

# CDC's COVID-19 Activities in the Dialysis Setting

**Dialysis Safety Team, Prevention and Response Branch  
Division of Healthcare Quality Promotion  
Centers for Disease Control and Prevention**

Kidney Community Emergency Response (KCER) Summit  
March 10, 2021



[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

CDC = Centers for Disease Control and Prevention

# CDC Guidance on Infection Control for COVID-19

The screenshot shows the CDC website interface for COVID-19 guidance. At the top, the CDC logo and tagline 'Centers for Disease Control and Prevention' are visible, along with a search bar for 'COVID-19'. The main navigation bar includes 'Your Health', 'Vaccines', 'Cases & Data', 'Work & School', 'Healthcare Workers', 'Health Depts', and 'More'. The 'Healthcare Workers' tab is active, and the page title is 'Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19)'. The left sidebar contains a list of topics, with 'Infection Control' expanded and 'Infection Control Guidance' circled in blue. The main content area lists various guidance topics such as 'Infection Control Guidance', 'Using Personal Protective Equipment (PPE)', 'Hand Hygiene', and 'Discontinuing Transmission-Based Precautions'. A 'Using Eye Protection' section is highlighted, containing text about eye protection recommendations and a 'See the Guidance' button. Other sections include 'Optimizing PPE Supplies' with sub-topics like 'N95 and Other Respirators', 'Facemasks', 'Eye Protection', and 'Gowns'.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

# CDC Guidance on Infection Control for COVID-19 (cont.)

The screenshot displays the CDC website's COVID-19 resources page. At the top, the CDC logo and tagline "Centers for Disease Control and Prevention" are visible, along with a search bar for "COVID-19". A navigation bar includes "Your Health", "Vaccines", "Cases & Data", "Work & School", "Healthcare Workers", "Health Depts", and "More". The "ACT NOW!" banner features icons for "WEAR A MASK", "STAY 6 FEET APART", and "AVOID CROWDS". The "Healthcare Workers" section is active, with a sidebar menu listing various topics. The "Dialysis Facilities" page is selected, showing an updated date of January 17, 2021. The main content area includes a photograph of a dialysis room and two columns of guidance links: "Infection Control Guidance" and "SARS-CoV2 Testing Guidance".

**Healthcare Workers**

- Testing
- Vaccination
- Clinical Care
- Infection Control**
- Infection Control Guidance
- Using PPE
- Hand Hygiene
- Alternate Care Sites
- Assisted Living Facilities
- Blood & Plasma Facilities
- Dialysis Facilities
- Patient Screening

## Dialysis Facilities

Updated Jan. 17, 2021 | Print

**Infection Control Guidance**

- Infection Control for Dialysis Facilities
- Patient Screening
- Acute Care Dialysis
- Home Dialysis
- Cleaning and Disinfecting of Transport Vehicles

**SARS-CoV2 Testing Guidance**

- Testing Dialysis Patients
- Testing Healthcare Personnel
- Antigen Testing Guidelines

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dialysis/infection-prevention-control.html>

# COVID-19 Dialysis Guidance

**COVID-19** **ACT NOW!** WEAR A MASK STAY 6 FEET APART AVOID CROWDS

Your Health Vaccines Cases & Data Work & School **Healthcare Workers** Health Depts More

Healthcare Workers

Testing +

Vaccination

Clinical Care +

**Infection Control** -

Infection Control Guidance

Using PPE

Hand Hygiene

Alternate Care Sites

Assisted Living Facilities

Blood & Plasma Facilities

Dental Settings

**Dialysis Facilities**

Infection Prevention and Control

Patient Screening

Acute Care Dialysis

Home Dialysis

Testing Patients

## Dialysis Facilities

Updated Jan. 17, 2021 Print

**Infection Control Guidance**

- Infection Control for Dialysis Facilities >
- Patient Screening >
- Acute Care Dialysis >
- Home Dialysis >
- Cleaning and Disinfecting of Transport Vehicles >

**SARS-CoV2 Testing Guidance**

- Testing Dialysis Patients >
- Testing Healthcare Personnel >
- Antigen Testing Guidelines >

Training Videos

Frontline Staff Toolkit  
Tips for Outpatient Hemodialysis Facilities During COVID-19

<https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis.html>

# COVID-19 Dialysis Guidance (cont.)

**COVID-19** **ACT NOW!** WEAR A MASK STAY 6 FEET APART AVOID CROWDS

Home Your Health Vaccines Cases & Data Work & School **Healthcare Workers** Health Depts More

Home Healthcare Workers

- Testing +
- Vaccination
- Clinical Care +
- Infection Control** -
  - Infection Control Guidance
  - Using PPE
  - Hand Hygiene
  - Alternate Care Sites
  - Assisted Living Facilities
  - Blood & Plasma Facilities
  - Dental Settings
  - Dialysis Facilities** -
    - Infection Prevention and Control
    - Patient Screening
    - Acute Care Dialysis
    - Home Dialysis
    - Testing Patients**

## Dialysis Facilities

Updated Jan. 17, 2021 Print

**Infection Control Guidance**

- Infection Control for Dialysis Facilities >
- Patient Screening >
- Acute Care Dialysis >
- Home Dialysis >
- Cleaning and Disinfecting of Transport Vehicles >

**SARS-CoV2 Testing Guidance**

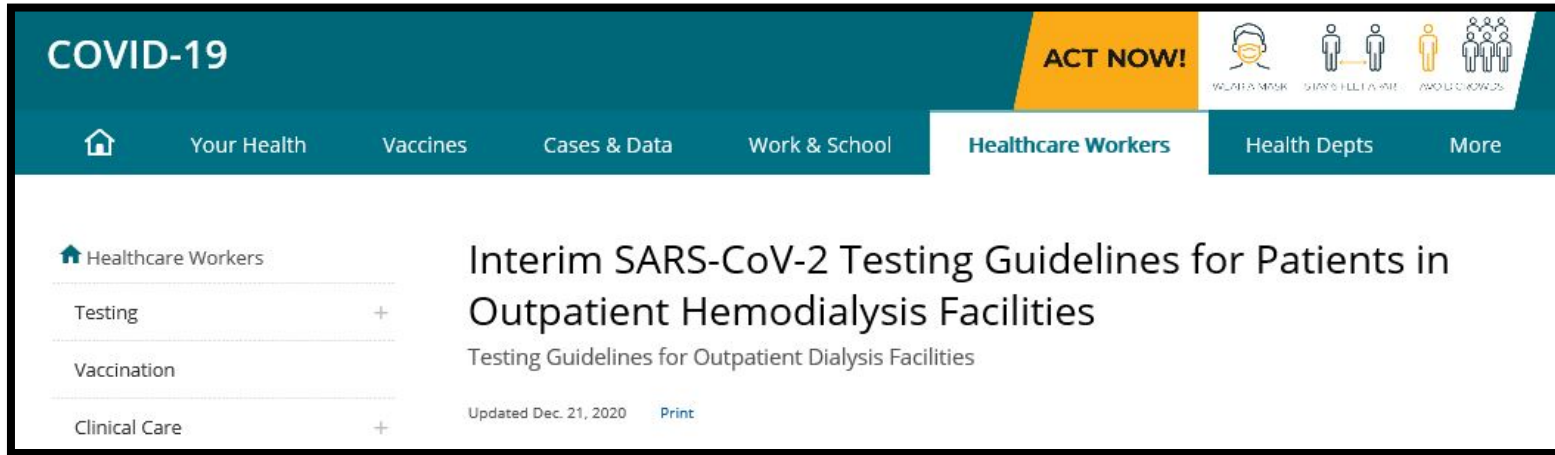
- Testing Dialysis Patients** >
- Testing Healthcare Personnel >
- Antigen Testing Guidelines >

**Training Videos**

**Frontline Staff Toolkit**  
Tips for Outpatient Hemodialysis Facilities During COVID-19

<https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis.html>

# Testing Guidelines



The screenshot shows the CDC COVID-19 website interface. At the top, there is a teal header with "COVID-19" on the left and "ACT NOW!" in an orange box on the right. Below the header is a navigation bar with links for "Your Health", "Vaccines", "Cases & Data", "Work & School", "Healthcare Workers" (which is highlighted), "Health Depts", and "More". To the right of the navigation bar are three icons: "WEAR A MASK", "STAY FULLY AWAY", and "AVOID GATHERINGS". The main content area features a sidebar on the left with a "Home" icon and links for "Healthcare Workers", "Testing", "Vaccination", and "Clinical Care". The main content area displays the title "Interim SARS-CoV-2 Testing Guidelines for Patients in Outpatient Hemodialysis Facilities" and a subtitle "Testing Guidelines for Outpatient Dialysis Facilities". Below the subtitle, it says "Updated Dec. 21, 2020" and "Print".

- Testing patients with signs and symptoms of COVID-19.
- Testing asymptomatic patients with known or suspected exposure to an individual infected with SARS-CoV-2, including close and expanded contacts (e.g., there is an outbreak in the facility) to control transmission.
- Testing to determine resolution of infection.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dialysis/testing-patients.html>

## Testing Asymptomatic Patients with Known or Suspected Exposure to an Individual Infected with SARS-CoV-2, Including Close and Expanded Contacts (e.g., There Is an Outbreak in the Facility) to Control Transmission

- Consider testing all patients and healthcare personnel (HCP) in the facility or at least all patients and HCP of the same shift.
- Identifying transmission within a dialysis facility can be challenging.
  - SARS-CoV-2 infections among HCP or patients with epidemiological links and no other exposures suggest transmission may have occurred within the facility.
  - Transmission within the facility should be considered an outbreak.
- Testing all patients as soon as transmission is suspected will allow:
  - Quick identification of infected patients.
  - Clinical management of patients.
  - Rapid implementation of infection prevention control (IPC) interventions.

## Testing Asymptomatic Patients with Known or Suspected Exposure to an Individual Infected with SARS-CoV-2, including Close and Expanded Contacts (e.g., There Is an Outbreak in the Facility) to Control Transmission (cont.)

- Facility leadership should be prepared to continue to provide dialysis and isolate patients as needed.
- HCP should also be tested.
- The following website has considerations on performing broad-based testing for SARS-CoV-2 infections in congregate settings:  
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/broad-based-testing.html>
- Notify local public health authorities of suspected or confirmed outbreaks in the dialysis facility.



## Coronavirus Disease 2019 (COVID-19) Outpatient Dialysis Facility Preparedness Assessment Tool



All U.S. outpatient dialysis facilities should be prepared for the possible arrival of patients with Coronavirus Disease 2019 (COVID-19). All outpatient dialysis facilities should ensure their staff are trained, equipped, and capable of practices needed to:

- Prevent the spread of respiratory infections, including COVID-19, within the dialysis facility.
- Promptly identify and isolate patients with possible COVID-19 and inform the correct dialysis facility staff and public health authorities.
- Provide dialysis for a limited number of patients with confirmed or suspected COVID-19 as part of routine operations.
- Potentially provide dialysis for a larger number of COVID-19 patients in the context of an escalating outbreak.
- Monitor and manage any healthcare personnel that might be exposed to COVID-19.
- Communicate effectively within the dialysis facility and plan for appropriate external communication related to COVID-19.

The following checklist is not a list of mandatory requirements; rather, it highlights important areas CDC recommends outpatient dialysis facilities review in preparation for potential arrivals of COVID-19 patients.

### Elements to be assessed

1. Infection prevention and control policies and training for healthcare personnel (HCP):			
	Completed	In Progress	Not Started
Facility leadership including, but not limited to, the Chief Medical Officer, quality officers, medical directors, facility administrator, nurse manager, infection prevention personnel, chief operating officer, nephrologists, nurse practitioners has reviewed the Centers for Disease Control and Prevention's COVID-19 guidance for dialysis facilities. <a href="http://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis.html">www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis.html</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Facility provides education and job-specific training to HCP regarding COVID-19 including:</b>			
Signs and symptoms of infection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Importance of hand hygiene, respiratory hygiene, cough etiquette and wearing a facemask or cloth face covering for source control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of personal protective equipment (PPE) including competency evaluation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Triage procedures and patient placement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HCP sick leave policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-monitoring for fever or respiratory symptoms including not reporting to work when ill.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How and to whom suspected and confirmed COVID-19 cases should be reported.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[www.cdc.gov/coronavirus](http://www.cdc.gov/coronavirus)

## 2. Process for rapidly identifying and isolating patients with confirmed or suspected COVID-19:

	Completed	In Progress	Not Started
Facility has notified patients to call ahead and report fever or symptoms of respiratory infection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 4. Transmission-Based Precautions:

	Completed	In Progress	Not Started
Facility has a procedure for assessing supply (inventory) of personal protective equipment (PPE) and other infection prevention and control supplies (e.g., hand hygiene supplies).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 8. Monitoring and managing HCP:

	Completed	In Progress	Not Started
Facility has sick leave policies that are non-punitive, flexible and allow ill healthcare personnel (HCP) to stay home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID-19-outpatient-dialysis.pdf>

# COVID-19

ACT NOW!



- Home
- Your Health
- Vaccines
- Cases & Data
- Work & School
- Healthcare Workers
- Health Depts
- More

## Healthcare Workers

- Testing +
- Vaccination
- Clinical Care +
- Infection Control -
  - Infection Control Guidance
  - Using PPE
  - Hand Hygiene
  - Alternate Care Sites
  - Assisted Living Facilities
  - Blood & Plasma Facilities
  - Dental Settings

## Dialysis Facilities

Updated Jan. 17, 2021 [Print](#)



### Infection Control Guidance

[Infection Control for Dialysis Facilities](#) >

[Patient Screening](#) >

[Acute Care Dialysis](#) >

### SARS-CoV2 Testing Guidance

[Testing Dialysis Patients](#) >

[Testing Healthcare Personnel](#) >

[Antigen Testing Guidelines](#) >

## Training Videos



### Frontline Staff Toolkit

Tips for Outpatient Hemodialysis Facilities During COVID-19

[Infection Prevention Basics \(Video\)](#)

[Personal Protective Equipment \(PPE\) Tips \(Video\)](#)

[Screening and Patient Placement \(Video\)](#)

# COVID-19 Dialysis Resources

## How our facility is keeping patients safe from COVID-19

Our outpatient dialysis facility is prepared for the possible arrival of patients with coronavirus disease 2019 (COVID-19). We are committed to keeping patients safe and are taking the following steps to reduce the risk of COVID-19 in our patients and staff:

- We are providing extra training for staff and education for patients about the importance of hand hygiene, facemasks, respiratory hygiene, and cough etiquette. Tissues, alcohol-based hand sanitizer, and trash cans will be provided in the waiting area and treatment area. Soap and water will continue to be available at all handwashing sinks and in the restrooms.
- We are monitoring all staff for symptoms of COVID-19. We are instructing staff who have symptoms of COVID-19 (e.g., fever, cough, shortness of breath, sore throat, muscle aches, tiredness) to stay home and not come to work.
- We are monitoring patients on dialysis and visitors for symptoms of COVID-19. Call ahead if you have fever, new cough, sore throat, tiredness, muscle aches or shortness of breath. This allows us to plan for your arrival and take infection prevention steps to keep you safe.
- We are prepared to quickly identify and separate patients with symptoms of COVID-19. All patients will be screened upon entry to the facility and instructed to continue wearing their cloth face covering (or offered a facemask, if available). Patients with symptoms of COVID-19 will be treated in a separate area or at a corner or end-of-row station, away from the main flow of traffic. This may affect your chair location, treatment time or day, or you may need to be transferred to another facility based on symptoms or diagnosis of COVID-19.

Call us at:

- We are training staff about proper use of personal protective equipment for COVID-19. You may see a change in the personal protective equipment (i.e. gowns, masks, gloves) that staff are asked to wear.
- We are continuing our routine cleaning and disinfection procedures as these procedures are recommended for protecting patients from COVID-19 in dialysis settings. Any surface, supplies, or equipment located within the patient station will continue to be disinfected or discarded. We will ensure any surface, supplies or equipment located within 6 feet of an ill patient is disinfected or discarded.
- We are limiting staff and visitors coming into the dialysis facility. We are limiting non-essential staff entry into the dialysis facility by exploring ways to provide care to patients remotely (e.g., using telehealth options). We are restricting visitor access to only those who are essential for the patient's care. Visitors will be screened for fever and symptoms of COVID-19 prior to entry. Visitors will be asked to wear their cloth face covering and limit their movement in the facility.
- We are encouraging patients and staff to share all questions and concerns related to COVID-19. Don't be afraid to use your voice. It is okay to ask staff questions about treatment changes and ways to protect yourself and your family.
- We are staying up-to-date with the latest information from CDC's COVID-19 web page: [www.cdc.gov/coronavirus](http://www.cdc.gov/coronavirus). Thank you for everything you are doing to keep yourself and your loved ones safe. We will keep you informed about any new precautions we think are necessary. Please feel free to contact us with additional questions.

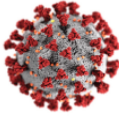


[cdc.gov/coronavirus](http://cdc.gov/coronavirus)

## Coronavirus Disease 2019 (COVID-19) Keeping Patients on Dialysis Safe


### What is COVID-19?

COVID-19 is a respiratory illness that can spread from person to person, similar to influenza.



### Take Everyday Precautions



- Wash your hands often with soap and water for at least 20 seconds or use hand sanitizer with at least 60% alcohol.
- Avoid touching your face.
- Everyone should wear a cloth face cover in public setting where other social distancing measures are difficult to maintain.
- Avoid close contact with people who are sick.
- Avoid crowds and keep at least six feet of space between yourself and others if COVID-19 is spreading in your community.
- If you are in a private setting and do not have on your cloth face covering, remember to always cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.
  - » Throw used tissues in the trash and immediately clean your hands.
- Routinely clean and disinfect surfaces you often touch, such as cell phones, computers, countertops, handles, and light switches.



### Preparing the Facility

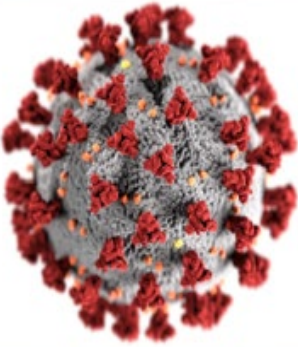
You may see changes as the dialysis facility prepares to keep you safe during treatment. This may include:

- Signs with special instructions for patients with symptoms of COVID-19.
- Additional education about hand hygiene and cough etiquette.
- Waiting areas will be divided for patients with symptoms and patients without symptoms.
- A change in patient chair locations, treatment times, or days.
- A change in the gowns, facemasks, and eye protection that the staff wear.
- Patients, visitors and staff will all be wearing a cloth face covering or facemask the entire time they are in the facility.





## Preparing Outpatient Hemodialysis Facilities for COVID-19

April 13, 2020



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)



<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dialysis/home-dialysis.html>

[https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/316158-A\\_FS\\_ProtectSelfAndFam.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/316158-A_FS_ProtectSelfAndFam.pdf)

[https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/316157-A\\_FS\\_KeepingPatientsSafe.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/316157-A_FS_KeepingPatientsSafe.pdf)


# General IPC Guidance

Infection Control	—
<b>Infection Control Guidance</b>	
Using PPE	
Hand Hygiene	
Postmortem Guidance	
Post-Vaccine Considerations for Healthcare Personnel	
First Responders	
Exposure in Healthcare Settings	+
Optimizing PPE Supplies	+
Facility Planning & Operations	+
Non-Hospital Settings	+
FAQs	

## Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

Updated Feb. 10, 2021 [Print](#)

### Summary of Recent Changes

Updates as of February 10, 2021 

#### As of February 10, 2021

- Updated the Implement Universal Use of Personal Protective Equipment section to expand options for source control and patient care activities in areas of moderate to substantial transmission and describe strategies for improving fit of facemasks. Definitions of source control are included at the end of this document.
- Included a reference to [Optimizing Personal Protective Equipment \(PPE\) Supplies](#) that include a hierarchy of strategies to implement when PPE are in short supply or unavailable.

[View Previous Updates](#)

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# Dialysis COVID-9 Module

National Healthcare Safety Network (NHSN)

CDC > NHSN > Materials for Enrolled Facilities > Outpatient Dialysis Facilities

Home NHSN

NHSN Login

About NHSN +

Enroll Here +

Change NHSN Facility Administrator

**Materials for Enrolled Facilities** -

- COVID-19 Information +
- Ambulatory Surgery Centers +
- Acute Care Hospitals/Facilities +

## Dialysis COVID-19 Module

[CDC's NHSN](#) provides healthcare facilities, with a customized system to track infections and prevention process measures in a systematic way. Tracking this information allows facilities to identify problems, improve care, and determine progress toward national healthcare-associated infection goals.

The NHSN Outpatient Dialysis Component is supporting the nation's COVID-19 emergency response with a COVID-19 module designed to collect data pertaining to in-center dialysis, home dialysis, and peritoneal dialysis patients.

The COVID-19 Module has a single data entry page with four sections:

- Patient Impact
- Staff and Personnel Impact
- Supply and Personal Protective Equipment
- Testing

### Dialysis Facility COVID-19 Module

### Reporting Sections

- Patient Impact
- Staff and Personnel Impact
- Supply and Personal Protective Equipment
- Testing

<https://www.cdc.gov/nhsn/dialysis/covid19/index.html>

# NHSN: Reporting HCP COVID-19 Vaccination

- Facilities participating in NHSN can report weekly COVID-19 vaccination data through the Healthcare Personnel Safety (HPS) Component
- Weekly reporting is currently optional
- Facilities can use the data to obtain a better picture of COVID-19 vaccination at their facility
  - Monitor vaccination rates over time
  - Identify HCP groups with lower vaccination rates
  - Improve vaccination tracking
  - Data from the HCP vaccination module can inform decision-making

<https://www.cdc.gov/nhsn/hps/weekly-covid-vac/index.html>

NHSN = National Healthcare Safety Network

# A Point Prevalence Survey Was Implemented at 4 Dialysis Facilities in the Metro Atlanta Area

~640 dialysis  
patients in-center

**Decreasing, but high community spread.  
No suspected outbreak or transmission in the facilities.**

Results are preliminary.

**634**

patients enrolled at all 4 facilities.



**548**

available for consent

**86**

unavailable for consent

Results are preliminary.



**634**

patients enrolled at all 4 facilities.



**548**

available for consent



**86**

unavailable for consent

Results are preliminary.

# Of the 86 Unavailable Patients, **51 (59%)** Patients Did Not Have a Reason for Missing Dialysis

Reasons for Unavailability	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	All Facilities
Sick or hospitalized	2	4	2	3	11
Hospice	0	1	0	0	1
Cognitive impairment	4	4	1	4	13
Dialysis schedule change	2	0	0	1	3
Too late to sample (night shift)	0	0	0	4	4
Deceased	0	0	2	1	3
<b>No show</b>	25	9	8	9	<b>51</b>
<b>Total</b>	<b>33</b>	<b>18</b>	<b>13</b>	<b>22</b>	<b>86</b>

Results are preliminary.

**634**

patients enrolled at all 4 facilities.



**548**

available for consent

**86**

unavailable for consent



**361 (66%)**

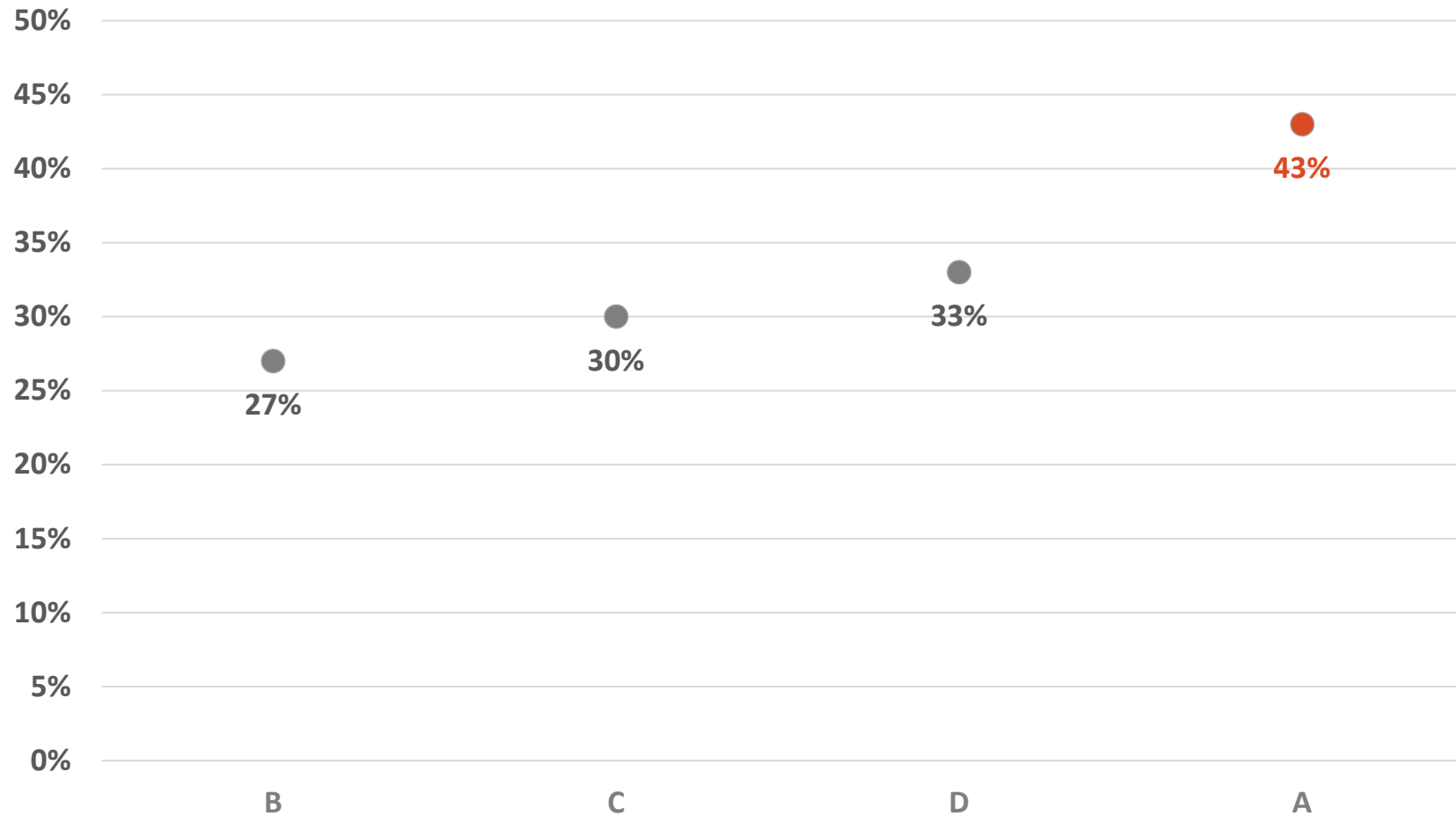
consented

**187 (34%)**

refused

Results are preliminary.

# Refusal Rates Ranged From **27–43%** Depending on the Dialysis Facility



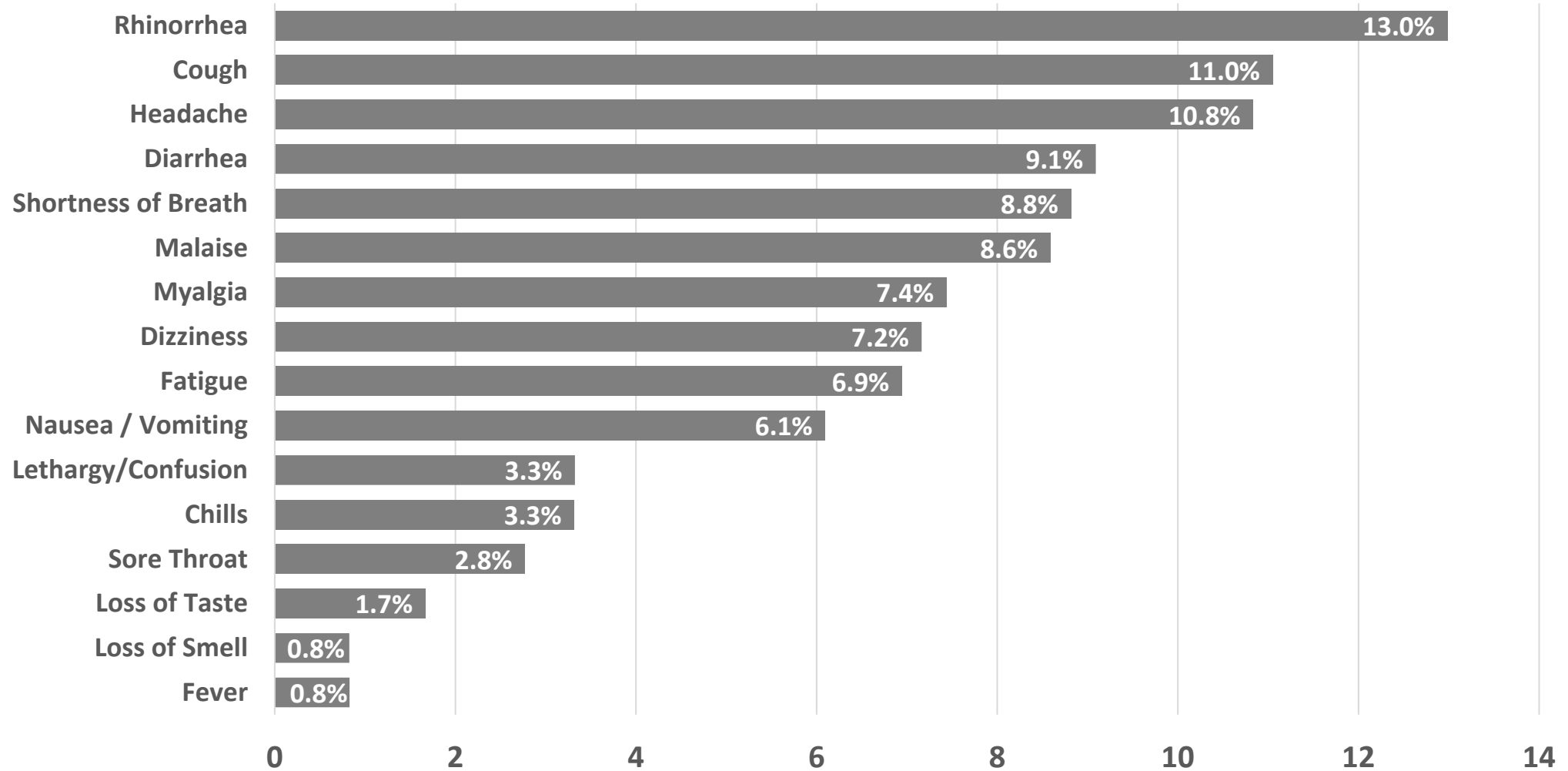
Results are preliminary.

# Of the 187 Patients Who Refused, Nearly **1 in 4** Were Likely to Refuse Because of **Testing in Recent Weeks**

Reasons for Refusal	A	B	C	D	All Facilities
<b>Previously Tested</b>	9	3	12	19	<b>43 (23%)</b>
Did not want to alter dialysis schedule	0	1	0	1	2
Getting tested soon	1	2	0	5	8
Distrust (CDC, testing, etc.)	1	1	1	7	10
Fear of result or of procedure	0	3	1	8	12
Asymptomatic	1	1	0	6	8
Other	2	0	2	0	4
<b>Total</b> *(+ those with no reason listed)	64	34	26	63	<b>187</b>

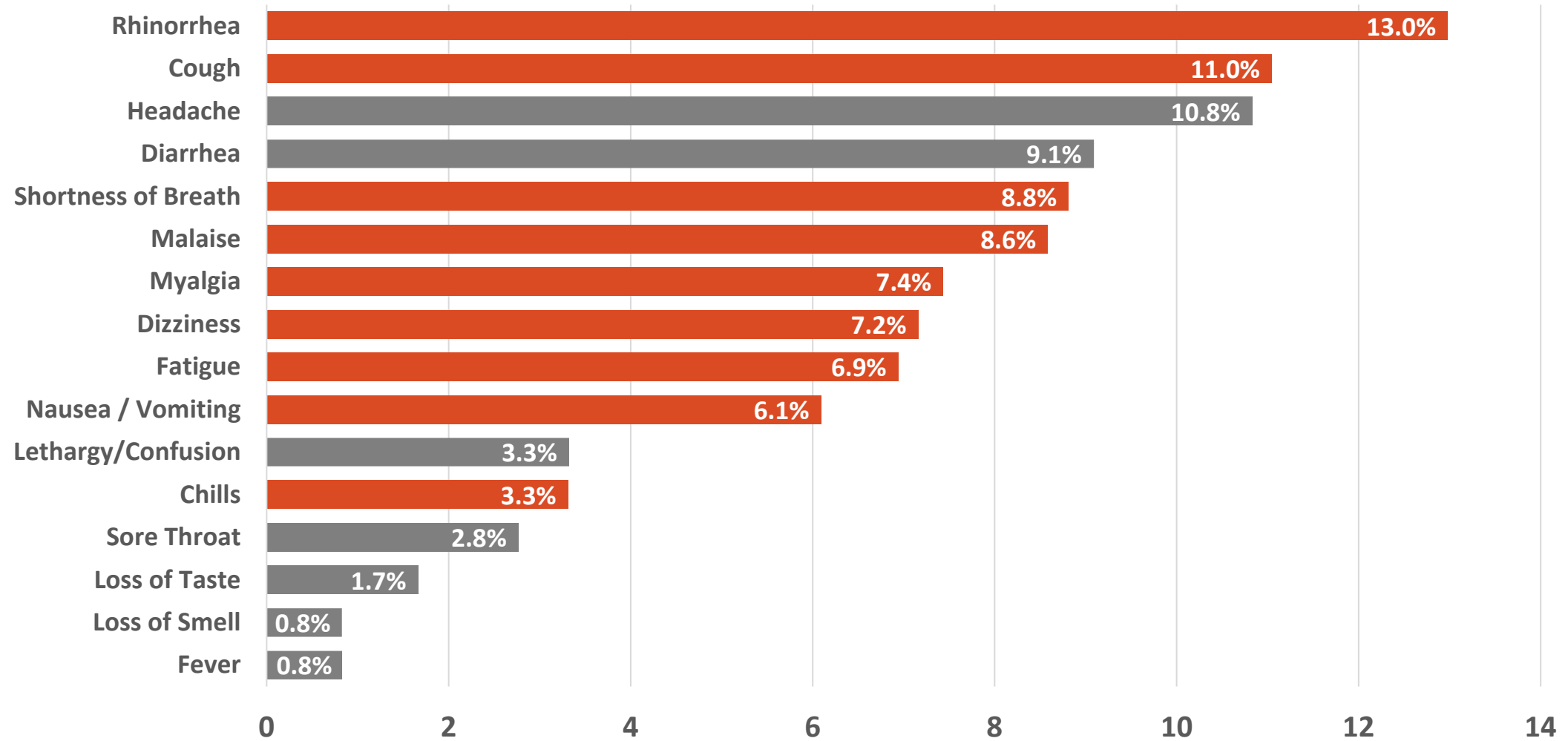
Results are preliminary.

# Among the **361** Participants, **165 (46%)** Reported Symptoms in the Last 14 Days



Results are preliminary.

# Some of the Most Reported Symptoms May Be Frequently Encountered in ESRD Patients



Results are preliminary.

# Among the **361** Patients Who Participated, Few Reported High-risk Exposures

**2%** had close contact to a person with COVID-19 at home or in the community

**1%** lived in a nursing home

Results are preliminary.



# Among the **361** Patients Who Participated, Few Reported High-risk Exposures

**1%** worked in a healthcare setting

**6%** attended gatherings >10  
people in the past 2 weeks

Results are preliminary.

Among the **361** Patients Who Participated,

**Zero** were positive for SARS-CoV-2.

Results are preliminary.

# **Heightened Infection Control Practices Were Already in Place**

**Universal masking**

**Enhanced social  
distancing**

**COVID-19 dialysis cohort**

Results are preliminary.

# Facility-wide Testing May Be More Useful When Specific Indicators Are Present

**Increasing community spread\***

**Suspected transmission within a dialysis facility**

\*=increasing cumulative incidence or % test positivity in the past 7 days

Results are preliminary.

# COVID-19 Vaccine Implementation

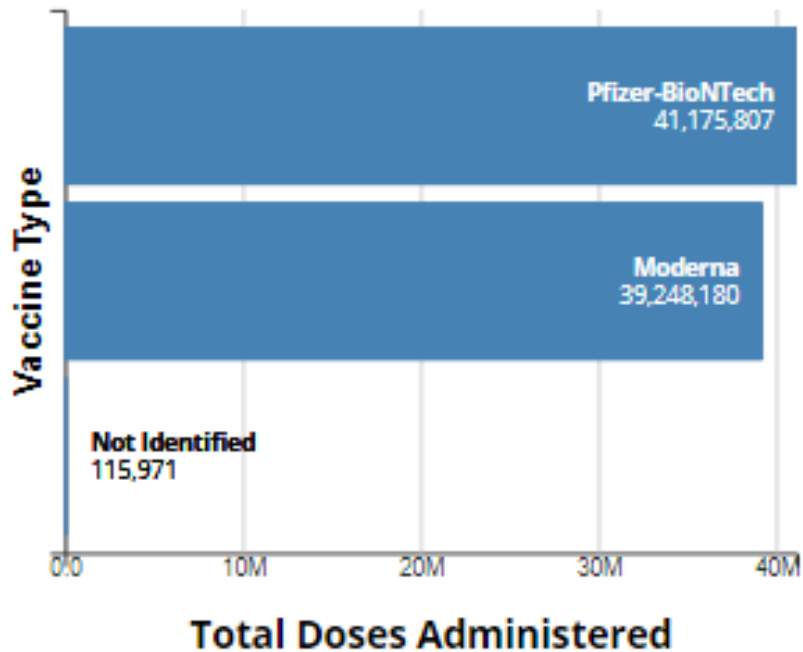


# COVID-19 Vaccines Administered

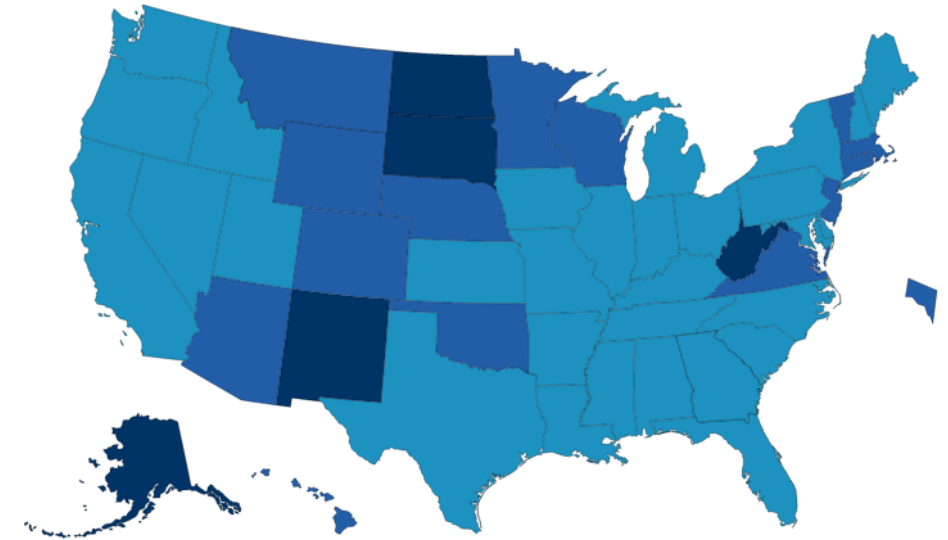
As of March 3, 2021

**Total Vaccine Doses Administered:  
80,540,474**

U.S. COVID-19 Vaccine Administration by Vaccine Type



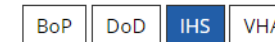
Total Doses Administered Reported to the CDC by State/Territory and for Select Federal Entities per 100,000 of the Total Population



Territories



Federal Entities



\* Data for Federal Entities are presented here and are also incorporated into the respective jurisdictional totals

Total Doses Administered per 100,000



# COVID-19 Vaccines Under FDA Emergency Use Authorizations (EUAs)

- Three vaccines have received Emergency Use Authorizations (EUAs) from the FDA:
  - **Pfizer/BioNTech:** 2 doses given at least 21 days apart
  - **Moderna:** 2 doses given at least 28 days apart
  - **Johnson & Johnson/Janssen:** 1 dose
- All three vaccines were tested in tens of thousands of adults from diverse backgrounds, including older adults and communities of color.
- All of the available vaccines have been proven effective at preventing serious illness, hospitalization, and death from COVID-19 disease.
- It is unknown how long protection from vaccines might last.

Sources: <https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine>  
<https://investors.modernatx.com/news-releases/news-release-details/modernas-covid-19-vaccine-candidate-meets-its-primary-efficacy>

# ACIP's Origins and Role

- ACIP established in **1964** by the Surgeon General of the U.S. Public Health Service.
- Designated as a Federal Advisory Committee in 1972.
- **Role**: To provide advice and guidance to the CDC Director and the HHS Secretary on most effective means to prevent vaccine-preventable diseases in the U.S. civilian population.
  - Advises on population groups and/or circumstances in which a vaccine is recommended.
- ACIP deliberations include consideration of disease **epidemiology** and **burden of disease, vaccine efficacy and effectiveness, vaccine safety**, the **quality** of evidence reviewed, **economic analyses**, and **implementation issues**.
- CDC is the secretariat for ACIP, but ACIP is independent of the CDC; Voting ACIP members are not CDC employees.

ACIP = Advisory Committee on Immunization Practices  
HHS = Health and Human Services Administration

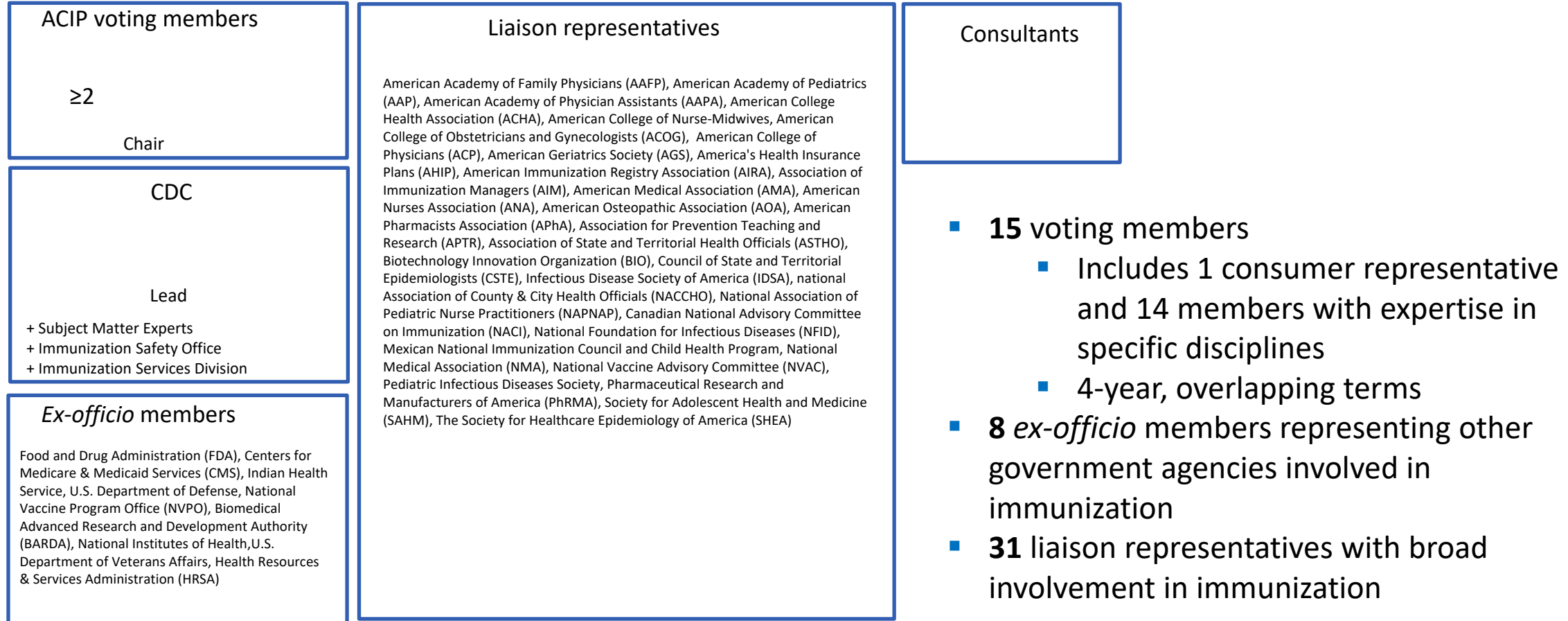


# ACIP Recommendations as HHS Policy

- ACIP recommendations become policy following approval by the CDC Director and MMWR publication.
- The Affordable Care Act (ACA) was enacted in 2010 and requires insurance coverage for immunizations included in ACIP's approved immunization schedules.
- Health plans have 1 plan year from MMWR publication to implement recommendations according to CDC immunization schedules.

MMWR = Morbidity and Mortality Weekly Report

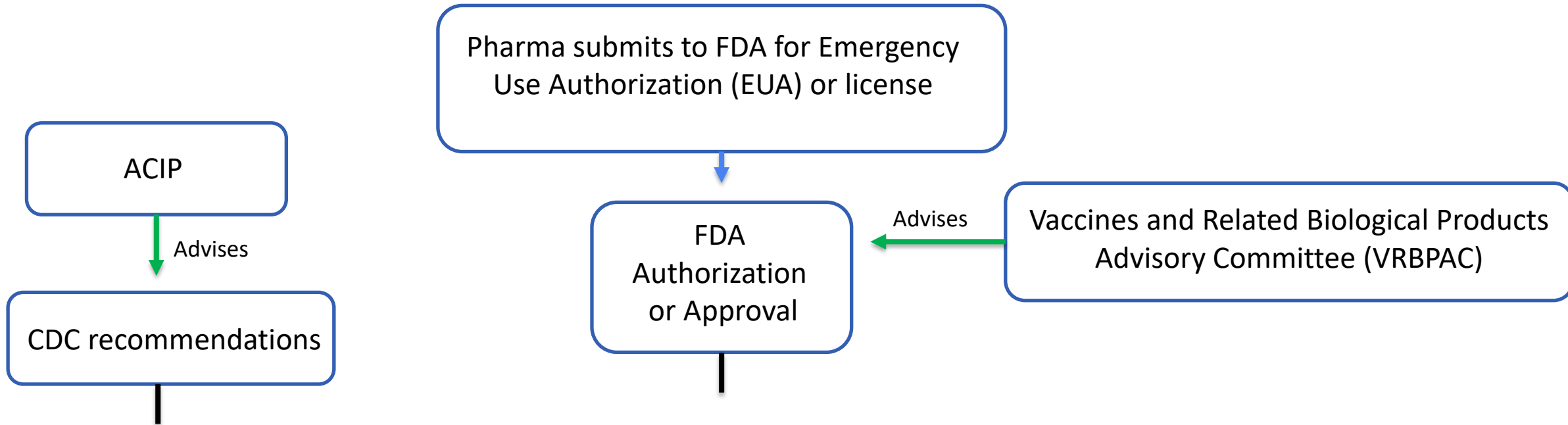
# ACIP



- **15** voting members
  - Includes 1 consumer representative and 14 members with expertise in specific disciplines
  - 4-year, overlapping terms
- **8** *ex-officio* members representing other government agencies involved in immunization
- **31** liaison representatives with broad involvement in immunization

See *ACIP Policies and Procedures* guidance for abbreviations

# Vaccine Licensure and Recommendations



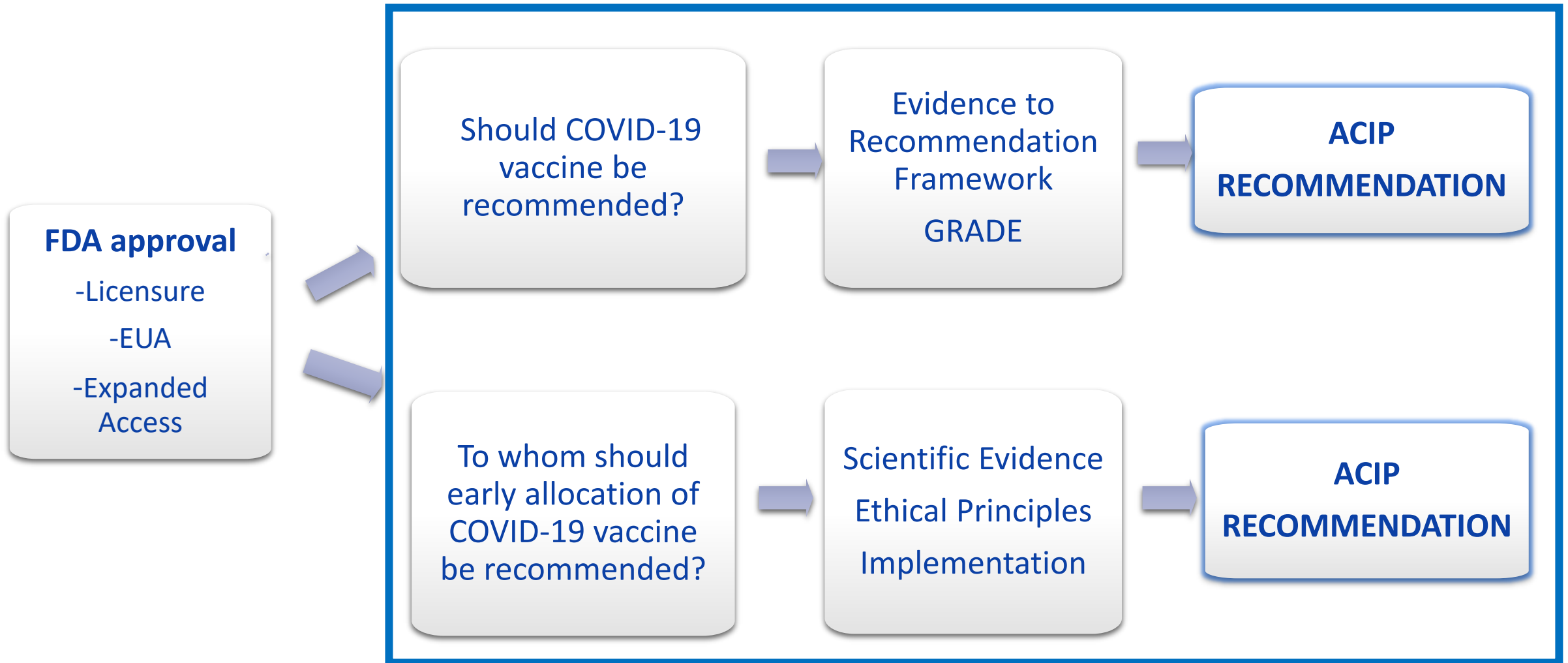
- Recommendation for use of EUA or licensed vaccines guided by FDA, labeling, and other considerations

- FD&C Act (section 564) and PHS Act (section 351(a))
- National Regulatory Agency, has enforcement authority
- Allows for availability and use of vaccines
- Labeling content restricted to stated intended use in studied population and supported by data from adequate and well-controlled studies provided by manufacturer

EUA = Emergency Use Authorization  
FDA = Food and Drug Administration  
FD&C Act = Food, Drug, and Cosmetic Act



# ACIP Pathway to Recommendation



# Overview of Groups Prioritized by ACIP

## Phase 1a

- ✓ Healthcare personnel
- ✓ Long-term care facility residents

## Phase 1b

- ✓ Frontline essential workers
- ✓ Persons ages 75 years and older

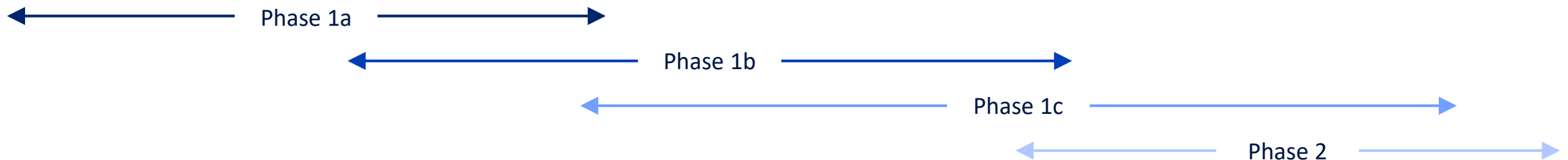
## Phase 1c

- ✓ Persons ages 65–74 years
- ✓ Persons ages 16–64 years with high-risk conditions
- ✓ Essential workers not recommended in Phase 1b

## Phase 2

- ✓ All people ages 16 years and older not in Phase 1 who are recommended for vaccination

Initiation of phases will be overlapping



# ACIP: COVID-19 Vaccine Guiding Principles

E  
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Y

**Efficient Distribution.** During a pandemic, efficient, expeditious, and equitable distribution and administration of authorized vaccine is critical.

**Flexibility.** Within national guidelines, state and local jurisdictions should have flexibility to administer vaccine based on local epidemiology and demand.

# Fast-tracking COVID-19 Vaccines While Ensuring Safety

- mRNA COVID-19 vaccines were developed based on years of research.
- Researchers used existing networks to conduct COVID-19 vaccine trials.
- Manufacturing began while clinical trials were still underway. Normally, manufacturing doesn't begin until after completion of the trials.
- mRNA vaccines are faster to produce than traditional vaccines.
- FDA and CDC are prioritizing review and authorization of COVID-19 vaccines.

\*For more information, visit the COVID-19 Prevention Network:

[www.coronaviruspreventionnetwork.org/about-covpn](http://www.coronaviruspreventionnetwork.org/about-covpn)

# Safety of COVID-19 Vaccines Is a Top Priority

COVID-19 vaccines are being held to the **same safety standards** as all vaccines.

## Before Authorization

- **FDA** carefully reviews all safety data from clinical trials.
- **ACIP** reviews all safety data before recommending use.

## After Authorization

- **FDA** and **CDC** closely monitor vaccine safety and side effects. There are systems in place that allow CDC and FDA to watch for safety issues.

**VAERS** Vaccine Adverse Event Reporting System  
[www.vaers.hhs.gov](http://www.vaers.hhs.gov)



V-safe: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html>



# COVID-19 Vaccine Safety Strategy

- 1. Use established systems** to implement heightened safety monitoring for COVID-19 vaccines.
- 2. Develop new platforms** and leverage other federal data sources to complement existing systems.
- 3. Communicate clearly** on the vaccine safety process and systems now; provide COVID-19 vaccine safety data and monitoring results once available.



CDC working with the FDA, DoD, Indian Health Service, and the U.S. Department of Veterans Affairs



active surveillance

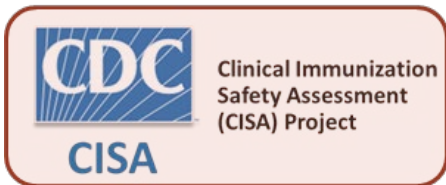
CDC + FDA  
VAERS  
Vaccine Adverse Event Reporting System

passive surveillance

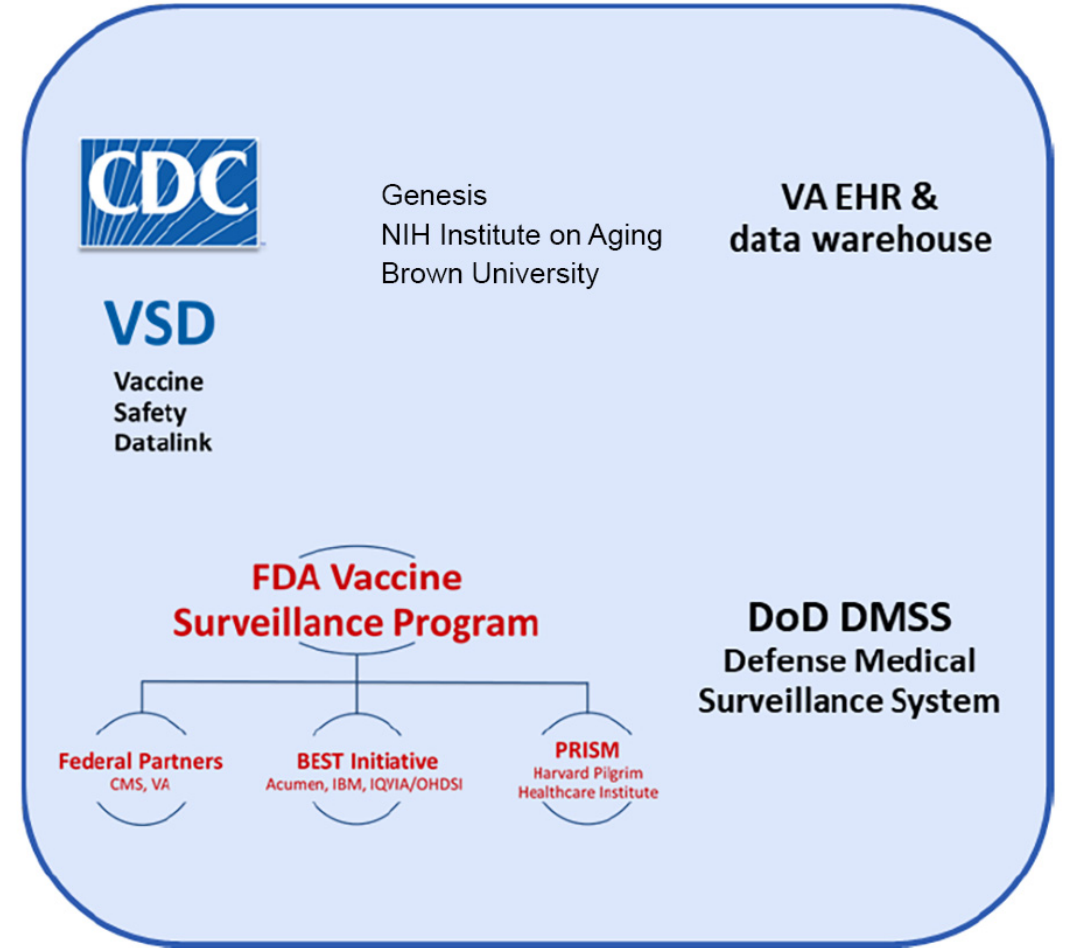
DoD VA ECS

VA ADERS

NHSN



individual case consults



start of  
vax

active surveillance, passive surveillance, case consults

large-linked database monitoring

safety monitoring timeline

# VAERS Is the Nation's Early Warning System for Vaccine Safety



## VAERS

### Vaccine Adverse Event Reporting System

Co-managed by the CDC and FDA.

<http://vaers.hhs.gov>

The screenshot shows the VAERS website homepage. At the top, the VAERS logo is followed by the text 'Vaccine Adverse Event Reporting System' and the URL 'www.vaers.hhs.gov'. Below this is a navigation bar with five items: 'About VAERS', 'Report an Adverse Event', 'VAERS Data', 'Resources', and 'Submit Follow-Up Information'. The main content area is divided into two columns. The left column contains a section titled 'Have you had a reaction following a vaccination?' with two numbered steps: '1. Contact your healthcare provider.' and '2. Report an Adverse Event using the VAERS online form or the new downloadable PDF. *New!*'. Below this is an 'Important' box with text: 'If you are experiencing a medical emergency, seek immediate assistance from a healthcare provider or call 9-1-1. CDC and FDA do not provide individual medical treatment, advice, or diagnosis. If you need individual medical or health care advice, consult a qualified healthcare provider.' Below that is a Spanish version of the same section: '¿Ha tenido una reacción después de recibir una vacuna?' with steps: '1. Contacte a su proveedor de salud.' and '2. Reporte una reacción adversa utilizando el formulario de VAERS en línea o la nueva versión PDF descargable. *Nuevo!*'. The right column features a large image of a family (father, mother, and two children) looking at a laptop. Below the image is the text 'What is VAERS?'. At the bottom of the page, there are four tiles, each with an image and a title: 'REPORT AN ADVERSE EVENT' (with a doctor and patient), 'SEARCH VAERS DATA' (with hands on a tablet), 'REVIEW RESOURCES' (with a woman at a computer), and 'SUBMIT FOLLOW-UP INFORMATION' (with a woman at a computer). Each tile also has a short description of the function.

# Vaccine Adverse Event Reporting System (VAERS)

## Strengths

- National data
- Rapidly detects safety signals
- Can detect rare adverse events
- Data available to public

## Limitations

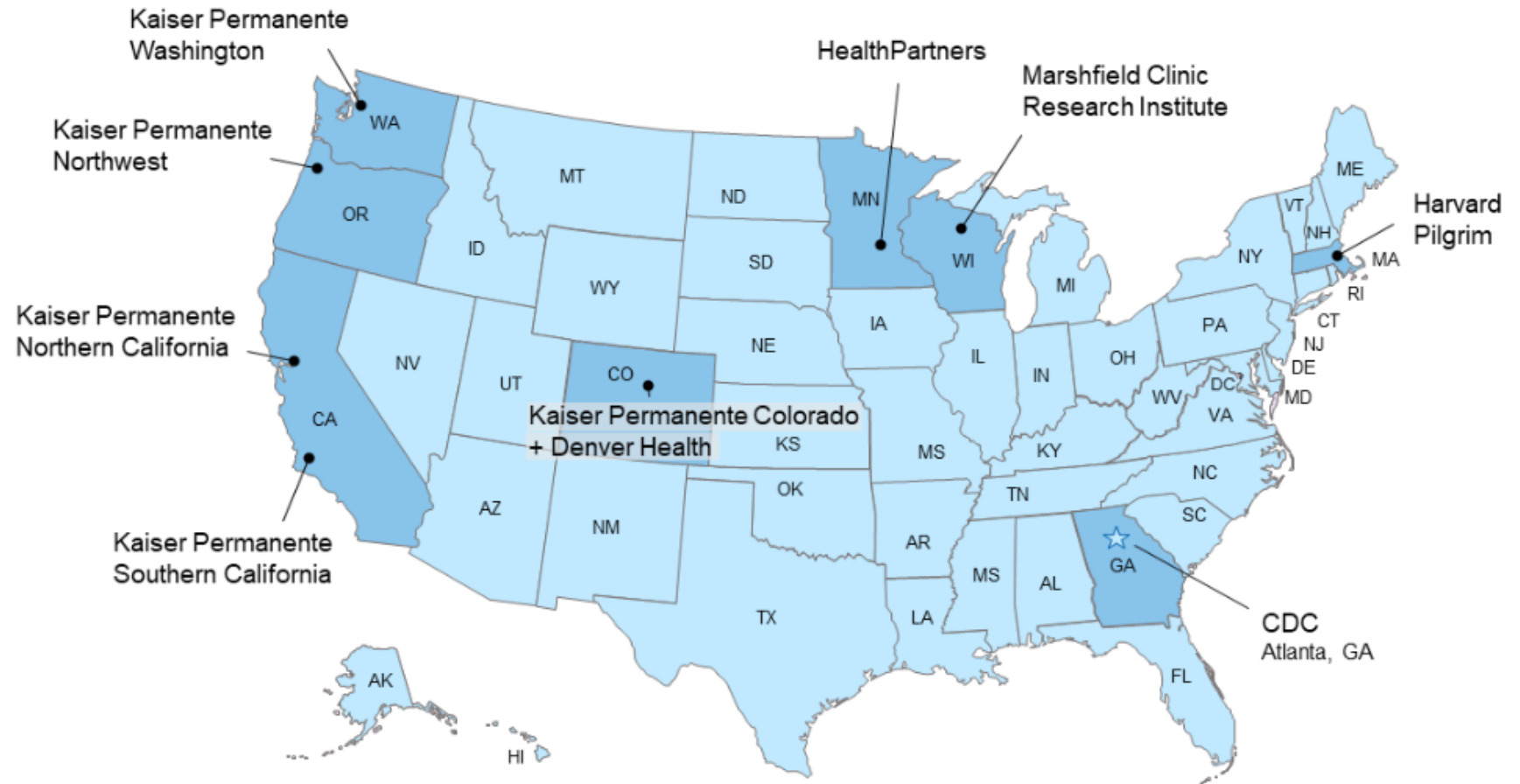
- Reporting bias
- Inconsistent data quality and completeness of information
- Lack of unvaccinated comparison group
- Not designed to assess causality

- VAERS accepts all reports from everyone regardless of the plausibility of the vaccine causing the event or the clinical seriousness of the event
- As a hypothesis-generating system, VAERS identifies potential vaccine safety concerns that can be studied in more robust data systems



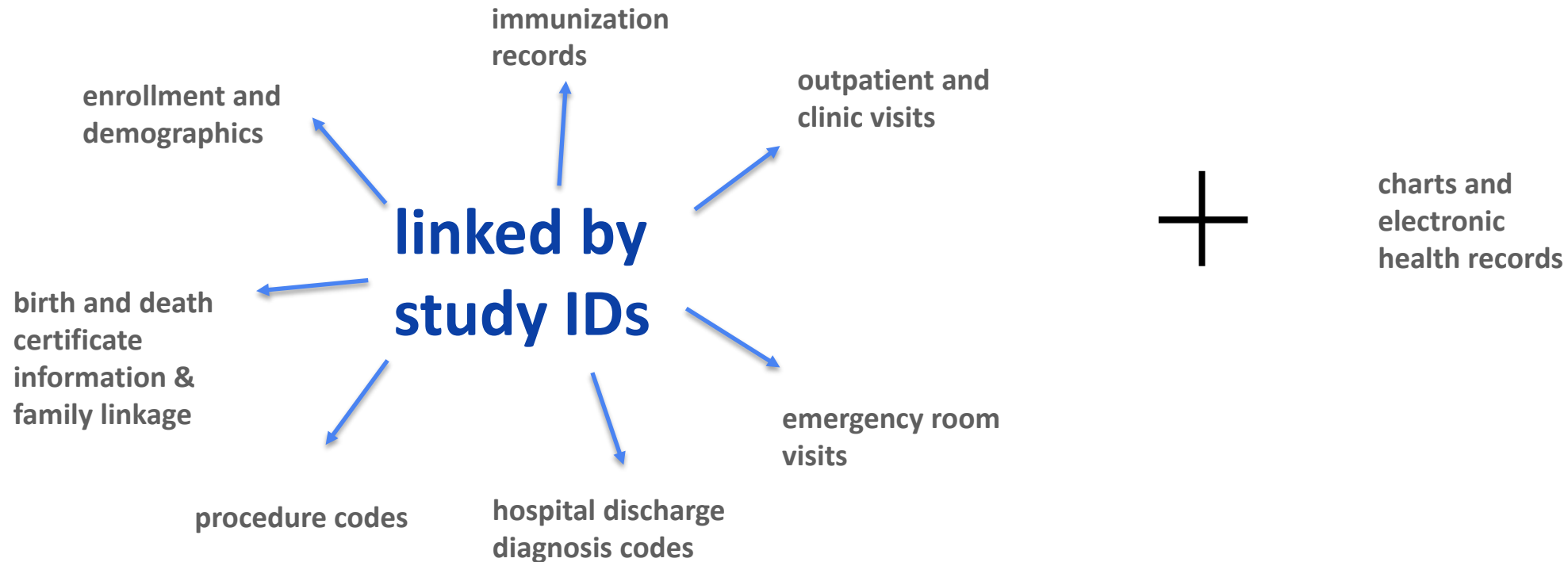
# VSD

## Vaccine Safety Datalink



- 9 participating integrated healthcare organizations
- data on over **12 million** persons per year

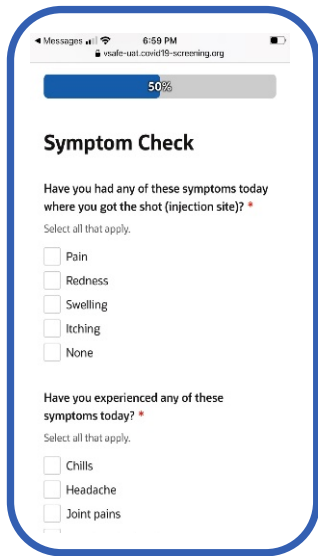
# Types of Information in VSD





# Active Safety Monitoring for COVID-19 Vaccines

- V-safe is a new CDC smart-phone based monitoring program for COVID-19 vaccine safety:
  - Uses text messaging and web surveys to check in with vaccine recipients after vaccination.
  - Participants can report any side effects or health problems after COVID-19 vaccination.
  - Includes active telephone follow-up by CDC for reports of significant health impact.



1. Text message check-ins from CDC (daily 1st week; weekly thru 6 weeks; then 3, 6, and 12 mo.)

vaccine recipient completes web survey\*



Vaccine recipients

2. Clinically important health impact reported



✓ received medical care

Call center

3. V-safe call center conducts active telephone follow-up on a clinically important event and takes a VAERS report if appropriate

4. Pregnancy registry team conducts outreach to assess eligibility for registry and obtain consent for enrollment and follow-up



Call center

\* Selected web surveys capture information on pregnancy status.



# The Problem: Need to Instill Vaccine Confidence

- Overall acceptability of a COVID-19 vaccine is **moderate**.<sup>1</sup>
  - Proportion intending to receive vaccine ranged across surveys: 42–86% (as of Nov.–Dec. 2020 polls).

## Factors weighing on acceptance:

Concern about side effects

Efficacy

Risk perception

Associated costs

## COVID-19 vaccine more acceptable if:

Healthcare provider said it was safe

There are no costs to the individual

It would help get back to school and work

They could get it easily

Tyson A, Johnson C, & Funk C. (2020, September 17). *U.S. Public Now Divided Over Whether To Get COVID-19 Vaccine*. Pew Research Center. <https://www.pewresearch.org/science/2020/09/17/u-s-public-now-divided-over-whether-to-get-covid-19-vaccine/>

Jackson C, & Newall M. (2020, September 29). *Despite COVID-19 spike, few individual behaviors are changing*. Ipsos. <https://www.ipsos.com/en-us/news-polls/axios-ipsos-coronavirus-index>

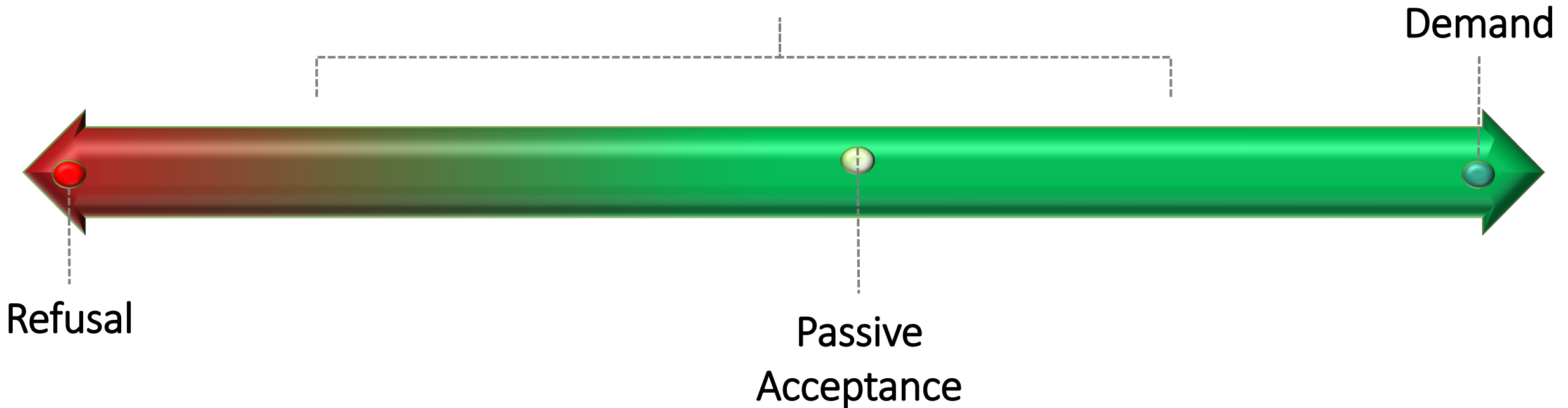
# Defining Vaccine Confidence

- Vaccine confidence is the trust that patients, parents, or providers have in:
  - recommended vaccines;
  - providers who administer vaccines; and
  - processes and policies that lead to vaccine development, licensure, manufacturing, and recommendations for use.

# The Vaccine Demand Continuum

INCREASING CONFIDENCE IN VACCINE, VACCINATOR, AND HEALTH SYSTEM

**May have questions, take “wait and see” approach, or want more information.**



# A New Pandemic, a New Vaccine, and a New Adult-Focused Platform Means Shifting Tactics

- Individuals across the spectrum will have concerns. These concerns are understandable and need to be addressed with empathy and transparency.
- Concerns among healthcare providers is a risk for overall vaccine confidence. Healthcare providers are the most trusted source for health information.
- Communities will have unique experiences informing COVID-19 vaccine perceptions. Engagement with community organizations and leaders will expand access to clear and accurate information on COVID-19 vaccines.



# Vaccinate with **Confidence**

## A National Strategy to Reinforce Confidence in COVID-19 Vaccines

### Reinforce Trust

**Objective: Regularly share clear and accurate COVID-19 vaccine information and take visible actions to build trust in the vaccine, the vaccinator, and the system.**

### Empower Healthcare Providers

**Objective: Promote confidence among healthcare personnel in their decision to get vaccinated and to recommend vaccination to their patients.**

### Engage Communities & Individuals

**Objective: Engage communities in a sustainable, equitable, and inclusive way—using two-way communication to listen, increase collaboration, and build trust in COVID-19 vaccine.**



# Vaccinate with **Confidence**

## A National Strategy to Reinforce Confidence in COVID-19 Vaccines (cont.)

### Reinforce Trust

**Objective: Regularly share clear and accurate COVID-19 vaccine information and take visible actions to build trust in the vaccine, the vaccinator, and the system.**

### Tactics

- ✓ **Communicate transparently** about the process for approving, making recommendations for, monitoring the safety of, and distributing COVID-19 vaccines.
- ✓ **Provide regular updates** on benefits, safety, and effectiveness, including updates from an independent vaccine safety monitoring group.
- ✓ **Proactively address and mitigate the spread and harm of misinformation** via social media platforms, partners, and trusted messengers.

### Sample Products and Tools

- Web content: "Vaccine Information for You & Your Family"
- Interactive vaccine rollout timeline webpage
- Field guide to address and build resilience against COVID-19 vaccine misinformation



# Vaccinate with **Confidence**

## A National Strategy to Reinforce Confidence in COVID-19 Vaccines (cont.)

### Empower Healthcare Providers

**Objective: Promote confidence among healthcare personnel in their decision to get vaccinated and to recommend vaccination to their patients.**

### Tactics

- ✓ Engage systems and healthcare personnel often and early to ensure clear understanding of the vaccine development and approval process, and the benefits of vaccination.
- ✓ Ensure healthcare systems and medical practices create a culture that is supportive of COVID-19 vaccine administration.
- ✓ Support empathetic vaccine conversations in healthcare encounters to confidently address vaccine-related questions and provide tailored vaccine information to patients.

### Sample Products and Tools

- “Talking to patients about COVID-19 vaccine” slide deck for healthcare personnel (HCPs)
- Quick answers to common COVID-19 vaccine questions (fact sheet for HCPs)
- Guide for how to build COVID-19 vaccine confidence within health systems and clinics



# Vaccinate with **Confidence**

## A National Strategy to Reinforce Confidence in COVID-19 Vaccines (cont.)

### Engage Communities & Individuals

**Objective: Engage communities in a sustainable, equitable, and inclusive way—using two-way communication to listen, increase collaboration, and build trust in COVID-19 vaccine.**

### Tactics

- ✓ Work with jurisdictions to engage new community partners for vaccine distribution.
- ✓ Work with jurisdictions and national partners to collaborate with communities around vaccine uptake and service delivery strategies.
- ✓ Collaborate with trusted messengers in communities of color to tailor and share culturally relevant messages and materials.

### Sample Products and Tools

- Vaccinate with Confidence—Rapid Community Assessment Guide
- Vaccinate with Confidence with COVID-19 Vaccines slide deck in multiple formats/languages
- Briefing materials for ethnic media roundtable events





# Vaccinate with **Confidence**

## **A National Strategy to Reinforce Confidence in COVID-19 Vaccines (cont.)**

- Is NOT
  - An advertising, marketing, or communications “campaign.”
- Is
  - A cohesive framework to support health departments, healthcare providers, immunization partners, community partners, and leaders’ promotion of COVID-19 vaccines.
  - Evidence-based content to amplify messages that enable an individual to make the decision to vaccinate.
  - Critical to ensuring safe and effective COVID-19 vaccines can help control and reduce the impact of this pandemic.

# Prepare for COVID-19 Vaccine Conversations

## Choose to get vaccinated yourself.

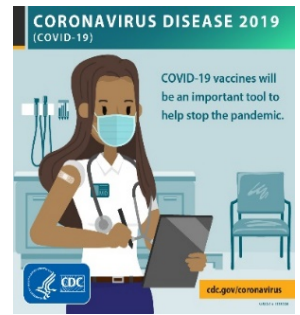
- “I believe in this vaccine and plan to get it as soon as it is available.”

## Engage in effective conversations.

- Start from a place of empathy and understanding.
- Address misinformation by sharing key facts.

## Be prepared for questions.

- Share CDC resources/toolkits.



Source: CDC

# Key Facts About COVID-19 Vaccination

Getting vaccinated can help prevent you from getting sick with COVID-19.

People who have already gotten sick with COVID-19 may still benefit from getting vaccinated.

COVID-19 vaccines cannot give you COVID-19.

COVID-19 vaccines will not cause you to test positive on COVID-19 viral tests.\*

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/about-vaccines/vaccine-myths.html>

\*<https://www.cdc.gov/coronavirus/2019-ncov/hcp/testing-overview.html>

# Clinical Considerations for Use of mRNA COVID-19 Vaccines

- CDC clinical considerations for mRNA COVID-19 vaccines published previously:
  - <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html>
- Clinical considerations are being updated to include Janssen COVID-19 vaccine.
  - Viral vector COVID-19 vaccine

## Interim Clinical Considerations for Use of mRNA COVID-19 Vaccines Currently Authorized in the United States



[Interim considerations: preparing for the potential management of anaphylaxis after COVID-19 vaccination](#)

Summary of recent changes (last updated February 10, 2021):

- New recommendations for preventing, reporting, and managing mRNA COVID-19 vaccine administration errors (Appendix A).
- Clarification on contraindications and precautions. Persons with a known (diagnosed) allergy to PEG, another mRNA vaccine component, or polysorbate, have a contraindication to vaccination. Persons with a reaction to a vaccine or injectable therapy that contains multiple components, one of which is PEG, another mRNA vaccine component or polysorbate, but in whom it is unknown which component elicited the immediate allergic reaction have a precaution to vaccination.
- Updated information on delayed, local injection-site reactions after the first mRNA vaccine dose. These reactions are neither a contraindication or precaution to the second dose.
- Updated quarantine recommendations for vaccinated persons. Fully vaccinated persons who meet criteria will no longer be required to quarantine following an exposure to someone with COVID-19. Additional considerations for patients and residents in healthcare settings are provided.
- Additional information and updated recommendations for testing for TB infection. TB testing can be done before or at the same time as mRNA COVID-19 vaccination, or otherwise delayed for ≥4 weeks after the completion of mRNA COVID-19 vaccination.

### On This Page

[Background](#)

[Authorized age groups](#)

[Administration](#)

[Interchangeability with other COVID-19 vaccine products](#)

[Coadministration with other vaccines](#)

[Booster doses](#)

[Vaccination of persons with a SARS-CoV-2 infection or exposure](#)

[Vaccination of persons with underlying medical conditions](#)

[Vaccination of pregnant or lactating people](#)

[Vaccination of children and adolescents](#)

[Patient counseling](#)

Sign up to receive email updates when clinical considerations are updated: <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html>.

# Your Role

**COVID-19 vaccine safety gets stronger with your participation.**

## Public health partners

- Promote participation in **v-safe**.
- Promote reporting to **VAERS**.
- Communicate with your partners on vaccine safety.

## Healthcare providers

- Encourage patient participation in **v-safe**.
- Report adverse events to **VAERS**.
- Communicate with patients on vaccine safety.

# CDC Resources

Learn more with **CDC's COVID-19 vaccine tools and resources**. Find information for COVID-19 vaccine administration, storage, reporting, patient education, and more.

- COVID-19 vaccination:  
<https://www.cdc.gov/vaccines/covid-19/index.html>
- For healthcare professionals:  
<https://www.cdc.gov/vaccines/covid-19/hcp/index.html>

## COVID-19 Vaccine Communication Toolkits

- Medical centers, clinics, and clinicians
- Long-term care facilities
- Community-based organizations
- Essential workers

The screenshot displays the CDC Vaccines & Immunizations website. The main navigation bar includes 'Vaccines & Immunizations' and 'Vaccines site'. The page content is organized into several sections:

- COVID-19 Vaccination:** A prominent section with the heading 'COVID-19 Vaccination' and the sub-heading 'Clinical Resources for Each COVID-19 Vaccine'. It includes a button for 'Pfizer-BioNTech Vaccine Information' and an illustration of healthcare workers.
- Navigation Menu:** A sidebar menu on the left lists various resources: 'Vaccines and Immunizations Home', 'For Parents', 'For Adults', 'For Pregnant Women', 'For Healthcare Professionals', 'COVID-19 Vaccination', 'For Healthcare Professionals', 'COVID-19 Vaccination Planning', 'Vaccination Communication Toolkit', 'COVID-19 Vaccination Reporting Data Systems', and 'For Immunization Managers'.
- Resource Cards:** Several cards are visible, including 'General Vaccine Administration', 'Storage and Handling Toolkit', 'ACIP Recommendations', and 'COVID-19 Vaccine EUAs'. There are also cards for 'Training and Education', 'Communicating with Recipients', 'Vaccination Provider Requirements &', and 'mRNA COVID-19 Vaccines'.
- Communication Toolkit:** A large graphic titled 'Getting 'Back to Normal' Is Going to Take All of Our Tools'. It features four icons representing different tools: 'Get vaccinated.', 'Wear a mask.', 'Stay 6 feet from others, and avoid crowds.', and 'Wash hands often.'. The text states: '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:'. The CDC logo and the URL 'www.cdc.gov/coronavirus/vaccines' are at the bottom.
- Success Badges:** Two circular badges at the bottom right say 'I GOT MY COVID-19 VACCINE!' with a bandage icon.

# Thank you.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)