

This information is based on currently available evidence, resources, information, emergency use authorization, and expert opinion, and is subject to change. As evidence regarding the use of COVID-19 vaccines for individuals emerges, it will be necessary to modify this document.

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Frequently Asked Questions (FAQs) about COVID-19 Vaccines

COVID-19 Vaccination Basics

What role do COVID-19 vaccinations play in helping to curb the pandemic?

COVID-19 vaccination will help protect ourselves, our families, and our communities from the disease and save lives. Vaccines can both prevent and reduce the severity of disease. Vaccines provide immunity without the serious risks associated with getting infected naturally. Wearing masks and physical distancing help reduce the chance of being exposed to the virus or spreading it to others, but these measures are not enough.

The COVID-19 vaccines are designed to work with our immune systems so the body is ready to fight the virus if we are exposed to the virus. When enough people in a community get vaccinated against COVID-19, immunity rates in our communities substantially increase, which reduces the spread of the virus.

Are the COVID-19 vaccines safe?

Yes. COVID-19 vaccines have been evaluated in tens of thousands of individuals who volunteered to participate in clinical trials. These clinical trials met the same rigorous standards set for all vaccines by the Food and Drug Administration (FDA).

The information from these clinical trials allowed the FDA to determine that the newly authorized COVID-19 vaccines meet its safety and effectiveness standards. Based on these findings, the FDA has made the vaccines available for use in the United States under what is known as an Emergency Use Authorization (EUA).

The Centers for Disease Control and Prevention (CDC) and the FDA will continue to monitor the safety of the vaccines now that they are in use.

How effective will the vaccines be for disease prevention?

The COVID-19 vaccines currently authorized for use were found to be highly effective in preventing COVID-19 in clinical trials.

For example, in Phase 3 trials, the Pfizer vaccine showed a 95% efficacy rate seven days after the second dose. The Moderna vaccine showed a 94% efficacy rate 14 days after the second dose.

These results for both vaccines were consistent across gender, age, race, and ethnicity.

How do COVID-19 mRNA vaccines (Pfizer and Moderna) work?

The vaccines contain synthetic mRNA, which is genetic information used to make the SARS-CoV-2 spike protein. The spike protein is the part of the virus that attaches to human cells. The spike protein alone cannot cause COVID-19.

Once the spike protein is created, it causes the immune system to make antibodies against the virus. These antibodies can then provide protection if a person comes into contact with the virus.

Since the vaccine does not contain any virus, it is not possible to spread COVID-19 from receiving the vaccine. The mRNA does not enter the center of the human cell where DNA is made (the nucleus); so, it cannot alter the genetic material of the cell (DNA). The mRNA is rapidly broken down, making the chance for long-term side effects less likely. The mRNA vaccines do not have the ability to cause cancer.

Learn more here: <https://www.cdc.gov/vaccines/covid-19/downloads/healthcare-professionals-mRNA.pdf>

Can I get COVID-19 from a vaccine?

No. None of the COVID-19 vaccines currently authorized for use or in development in the United States use the live virus that causes COVID-19.

What many people experience as a result of receiving the vaccine are not side effects, but rather the body's immune system responding to the COVID-19 vaccine. Both COVID-19 mRNA vaccines (Pfizer and Moderna) work with your immune system so it will be ready to fight the virus if you are exposed. The most common immune responses are short-term injection site pain, swelling or redness, tiredness, headache, muscle pain, joint pain, chills or fever.

It usually takes a few weeks for the body to build immunity after receiving the second dose of the vaccine. That means it is possible for an individual to be infected with the virus that causes COVID-19 if exposed just before or just after vaccination. The vaccine itself does not cause infection.

What is an Emergency Use Authorization (EUA)?

During a public health emergency, the FDA can use a process called "Emergency Use Authorization" (EUA). This process allows the use of medical products that are not yet approved to diagnose, treat, or prevent serious or life-threatening diseases when certain criteria are met.

Several additional COVID-19 vaccines are currently being developed and tested for their safety and effectiveness in clinical trials (efficacy). Once vaccine manufacturers submit for authorization, the FDA evaluates the EUA request and determines whether they are safe and effective, taking scientific evidence into account. For a vaccine to receive an EUA, the FDA must determine if the vaccine's benefits outweigh its risks based on data from rigorous clinical trial(s).

Additional information on EUAs: <https://www.fda.gov/vaccines-blood-biologics/vaccines/emergency-use-authorization-vaccines-explained>

How does the FDA Assess Safety and Effectiveness of a COVID-19 Vaccine Submitted for Emergency Use Authorization (EUA)?

COVID-19 vaccines are undergoing a rigorous development process that includes tens of thousands of study participants to gather required safety and efficacy data, in the same way as many other currently approved vaccines. The FDA evaluates the information submitted by a vaccine manufacturer and uses all available tools and information, including records reviews, site visits, and previous manufacturing compliance history.

For an EUA to be issued, the FDA must determine that the known and potential benefits outweigh the known and potential risks of the vaccine.

Link: <https://www.fda.gov/vaccines-blood-biologics/vaccines/emergency-use-authorization-vaccines-explained>

Which COVID-19 vaccines have been authorized for use by the FDA?

At this time, there are two COVID-19 vaccines authorized for use by the FDA. The **Pfizer mRNA COVID-19 vaccine** received FDA authorization December 11, 2020 for individuals **ages 16 and older**. It is a 2-dose vaccination series, given intramuscularly, recommended **at least 3 weeks apart**. For the full FDA statement on the authorization of this vaccine:

<https://www.fda.gov/news-events/press-announcements/fda-takes-key-action-fight-against-covid-19-issuing-emergency-use-authorization-first-covid-19>

The **Moderna mRNA COVID-19 vaccine** received FDA authorization December 18, 2020 for individuals **18 and older**. It is a 2-dose vaccination series, given intramuscularly, recommended **at least 1 month apart**. For the full FDA statement on the authorization of this vaccine:

<https://www.fda.gov/news-events/press-announcements/fda-takes-additional-action-fight-against-covid-19-issuing-emergency-use-authorization-second-covid>

Why have vaccines been developed so quickly?

The vaccine process has happened faster because vaccine research and development, clinical trials, manufacturing, and plans for distribution have occurred at the same time. This method removed delays that occur when these processes are carried out one after the other. Steps to ensure safety were **NOT** eliminated.

Why do we need a vaccine if we can take other COVID-19 precautions, like masking and physical distancing, to slow or prevent the spread?

It is vital that each person uses all tools available to stop the pandemic. Vaccines work with the immune system and allow a strengthened response to the virus if exposure occurs.

Other steps, like covering the mouth and nose with a mask, washing hands, and staying at least 6 feet away from others, help reduce chances of exposure to the virus or spreading it to others.

Together, COVID-19 vaccination and following recommendations [for self-protection and to protect others](#) will offer the best prevention for further spread of COVID-19. For more information: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Before Getting Vaccinated

Should I take COVID-19 vaccines if I have a significant history of allergic reactions?

This section addresses contraindications and precautions to mRNA COVID-19 vaccines. **Individuals with allergy questions or concerns should consult a health care provider.** Disclose any allergies to medical staff prior to vaccination.

While rare, anaphylactic reactions have been reported following vaccination with mRNA COVID-19 vaccines. Although investigations are ongoing, persons with a history of an immediate allergic reaction (of any severity) to an mRNA COVID-19 vaccine or any of its components might be at greater risk for severe reaction upon taking additional doses. For the purposes of this guidance, **an immediate allergic reaction** to a vaccine or medication is defined as any hypersensitivity-related signs or symptoms such as hives (urticaria); swelling around the face, lips, and tongue (angioedema); wheezing or other respiratory distress; or anaphylaxis that occur within four hours following getting the vaccine.

Recommendations for contraindications and precautions are described below and summarized in the figure from CDC at the end of this question section. The following recommendations may change as further information becomes available.

Contraindication to vaccination:

Contraindications are conditions or factors that would be a reason to not get vaccination due to harm. (Individuals with a contraindication should **not** get the COVID-19 vaccine.)

CDC considers a history of the following to be a contraindication to vaccination with both the Pfizer-BioNTech and Moderna COVID-19 vaccines:

1. **Severe allergic reaction** (e.g., anaphylaxis) after a previous dose of an mRNA COVID-19 vaccine **or** any of its components
2. **Immediate allergic reaction*** (within 4 hours) **of any severity** to a **previous dose of an mRNA COVID-19** vaccine or any of its components (including polyethylene glycol [PEG])
3. **Immediate allergic reaction*** (within 4 hours) **of any severity to polysorbate** (due to potential cross-reactive hypersensitivity with the vaccine ingredient PEG)*

*As noted above: For the purposes of this guidance, **an immediate allergic reaction** to a vaccine or medication is defined as any hypersensitivity-related signs or symptoms such as hives (urticaria); swelling around the face, lips, and tongue (angioedema); wheezing or other respiratory distress; or anaphylaxis that occur within four hours following getting the vaccine.

Persons with an immediate allergic reaction to the first dose of an mRNA COVID-19 vaccine should **NOT** receive additional doses of either of the mRNA COVID-19 vaccines. Providers should attempt to determine whether reactions reported following vaccination are consistent with immediate allergic reactions versus other types of reactions commonly observed following vaccination, such as passing out (a vasovagal reaction) or post-vaccination side effects—which are not contraindications to receiving the second vaccine dose (see the figure at the bottom of this question section).

The following fact sheets contain additional information about who should not receive the vaccine.

Pfizer-BioNTech Fact Sheet for Vaccine Recipients and Caregivers:

<https://www.fda.gov/media/144414/download>

Moderna Fact Sheet for Vaccine Recipients and Caregivers:

<https://www.fda.gov/media/144638/download>

The following ingredients list is available from:

<https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2020-12/slides-12-19/06-COVID-Mbaeyi.pdf>

Ingredients* included in mRNA COVID-19 vaccines

Description	Pfizer-BioNTech	Moderna
mRNA	Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2	Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2
Lipids	2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide	Polyethylene glycol (PEG) 2000 dimyristoyl glycerol (DMG)
	1,2-distearoyl-sn-glycero-3-phosphocholine	1,2-distearoyl-sn-glycero-3-phosphocholine
	Cholesterol	Cholesterol
	(4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)	SM-102
Salts, sugars, buffers	Potassium chloride	Tromethamine
	Monobasic potassium phosphate	Tromethamine hydrochloride
	Sodium chloride	Acetic acid
	Dibasic sodium phosphate dihydrate	Sodium acetate
	Sucrose	sucrose

*As reported in the prescribing information

Precaution to vaccination:

Precautions are conditions or factors that would be a reason to consult with a health care provider before proceeding with vaccination. Vaccine providers should observe these patients for 30 minutes after vaccination to monitor for the development of immediate adverse reactions.

The CDC considers a history of immediate allergic reaction to *any other* vaccine or injectable therapy (e.g., intramuscular, intravenous, or subcutaneous) as a **precaution** but not a contraindication to vaccination. These persons may still receive vaccination but should be counseled about unknown risks of developing a severe allergic reaction and balance these risks against the benefits of vaccination. All vaccination sites will have the medication they need, and the trained medical professionals, to respond to an allergic reaction if one occurs. The CDC advises that individuals who are concerned about their history of allergies may prefer to be vaccinated in a setting where more comprehensive medical care is immediately available for anaphylaxis.

No contraindication or precaution:

There are allergies that do not constitute a contraindication or precaution to vaccination, including:

- History of food, pet, insect, venom, environmental/seasonal, latex, or other allergies not related to vaccines or injectable therapies
- History of allergy to oral medications (including the oral equivalent of an injectable medication)
- Family history of anaphylaxis
- Any other history of anaphylaxis that is not related to a vaccine or injectable therapy

For rare instances when individuals experience immediate allergic reactions, appropriate medical treatments are available (and are mandatory on site) to manage the symptoms. Clinical considerations are available here: <https://www.cdc.gov/vaccines/covid-19/info-by-product/pfizer/anaphylaxis-management.html>

Triage of Individuals Presenting for COVID-19 Vaccination:

	MAY PROCEED WITH VACCINATION	PRECAUTION TO VACCINATION	CONTRAINDICATION TO VACCINATION
CONDITIONS	<p>CONDITIONS</p> <ul style="list-style-type: none"> • Immunocompromising conditions • Pregnancy • Lactation <p>ACTIONS</p> <ul style="list-style-type: none"> • Additional information provided* • 15 minute observation period 	<p>CONDITIONS</p> <ul style="list-style-type: none"> • Moderate/severe acute illness <p>ACTIONS</p> <ul style="list-style-type: none"> • Risk assessment • Potential deferral of vaccination • 15-minute observation period if vaccinated 	<p>CONDITIONS</p> <ul style="list-style-type: none"> • None <p>ACTIONS</p> <ul style="list-style-type: none"> • N/A
ALLERGIES	<p>ALLERGIES</p> <p>History of allergies that are unrelated to components of an mRNA COVID-19 vaccine†, other vaccines, injectable therapies, or polysorbate, such as:</p> <ul style="list-style-type: none"> • Allergy to oral medications (including the oral equivalent of an injectable medication) • History of food, pet, insect, venom, environmental, latex, etc., allergies • Family history of allergies <p>ACTIONS</p> <ul style="list-style-type: none"> • 30-minute observation period: Persons with a history of anaphylaxis (due to any cause) • 15-minute observation period: All other persons 	<p>ALLERGIES</p> <ul style="list-style-type: none"> • History of any immediate allergic reaction‡ to vaccines or injectable therapies (except those related to component of mRNA COVID-19 vaccines‡ or polysorbate, as these are contraindicated) <p>ACTIONS:</p> <ul style="list-style-type: none"> • Risk assessment • Consider deferral of vaccination and/or referral to allergist-immunologist • 30-minute observation period if vaccinated 	<p>ALLERGIES</p> <p>History of the following are contraindications to receiving either of the mRNA COVID-19 vaccines‡:</p> <ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) after a previous dose of an mRNA COVID-19 vaccine or 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)¶ • Immediate allergic reaction of any severity to polysorbate¶ <p>ACTIONS</p> <ul style="list-style-type: none"> • Do not vaccinate¶ • Consider referral to allergist-immunologist

* See Special Populations section for information on patient counseling in these groups

† Refers only to mRNA COVID-19 vaccines currently authorized in the United States (i.e., Pfizer-BioNTech, Moderna COVID-19 vaccines)

‡ Immediate allergic reaction to a vaccine or medication is defined as any hypersensitivity-related signs or symptoms consistent with urticaria, angioedema, respiratory distress (e.g., wheezing, stridor), or anaphylaxis that occur within four hours following administration.

¶ See Appendix B for a list of ingredients. Note: Polyethylene glycol (PEG), an ingredient in both mRNA COVID-19 vaccines, is structurally related to polysorbate and cross-reactive hypersensitivity between these compounds may occur. Information on ingredients of a vaccine or medication (including PEG, a PEG derivative, or polysorbates) can be found in the package insert.

¶ 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)

The above figure is available at: <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html>

Are children and adolescents recommended to receive COVID-19 mRNA (Pfizer and Moderna) vaccines?

Children/adolescents under age 16.

COVID-19 vaccines are not recommended for children/teens under age 16 (Pfizer) or under age 18 (Moderna) at this time. In early clinical trials for various COVID-19 vaccines, only adults who were not pregnant participated. Older children (12 and up) were added in later trials. However, clinical trials continue to expand and include other groups, so these recommendations may change in the future.

Adolescents age 16 and older.

Individuals aged 16-17 years are eligible to receive the Pfizer-BioNTech COVID-19 vaccines (but **not** the Moderna COVID-19 vaccine at this time). No safety concerns were identified in this group during Pfizer-BioNTech COVID-19 clinical trials. Although vaccine safety and efficacy data in this age group are somewhat limited, there is no medical reason to believe that responses from this group would be different from those who are 18 years of age and older. Adolescents aged 16-17 years who are part of a group recommended to receive a COVID-19 vaccine may be vaccinated with the Pfizer-BioNTech vaccine.

Should I take the vaccine if I am pregnant?

Currently, there are no data on the safety and efficacy of COVID-19 vaccines in pregnant women. However, people who are pregnant and become infected with COVID-19 can have an increased risk of severe illness or negative pregnancy outcomes, such as preterm birth. Based on current knowledge, experts believe that mRNA vaccines are unlikely to pose a risk for people who are pregnant. Reputable sources, such as the American College of Obstetricians and Gynecologists, have advised that the benefit of vaccination may outweigh the risk of severe COVID-19 disease. For this reason, if a person who is pregnant is part of a group who is recommended to receive a COVID-19 vaccine, **they may choose to be vaccinated**. A discussion with a health care provider can help make an informed decision. Although a conversation with a healthcare provider may be helpful, it is not required prior to vaccination.

Should I take the vaccine if I am breastfeeding?

If someone who is breastfeeding is part of a group who is recommended to receive a COVID-19 vaccine, **they may choose to be vaccinated**. Currently, there is no data on the safety and efficacy of COVID-19 vaccines in breastfeeding women as they were excluded from clinical trials. However, the CDC has stated that since the mRNA vaccine does not contain live virus, it is not thought to be a risk to breastfeeding infants. A discussion with a health care provider can help to make an informed decision. Although a conversation with a healthcare provider may be helpful, it is not required prior to vaccination.

Are the mRNA vaccines safe for people who want to become pregnant?

There is no evidence the COVID-19 vaccine affects fertility. People who are trying to become pregnant or who are pregnant and for whom the vaccine is recommended may choose to be vaccinated. A discussion with a health care provider can help to make an informed decision.

More information from the American Society for Reproductive Medicine is available here: <https://www.asrm.org/news-and-publications/news-and-research/press-releases-and-bulletins/asrm-issues-statement-on-covid-19-vaccines-joins-other-obgyn-groups-on-community-wide-statement/>

Should I take the vaccine if I am immunocompromised?

Currently, there is no data on the safety and efficacy of COVID-19 vaccines in immunocompromised people. However, persons with immunocompromising conditions or who take immunosuppressive medications or therapies might be at increased risk for severe disease if they get COVID-19. Therefore, the CDC recommends these individuals receive the COVID-19 vaccine. Immunocompromised individuals should discuss this with a healthcare provider. It is important to note that the mRNA vaccines do not contain live virus; so, it is not possible to develop COVID-19 from vaccination.

Are COVID-19 vaccines safe for people with autoimmune disease?

Experts say there is no reason to believe that the currently approved mRNA COVID-19 vaccines will be unsafe for people with autoimmune disease. Additionally, authorized mRNA vaccines are expected to be safe for immunocompromised patients and those on immunosuppressant drugs. However, it is yet unconfirmed whether immunosuppressant medications or unchecked disease activity may reduce vaccine effectiveness. Persons with autoimmune conditions who have no contraindications to vaccination may receive an mRNA COVID-19 vaccine. A discussion with a health care provider can help to make an informed decision.

Should I take the vaccine if I have Guillain-Barré syndrome?

To date, no cases of Guillain-Barré syndrome (GBS) have been reported following vaccination among participants in the mRNA COVID-19 vaccines clinical trials. With few exceptions, Advisory Committee on Immunization Practices (ACIP) general best practice guidelines for immunization does not include history of GBS as a contraindication or precaution to vaccination. Persons with a history of GBS may receive an mRNA COVID-19 vaccine unless they have a contraindication to vaccination. Any occurrence of GBS following mRNA COVID-19 vaccination should be reported to VAERS.

Should I take the vaccine if I have a history of Bell's palsy?

Cases of Bell's palsy were reported following vaccination in participants in both the Pfizer-BioNTech and Moderna COVID-19 vaccines' clinical trials. However, the FDA does not consider these to be above the frequency expected in the general population and has not concluded that these cases were causally related to vaccination. The FDA and CDC will continue to monitor the vaccines' safety. In the absence of such evidence, persons with a history of Bell's palsy may receive an mRNA COVID-19 vaccine unless they have a contraindication to vaccination. Any occurrence of Bell's palsy following mRNA COVID-19 vaccination should be reported to VAERS.

Should I take the vaccine if I have had convalescent plasma or monoclonal antibody?

The Advisory Committee on Immunization Practices (ACIP) recommends that vaccination should be deferred until 90 days after receiving convalescent plasma or monoclonal antibodies. Currently, there are no data on the safety and efficacy of COVID-19 vaccines in people who

received convalescent plasma or monoclonal antibody therapy. This is to avoid interference of these treatments with vaccine-induced immune responses. The risks and benefits of vaccination based upon the underlying risk factors, including living in a nursing home, could be considered. A discussion with a health care provider can help make an informed decision.

Should I take the vaccine if I already had COVID-19 and recovered?

Data from clinical trials indicate that mRNA COVID-19 vaccines are safe in persons with evidence of a prior SARS-CoV-2 infection. Vaccination should be offered to individuals regardless of history of COVID-19 (symptomatic or asymptomatic). The length of immunity after recovering from COVID-19 is unknown; early studies show that it is not long lasting and rare cases of reinfection have been reported.

Testing specifically to determine whether a person has active or prior COVID-19 infection is not recommended solely for the purpose of vaccine decision-making.

How long after recovering from COVID-19 should I take the vaccine?

The CDC states current evidence suggests reinfection is uncommon within 90 days after initial infection, so vaccination *could* be deferred until the end of this period; however, given initially limited supply of vaccines, it is not certain when another opportunity for vaccination will be available.

Should I take the vaccine if I currently am infected with COVID-19?

No. Those infected should wait until they have recovered from the acute illness (if the person had symptoms) and criteria have been met for them to end their isolation. This waiting period is essential to avoid exposing healthcare personnel (HCP) or other persons during the vaccination visit. Getting the vaccine while infected is not expected to harm you, but leaving isolation will put others in danger of getting COVID-19. This recommendation applies to persons who get COVID-19 before receiving any vaccine doses as well as those who get COVID-19 after the first dose but before taking the second dose.

Should I get the vaccine if I am in quarantine?

Individuals in a community or outpatient setting should defer vaccination until quarantine period has ended to avoid exposing healthcare personnel (HCP) or other persons during the vaccination visit.

Residents of congregate healthcare settings (e.g., long-term care facilities) may be vaccinated, as this likely would not result in any additional exposures. HCP are already in close contact with residents and should employ appropriate infection prevention and control procedures.

Residents of other congregate settings (e.g., correctional facilities, homeless shelters, residential settings) may be vaccinated, in order to avoid delays and missed opportunities for vaccination. Where possible, precautions should be taken to limit mixing of these individuals with other residents or non-essential staff.

How long after the flu shot or other vaccines do I have to wait to take the COVID-19 vaccine?

Given the lack of data on the safety and efficacy of mRNA COVID-19 vaccines administered simultaneously with other vaccines, the vaccine series should routinely be administered alone,

with a minimum interval of 14 days before or after administration with any other vaccine. However, mRNA COVID-19 and other vaccines may be administered within a shorter period in situations where the benefits of vaccination are deemed to outweigh the potential unknown risks of vaccine co-administration (e.g., tetanus toxoid-containing vaccination as part of wound management, measles or hepatitis A vaccination during an outbreak) or to avoid barriers or delays to mRNA COVID-19 vaccination (e.g., in long-term care facility residents or healthcare personnel who received influenza or other vaccinations prior to/upon admission or onboarding). If mRNA COVID-19 vaccines are administered within 14 days of another vaccine, doses do not need to be repeated for either vaccine.

Should premedication be given prior to vaccination?

Taking medications such as acetaminophen or ibuprofen before receiving the vaccine to try to prevent symptoms like fever or pain is not recommended at this time. This is because there is not enough information on how pain-relieving medications will impact immune responses. These medications may be taken after receiving the vaccine for the treatment of symptoms.

Getting Vaccinated

What is the Vaccine Administration Management System (VAMS)?

The Vaccine Administration Management System (VAMS) is an easy-to-use, secure, online tool to manage vaccine administration from the time the vaccine arrives at a clinic to when it is administered to a person. VAMS is free for approved clinics and can be used on computers, tablets, and other mobile devices. It is not a smartphone app; no installation or download is required for this web-based platform.

West Virginians in Phase 1 will use VAMS to schedule their vaccination appointment. Phase 1 participants may receive an email from no-reply@mail.vams.cdc.gov to schedule the appointment. Appointments may also be scheduled by an employer or long-term care facility.

VAMS will allow clinicians to set up customized vaccine schedules and allow recipients to make vaccination appointments, in addition to sending a reminder about returning for a second dose.

For more information on VAMS: <https://www.cdc.gov/vaccines/covid-19/reporting/vams/faqs.html>

When will I get the vaccine?

After receiving FDA authorization for use in the U.S., Pfizer and Moderna vaccines began arriving in West Virginia in early-mid December. Vaccines remain in limited supply nationally. West Virginia is dedicated to ensuring that all West Virginians have access to a COVID-19 vaccination as soon as possible. The guiding principles in decision making for getting COVID-19 vaccines to our higher-risk groups include: protecting our most vulnerable, reducing deaths, reducing hospitalizations, and maintaining our critical services and acute care.

As vaccine availability increases over the coming months, the state will be able to reach more and more of the general public to offer COVID-19 vaccines as the national supply can meet demand.

Decisions regarding overlapping phased distribution of limited vaccine supplies will remain flexible to ensure West Virginians are offered access as quickly, efficiently, and equitably as possible. It is not necessary to fully complete vaccination in one phase before beginning the next phase.

To view the state's overlapping phased allocation plan and more details regarding particular age groups and high-risk settings: [vaccinate.wv.gov](https://www.vaccinate.wv.gov)

How is the COVID-19 vaccine administered?

COVID-19 vaccines are given through intramuscular (IM) injections, typically in the upper arm. Each person receives the recommended dose set forth by the manufacturer.

Who will administer the COVID-19 vaccine?

The vaccine will be administered by a health care professional trained in giving an injection into the muscle.

How long between mRNA COVID-19 vaccine doses? What happens if I'm late for the second dose?

Pfizer-BioNTech. The Pfizer product requires a 2-dose vaccination series administered three weeks (21 days) apart. Administration of second dose is allowed within a 4-day grace period (meaning days 17-21) or after. If more than 21 days have passed since the first dose, the second dose should be administered at the earliest opportunity.

Moderna. The Moderna vaccine requires a 2-dose vaccination series administered one month (28 days) apart. Administration of second dose is allowed within a 4-day grace period (meaning days 24-28) or after. If more than 28 days have passed since the first dose, the second dose should be administered at the earliest opportunity.

Any individual who is late to receive their second dose will still mount an immune response upon receipt of the second dose. However, in the meantime between first and second doses, the individual will not have maximum protection against COVID-19. Further, the longer one waits after the recommended dosage period (3-4 weeks after the first dose), it is unknown how protected they will be. Thus it is advised for the second dose to be administered as close to the recommended time period as possible.

For 2-dose vaccines, what happens if I only receive one dose of the vaccine and not both?

It is recommended to receive both doses of the vaccine for maximum protection.

Can I get one dose of one mRNA vaccine (e.g., Pfizer) and the second dose of another mRNA vaccine (e.g., Moderna)?

Individuals should receive the second dose of the COVID-19 vaccine from the same manufacturer as the first dose. The COVID-19 vaccine products are not interchangeable. The safety and efficacy of mixing products in the vaccination series have not been evaluated. However, if two doses of different mRNA COVID-19 vaccine products are *inadvertently* administered, no additional doses of either product are recommended at this time. Recommendations may be updated as further information becomes available or other vaccine types (e.g., viral vector, protein subunit vaccines)

are authorized. As further information becomes available and other vaccine types are authorized, recommendations may be updated.

How will the second dose of the vaccine be ensured?

The Vaccine Administration Management System (VAMS) will allow clinicians to set up customized vaccine schedules and allow recipients to make vaccination appointments, in addition to sending a reminder about returning for a second dose.

Is taking the COVID-19 vaccine mandatory?

The vaccine is not mandatory.

After Getting Vaccinated

What are common side effects or immune responses after receiving mRNA COVID-19 vaccines?

Short-Term: The majority of short-term effects reported in clinical trials were mild to moderate and occurred within the first few days of receiving a COVID-19 vaccine. Examples of common mild to moderate immune responses include pain at the injection site, headache, fatigue, fever, or chills.

It is also worth noting that clinical trials showed stronger immune responses (and reported short-term side effects) after the second dose. The second dose remains essential for maximum protection.

Long-Term: Historically, long-term side effects from vaccines have been rare and most side effects have been seen within the first 60 days of receiving vaccines.

Before vaccination, COVID-19 vaccine recipients should be counseled about expected local (e.g., pain, swelling, erythema at the injection site) and systemic (e.g., fever, fatigue, headache, chills, myalgia, arthralgia) post-vaccination symptoms.

What is the V-safe after vaccination health checker?

V-safe is a smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after a person receives a COVID-19 vaccination. Through V-safe, a person can quickly tell the CDC if they experience side effects after getting the COVID-19 vaccine. Depending on the person's responses, a CDC staff member may call for additional information. V-safe also sends reminders to get the second COVID-19 vaccine dose. Participation in the CDC's V-safe initiative makes a difference — it helps keep COVID-19 vaccines safe.

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

Should side effects from COVID-19 vaccines be reported? What is VAERS?

Individuals concerned about their health after getting vaccinated should talk with a health care provider, who will determine the appropriate treatment and reporting requirements. Anyone

also can choose to report a side effect. Reporting is encouraged for any other clinically significant adverse event, even if it is uncertain whether the vaccine caused the event.

Vaccination providers are required by the FDA to report the following occurring after mRNA COVID-19 vaccination:

- Vaccine administration errors
- Serious adverse events
- Cases of Multisystem Inflammatory Syndrome
- Cases of COVID-19 that result in hospitalization or death

Information on how to submit a report to VAERS is available at <https://vaers.hhs.gov/> or by calling 1-800-822-7967.

If I develop COVID-19 symptoms after getting the vaccine, should I quarantine?

Yes. It typically takes a few weeks for the body to build immunity after the second dose of the vaccine. That means it is possible a person could be infected with the virus that causes COVID-19 just before or just after vaccination and get sick as the vaccine has not had enough time to provide protection for disease.

Individuals who have COVID-19 virus symptoms after getting the vaccine or at any time should contact a health care provider and consider getting tested for COVID-19.

Do I need to quarantine if I am exposed between doses?

If exposure occurs between doses, follow quarantine guidance as advised by the local health department.

Quarantine is used to keep someone who might have been exposed to COVID-19 away from others. Quarantine helps prevent spread of disease that can occur before a person knows they are sick or if they are infected with the virus without feeling symptoms.

How long will immunity last after I get vaccinated? Will I need to be vaccinated every year?

The length of immunity following vaccination is not yet known for COVID-19.

Do I still need to wear a mask and take other COVID-19 precautions after I get the vaccine?

Yes. Wearing a mask, washing hands, and staying at least 6 feet away from others will remain important after receiving the vaccine. Since there will be limited doses available initially, and people will be vaccinated in phases, it will take time to vaccinate enough of the population to stop the spread of COVID-19.

Additionally, as the length of immunity is unknown, infection after a receiving a vaccine may still be possible. It is likely that infection after receiving the COVID-19 vaccine would be less severe, with mild or asymptomatic conditions.

Other factors for continuing precautions include how many people get vaccinated and how the virus is spreading in West Virginia communities.

How many people need to get the vaccine for community immunity (herd immunity)?

Vaccination is the safest path to community or “herd” immunity. These terms describe when enough people have protection, either from previous infection or vaccination, making it unlikely an infection can spread in the population and cause disease. As a result, everyone within the community is protected, even if some people have not received the vaccination. The percentage of people who need to have protection in order to achieve community immunity varies by disease and with the use of other measures to limit spread like social distancing and mask use. The number, or percentage of population, that need to be immune in order to reach community immunity for COVID-19 is not yet known but is thought to begin at around 60-70%.

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Questions and concerns can also be directed to the 24/7, toll-free COVID-19 vaccines information line:
1-833-734-0965