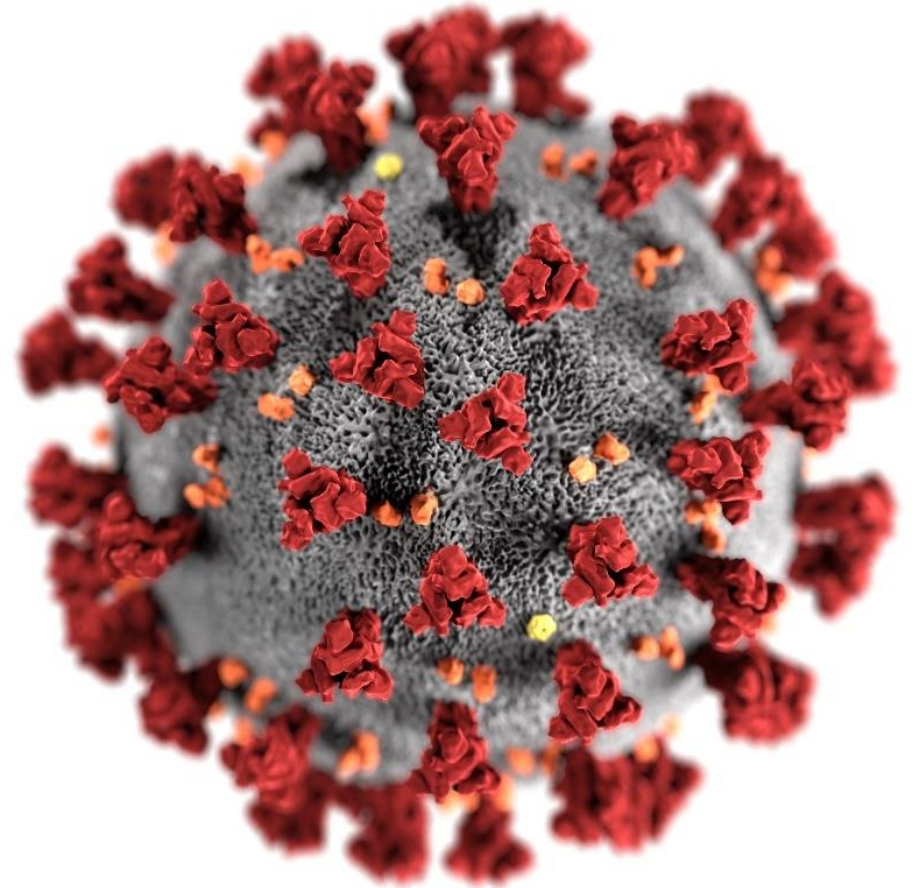# COVID-19 Vaccines & Implementation

Margaret Kitt, MD, MPH
Rear Admiral (Retired), United States Public Health Service
Lead, Essential Workers Team
Vaccine Task Force, COVID-19 Response
Centers for Disease Control and Prevention

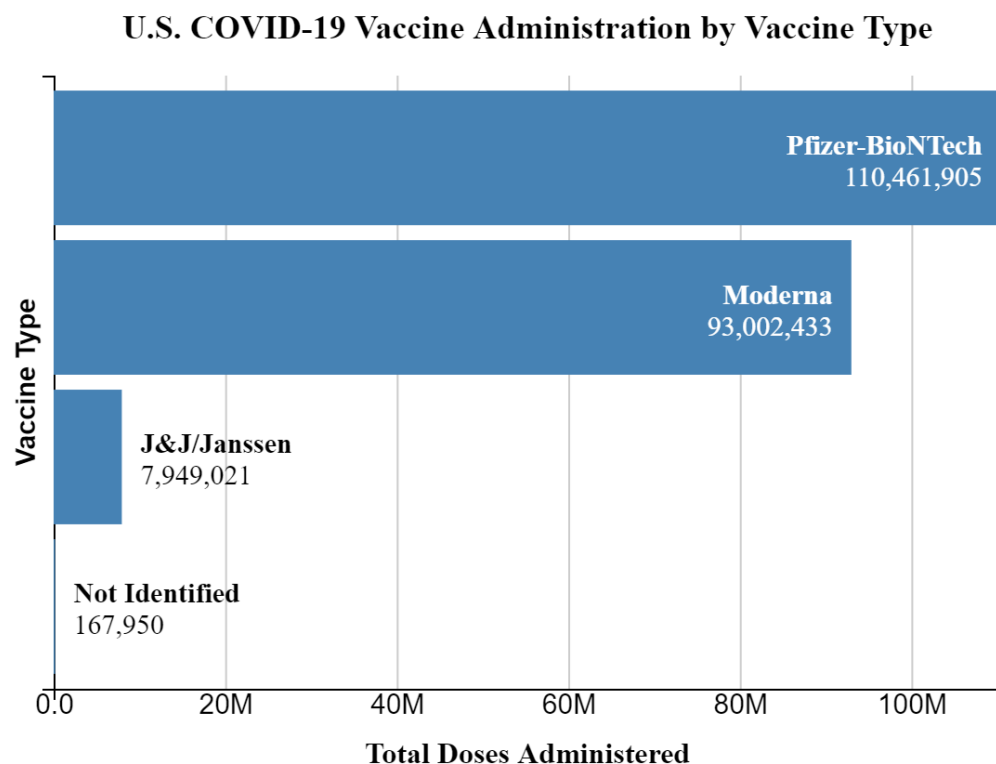# COVID-19 Vaccination is a Safer Way to Build Protection

- Getting the virus that causes COVID-19 may offer some natural protection, known as an antibody or immunity. But experts don't know how long this protection lasts.

- The risk of severe illness and death from COVID-19 far outweighs any benefits of natural immunity.

- COVID-19 vaccination will help protect you by building immunity without the risk of severe illness.

4/21/21

COVID-19 Vaccines Administered

As of April 19, 2021

Total Vaccine Doses Administered:
211,581,309

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

Pfizer-BioNTech
110,461,905

Moderna
93,002,433

J&J/Janssen
7,949,021

Not Identified
167,950

Vaccine Type

Total Doses Administered

0.0   20M   40M   60M   80M   100M
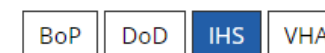
Available: https://covid.cdc.gov/covid-data-tracker

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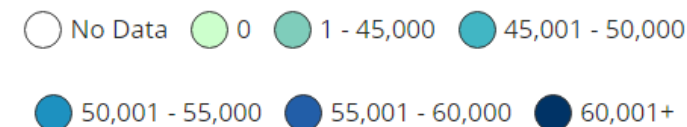

Territories

GU | AS | RP | FM | MP | MH | VI

Federal Entities

BoP | DoD | IHS | VHA
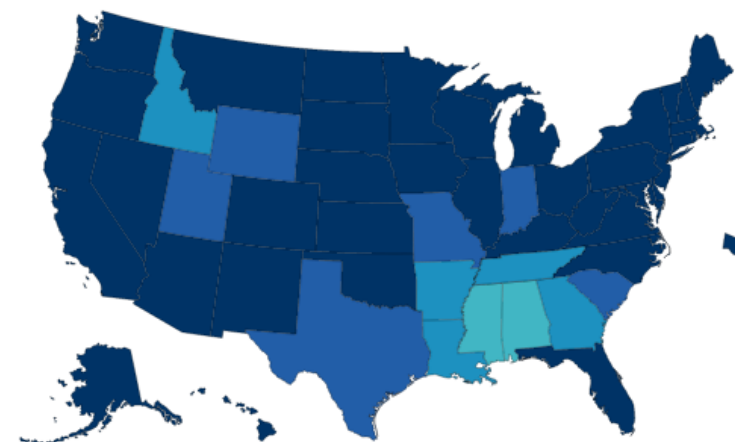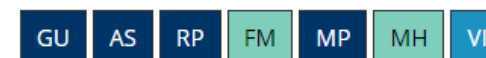
* Data for Federal Entities are presented here and are also incorporated into the respective jurisdictional totals

Total Doses Administered per 100,000

○ No Data ○ 0 ○ 1 - 45,000 ○ 45,001 - 50,000

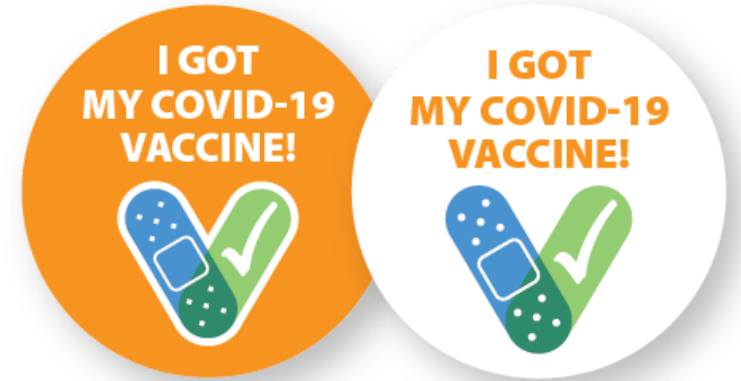○ 50,001 - 55,000 ● 55,001 - 60,000 ● 60,001+

4/21/21

Currently Authorized Vaccines

- Pfizer-BioNTech
- Moderna

  → mRNA vaccine
  Require two doses

- Johnson & Johnson/Janssen

  → Viral vector vaccine
  Requires one 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.

4/21/21

What are messenger RNA (mRNA) vaccines?

■ Carry genetic material that teaches our cells how to make a harmless piece of "spike protein," which is found on the surface of the SARS-CoV-2 virus.

– Genetic material from the vaccine is destroyed by our cells once copies of the spike protein are made and it is no longer needed.

■ Cells display this piece of spike protein on their surface, and an immune response is triggered inside our bodies. This produces antibodies to protect us from getting infected if the SARS-CoV-2 virus enters our bodies.

Sources: College of Physicians of Philadelphia. What is an mRNA vaccine? https://historyofvaccines.blog/2020/07/29/what-is-an-mrna-vaccine/
JAMA. COVID-19 and mRNA Vaccines—First Large Test for a New Approach. https://jamanetwork.com/journals/jama/fullarticle/2770485

4/21/21

What Are Viral Vector Vaccines?

- Viral vector vaccines use a modified version of a different virus (the vector) to deliver important instructions to our cells.

- For COVID-19 viral vector vaccines, the vector (**not** the virus that causes COVID-19, but a different, harmless virus) enters a cell in our body and then uses the cell's machinery to produce **a harmless** piece of the virus that causes COVID-19.

  - This piece is known as a spike protein and it is only found on the surface of the virus that causes COVID-19.

- Non-replication—this is <u>not</u> a live-virus vaccine

4/21/21

Johnson & Johnson's Janssen COVID-19 Vaccine: Considerations for Utilization

Where?

- Mobile/pop-up clinics
- Newly established vaccine administration sites
- Sites that do not have freezer capacity (e.g. adult HCP offices)

Who?

- People who want to be fully vaccinated quickly
- People who don't want to return or can't return for a second dose
- Mobile populations or homebound populations

4/21/21
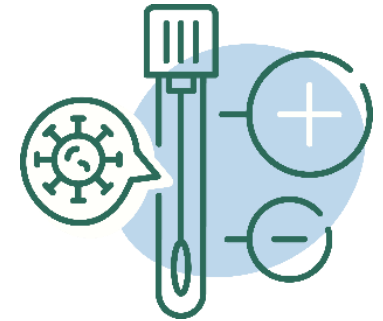
Key Facts about COVID-19 Vaccination

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 <u>cannot</u> give you COVID-19

COVID-19 vaccines will not cause you to test positive on COVID-19 <u>viral</u> 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

4/21/21

Fast-Tracking COVID-19 Vaccines While Ensuring Safety

- 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 trials are completed.

- 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

4/21/21

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

v-safe after vaccination health checker

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

4/21/21

Active Safety Monitoring for COVID-19 Vaccines

- **V-safe** is a new CDC smartphone-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.

4/21/21

Fully vaccinated* people can:

- Visit with other fully vaccinated people indoors without masks or social distancing
- Visit with other unvaccinated people from a single household, if unvaccinated persons are low risk for severe COVID-19, indoors, without masks or social distancing
- Refrain from quarantine and testing following a known exposure to COVID-19 if asymptomatic

* ≥2 weeks after the second dose in a 2-dose series (Pfizer-BioNTech or Moderna), or ≥2 weeks after a single-dose vaccine (Johnson and Johnson [J&J]/Janssen)

4/21/21

Domestic Travel During COVID-19

Domestic Travel
RECOMMENDATIONS AND REQUIREMENTS

	Not Vaccinated	Fully Vaccinated
Get tested 1-3 days before travel	✅	
Get tested 3-5 days after travel and self-quarantine for 7 days. Self-quarantine for 10 days if you don't get tested.	✅	
Self-monitor for symptoms	✅	✅
Wear a mask and take other precautions during travel	✅	✅

323515-A

4/21/21

International Travel During COVID-19

International Travel RECOMMENDATIONS AND REQUIREMENTS	Not Vaccinated	Fully Vaccinated
Get tested 1–3 days before traveling out of the US	✓	
Mandatory test required before flying to US	✓	✓
Get tested 3-5 days after travel	✓	✓
Self-quarantine after travel for 7 days with a negative test or 10 days without test	✓	
Self-monitor for symptoms	✓	✓
Wear a mask and take other precautions during travel	✓	✓

cdc.gov/coronavirus

CS323515-A 04/02/2021

4/21/21

For now, fully vaccinated people should continue to:

- Take precautions in public, including masks and physical distancing
- Avoid medium- and large-sized in-person gatherings
- Get tested if experiencing COVID-19 symptoms
- Follow guidance issued by individual employers
- Follow CDC and health department travel requirements and recommendations

4/21/21

COVID-19 Vaccine Implementation

- U.S. Goal: Mount a safe, effective, and comprehensive vaccination program that reaches people in *all* communities
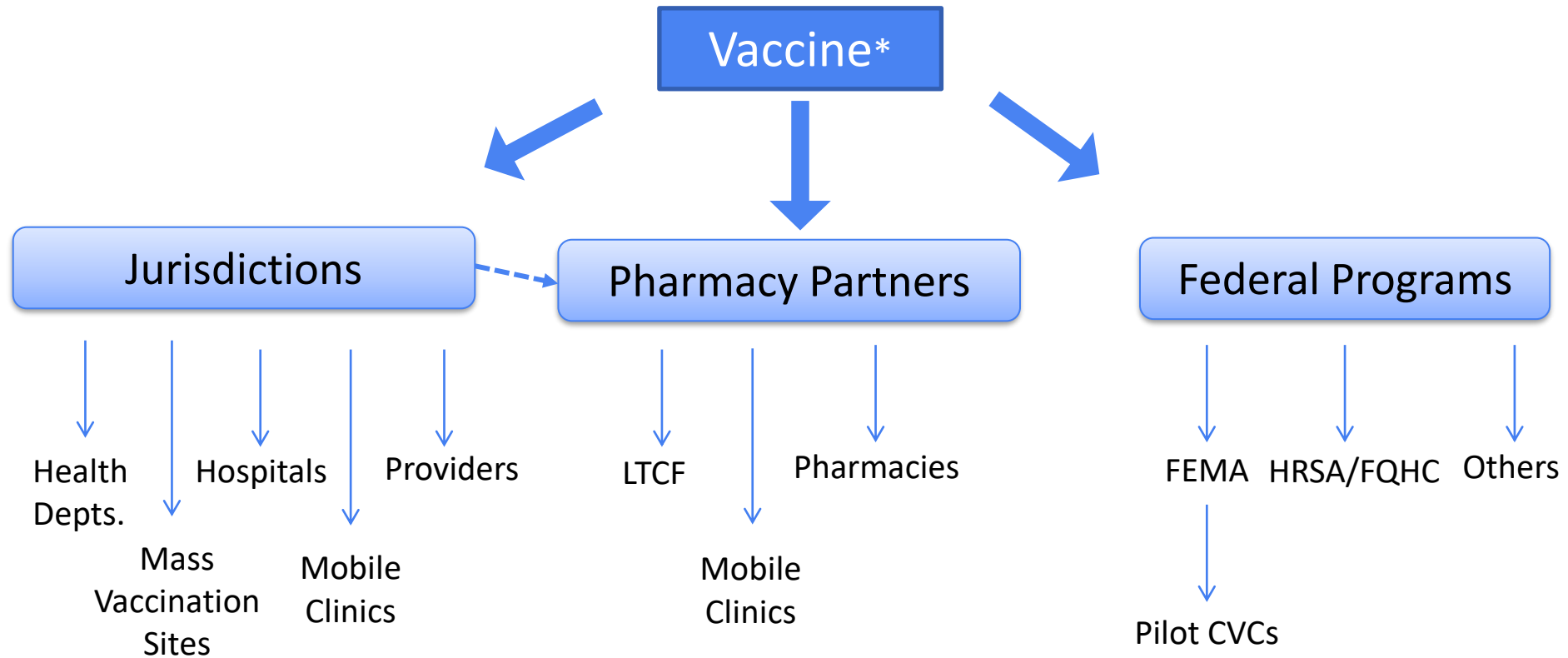
*Diagram is meant to illustrate various methods of vaccine distribution and is not a comprehensive view.

4/21/21

Collaboration between CDC and FEMA

- **Expanding partnership between CDC and FEMA on key objectives**

  - Coordination with FEMA around their Community Vaccination Centers

  - Ensuring support for vaccine sites, delivery of doses, and equitable access to vaccines

  - Coordination with regional, state, tribal, and territorial authorities, private sector partners and others to assist with vaccine distribution

- CDC is working closely with FEMA colleagues at National, Regional and Jurisdictional levels to provide holistic federal support to jurisdictional activities and address jurisdictions-specific challenges

Retail Pharmacy Program

- 21 national pharmacy partners and network administrators enrolled

- Provides a COVID-19 vaccination provider network of **over 40,000 store locations**

- Given supply constraints, could not activate this program all at once.
  - **Incremental roll out** in close coordination with jurisdictions
  - Initial pharmacy partners were selected based on their ability to reach select target populations and serve socially vulnerable populations.

- As supply increases, additional pharmacy locations will be allocated vaccine, until the entire network is activated.

4/21/21

Health Center COVID-19 Vaccine Program

- HRSA and CDC partnership to directly allocate COVID-19 vaccines to health centers
- Separate federal allocation deployed in coordination with jurisdictions
- Incrementally started at select HRSA-supported health centers, but extended to all health centers over time
  - Phase 1: 250 health centers invited
  - Phase 2: 700 health centers invited
  - Phase 3: 520 health centers invited

# Special Considerations and Challenges for Vaccination of Workers

- Workers may work in one state but live in another
- Coordination and planning for if, where, and when staff are eligible and can be vaccinated
  - Possible use of worksites to administer vaccine
- Transient workforces or workers whose jobs involve interstate transportation may have difficulty getting 2nd dose
- Concerns about vaccine safety among some workers
- Need for culturally appropriate vaccination information in multiple languages

Special Considerations and Challenges for Vaccination of Workers

- Rural areas have limited access to health care and health providers

- Methods of communication may be different (e.g. radio, print)

- Rely on community leaders to serve as trusted sources for information

- Some missed days may occur due to post-vaccination side effects

- Critical infrastructure employers have an obligation to manage the continuation of work in a way that best protects the health of their workers and the general public

Construction Sector

- Large number of essential workers

- Mostly smaller companies (fewer than 20 workers)

- Multiple languages represented

- High percentage with risk factors for COVID-19 (high proportion of workers with chronic disease, aged 65 or older, and tobacco users)

- Wide variety of working environments, COVID-19 risk factors, and potential barriers to vaccination

CORONAVIRUS DISEASE 2019 (COVID-19)

CDC

cdc.gov/coronavirus
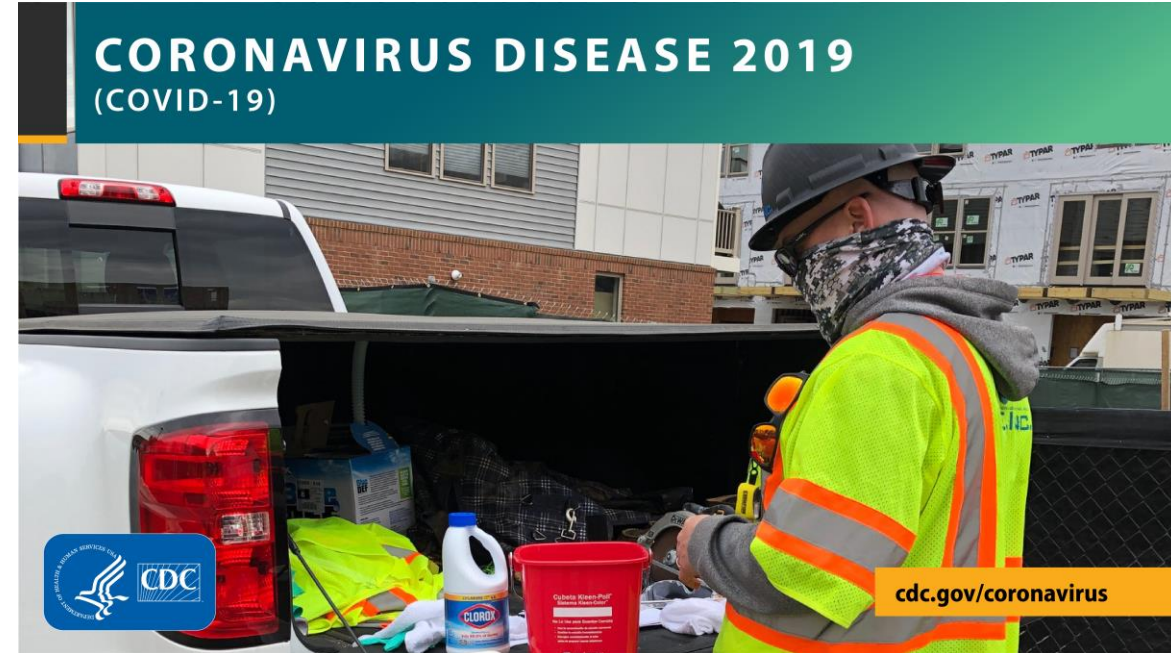
Construction Workers and COVID-19 Vaccination

- **Important considerations for vaccination of workers:**

  – Vaccination information needed in multiple languages that are common in the community

  – Ability to obtain two doses in same location/job site (for certain vaccines only)

  – Concerns from workers about providing personal identification beyond what is required by the jurisdiction

  – Concerns about post-vaccination symptoms and not being able to work

4/21/21

Construction Workers and COVID-19 Vaccination

- **Possible solutions for those offering vaccines**:
  - Consider offering or recommending one-dose vaccine, if available.
  - Work with local health departments to administer vaccines on site.
  - Offer flexible, non-punitive sick leave options (e.g., paid sick leave) for employees to get vaccinated and for employees with side effects after vaccination.
  - Allow time for vaccine confidence to grow.
    - Workers who are hesitant at first may become more confident after seeing coworkers, friends, and family get vaccinated.
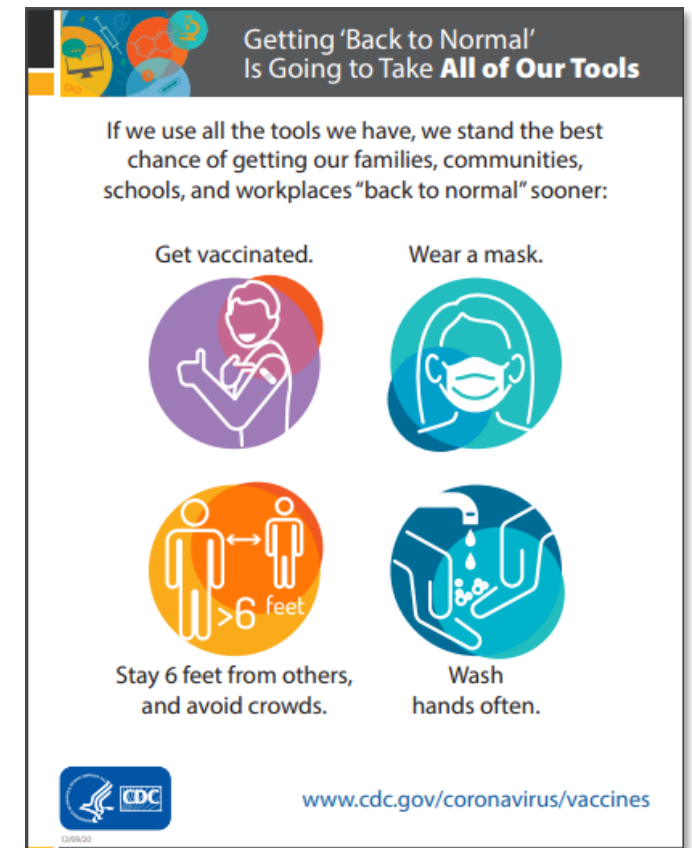 - Offer more than one opportunity for vaccination, if hosting an on-site clinic.

4/21/21

Workplace Vaccination Program

Employers considering implementing a workplace COVID-19 vaccination program should:

- Contact the health department in their jurisdiction for guidance.

- Understand a workplace vaccination program works best for employers with:
  - A large number of workers on site with predictable schedules
  - A location with enough space to stand up a vaccination clinic while maintaining social distancing through the process

- Include input from management, human resources, employees, and labor representatives in the planning process.

- Offer the vaccination at no charge to workers and offer it during work hours.

- Offer more than one opportunity for vaccination. Workers who are hesitant at first might become more confident after seeing coworkers get vaccinated.

- Offer flexible, non-punitive sick leave options for employees with signs and symptoms after vaccination.

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/essentialworker/workplace-vaccination-program.html
https://www.eeoc.gov/wysk/what-you-should-know-about-covid-19-and-ada-rehabilitation-act-and-other-eeo-laws

4/21/21

Encourage Employees to Get Vaccinated

▪ If your business can't offer COVID-19 vaccinations on site, encourage employees to seek COVID-19 vaccination in their community and provide them with information about where they can get the vaccine.

  – Be flexible in your human resources policies. Establish policies that allow employees to take paid leave to seek COVID-19 vaccination in the community. Support transportation to off-site vaccination clinics.

  – Use promotional posters/flyers to advertise locations offering COVID-19 vaccination in the community. Display posters about COVID-19 vaccination in break rooms, cafeterias, and other high traffic areas.

  – Post articles in company communications (e.g., newsletters, intranet, emails, portals) about the importance of COVID-19 vaccination and where to get the vaccine in the community.

Getting 'Back to Normal' Is Going to Take **All of Our Tools**

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.

Wear a mask.

Stay 6 feet from others, and avoid crowds.

Wash hands often.

www.cdc.gov/coronavirus/vaccines

Vaccine Mandates

- CDC recommends that employers **encourage** vaccination and establish supportive policies to make it as easy and convenient as possible for their employees.

- Guidance from the Equal Employment Opportunity Commission suggests that employers *can* mandate COVID-19 vaccination, but they still must allow exemptions for medical conditions and sincerely held religious beliefs.

- Ultimately, whether an employer requires or mandates COVID-19 vaccination is a matter of state or other applicable law.

CDC Vaccine Task Force/Essential Workers Team

- **Mission**
  - Focuses on vaccine implementation for essential workers through linkages with workers, industry, labor, and other stakeholders

- **Strategic Efforts**
  - Disseminating information to enhance vaccine confidence in essential workers
  - Supporting jurisdictions to implement vaccination strategies for essential workers

4/21/21

COVID-19 Vaccine Communication Toolkit for Essential Workers

This toolkit will help your organization educate community members about COVID-19 vaccines, raise awareness about the benefits of vaccination, and address common questions and concerns.

- Key messages

- Slide deck

- Frequently Asked Questions

- Posters/Flyers

- Newsletter Content

- Letter to Members

- Social Media Content

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/toolkits/essential-workers.html
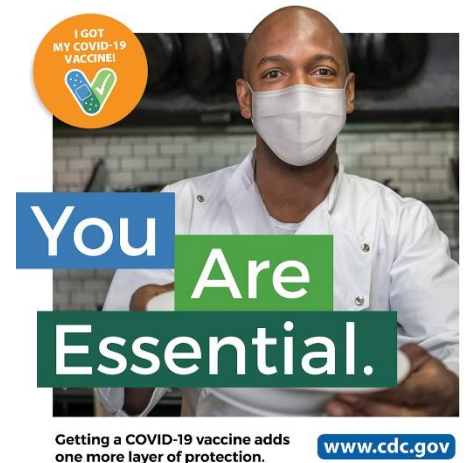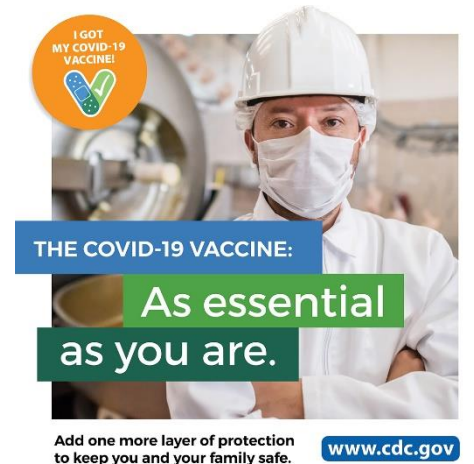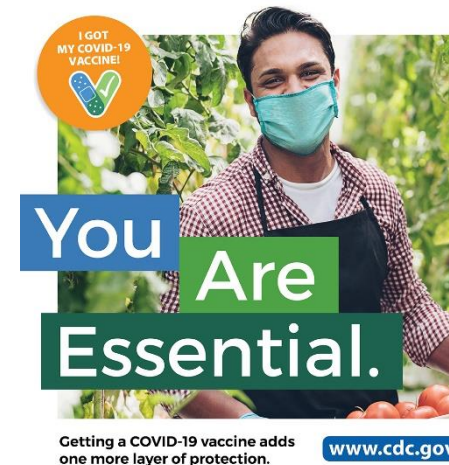
Vaccination is One Measure to Help Stop the Pandemic

- While COVID-19 vaccines appear to be highly effective, additional preventive tools remain important to limit the spread of COVID-19.

- Both getting a vaccine <u>and</u> following CDC recommendations to protect yourself and others offer the best protection from COVID-19.
  - Cover your nose and mouth with a mask.
  - Stay at least 6 feet from people who don't live with you.
  - Avoid crowds and poorly ventilated indoor spaces.
  - Wash your hands.

4/21/21

COVID-19 Vaccine Implementation
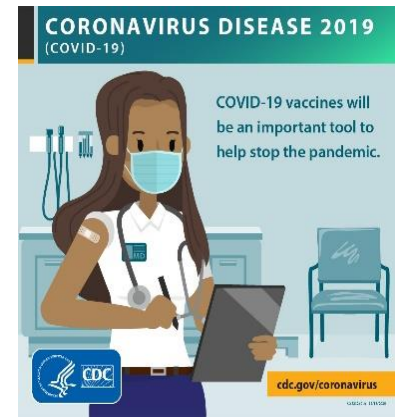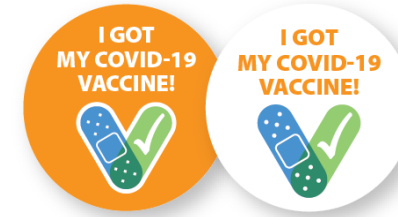
- This is an **exciting and historic time**, but the work is far from over.

- There will be **unanticipated challenges**, but CDC will continue to work closely with you, our partners, to **find solutions and overcome obstacles**.

- Vaccines are an important tool to control the pandemic, but we need to continue to message the importance of **masks, social distancing, and hand washing, even post-vaccination.**

- After vaccination of essential workers**, workplace safety and health protections implemented for the pandemic need to remain in place.**

4/21/21

Thank you

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