

COVID-19



Vaccination Q&A Webinar

# Outline

- Why you should get vaccinated
- How the vaccine works
- Safety and efficacy
- Clinical considerations
- Contraindications / precautions
- State of MO distribution plan / tiers
- How to get the vaccine



# COVID-19 Vaccinations in the United States

Overall US COVID-19 Vaccine | Deliveries and Administration; Maps, charts, and data provided by CDC, updated daily by 8 pm ET<sup>†</sup>  
 Represents all vaccine partners including jurisdictional partner clinics, retail pharmacies, long-term care facilities, Federal Emergency Management Agency and Health Resources and Services Administration partner sites, and federal entity facilities.

<b>Total Vaccine Doses</b>		<b>People Vaccinated</b>		
			At Least One Dose	Fully Vaccinated
Delivered	169,223,125	Total	85,472,166	46,365,515
Administered	130,473,853	% of Total Population	25.7%	14%
<a href="#">Learn more about the distribution of vaccines.</a>		Population ≥ 18 Years of Age	85,234,448	46,298,888
		% of Population ≥ 18 Years of Age	33%	17.9%
		Population ≥ 65 Years of Age	38,455,168	23,974,748
		% of Population ≥ 65 Years of Age	70.3%	43.8%
<a href="#">Read more about how these data are reported.</a>				

CDC | Data as of: Mar 24 2021 6:00am ET | Posted: Mar 24 2021 1:10PM ET

# Vaccination is one measure to help stop the pandemic.

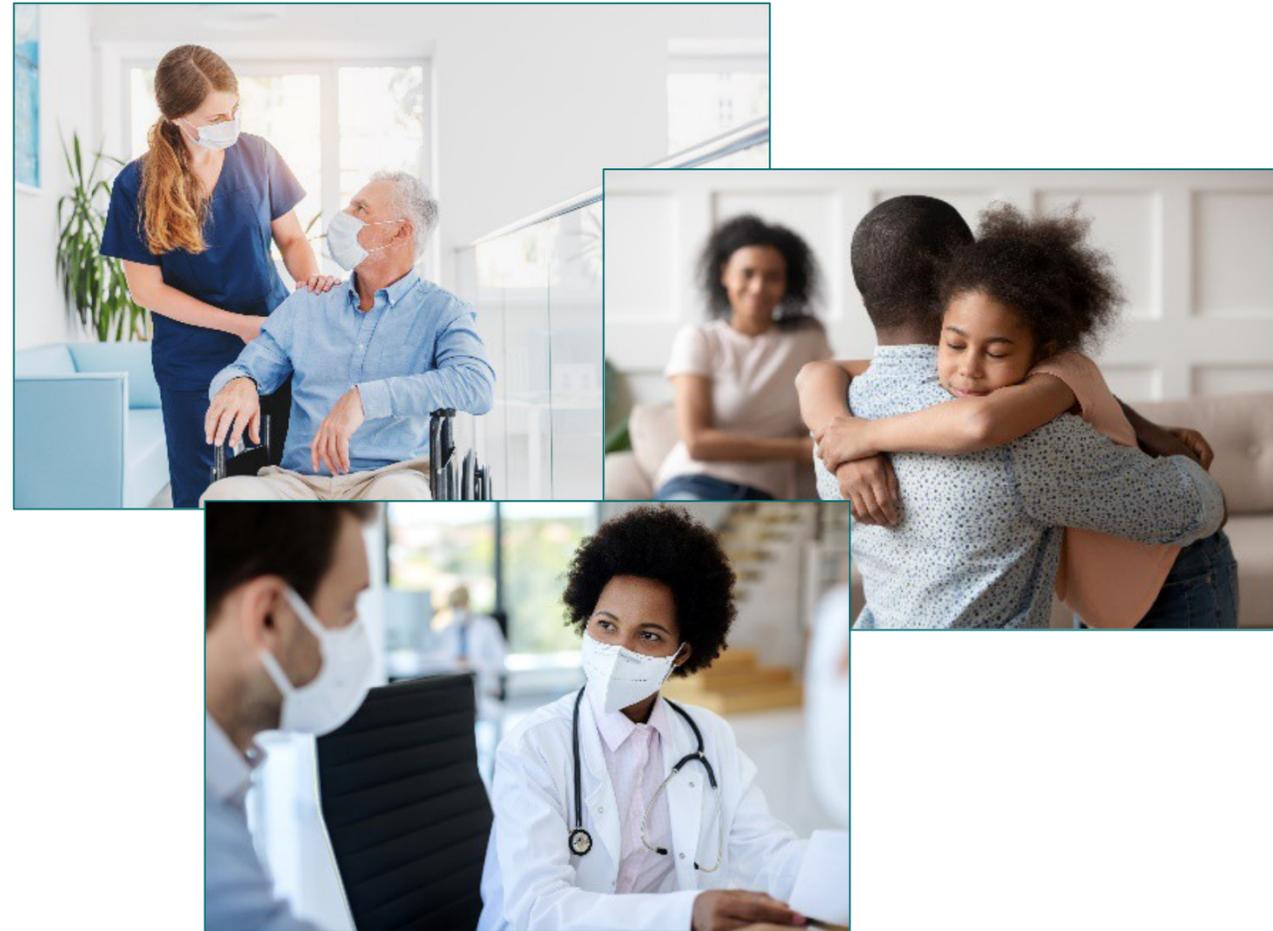
- While COVID-19 mRNA vaccines appear to be highly effective, additional preventive tools remain important to limit the spread of COVID-19.
- The combination of getting vaccinated and following CDC recommendations to protect yourself and others offers the best protection from COVID-19.
  - Cover your nose and mouth with a mask.
  - Avoid close contact. Maintain social distancing.
  - Clean and disinfect.
  - Wash your hands.



# COVID-19 vaccination will help protect you from COVID-19.

## Getting a COVID-19 vaccine...

- Will help create an immune response in your body against the virus.
- May help keep you from getting severely ill, even if you do get COVID-19.
- May protect your family, your coworkers, and patients.



# COVID-19 vaccination is a safer way to build protection.

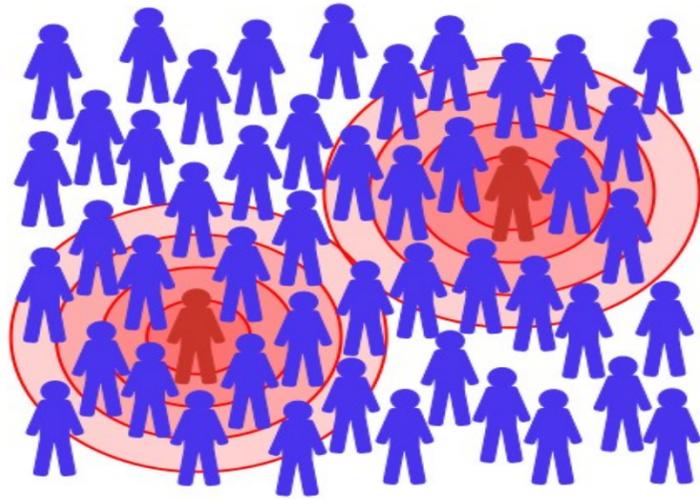
- Getting the virus that causes COVID-19 may offer some natural protection, known as immunity. However, the risk of severe illness and death from COVID-19 far outweighs any benefits of natural immunity.
- COVID-19 vaccination will help protect you by creating an antibody response without the risk of severe illness.
- Both natural immunity and immunity produced by a vaccine are important parts of COVID-19 disease that experts are trying to learn more about.



 = not immunized, but still healthy

 = immunized and healthy

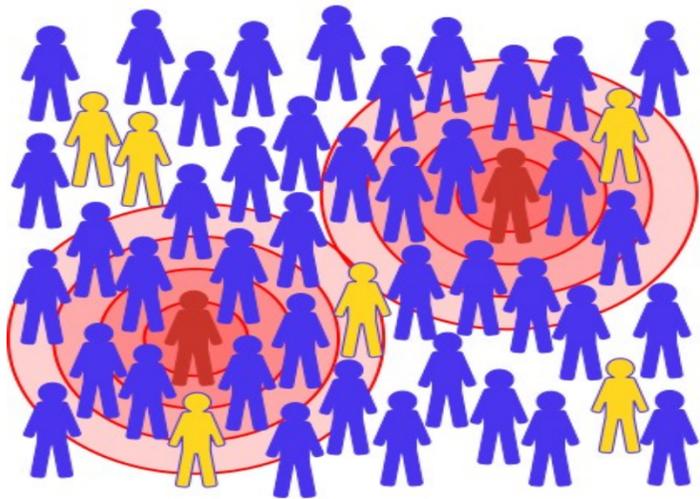
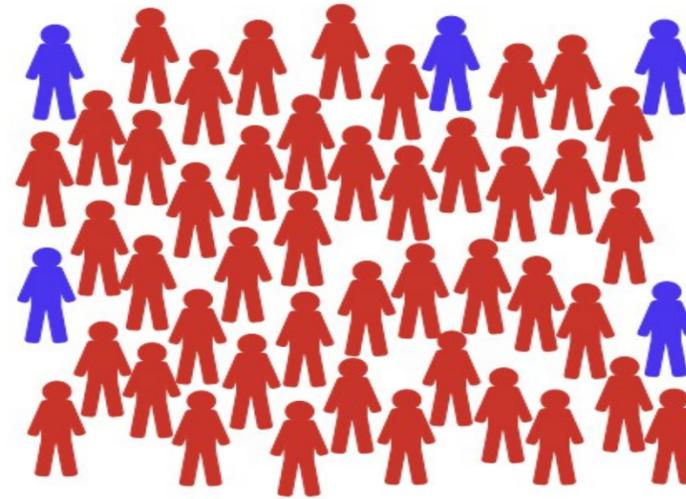
 = not immunized, sick, and contagious



No one is immunized.



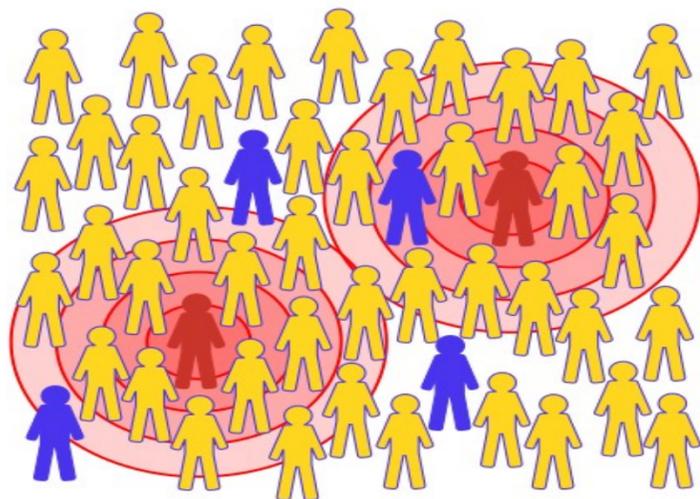
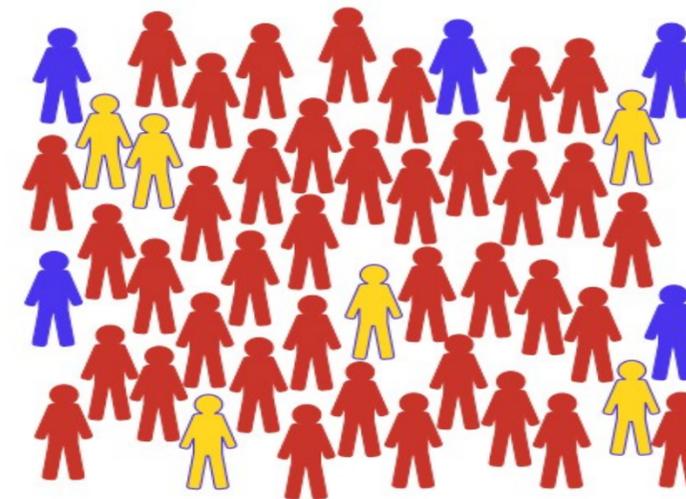
Contagious disease spreads through the population.



Some of the population gets immunized.



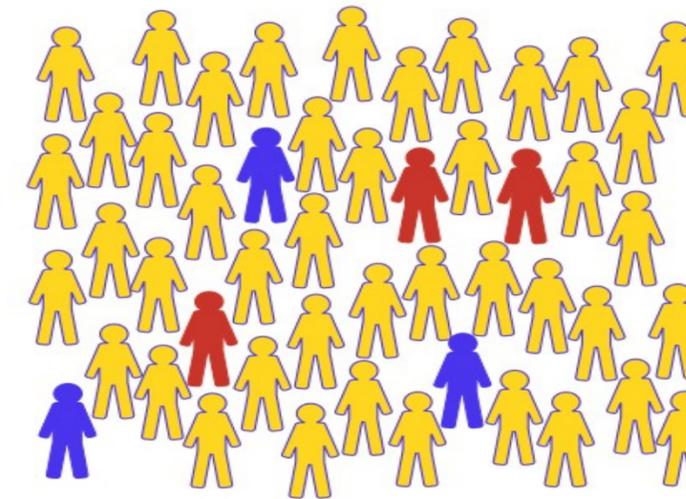
Contagious disease spreads through some of the population



Most of the population gets immunized.



Spread of contagious disease is contained.



# Vaccines for COVID-19 approved for use in the U.S.



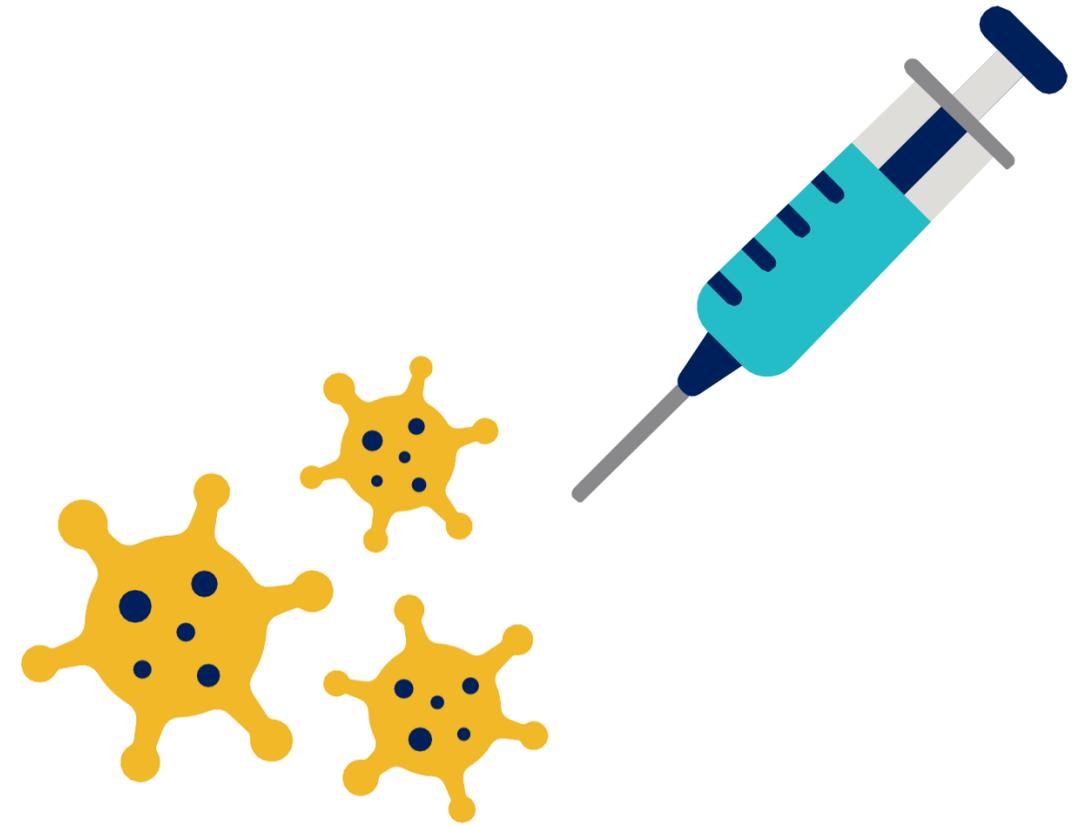
MRNA Vaccine  
Produced by Pfizer and BioNTech  
2 doses, 21 days apart

[www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html](http://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html)



MRNA Vaccine  
Produced by ModernaTX  
2 doses, 28 days apart

[www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Moderna.html](http://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Moderna.html)



## Just Approved



Viral Vector Vaccine  
Produced by Johnson & Johnson  
1 Dose

[emergency.cdc.gov/coca/calls/2021/callinfo\\_030221.asp](http://emergency.cdc.gov/coca/calls/2021/callinfo_030221.asp)

# MRNA Vaccine

Both MRNA vaccines currently approved for use in the U.S. are vaccines that require an initial dose and booster dose to reach their full effectiveness rates.



Dose 1

with  
Eligibility  
& Access

Dose 2

21 or 28 Days  
following 1st  
MRNA Vaccine

Full  
Effectiveness

2 weeks after  
the 2nd Dose  
Vaccine

# Johnson & Johnson Vaccine

This vaccine reaches its' approved effectiveness after only one dose. No second dose is currently recommended.

Dose 1

with  
Eligibility  
& Access

Full  
Effectiveness

2 weeks after  
the 1st Dose

No 2nd  
Dose

No 2nd Dose  
Needed

# How COVID-19 mRNA vaccines work

- 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.
- mRNA vaccines **do not affect our DNA**; mRNA does not enter the cell nucleus.
- mRNA vaccines **cannot give someone COVID-19**.
- mRNA vaccines are new, but the technology is not. mRNA vaccines have been studied for influenza, Zika, rabies, and cytomegalovirus (CMV).



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>

# How COVID-19 viral vector vaccines work

- Viral vector vaccines use a modified version of a harmless adenovirus virus to 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.
- 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.
- Viral vector vaccines **do not affect our DNA**
- Viral vector vaccines **cannot give someone COVID-19.**
- Viral vector vaccines have been used for other diseases such as Ebola, influenza, Zika, and HIV.



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>

## The facts:

# COVID-19 mRNA vaccines will not give you COVID-19.

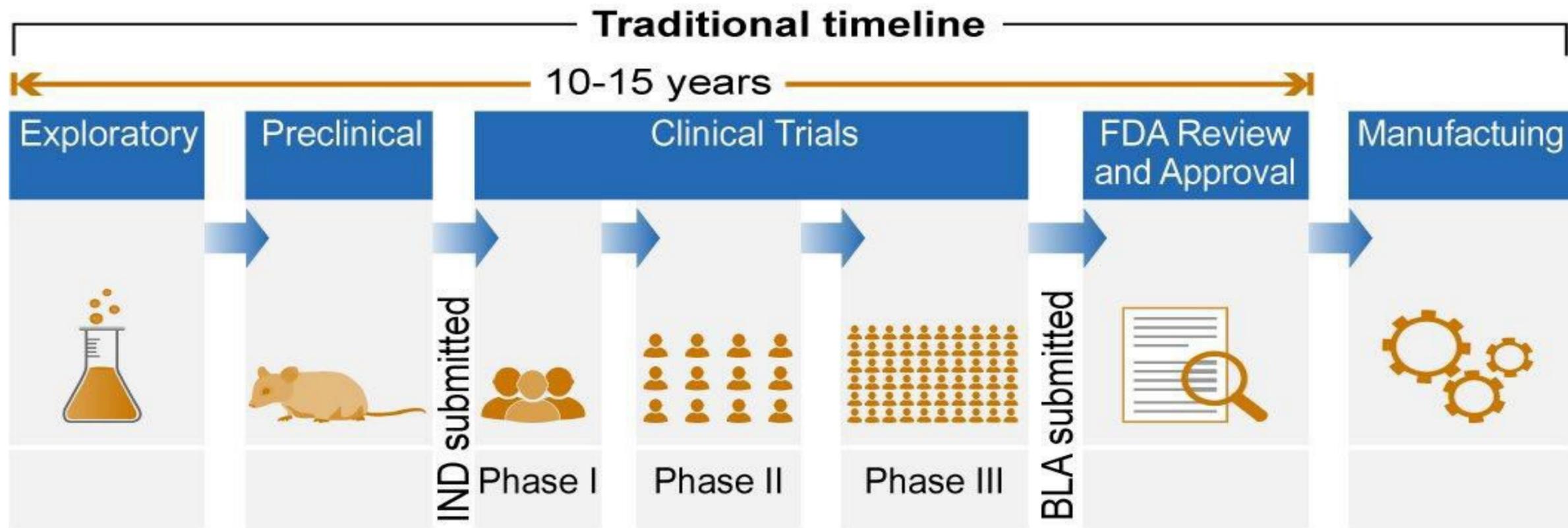
- **None** of the COVID-19 vaccines in use or under development use the live virus that causes COVID-19.
  - People can experience normal side effects, such as fever, after vaccination. These side effects are signs that the body is building immunity.
  - The two vaccines currently authorized require two doses for best protection. Receiving only one dose will not provide optimal protection.
  - It takes a few weeks for the body to build immunity after vaccination. A person could be infected with the virus that causes COVID-19 just before or just after vaccination and get sick. This is because the vaccine has not had enough time to provide protection.
- 

# Q: How do we know if COVID-19 vaccines are safe?

- Explain:
  - FDA carefully reviews all safety data from clinical trials.
  - FDA authorizes emergency vaccine use only when the expected benefits outweigh potential risks.
  - ACIP reviews safety data before recommending any vaccine for use.
  - FDA and CDC will continue to monitor the safety of COVID-19 vaccines to make sure even very rare side effects are identified.

“COVID-19 vaccines were tested in large clinical trials to make sure they meet safety standards. Many people were recruited to participate in these trials to see how the vaccines offer protection to people of different ages, races, and ethnicities, as well as those with different medical conditions.”





BLA = Biologics License Application

EUA = Emergency Use Authorization

IND = Investigational New Drug

Source: GAO analysis of GAO-20-215SP, FDA, HHS, and Pharmaceutical Research and Manufacturers of America (PhRMA) documentation. | GAO-20-583SP

# Efficacy data

## Pfizer-BioNTech COVID-19 vaccine: Phase III data

- Primary efficacy endpoint: Symptomatic, laboratory-confirmed COVID-19 among subjects without evidence of prior infection
  - Efficacy: **95.0%** (90.3–97.6%)
- **High** efficacy ( $\geq 92\%$ ) for additional efficacy analysis: across age, sex, race, and ethnicity categories, and those with underlying medical conditions
  - Efficacy among adults  $\geq 65$  years of age: **94.7%** (66.7–99.9%)

# Efficacy data

## Moderna COVID-19 vaccine: Phase III data

- Primary efficacy endpoint: Symptomatic, laboratory-confirmed COVID-19 among subjects without evidence of prior infection subjects without evidence of prior infection
  - Efficacy: **94.1%** (89.3%–96.8%)
- **High** efficacy for additional efficacy analysis, across age, sex, race, and ethnicity categories, and those with underlying medical conditions
  - Efficacy among adults 18-64 years of age: **95.6%** (90.6%–97.9%)
  - Efficacy among adults  $\geq 65$  years of age: **86.4%** (61.4%–95.5%)
    - Efficacy among adults  $\geq 75$  years of age: **100%**

# Key Efficacy Findings from Ad26.COVS Single-Dose Study Demonstrate Protection Against Symptomatic COVID-19



## 85% vaccine efficacy\* against severe COVID-19 globally, including the United States

- Consistent vaccine efficacy against severe disease across all regions
- Equally high protection in South Africa (n > 6,500) where B.1.351 is highly prevalent (> 95%)
- Complete protection against COVID-19 related hospitalizations as of day 28 and no COVID-19 related deaths in the Ad26 group compared to 5 in the placebo group



## 72% vaccine efficacy\* against moderate to severe/critical COVID-19 in the United States

- Participants reflected diversity of US population (n > 19,000)



## 66% vaccine efficacy\* against moderate to severe/critical COVID-19 across all countries

- Protection as of 2 weeks after vaccination



Similar vaccine efficacy demonstrated by age, comorbidities status, sex, race, and ethnicity

# Vaccine efficacy or effectiveness (VE) against variants

Vaccine	Study type	VE
<b>Pfizer</b>	Post-licensure	<ul style="list-style-type: none"> <li>• 86% in UK (predominate B.1.1.7 circulation)*</li> <li>• 94% in Israel (up to 80% of cases from B.1.1.7)</li> </ul>
<b>Janssen</b>	Pre-licensure	<ul style="list-style-type: none"> <li>• 74% in U.S.</li> <li>• 66% in Brazil</li> <li>• 52% in S. Africa</li> </ul>
		<div style="border: 1px solid black; background-color: #0056b3; color: white; padding: 5px; display: inline-block;">73-82% for severe/critical disease in each country</div>
<b>Novavax</b>	Pre-licensure	<ul style="list-style-type: none"> <li>• 96% against non-B.1.1.7 in UK</li> <li>• 86% against B.1.1.7 in UK</li> </ul>
	Pre-licensure	<ul style="list-style-type: none"> <li>• 60% in S. Africa (93% of cases from B.1.351)</li> </ul>
<b>AstraZeneca</b>	Pre-licensure	<ul style="list-style-type: none"> <li>• 84% against non-B.1.1.7 in UK</li> <li>• 75% against B.1.1.7 in UK</li> </ul>
	Pre-licensure	<ul style="list-style-type: none"> <li>• 10% against B.1.351 in South Africa</li> </ul>

Hall et al. Lancet preprint (Feb 22 2021): [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3790399](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3790399); \*VE for symptomatic & asymptomatic infection

Dagan et al. NEJM (2021). <https://www.nejm.org/doi/full/10.1056/NEJMoa2101765?query=TOC>

<https://www.fda.gov/media/146217/download>

Novavax.: <https://ir.novavax.com/news-releases/news-release-details/novavax-covid-19-vaccine-demonstrates-893-efficacy-uk-phase-3>

Madhi et al. medRxiv preprint (Feb 12 2021): <https://doi.org/10.1101/2021.02.10.21251247>

Emary et al. Lancet preprint (Feb 4 2021): [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3779160](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3779160)



# Contraindications to mRNA COVID-19 vaccination

Pfizer-BioNTech and Moderna COVID-19 vaccines

- Contraindications to either of the mRNA COVID-19 vaccines:
  - Severe allergic reaction (e.g., anaphylaxis) after a previous dose of an mRNA COVID-19 vaccine or to any of its components
  - Immediate allergic reaction of any severity to a previous dose of an mRNA COVID-19 vaccine or any of its components (including polyethylene glycol [PEG])\*
  - Immediate allergic reaction of any severity to polysorbate (due to potential cross-reactive hypersensitivity with the vaccine ingredient PEG)\*
- Persons with an immediate allergic reaction to the first dose of an mRNA vaccine should not receive additional doses of either of the mRNA COVID-19 vaccines

\* These persons should not receive mRNA COVID-19 vaccination at this time unless they have been evaluated by an allergist-immunologist and it is determined that the person can safely receive the vaccine (e.g., under observation, in a setting with advanced medical care available).

# Precautions to mRNA COVID-19 vaccines

Pfizer-BioNTech and Moderna COVID-19 vaccines

- Any immediate allergic reaction to any other vaccine or injectable therapy (i.e., intramuscular, intravenous, or subcutaneous vaccines or therapies not related to a component of mRNA COVID-19 vaccines or polysorbate)
- Unknown risks of developing a severe allergic reaction should be balanced against the benefits of vaccination
- Deferral of vaccination and/or consultation with an allergist-immunologist may be considered

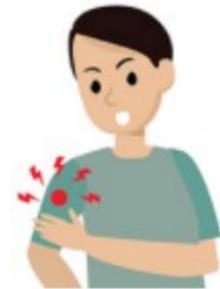
# Common Immune Response Following the Vaccine

**These typically only last 1-2 days and show that your body is creating an immune response.**

**You are not contagious with COVID-19 experiencing these symptoms following the vaccine.**

## Common side effects

On the arm where you got the shot:



- Pain
- Redness
- Swelling

Throughout the rest of your body:



- Tiredness
- Headache
- Muscle pain
- Chills
- Fever
- Nausea

To reduce pain and discomfort where you got the shot



- Apply a clean, cool, wet washcloth over the area.
- Use or exercise your arm.

To reduce discomfort from fever



- Drink plenty of fluids.
- Dress lightly.

# 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 vaccine authorization

- **FDA** and **CDC** closely monitor vaccine safety and side effects.

# Monitoring vaccine safety is a regular, ongoing part of vaccine development.

- **Existing** systems and data sources are used to monitor safety of vaccines after they are authorized or licensed, such as:
  - [Vaccine Adverse Event Reporting System \(VAERS\)](#)
  - [Vaccine Safety Datalink \(VSD\)](#)
  - [Clinical Immunization Safety Assessment \(CISA\)](#)
  - [Biologics Effectiveness and Safety System \(BEST\)](#)
- **New** systems are being developed to monitor vaccine safety, such as [v-safe](#):
  - Active surveillance that uses text messaging to initiate web-based survey monitoring
  - Any clinically important events reported by a participant would be sent to VAERS for follow-up



## Some Benefits of Being Fully Vaccinated:

- Visiting with other fully vaccinated people without the need to wear masks or physically distance
- Visit with unvaccinated people from a single household who are low-risk for developing severe COVID-19
- No quarantine is needed following a COVID-19 exposure as long as there are no symptoms appearing
- You should continue taking precautions in public and around unvaccinated high-risk individuals



# Celebrate!

**You now have safe  
and effective  
protection against  
serious COVID-19!**

# mRNA COVID-19 vaccines

## Clinical Considerations



## The facts:

# People previously diagnosed with COVID-19 should still get vaccinated with a COVID-19 vaccine.

- Due to the severe health risks associated with COVID-19 and the fact that a person can become infected with the virus more than once, vaccine should be offered regardless of whether you already had COVID-19 infection.
- At this time, experts do not know how long someone is protected from getting sick again after recovering.



# Pregnant women

- COVID-19 and pregnancy
  - Increased risk of severe illness (ICU admission, mechanical ventilation and death)
  - Might be an increased risk of adverse pregnancy outcomes, such as preterm birth
- There are limited data on the safety of COVID-19 vaccines in pregnant women
  - Limited animal developmental and reproductive toxicity (DART) data
  - Studies in humans are ongoing and more planned
- If a woman is part of a group (e.g., healthcare personnel) who is recommended to receive a COVID-19 vaccine and is pregnant, she may choose to be vaccinated.

## Q: Is it safe to get a COVID-19 vaccine if I am pregnant or breastfeeding?

- Explain that there is limited data about the safety of COVID-19 vaccines during pregnancy and breastfeeding, but that experts do not believe it poses a risk.
- Clarify that patients may choose to get vaccinated if they are part of a recommended group.
- Emphasize that vaccination is a personal decision and offer to discuss it in more depth.

There is limited information about the safety of COVID-19 vaccines during pregnancy. However, based on what we know about how these vaccines work, experts believe they are unlikely to pose a risk for pregnant patients. You may choose to get vaccinated if you are part of a group that is recommended for COVID-19 vaccine. We can talk through this decision together.



## Protect yourself, your family, friends, coworkers, and your community. Get vaccinated.

- Choose to get vaccinated when it is offered.
- Participate in **v-safe** and help CDC monitor for any health effects after vaccination.
- Share your experience with coworkers, friends, and family.
- Know the basics about the COVID-19 vaccine. Help answer questions from your family and friends.
- Stay updated from reputable information sources
- Show you received the vaccine by wearing a sticker or button prominently.



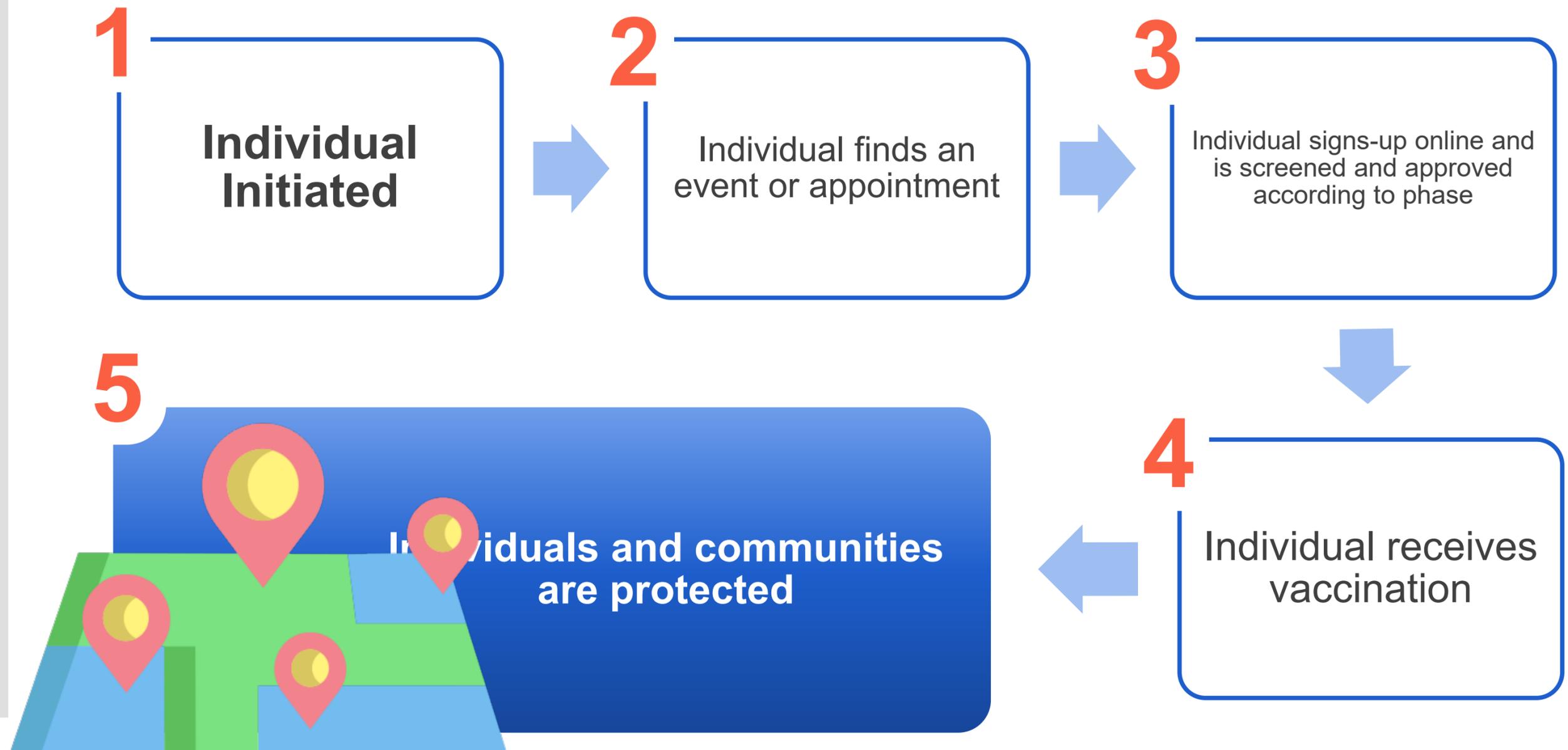


# How to Get the Vaccine

---

March 26, 2021

# You Go to the Vaccine



# Off-Site Clinic

- This is the best option for workplaces with few staff, staff in multiple locations and shifts who are eager to receive the vaccine.
- Identify the event that is going to work best for your schedule:  
[health.springfieldmo.gov/VaccineRegistration](https://health.springfieldmo.gov/VaccineRegistration). Make this option available to your staff and let them know how they register & sign up.
- SGCHD sends out a weekly business update that includes this information. You can subscribe at [surveymonkey.com/r/VaccineEssential](https://surveymonkey.com/r/VaccineEssential).
- Most vaccination events are held during business hours, so consider your staffing needs.
- Slots are available next week!



## REGISTER

Patients must register through Missouri's Vaccine Navigator program to be vaccinated through SGCHD/JVCHC. Once you are registered, Vaccine Navigator will generate an 8-10 digit Patient ID. This ID will be needed to schedule your appointment.

If you do not remember your Patient ID, call [877-435-8411](tel:877-435-8411).

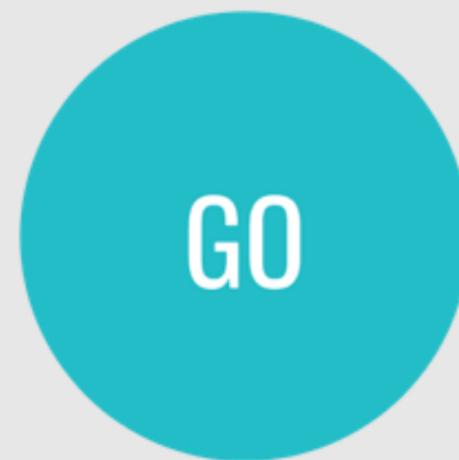
[Sign up using Missouri Vaccine Navigator](#)



## SCHEDULE

Schedule an appointment at the Springfield-Greene County Health Department or Jordan Valley Community Health Center vaccine clinics. Please allow one hour for your appointment. Due to the demand for vaccine, it is important that you make your scheduled appointment a priority. Rescheduling may not be available in a timely manner.

[Schedule your appointment](#)



## COME TO VACCINE EVENT

Please bring identification and your patient ID number (from Vaccine Navigator) to your appointment.

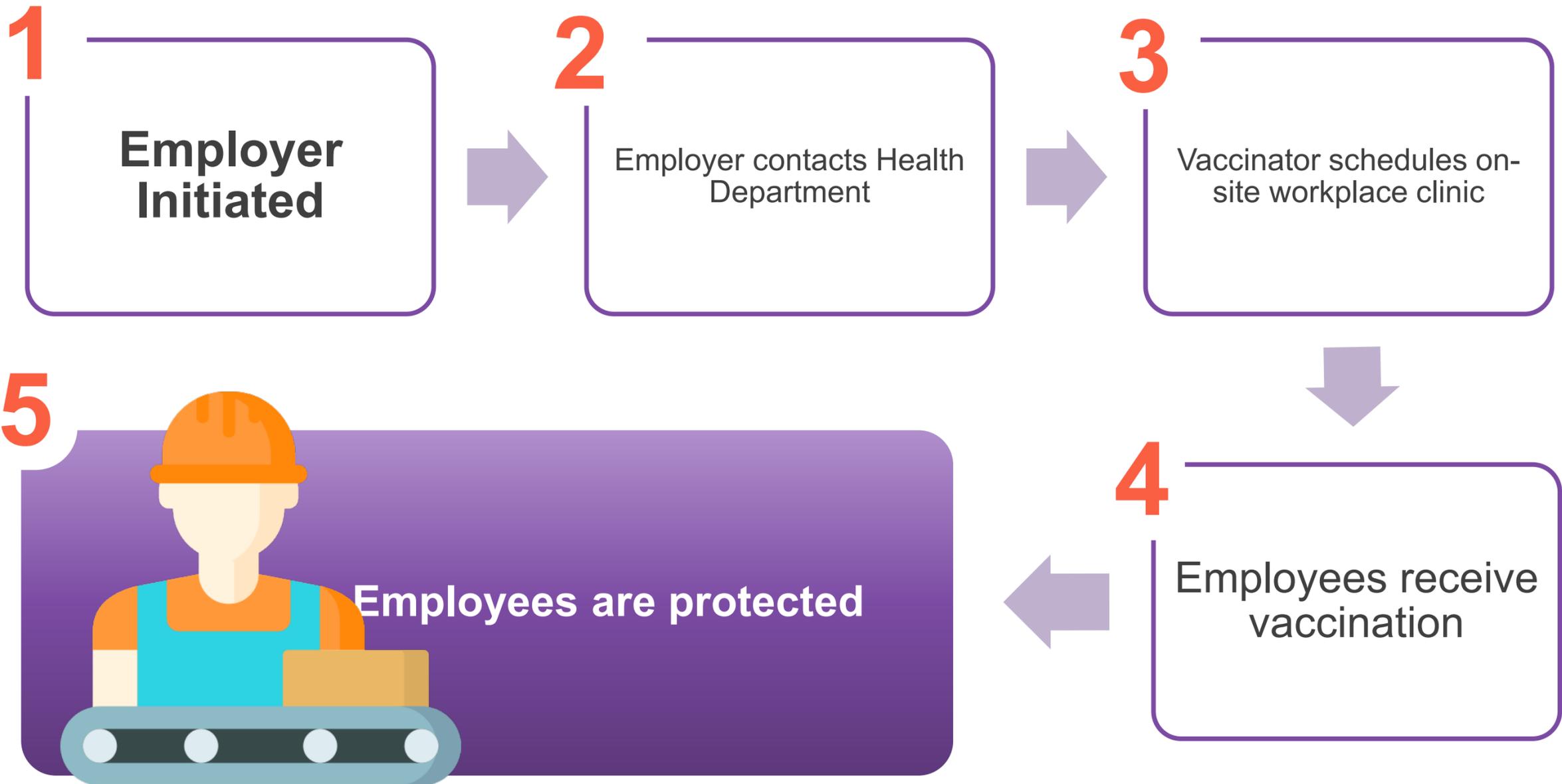
**If you do not remember your Patient ID, call [877-435-8411](tel:877-435-8411).**

*Please note: you will not be charged anything out of pocket for your vaccine.*

# Employer's Role

- Share our Ready, Set, Go flyer that includes the information your staff needs to get signed up for a vaccination appointment.
- Allow staff to schedule appointments during their shift.
- Make vaccine education resources available to the entire workplace.
- Direct individuals with questions to the Springfield-Greene County Health Department at 874-1211 or [coronavirus@springfieldmo.gov](mailto:coronavirus@springfieldmo.gov).

# Vaccine Comes to You



# On-Site Clinics

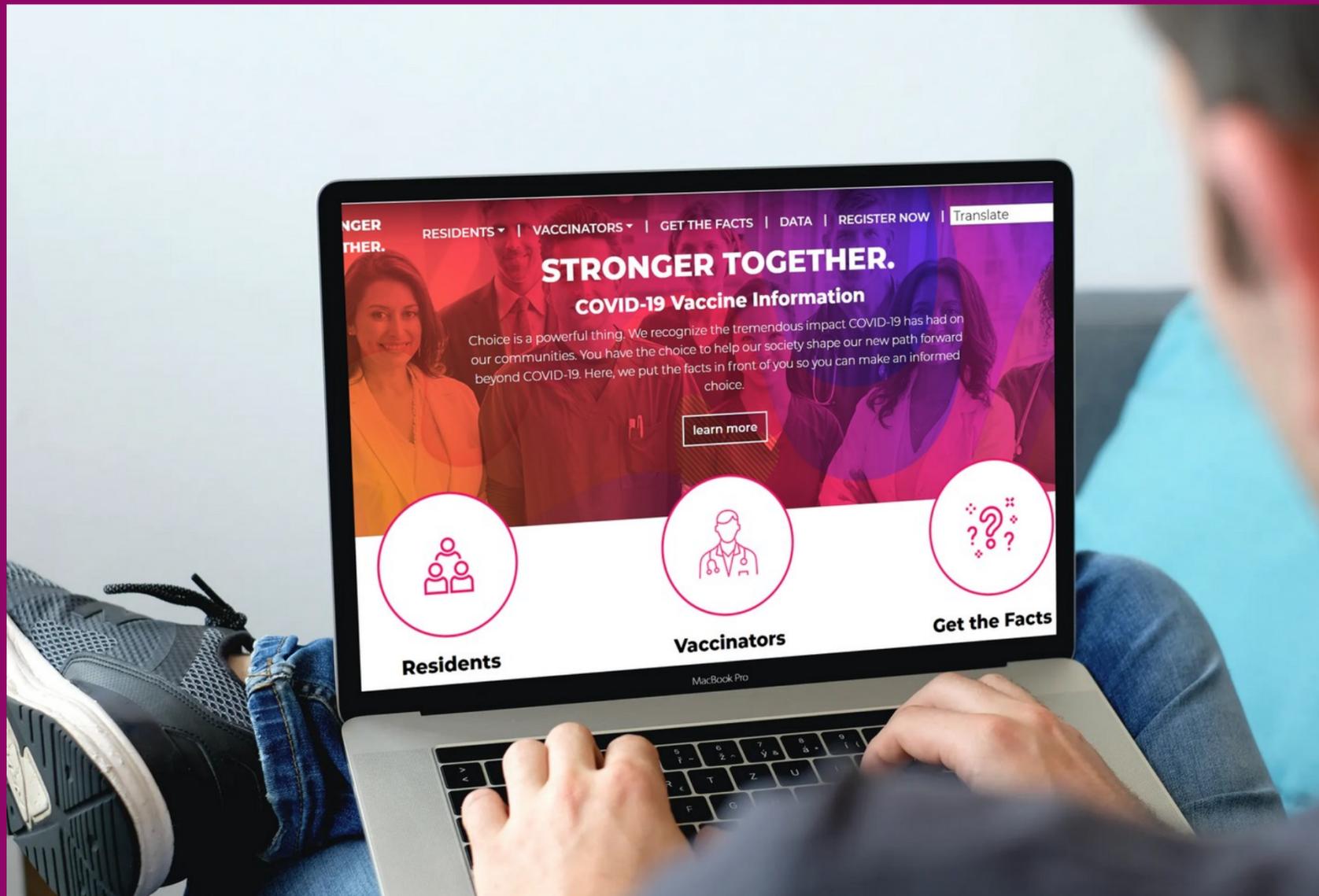
- A good option for workplaces with more staff needing the vaccination, and the best option for workplaces that have employed or contract health care staff.
- Increasing convenience helps reduce compliancy. If it's there and available, more people will get vaccinated!
- Interested workplaces who have not already signed up or those interested in learning more can let us know by emailing [coronavirus@springfieldmo.gov](mailto:coronavirus@springfieldmo.gov) or calling 417-874-2777. There are also opportunities with other vaccination partners, so when in doubt reach out!
- Keep up to date by subscribing to our updates: [surveymonkey.com/r/VaccineEssential](https://surveymonkey.com/r/VaccineEssential).

# Employer's Role

- Survey your staff and find out how many will need a vaccine. The Chamber has an Employee Count Form that makes this easy.
- Make vaccine education resources available to the entire workplace prior to the event.
- Schedule and coordinate appointments for staff receiving the vaccine during the allotted time, especially if they are coming in from multiple locations or when they are off the clock.
  - If receiving Pfizer or Moderna, be prepared to do this again in 21 or 28 days.
- Reach out to us at [coronavirus@springfieldmo.gov](mailto:coronavirus@springfieldmo.gov) if you have many employees that are currently uninterested in receiving the COVID-19 vaccine.

# Vaccine Information for Missouri

<https://covidvaccine.mo.gov/>



## Find Out:

- Details for Phases & Tiers
- Details about Vaccine
- Sign Up on Vaccine Navigator waiting list
- How to Become a Vaccinator



# Vaccines Questions?

## **Contact Us Here:**

**[coronavirus@springfieldmo.gov](mailto:coronavirus@springfieldmo.gov)**

**417-874-1211**

## More Info?

## **Information Sites:**

**Missouri Website:** [covidvaccine.mo.gov/](https://covidvaccine.mo.gov/)

**Greene County:** [health.springfieldmo.gov/COVIDvaccine](https://health.springfieldmo.gov/COVIDvaccine)



SPRINGFIELD -  
GREENE COUNTY  
**HEALTH**

