



# **Immunize Colorado Education Series: 2021 Legislative Preview**

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January 20, 2021

# Partnering to KEEP COLORADO COMMUNITIES HEALTHY

## OUR MISSION

Founded in 1991, Immunize Colorado (formerly the Colorado Children's Immunization Coalition) is a statewide 501(c)3 nonprofit that serves to protect Colorado families, schools and communities from vaccine-preventable diseases.

# What We Do



**Coalition Building:** Strengthen and expand Colorado's immunization initiatives and data through partnerships and collaboration



**Public Policy:** Advocate for policies that aim to better protect Colorado children and communities



**Free and Low-Cost Vaccines:** Partner to provide free and low-cost vaccines to families in need



**Community Outreach and Awareness:** Communicate vaccine information with healthcare providers, parents, the media and organizations



**Provider Education:** Educate health care professionals on crucial and timely vaccine-related topics



**Data Translation and Action:** Spearhead partnerships to advance the understanding and utilization of local, state and national immunization data

# How is Colorado Doing?

27.3  
PERCENT



27.3 PERCENT of children 19-35 months in Colorado are under- or unvaccinated against one or more vaccine-preventable diseases.

9,424  
COLORADO  
CHILDREN

9,424 COLORADO CHILDREN were hospitalized or went to an emergency room with vaccine-preventable diseases in 2017.

52.7  
PERCENT

Immunization helps to protect our youngest and most vulnerable community members. 52.7 PERCENT of Colorado children hospitalized with vaccine-preventable disease are four years of age or younger.

\$55.5  
MILLION



There were \$55.5 MILLION in hospital and emergency department charges for treating Colorado children for vaccine-preventable diseases in 2017. Actual costs, taking into account office visit, pharmacy costs and missed work, are much higher.

87.4  
PERCENT



Only 87.4 PERCENT of Colorado kindergarteners are up-to-date with the measles, mumps and rubella (MMR) vaccine, ranking the state 49th out of 49 states that reported coverage data.

49,070  
STUDENTS

49,070 STUDENTS in Colorado could be potentially excluded from attending school in the event of a measles outbreak.

# IC Updates

- **IC Annual Survey 2020 (link will be sent out soon!)**
- **Factsheets**
  - **CDC National Immunization Survey Data Updates (2017-2019)**
  - **Vaccine Hesitancy: Implications for COVID-19 Vaccine**
- **Colorado Vaccine Equity Taskforce**

# New Factsheet

## Vaccine Hesitancy: Implications for COVID-19 Vaccine



As the United States distributes COVID-19 vaccine, confidence and trust in its safety and benefit will be critical to ensure widespread acceptance, especially as the disease disproportionately burdens communities of color.

### Vaccine Hesitancy in the United States and Colorado

Despite overwhelming evidence that vaccines are safe and effective and preventing disease, a growing number of people in the US are hesitant to receive recommended vaccinations or refuse them altogether. In 2019, the World Health Organization named vaccine hesitancy as one of the top 10 global health threats, citing access barriers and a lack of confidence as factors.

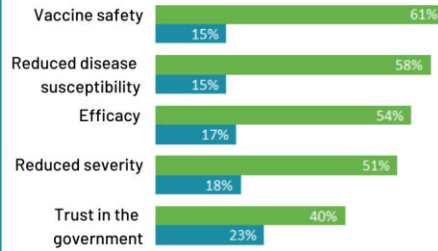
In the US, only half of children aged 19-35 months are up-to-date on all recommended vaccines. Colorado reports some of the highest rates of nonmedical vaccine exemptions in schools and vaccination rates for MMR, Dtap, and Varicella are well below the national average for Kindergarteners. These low vaccination rates make Colorado particularly vulnerable to vaccine-preventable outbreaks.

### Vaccine Hesitancy in Communities of Color

Vaccine hesitancy in communities of color stems from a long history of systemic racism and resulting structural inequities in healthcare.

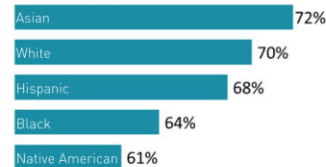
- Studies have shown that people of color are **routinely under-treated for pain and report lower quality of care** from medical professionals.
- People of color are widely underrepresented in the medical field; in the US, **just 5% of practicing physicians are Black**, 5.8% are Hispanic, and 56.2% are white.
- People of color have been historically **underrepresented in clinical trials**, despite the results being generalized to larger populations.
- Anti-vaccine activists have been especially **targeting communities of color with false information**.

Vaccine perceptions differed among **parents who vaccinate their children and parents who opt out of vaccinations through nonmedical exemptions.**



Source: Siddiqui M, Salmon DA, Omer SB. Epidemiology of vaccine hesitancy in the United States. Human vaccines & immunotherapeutics. 2013 Dec 24;9(12):2643-8.

**On average, Black and Native American children are less likely to be fully vaccinated for routine childhood immunizations by age 2.**



Source: Hill, H. A., & Singleton, J. A. (2019, October 17). Vaccination Coverage by Age 24 Months Among Children Born in 2015 and 2016 - National Immunization Survey Child, United States, 2016-2018.

White (49%) and Asian Americans (47%) receive the **flu shot** at higher rates than Black (39%), American Indian and Alaskan Natives (38%), and Hispanic (37%) Americans.

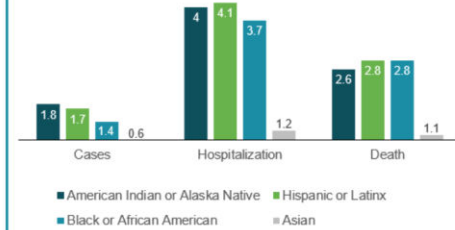
People of color are 8.6% less likely to complete the HPV series than Whites. This disparity is especially problematic as Black and Hispanic women are twice as likely to die from cervical cancer than white women.

### The Impact of COVID-19 on Communities of Color

Communities of color bear the greatest burdens of health disparities in the US medical system due to systemic racism and income inequality.

- Social determinants of health, such as **access to health care, socioeconomic status, education, and housing** affect health outcomes.
- People of color are more likely to live in densely populated areas and **depend on public transportation**, increasing risk of transmission.
- People of color are overrepresented in **frontline jobs**.
- Over 50% of Latinx and 38% of Black workers **cannot earn paid sick leave**, making income dependent on health.

Communities of color have been **disproportionally impacted by COVID-19** and have higher case, hospitalization, and death rates are compared to white Americans.



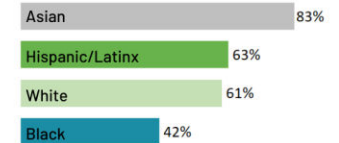
Source: Centers for Disease Control and Prevention. Updated Nov 30, 2020

### COVID-19 Vaccine Hesitancy in Communities of Color

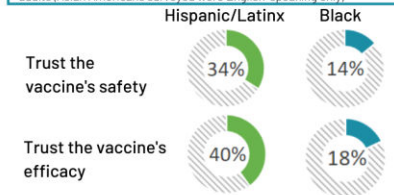
Vaccine hesitancy remains a key barrier for COVID-19 vaccine administration. While vaccine hesitancy continues to change as vaccine development and administration proceeds, a November 2020 poll by Pew Research showed Black Americans continue to be most hesitant about the COVID-19 vaccine. A poll by Healthier Colorado conducted in November 2020 showed a similar breakdown of vaccine hesitancy for Black Coloradans (52%) and Hispanic Coloradans (56%) compared to white Coloradans (61%).

The strongest predictor for vaccine uptake among Black and Latinx adults is trust in vaccine safety, which is scarce in these communities. Trust in vaccine safety is predicted by levels of confidence in the institutions involved vaccine production, the US government and the medical system generally to look out for the interests of Black and Latinx people, which is also low in these communities.

**Less than half of Black Americans are willing to receive a COVID-19 vaccine.**



Source: Pew Research poll conducted Nov 18-29, 2020. n = 12,648 American adults (Asian Americans surveyed were English-speaking only)



Source: Langer Research Associates. COVID Collaborative Survey: Coronavirus Vaccination Hesitancy in the Black and Latinx Communities.

### How Can We Improve Vaccine Acceptance and Equitable Distribution?



Provide transparent information on vaccine development and approval processes



Build trust in the COVID-19 vaccine by leveraging community partnerships and systems



Prioritize equitable vaccine administration with no out-of-pocket costs for patients



Advance policies and increase funding to ensure equitable access to immunization

# New Factsheet

## CDC National Immunization Survey Data Updates (2017-2019)



Vaccination coverage in the US and Colorado remains mostly high and stable. However, for many vaccines, the US and Colorado fail to reach the Center for Disease Control (CDC) Healthy People (HP) 2030 targets, and Colorado falls below national averages for vaccine coverage. This report provides an overview of data from the National Immunization Survey, conducted annually by the CDC. **It is important to note that in 2020, vaccination rates declined significantly**, due in part to more limited healthcare access during the COVID-19 pandemic. This decline is not currently represented in this review.

### Vaccine Disparities Among Children Under 2 Years Old (2017)

Nationally, **1.3%** of or **100,000** children under 2 years old have received no vaccines (2017), compared to just 0.3% in 2001. Vaccine disparities are especially prevalent among children who are uninsured, on Medicaid, and/or living in rural areas.

#### UNINSURED

Vaccination rates among uninsured children were **14.7%-30.3%** lower than for those covered under private insurance, depending on the vaccine.

#### MEDICAID

For most vaccines, immunization rates for children insured under Medicaid were **2.5%-15%** lower than for children covered under private insurance.

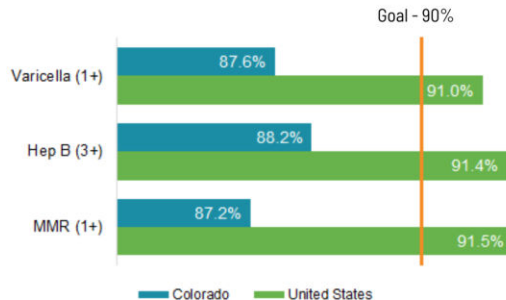
#### RURAL AREAS

Children living in rural communities were less likely to be vaccinated with some or all shots and were more likely to have received no vaccines than children living in urban communities.

The Vaccines for Children (VFC) program is a federally funded program that provides vaccines at no cost to children who are unable to be vaccinated due to financial reasons. Colorado could expand its VFC coverage to further address vaccine disparities in the state.

### Vaccination Coverage Among Children Aged 19-35 Months (2017)

Infant immunization coverage in Colorado falls below national averages and HP 2030 goals.



#### 7 - SERIES VACCINE

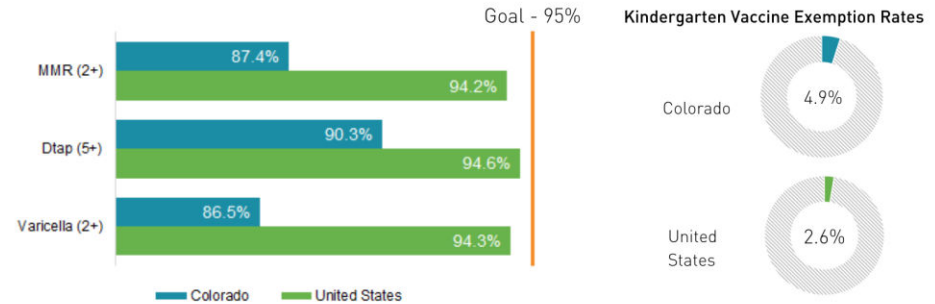
The 7-series vaccine, which includes vaccines for diphtheria, tetanus, and whooping cough (pertussis) (DTaP), polio, measles, haemophilus influenzae (Hib), Hepatitis B, varicella, and Pneumococcal conjugate vaccine (PCV), has a HP 2030 goal of **80% coverage**. In 2017, 71% of 19-35 month old children in Colorado were vaccinated with the 7-series vaccine, compared to a 70.4% national coverage rate.

## CDC National Immunization Survey Data Updates (2017-2019) cont.



### Kindergarten Immunization Survey (2018-2019 School Year)

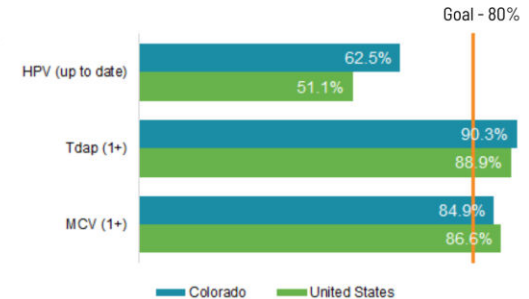
Kindergarten vaccination rates in Colorado consistently fall below national averages, with high rates of vaccine exemptions. It is important to note that comparing vaccination rates across states is challenging due to varying data collection and reporting methods for kindergarten vaccination records. Although it has yet to be published, Colorado, through an impressive vaccination effort, increased its kindergarten MMR rates to 91% in the 2019-2020 school year.



### Vaccination Coverage Among Adolescents Aged 13-17 Years (2018)

Colorado's HPV vaccination rates have increased but are still well below the HP 2030 goal of 80%. However, rates of incomplete HPV vaccinations (1 or more shot of a 2 or 3 dose series) are higher; 77.2% of Colorado adolescents received one or more HPV vaccination (compared to 68.1% nationally) exposing a lack of follow through for the HPV vaccine series.

Colorado and the US are well positioned for Tdap and MCV coverage in relationship to the HP 2030 goal of 80% coverage.



### Maintaining Childhood and Adolescent Immunizations During COVID-19

Routine childhood immunization rates have dropped precipitously during the COVID-19 pandemic. VFC programs have reported steep declines in vaccine orders, which will likely exacerbate existing vaccine disparities. It is essential to increase efforts to maintain routine childhood and adolescent vaccinations throughout and following the COVID-19 pandemic.



# Colorado Vaccine Equity Taskforce

The Colorado Vaccine Equity Taskforce exists to ensure that all groups – regardless of race, ethnicity, ability and other factors – have all the facts to make informed decisions about the safety of vaccines for their families, and to hold leaders accountable for ensuring access to these vaccines for all. Taskforce members represent a diverse collection of Coloradans working to ensure all communities have all the facts to keep their families healthy.

<https://www.coloradovaccineequity.org/>



# Dr. Anuj Mehta

- Pulmonologist and Critical Care specialist at Denver Health
- Assistant Professor of Medicine at CU Anschutz School of Medicine
- Chair, GEEERC Medical Advisory Group on Vaccine Allocation



# Ruth Aponte

Founding partner of  
the firm Aponte &  
Busam Public Affairs  
Consultants





**DENVER HEALTH**™

est. 1860

**FOR LIFE'S JOURNEY**

# COVID-19 Vaccines: Where We Stand Today

Anuj Mehta, MD

Pulmonary and Critical Care Medicine

Chair, GEEERC Medical Advisory Group on Vaccine Allocation

Immunize Colorado Legislative Preview Webinar

January 20, 2021



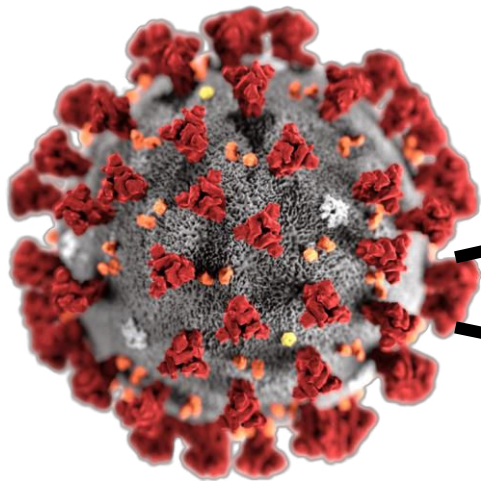
# A moment

- US daily death toll >4,000 per day. More deaths than 9/11
- US cumulative deaths soon to exceed 400,000. Estimates of total US casualties during World War II 405,000-420,000

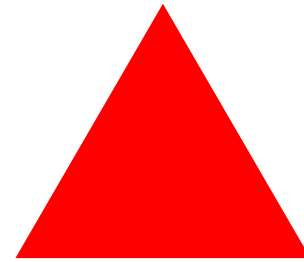
# Agenda

- Review basic biology of immunity and vaccines
- How do mRNA vaccines (Pfizer and Moderna) work?
- How do viral vector vaccines (AstraZeneca and J&J) work?
- Safety Profile
- Key Points about COVID-19 Vaccines
- Prioritization and Distribution Plans
- Equity Considerations
- Bottle Necks

# The Face of our Enemy: SARS-CoV-2 (aka COVID)

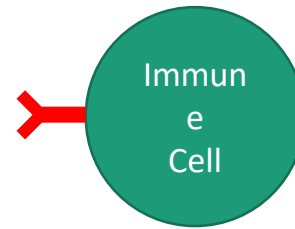
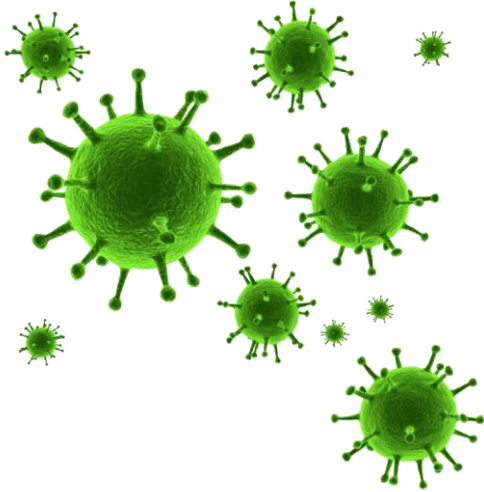


**The Spike Protein**



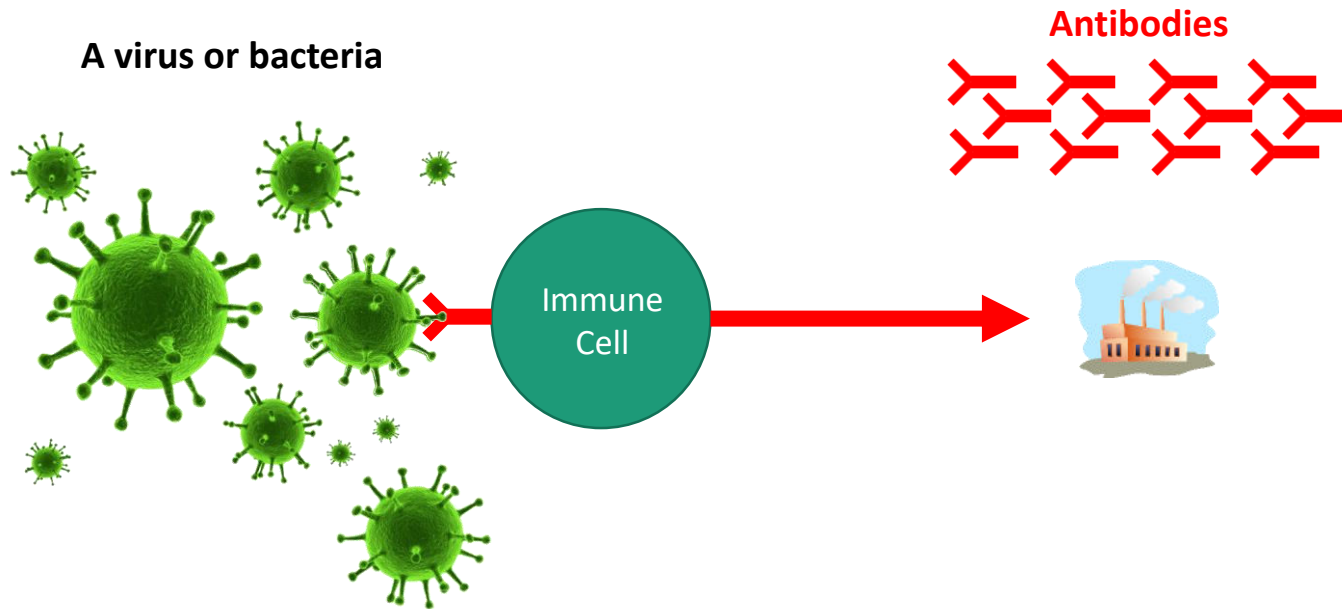
# How does immunity work work?

A virus or bacteria



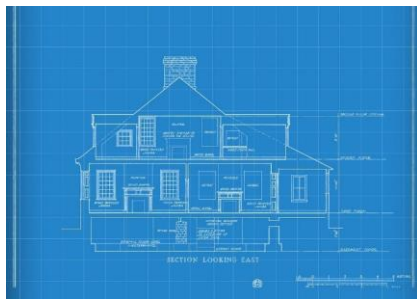


# How does immunity work work?



**Key concept is that you make antibodies against a PROTEIN(s) that belongs to a virus or bacteria**

# The Central Dogma of Biology



DNA

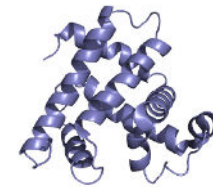
transcription  
→



mRNA



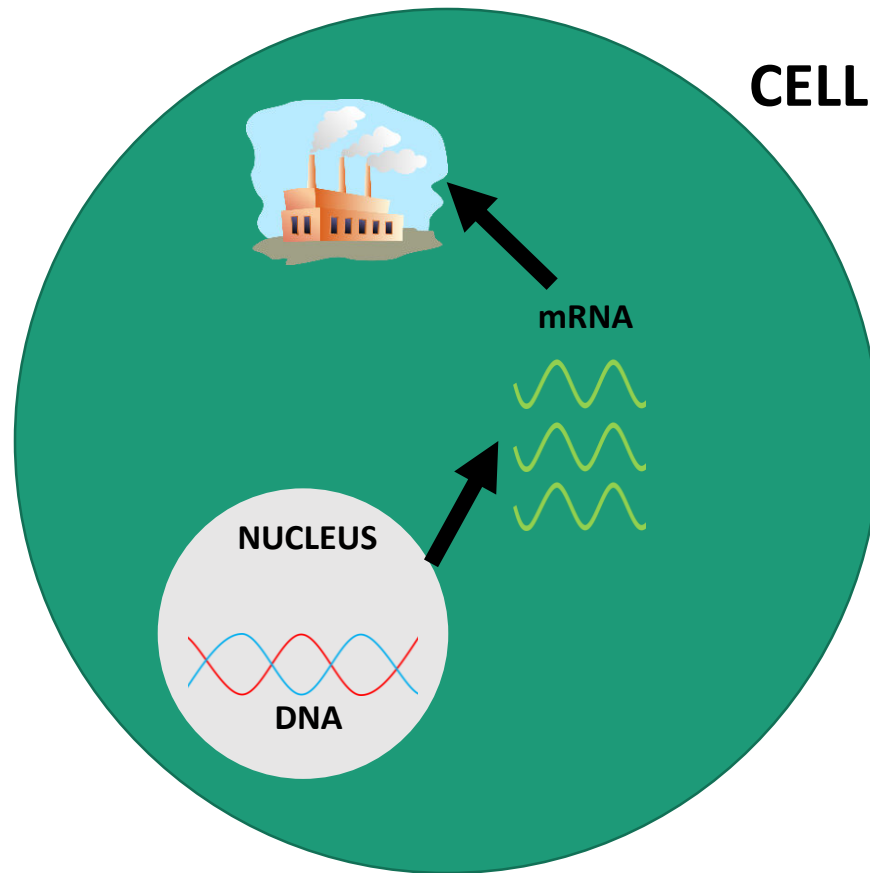
translation  
→



protein



# Basic Biology

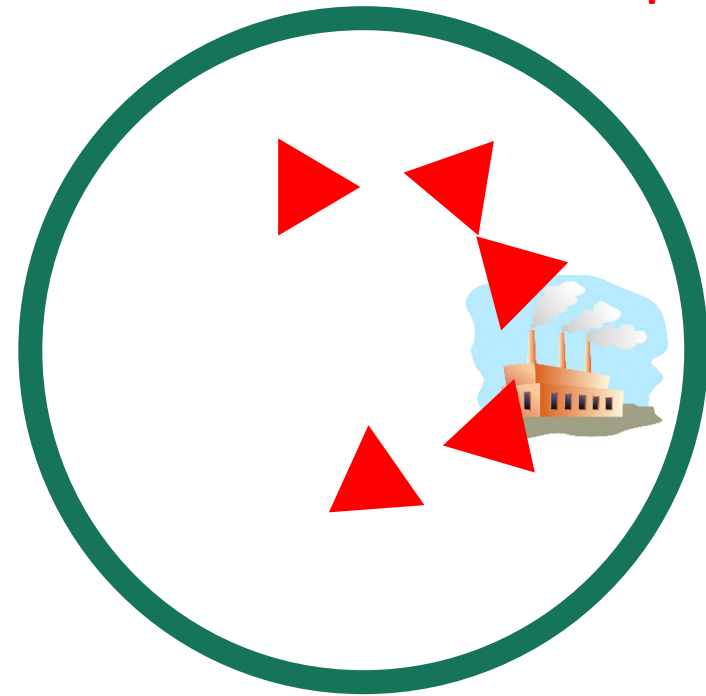


# How do mRNA Vaccines Work?

mRNA in a bubble

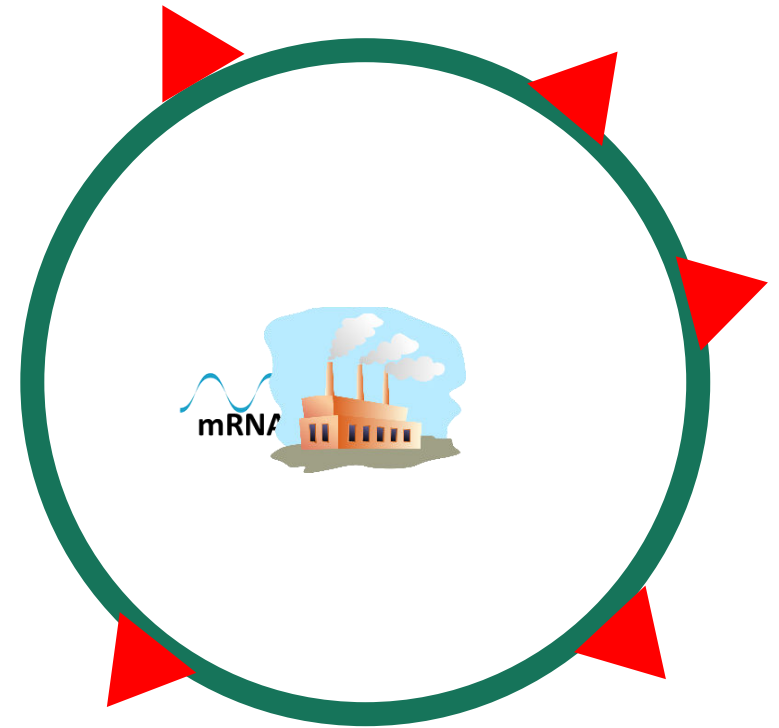


Spike Protein



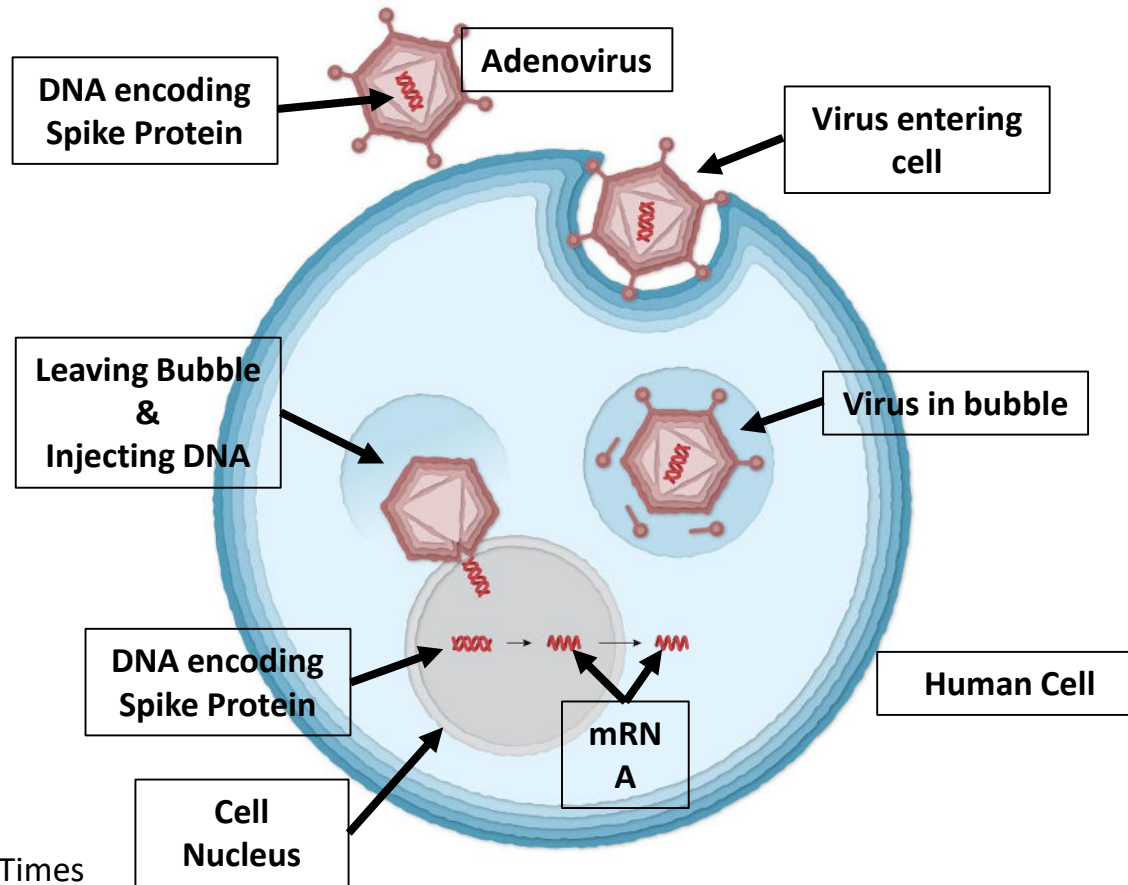
Human Cell

# What Happens to the mRNA?



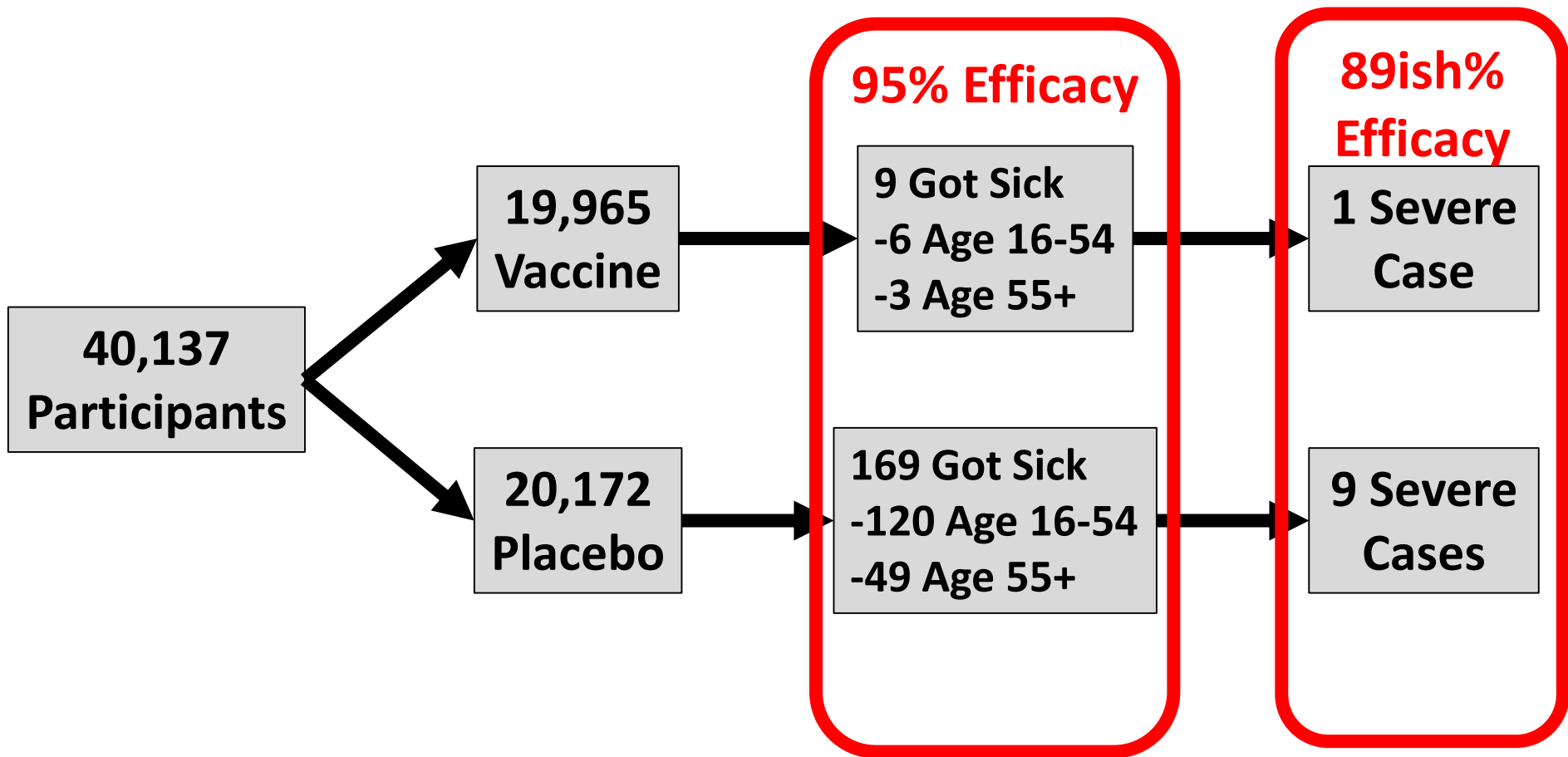
**Human Cell**

# Inactivated Viral Vectors: AZ and J&J



Source: The New York Times

# Pfizer/BioNTech



# Who was in the Pfizer trial?

## Trial Progress



The clinical trial has enrolled **44,863** participants and **43,004** have received their **second vaccination** at approximately **150 clinical trial sites** in **6 countries**.

## Participant Diversity

Approximately **42%** of overall and **30%** of U.S. participants have diverse backgrounds.

Race/Ethnicity	Overall Study	U.S. Only
Asian	5%	6%
Black	10%	10%
Hispanic/Latinx	26%	13%
Native American	1.1%	1.3%

## Participant Age



Ages 12-15 697

Ages 16-17 733

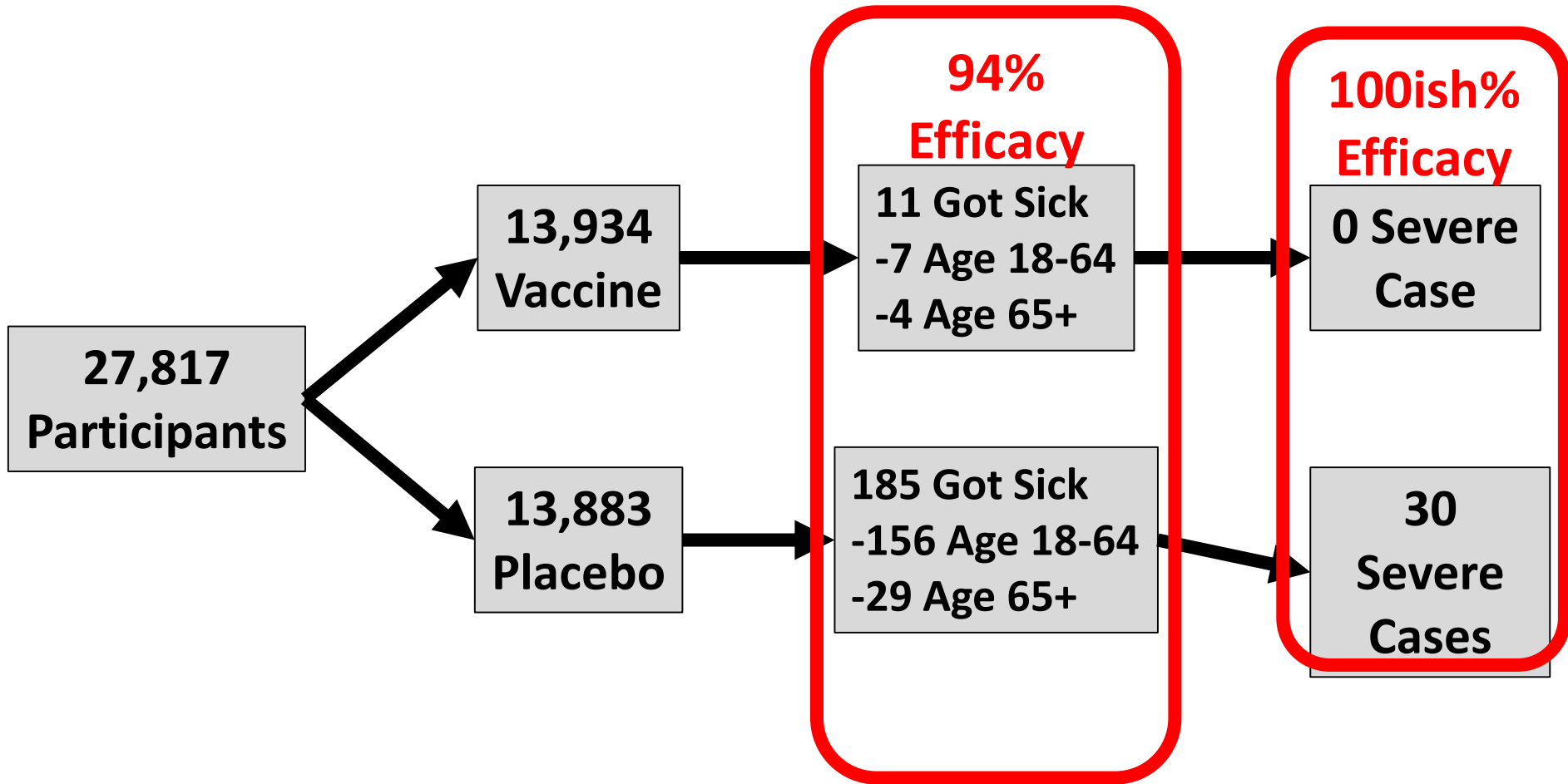
Ages 18-55 25,527

Ages 56+ 17,893

Updated as of Monday, December 14. Updates are made on a weekly basis.



# Moderna



# Who was in the Moderna trial?



Interim data snapshot - October 21, 2020 - subject to change

**moderna**

# Side Effects

## Common/Expected

- Fatigue
- Fever
- Headache
- Myalgias
- Arthralgias
- Lymphadenopathy
- Diarrhea
- Allergic Reaction

## Reports (?Background Rate)

- Numbness/Tingling
- Bell's Palsy
- No indication of fertility issues
- **EXPECT MORE REPORTS AS WE VACCINATE SICKER POPULATIONS**

# An Example: 2019

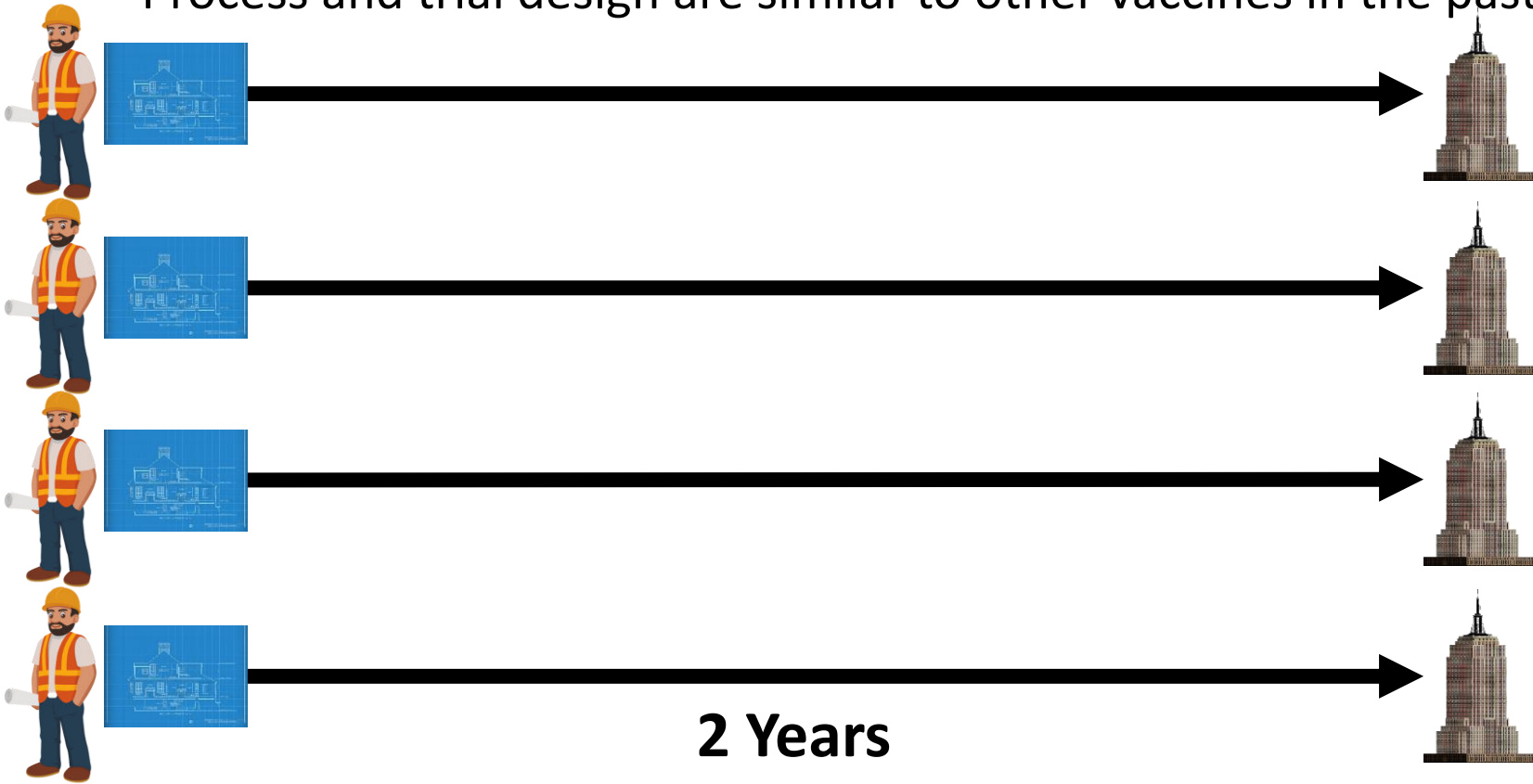
- 2019 – 28,373 adults 65+ died
- Translates to ~78 deaths/day in 65+ to be expected
- If we vaccinate a large number of older adults all at once and 78 people die the next day what does that mean?
- **MUST BE CAREFUL ABOUT DRAWING CAUSAL LINKS FROM EXPECTED ASSOCIATIONS OR EVENTS**

# Special Populations

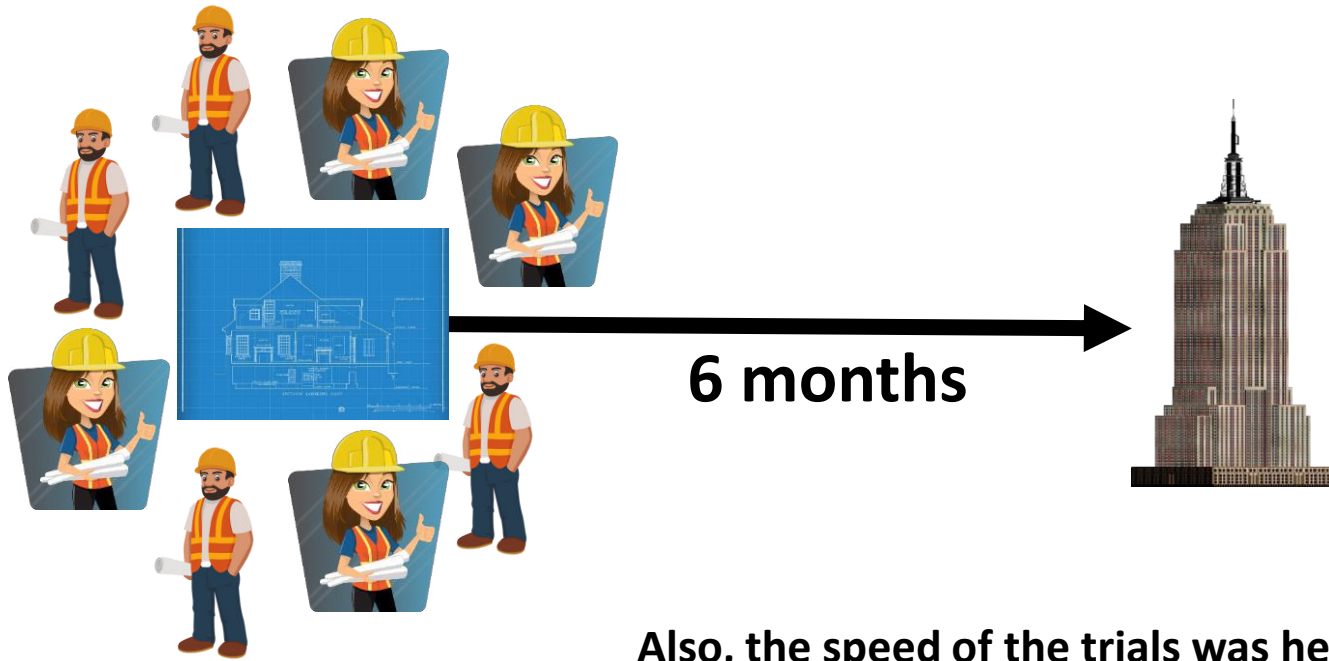
- Pregnancy/Breast-feeding
- Immunocompromised
- Pre-existing conditions
- Previous COVID-19 infection
- Previous COVID-19 monoclonal antibody treatment/plasma
- Allergy history
- Other vaccines

# Is it Too Fast?

- Process and trial design are similar to other vaccines in the past.



# Is it Too Fast?



**Also, the speed of the trials was heavily dictated by how fast COVID was spreading in the community**

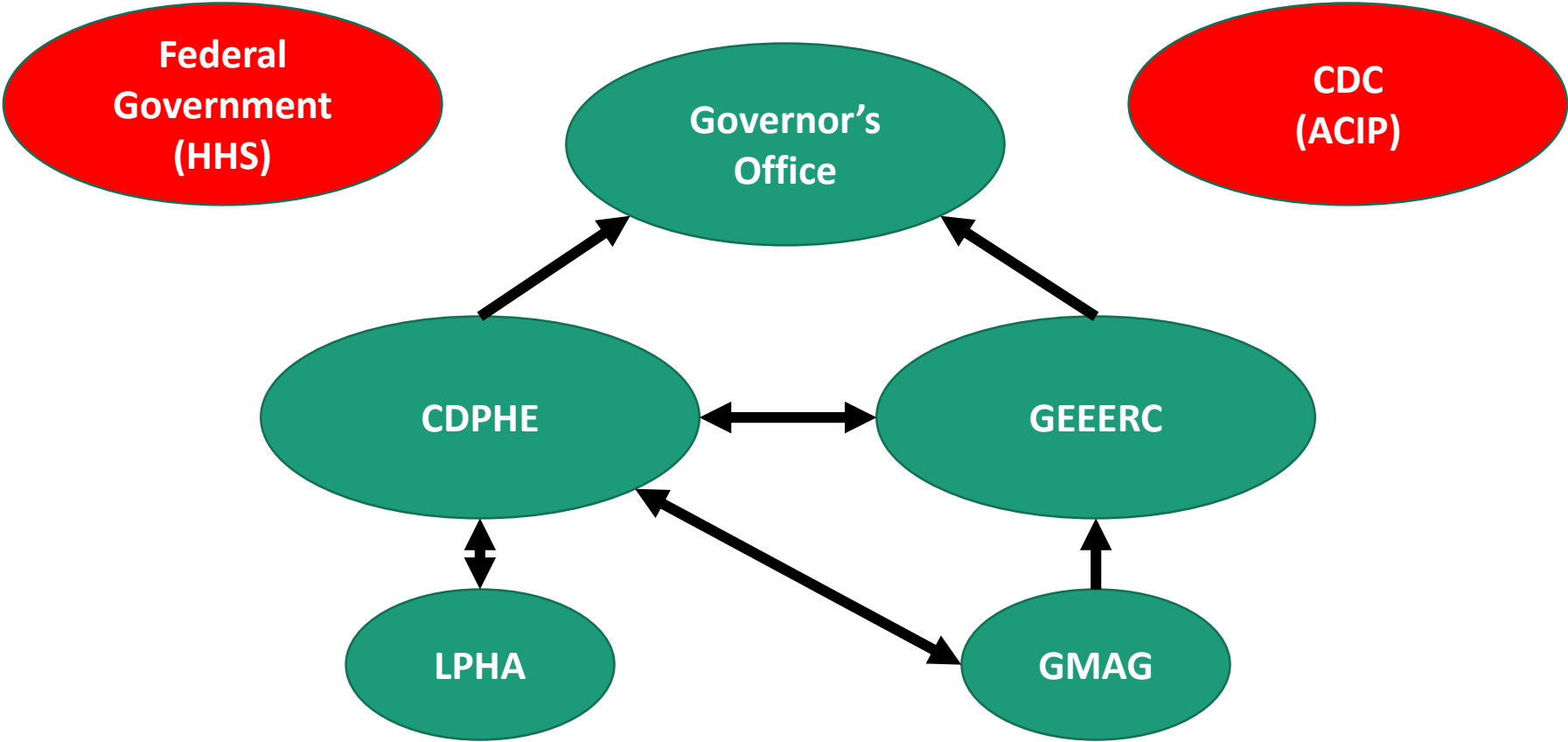
# Take Home Messages About COVID-19

## Vaccines

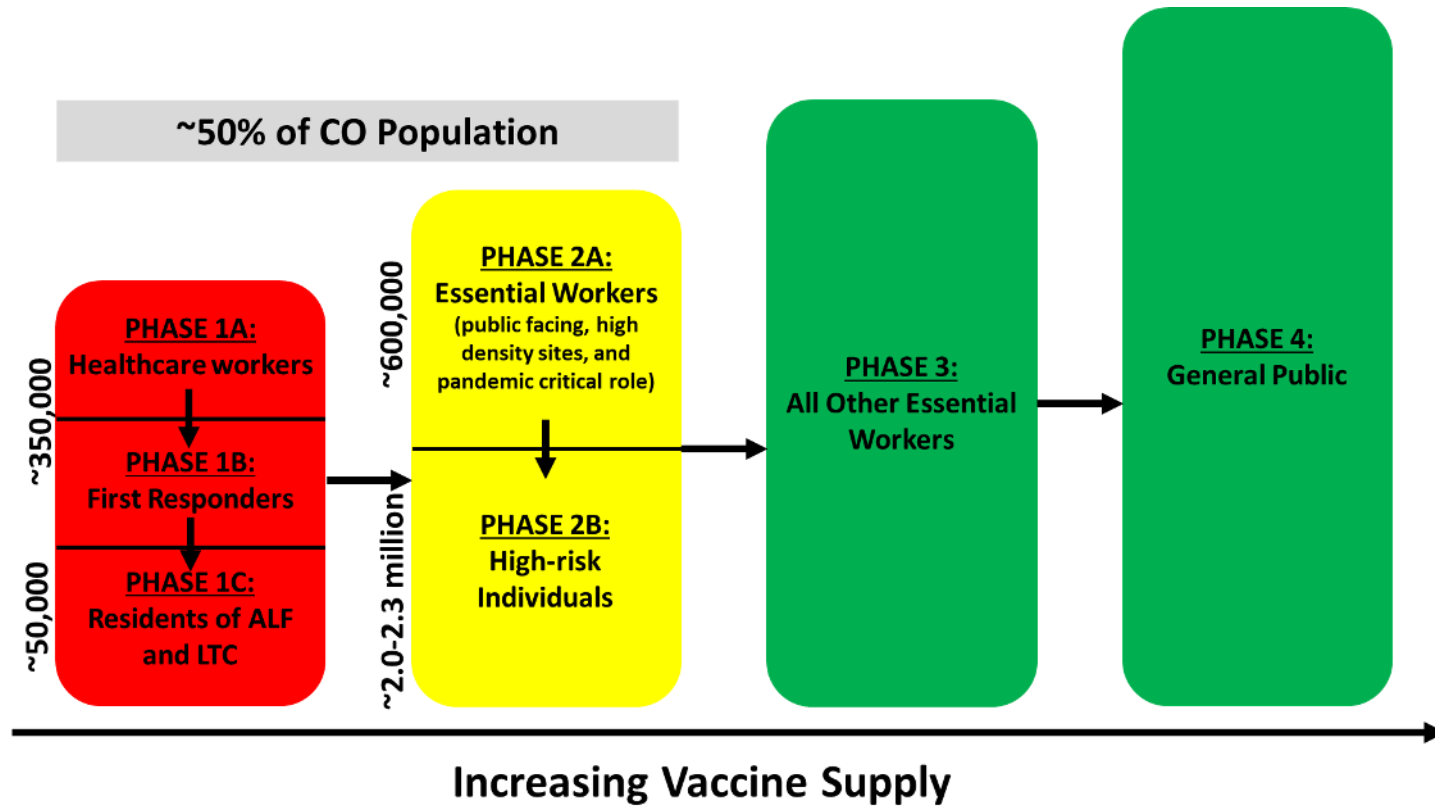
1. You CANNOT get COVID from the vaccines.
2. Utilizes the SAME process of building immunity and preventing disease as other vaccines. It is just a different delivery method.
3. RNA technology has been around for a long time. It is just the delivery method that is novel.
4. mRNA DOES NOT affect DNA.
5. mRNA is destroyed quickly
6. SAFE and high EFFICACY
7. Same approvals process and independent review



# Colorado Decision-Making



# Initial GMAG Recommendations



# Recommendations on 12/10/2020

## COVID-19 VACCINE DISTRIBUTION

### PHASE 1

Winter



1A

#### Highest-risk health care workers and individuals:

- People who have direct contact with COVID-19 patients for 15 minutes or more over a 24-hour period.
- Long-term care facility staff and residents.

1B

#### Moderate-risk health care workers and responders:

- Health care workers with less direct contact with COVID-19 patients.
- Workers in home health/hospice and dental settings.
- EMS, firefighters, police, correctional workers, dispatchers, funeral services, other first responders, and COVID-19 response personnel.

### PHASE 2

Spring



2

#### Higher-risk individuals and essential workers:

- People age 65 or older.
- People of any age with obesity, diabetes, chronic lung disease, significant heart disease, chronic kidney disease, cancer, or are immunocompromised.
- People who interact directly with the public at work, such as grocery store workers and school staff.
- People who work in high density settings like farms and meat-packing plants.
- Workers serving people that live in high-density settings.
- Other health care workers not covered in Phase 1.
- Adults who received a placebo during a COVID-19 vaccine clinical trial.

### PHASE 3

Summer



3

#### The general public:

- Anyone age 18-64 without high risk conditions.

\*Timeline subject to change based on supply chain. Prioritization subject to change based on data, science, availability.



# Current Vaccine Plan (as of 12/30/2020)

## COVID-19 VACCINE DISTRIBUTION

### PHASE 1 Winter



1A

#### Highest-risk health care workers and individuals:

- People who have direct contact with COVID-19 patients for 15 minutes or more over a 24-hour period.
- Long-term care facility staff and residents.

1B

#### Coloradans age 70+, moderate-risk health care workers, first responders, frontline essential workers, and continuity of state government:

- Health care workers with less direct contact with COVID-19 patients (e.g. home health, hospice, pharmacy, dental, etc.) and EMS.
- Firefighters, police, COVID-19 response personnel, correctional workers, and funeral services.
- People age 70 and older.
- Frontline essential workers in education, food and agriculture, manufacturing, U.S. postal service, public transit and specialized transportation staff, grocery, and public health, and direct care providers for Coloradans experiencing homelessness.
- Essential officials from executive, legislative and judicial branches of state government.
- Essential frontline journalists.

### PHASE 2 Spring



2

#### Higher-risk individuals and other essential workers:

- People age 65-69.
- People age 16-64 with obesity, diabetes, chronic lung disease, significant heart disease, chronic kidney disease, cancer, or are immunocompromised.
- Other essential workers and continuity of local government.
- Adults who received a placebo during a COVID-19 vaccine clinical trial.

### PHASE 3 Summer



3

#### The general public:

- Anyone age 16-64 without high risk conditions.

\*Timeline subject to change based on supply chain. Prioritization subject to change based on data, science, availability.

Revised date: 12/30/2020



# Equity Considerations

- Broad definition of HCW
  - Long-term care staff
  - Home health aides
  - Front facing essential workers
  - Patients with comorbidities
    - Obesity, DM, heart disease, etc.
  - Congregate housing
    - Prison/jail
    - ICE detention
    - Homeless shelters
- 
- The diagram consists of three green callout boxes with black outlines, connected to the main list by black lines. The top box is connected to 'Broad definition of HCW', 'Long-term care staff', 'Home health aides', and 'Front facing essential workers'. The middle box is connected to 'Patients with comorbidities'. The bottom box is connected to 'Prison/jail', 'ICE detention', and 'Homeless shelters'.
- Higher rates from communities of color
  - More likely to live with high risk adults (multigenerational housing)
  - More likely to live in high density communities
- Higher rates in communities of color
- Higher rates from communities of color
  - Can be vector back to communities
  - Prisoners can be vector to correctional staff and court workers
  - Not vaccinating restricts visitors
  - Only 15,000 prisoners in state facilities

# Current Distribution

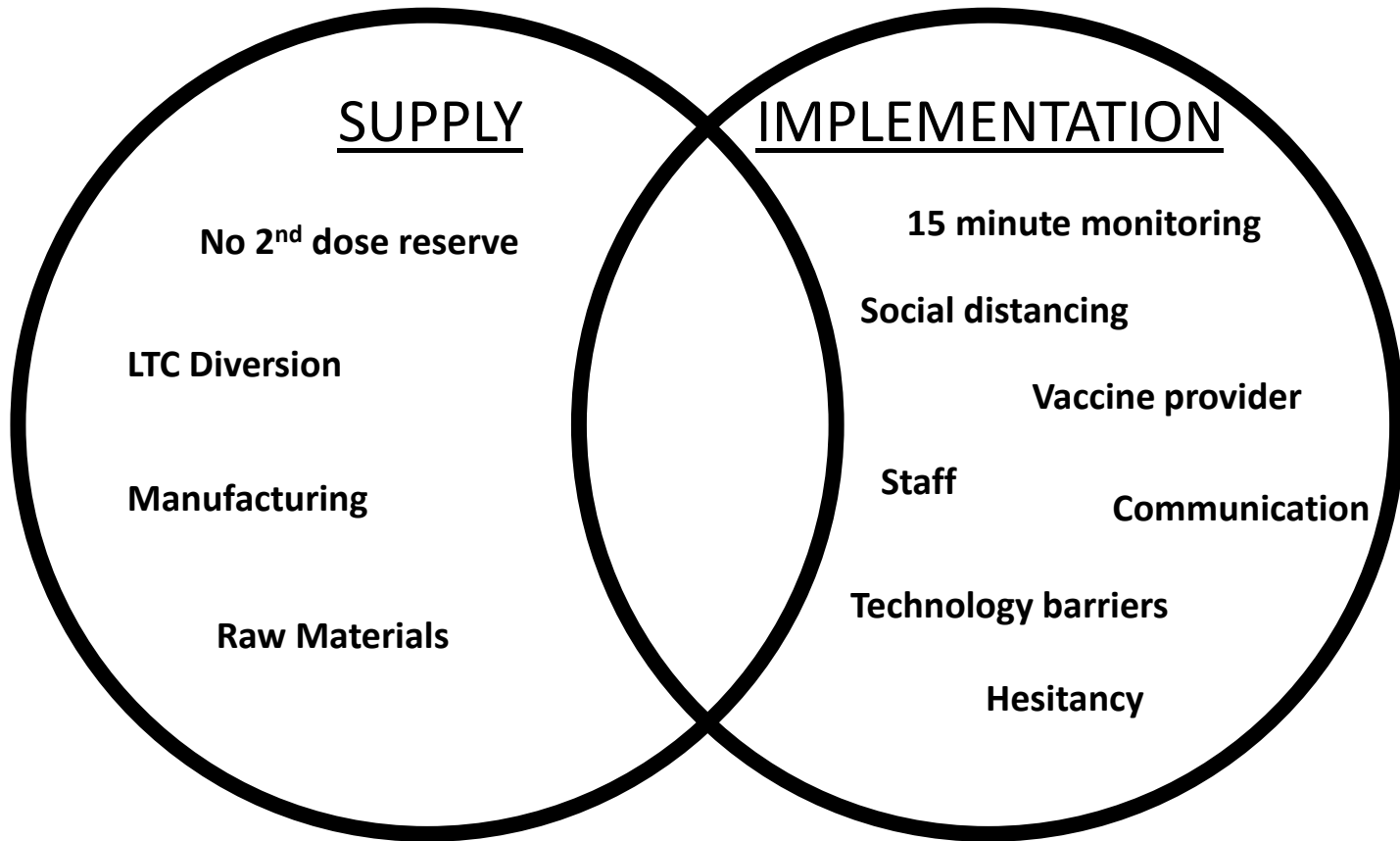
## Sites

- 50% hospitals/healthcare systems
- 20% FQHC
- 20% Retail pharmacies
- 10% LPHAs

## Limitations

- Non-hospital HCW
- 70+ without routine healthcare
- Technology (email invitations)
- Resources for schedulers
- Provider sites

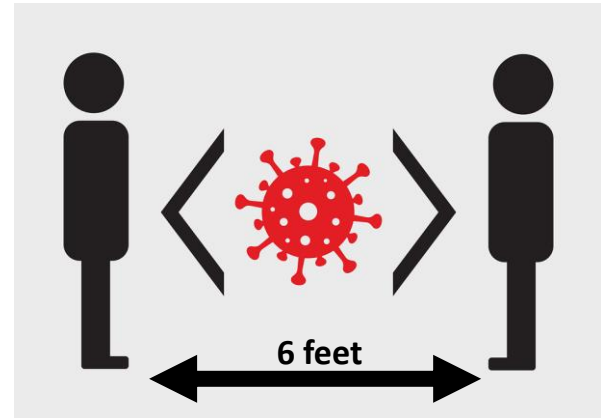
# Gaps and Bottlenecks



# Vaccines are not a free ticket



**You still need to wear a mask**



**You still need to social distance**



# Questions?

[anuj.mehta@cuanschultz.edu](mailto:anuj.mehta@cuanschultz.edu)

# Q&A Session

Questions?

Please put in the chat box!

# Immunize Colorado

## 2021 Legislative & Advocacy Training

Presented by

Ruth Aponte, Dave  
DeNovellis and Emily Biniki

*Aponte & Busam Public  
Affairs*



# Goals for the Training

1. Provide a recap of SB20-163 and an update on its implementation
2. Provide a recap of the state election results
3. Provide updates on the format of the 2021 legislative session as a result of COVID-19
4. Provide a legislative preview for the 2021 session on potential vaccine legislation, and relevant public health bills



## A&B Lobby team

Ruth Aponte & Dave DeNovellis:  
Lead Lobbyists



Aponte & Busam is a full-service contract government affairs firm with expertise navigating the state legislative and regulatory policy arenas on behalf of a wide variety of clients in the health care, education, nonprofit and technology sectors.

**Representing Immunize Colorado for almost two decades!**

# 2021 General Assembly Leadership

## Senate 20-15



Senate  
President  
Leroy  
Garcia  
(D-Pueblo)



Senate  
Minority  
Leader  
Chris  
Holbert(R-  
Parker)

## House 41-24



House  
Speaker  
Alec  
Garnett (D-  
Denver)



House  
Minority  
Leader  
Hugh  
McKean (R-  
Loveland)

*House of Representatives: 14 new members*  
*State Senate: 7 new members*

# 2021 Health Committee Chairs

## Senate



Senator  
Rhonda  
Fields—Chair,  
Health and  
Human  
Services  
Committee

## House



Representative  
Dafna  
Michaelson  
Jenet—Chair  
Public &  
Behavioral &  
Human  
Services  
Committee



Representative  
Susan  
Lontine—Chair,  
Health and  
Insurance  
Committee



## **SB 20-163 SCHOOL ENTRY IMMUNIZATION REQUIREMENTS**

- Combined personal and religious exemptions into a single non-medical exemption category
  - Allows exemption from school-entry immunization requirements only with the signature of a qualified medical provider or completion of online CDPHE education module.
  - Establishes vaccinated child standard of 95%
  - Require medical providers to report both immunization and exemption information in CIIS
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- Schools not required to make any changes during the 2020-2021 school year
  - CDPHE passed rules on SB20-163 in December 2020
  - ACIP provisions will be addresses in the summer of 2021



## Lawmaking during Covid: expectations for 2021 session

1. The General Assembly is operating under the emergency public health order, Joint Rule 44. This allows them to complete 120 session with intermittent recesses versus over consecutive days.
2. The General Assembly is scheduled to come back into session on February 16, 2021, in person.
  1. Legislators, Legislative Staff, and in-house journalists will all be vaccinated between now and February 16<sup>th</sup>
3. Remote participation for members will be available in both floor proceedings and during committee hearings.
4. Remote participation will also be available for public testimony and is available for sign up on the General Assembly website.



## Legislative priorities

- Funding for COVID vaccination implementation, outreach
- Biden Administration- changes in vaccine policy & funding
- DEFENSE –anti-vaccine bills: “Anti-discrimination bill,” and employee vaccination mandate ban are likely.
- Public Health Worker’s Protection bill (CALPHO initiated, sponsors Rep. Caraveo & Sens. Bridges and Lundeen)
- Bill to establish a Board of Health separate from the Board of County Commissioners (Rep. Kipp & Sen. Ginal)
- Equity is likely to be a common theme of this session, specifically around housing and public health
- Financial Relief for small businesses impacted by COVID



# Q&A



IMMUNIZE COLORADO

# Thank You!

Please take the time to fill out a short survey

<https://www.surveymonkey.com/r/PPL6VGF>

[www.ImmunizeColorado.org](http://www.ImmunizeColorado.org)

# Pocket Slides

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