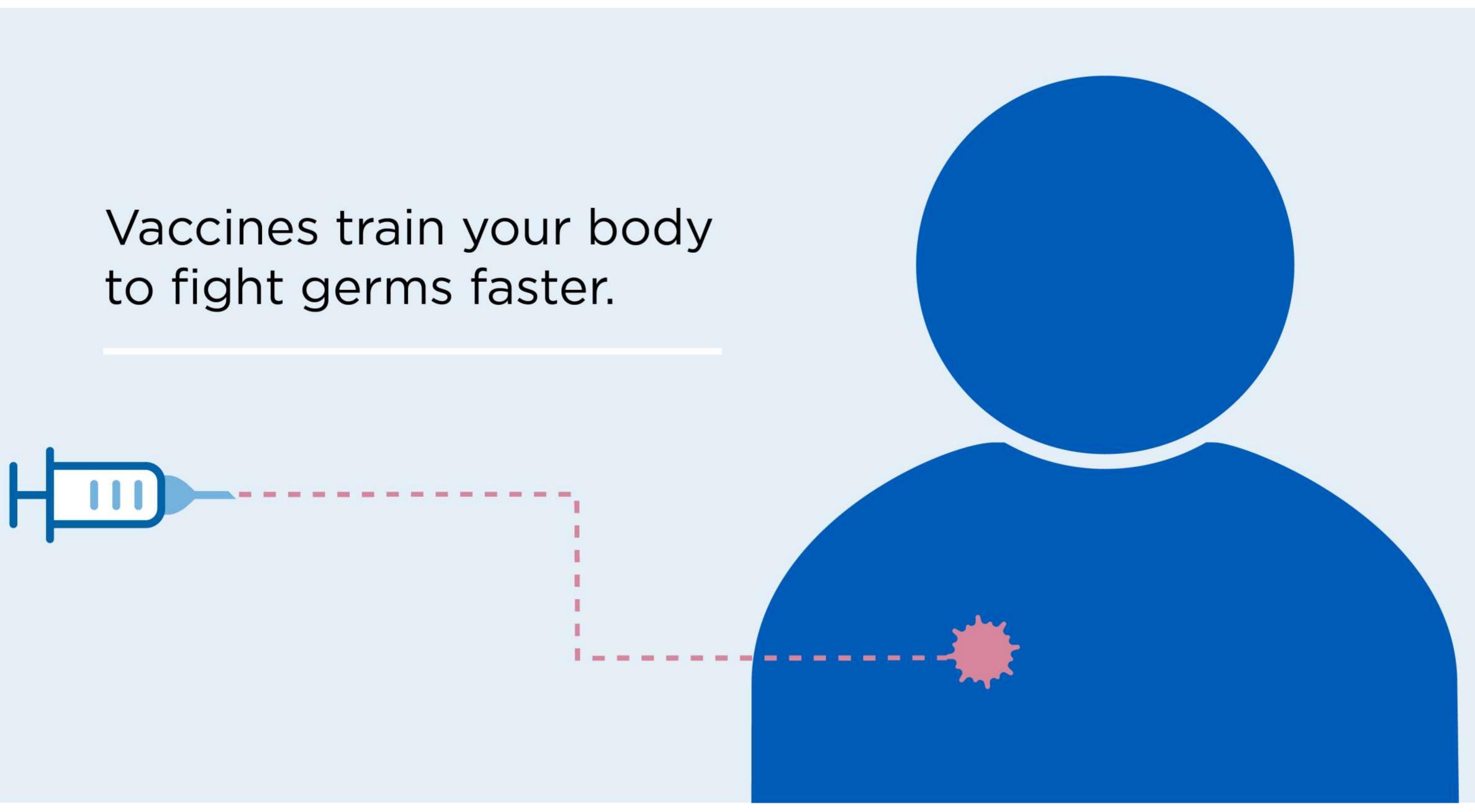


### HOW DID WE GET A VACCINE SO QUICKLY? OPERATION WARP SPEED



"This process demonstrates what is possible in the context of motivated collaboration among key sectors of society, including academia, government, industry, regulators and the larger community."

**NIH/Moderna Vaccine trial authors** 



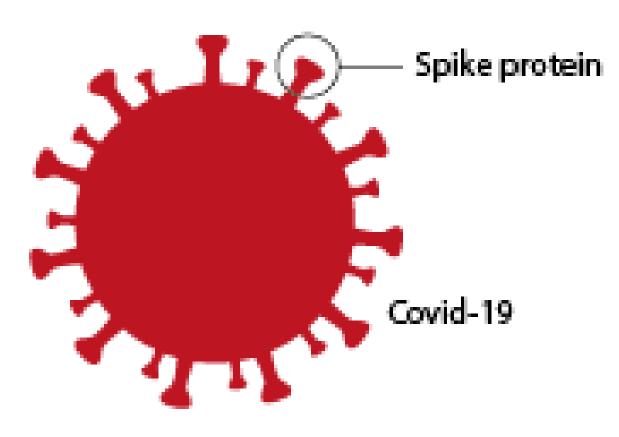
## Many Different Approaches to Designing a Vaccine

#### Leading vaccines

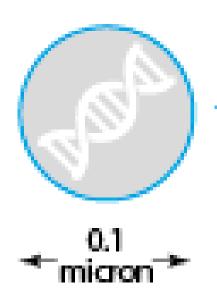
Developer	Туре	Phase	Status
Pfizer-BioNTech	mRNA	2 3	Approved in Canada, other countries. Emergency use in U.S., other countries.
Moderna	mRNA	3	Approved in Canada. Emergency use in U.S.
Gamaleya	Adenovirus	3	Early use in Russia. Emergency use in Belarus, Argentina.
Oxford-AstraZeneca	Adenovirus	2 3	Emergency use in Britain, India, Argentina.
CanSino	Adenovirus	3	Limited use in China.
Johnson & Johnson	Adenovirus	3	
Vector Institute	Protein	3	Early use in Russia.
Novavax	Protein	3	
Sinopharm	Inactivated	3	Approved in China, U.A.E., Bahrain.
Sinovac	Inactivated	3	Limited use in China.
Sinopharm-Wuhan	Inactivated	3	Limited use in China, U.A.E.



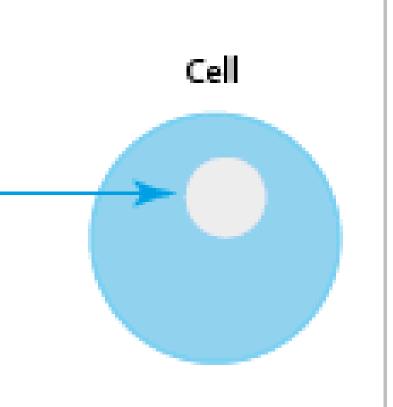
#### How mRNA vaccines work

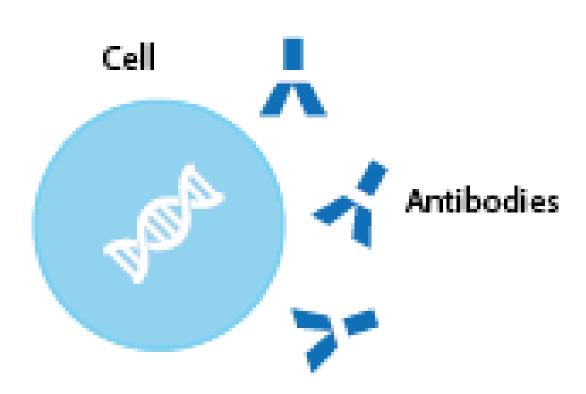


Messenger RNA (mRNA) is a synthetic genetic sequence. It contains instructions that cells can use to make the Covid-19 spike protein without causing the disease. mRNA lipid nanoparticle



The mRNA is packaged in fatty lipid nanoparticles. These protect the fragile genetic instructions while they are manufactured, transported and finally administered.





Once inside the cell, the mRNA instructs the cell to produce the viral protein. This appears on the surface of the cells and stimulates an immune system response.

# What is in the Vaccine?

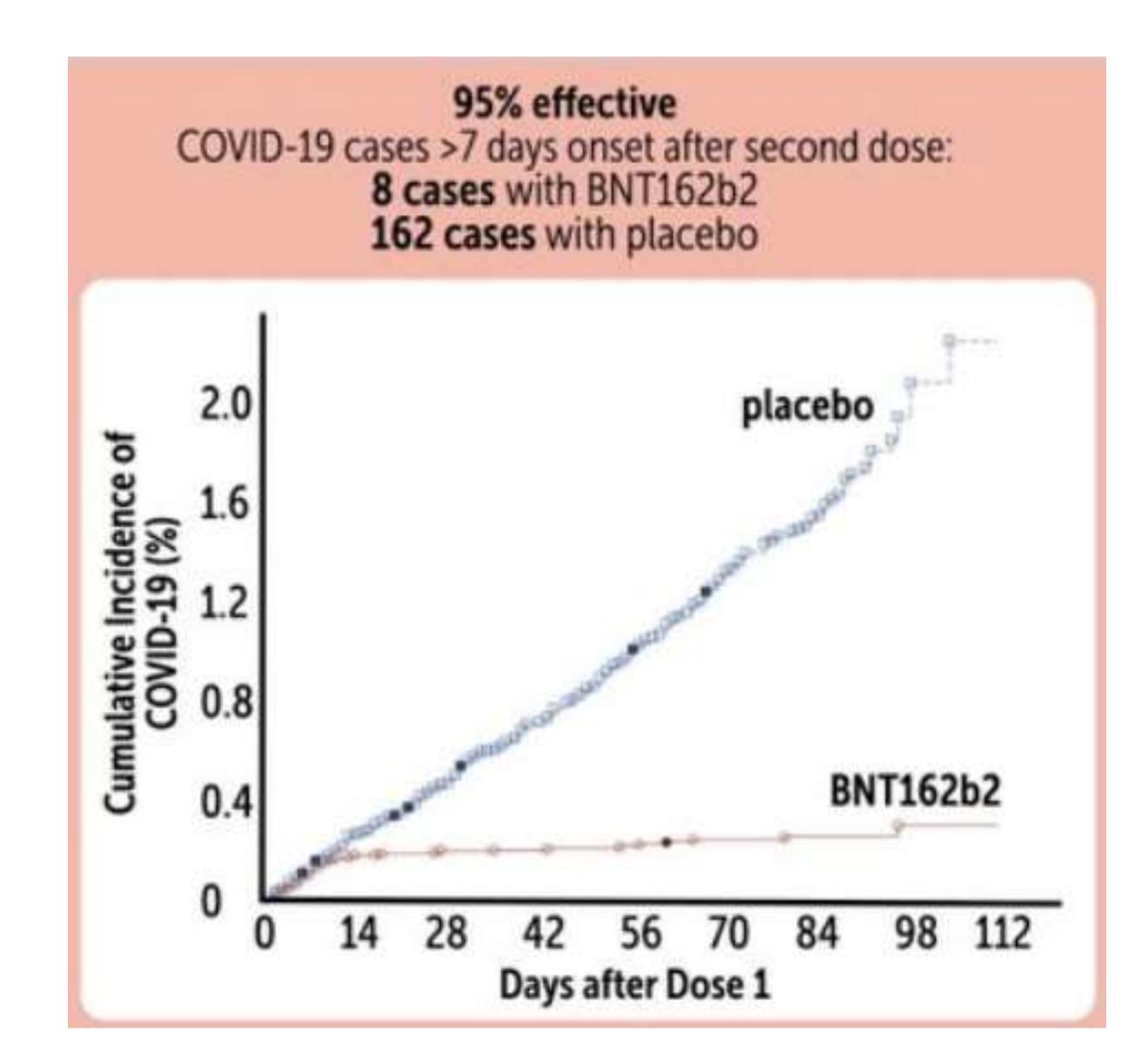
Pfizer-BioNTech COVID-19 Vaccine includes the following ingredients:

mRNA cholesterol) potassium chloride monobasic potassium phosphate sodium chloride dibasic sodium phosphate dihydrate sucrose

### Or, in English: Salts, sugar, mRNA, in a fat envelope

#### lipids ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 2 [(polyethylene glycol)-2000]-N,N-ditetradecylacetamide, 1,2-Distearoyl-sn-glycero-3- phosphocholine, and

# **Pfizer BioNTec Vaccine Efficacy**



#### **COVID-19 VACCINE TRIALS** Any vaccine we receive will have been authorized by the U.S. Food and Drug Administration and will have completed:

STUDIES PRECLINCAL

PHASE 1

Test for safety in a small number of people.



# PHASE 2

Tests hundreds of people with different characteristics (such as age and health status). This is to understand effectiveness and side effects.

Hundreds of people



# PHASE 3

Tests thousands of people to assess safety and effectiveness.



Source: AK DHSS



# Do we really need a vaccine?

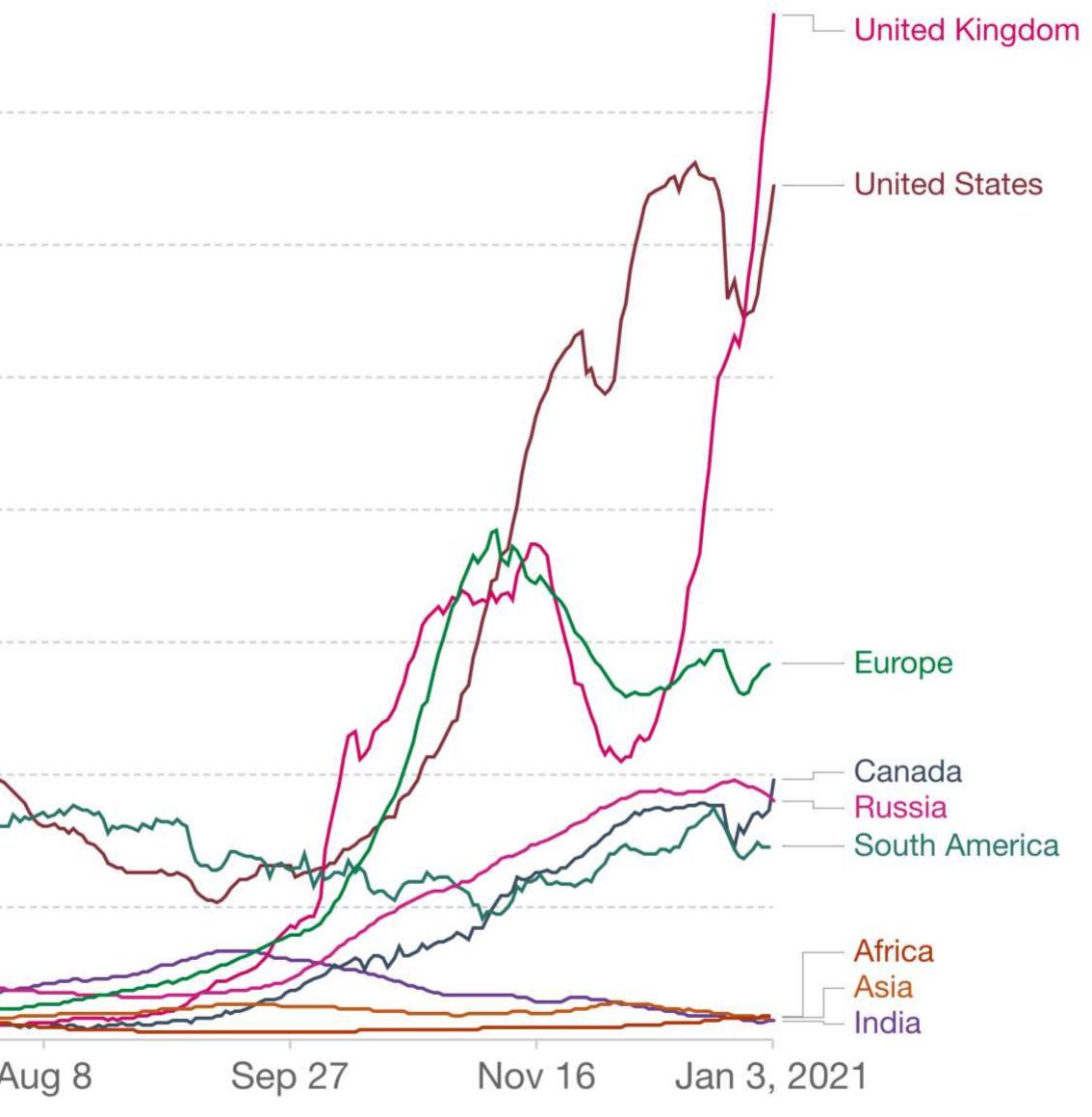


#### Daily new confirmed COVID-19 cases per million people

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

700			
600			
500	an lat		tan san kat san kat san kat s
400			
300			
200		/	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
100		m	5
			2
Mar 1, 2020	Apr 30	Jun 19	A
Courses Johns Llos	king University CCC		Last

Source: Johns Hopkins University CSSE COVID-19 Data – Last updated 4 January, 06:06 (London time)



Our World

in Data

# **Alaska Covid - 19 Cases** January 5, 2021



### Total Cases 47,006

New Cases Yesterday

### 203

Updated Daily by Noon

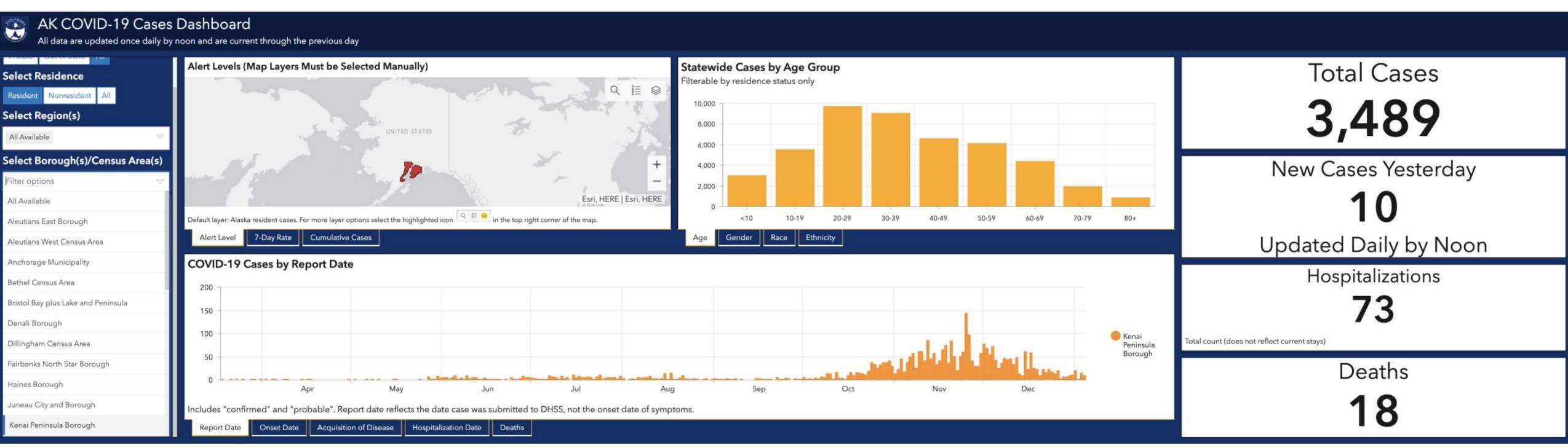
Hospitalizations

#### 1,036

Deaths

217

# Kenai Peninsula Borough Cases 1/5/2021



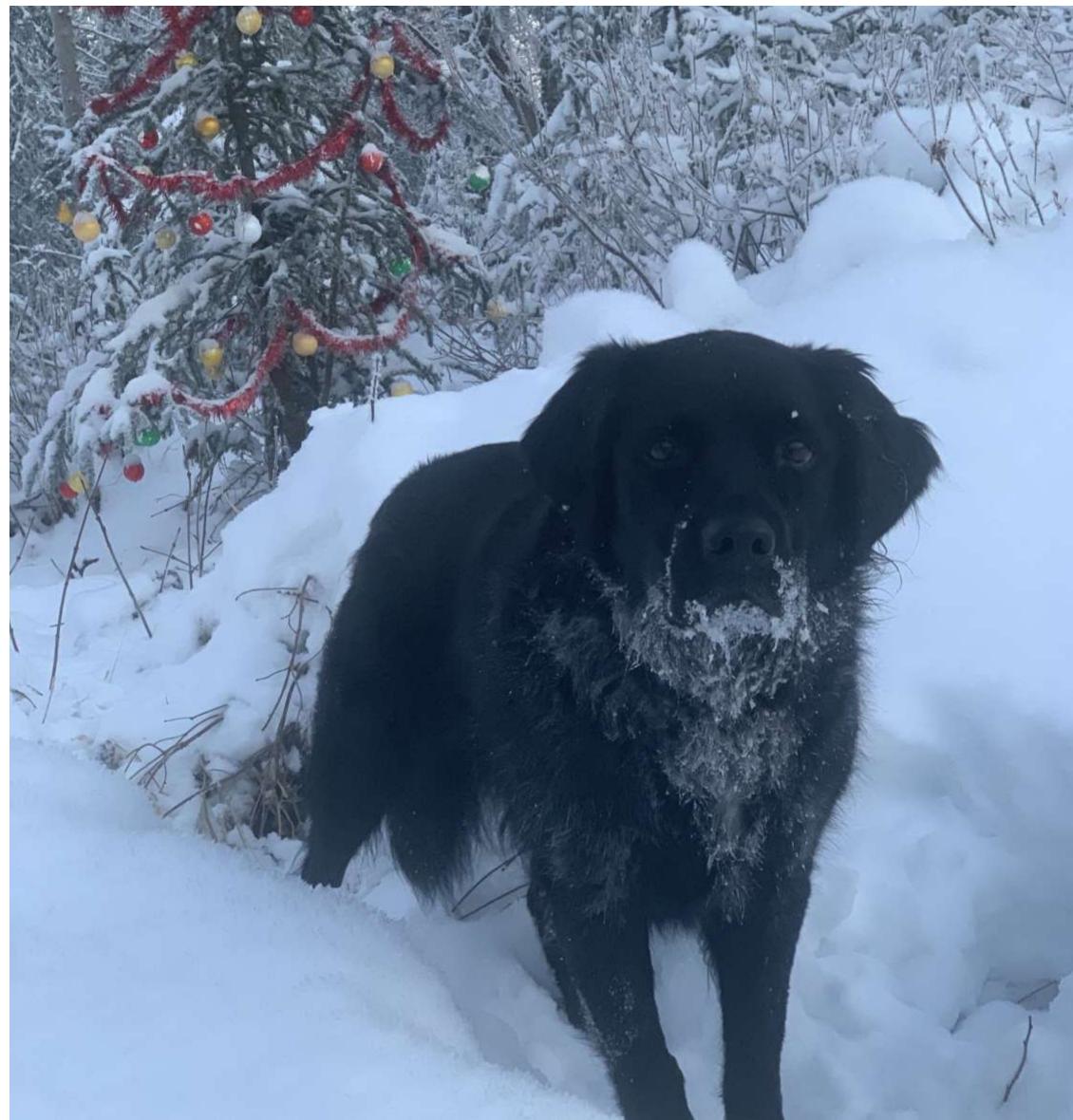
# **Putting Covid-19 Deaths in Perspective**

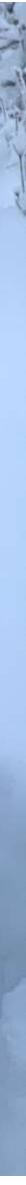
Covid-19 has killed more than 356,000 Americans as of January 5

The 1918 influenza pandemic killed 675,000 Americans 2009 H1N1 pandemic killed 12,469 Americans

116,000 Americans died in World War I405,000 Americans died in World War II37,000 Americans died in the Korean War58,000 Americans died in the Vietnam War

# So, what can we do?

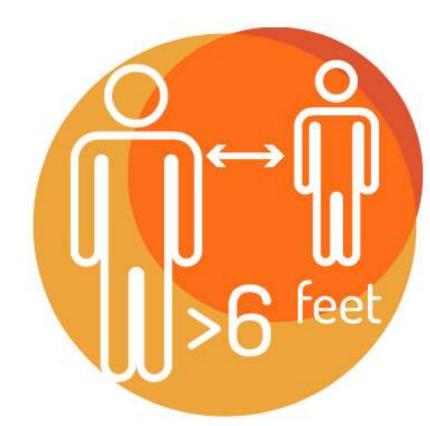




If we use all the tools we have, we stand the best chance of getting our families, communities, schools, and workplaces "back to normal" sooner:

Get vaccinated.





Stay 6 feet from others, and avoid crowds. Wear a mask.





Wash hands often.

## **Breaking News** Vaccine is available soon for those over 65

#### Groups that will be eligible soon

Planning Phase 1b, Tier 1 (Scheduling opens at 12pm on Jan. 6, 2021)

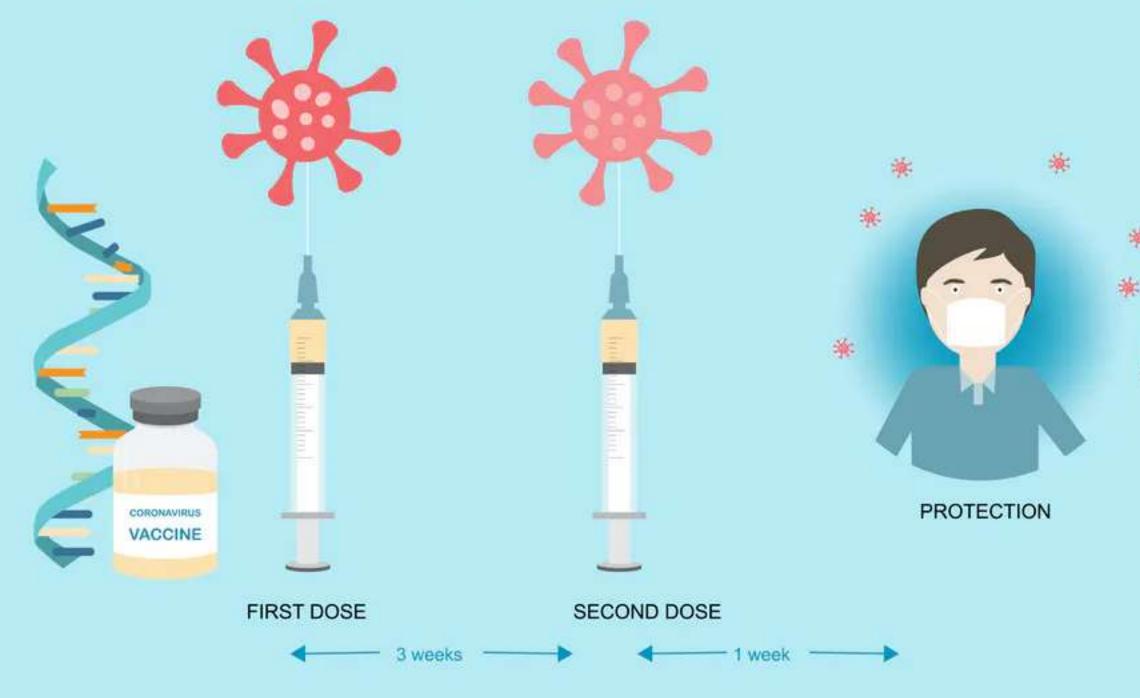
The following tier is further outlined in Phase 1b recommendations (PDF).

> Persons aged 65 years and older

# Sign Me Up!

### Covidvax.alaska.gov

#### **mRNA CORONAVIRUS VACCINE**





# Thank Yous

•KPB elected officials for the opportunity to speak tonight

•Chris Beaudoin and his volunteer film crew Jane, Mandy, Brandon, Cindy for the COVID-AROD footage

•All medical staff and frontline workers who are working so hard to keep us safe and healthy and fed and housed and educated during the pandemic

•All of you who are doing your part to keep the community safe and get us back to a healthy economy by wearing masks, maintaining distance and washing hands





#### COVIDVAX.ALASKA.GOV

# DON'T MISS YOUR SHOT!

Central Peninsula Hospital

## Questions

Who should not get the vaccine? What if I have food allergies? What if I am pregnant or breastfeeding? What if I have COPD/heart disease/diabetes? What about serious side effects later?

Can I choose which vaccine I get? Can I switch brands for the booster? Cases have been falling. When can we stop wearing masks? Can I stop wearing my mask as soon as I get vaccinated?

> How much will it cost? When will I get my turn? Where will I go for my vaccine?



### **Rumors and Misinformation**

I heard there are tracking chips in the vaccine

I heard the vaccine will give me Covid

I heard the vaccine causes infertility

I heard the vaccine is using fake needles

I heard they use fetal tissue to make vaccines

I heard 5G technology causes Covid-19

I saw on YouTube than masks activate the virus



# **Reliable Sources of Information**

- •DHSS dhss.alaska.gov
  •CDC cdc.gov
  •CPH hospital cpgh.org/corona
- •City and Borough websites

# covidvax.alaska.gov to sign up