

# The COVID-19 Vaccine

## Frequently Asked Questions

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***We are very optimistic about the COVID-19 vaccines that are currently available. Widespread immunization will help us eradicate the COVID-19 pandemic and get our lives back to normal more quickly. We are on our way, but we need everyone to do their part by getting vaccinated so this crisis can end.***

***We are part of a large network of quality-driven dermatology practices. Together with our 75 physician colleagues across 9 states, we have closely followed the vaccine development, clinical trials and early success of the ongoing vaccine campaign. Below are the answers we compiled to address our patients' most common questions about the vaccines, and we thought they might be helpful to you.***

### ***How effective is the COVID-19 Vaccine?***

On December 10, 2020, the vaccine developed by Pfizer/BioNTech was reviewed by a panel of experts who recommended that the FDA issue an Emergency Use Authorization (EUA) for people ages 12 and older. The FDA approved the original EUA, allowing immediate distribution throughout the US and vaccinations for adults began on Monday December 14, 2020. This novel vaccine prevented the virus in 95% of clinical trial participants.

Data for the similar Moderna vaccine shows an effectiveness of 94.5% in preventing coronavirus infection, and has been approved for distribution as well. These results are promising because those levels of protection would put these vaccines on par with highly-effective childhood vaccines for diseases such as measles. The Moderna vaccine is currently in trials for people ages 12-17 and showing promising results – an effectiveness of 96% two weeks after the second dose. The vaccine was "generally well tolerated," and there were no serious safety concerns identified thus far.

Pfizer has said it expects to seek authorization of its vaccine for children ages 2 - 11 this September, and Moderna says a phase 2 study of its vaccine in children 6 months to 11 years old is ongoing.

Johnson & Johnson's vaccine has also been approved and although it is not quite as effective in preventing symptomatic infection (70%), the Johnson & Johnson vaccine does not require a second dose. All 3 vaccines are >99% effective at preventing serious disease, hospitalization and death. No serious safety concerns have been observed for the Pfizer or Moderna vaccines. Use of the Johnson & Johnson vaccine was temporarily paused due to rare, yet serious, complications in 15 female vaccine recipients, ages 18-50. The Johnson & Johnson vaccine has been administered to more than 6.8 million people in the U.S. to date, so the blood clot issues are extremely rare and seem to be isolated to women.

The CDC and FDA did a thorough review of all available data, and recommended the use of the Johnson & Johnson vaccine resume, as the benefits outweigh its known and potential risks. More information about the Johnson & Johnson vaccination pause can be found at the end of this document.

### ***Should I be concerned about the side effects of the vaccine?***

A small number of clinical trial participants experienced mild, short-term side effects such as fatigue, soreness at the injection site, and headaches. These side effects are similar to those that are experienced with other long-used vaccines such as MMR.

A reaction to the vaccine is typically not an allergy or a sickness. It is caused by your immune system working to pump out antibodies in response to the vaccine. These mild side effects show that your body is working hard to protect you from the virus. Many people experience no side effects from vaccines.

Recently, 15 out of the almost 7 million recipients of the Johnson & Johnson vaccine experienced a rare, but serious blood clotting issue. After a brief pause in usage, the CDC and FDA has authorized use of the Johnson & Johnson vaccine to resume based on their findings that the risks of developing blood clots are extremely limited. Based on their findings, the CDC and FDA advise women younger than 50 years old be made aware of the increased blood clot risks and that other vaccine options are available that have not been associated with similar issues. More in-depth information about this can be found at the end of this document.

### ***These vaccines were developed quickly. How do I know they are safe?***

No corners were cut in the development of these vaccines, which have shown high levels of both protection and safety. The mRNA technology used in these new vaccines had been available for years and allowed companies a head start in the process. Additionally, the US government's Operation Warp Speed provided funding for companies to begin mass production of the vaccines at the same time they enrolled patients in clinical trials. Before a vaccine is approved for the US, it must undergo rigorous clinical trials, the final of which is Phase 3.

Phase 3 clinical trials for the COVID-19 vaccines involved *tens of thousands of volunteers* who were randomized to either receive the vaccine or a placebo, and then monitored for both side effects and for infection with SARS-CoV-2 (coronavirus). Study volunteers were closely monitored for any signs or symptoms that would indicate a problem with the vaccines. Fortunately, when the data showed great results, the vaccine was ready to ship out immediately.

For a vaccine to be approved for the US, a vaccine must reduce infection by at least 50%, and must not cause significant adverse events in those who receive it. After several months and more than 230 million doses administered, these three vaccines have all shown excellent safety profiles. New studies also show in real life scenarios, the Pfizer and Moderna vaccines show 90% effectiveness in preventing infection in high-risk healthcare workers.

**mRNA COVID-19 vaccines are highly effective in preventing infections in real-world conditions**

Nearly 4,000\* health care personnel, first responders, and essential workers were tested weekly for the virus that causes COVID-19

Those who were fully vaccinated† were **90% less likely** to get infected

\* Effectiveness of Pfizer-BioNTech and Moderna mRNA vaccines among 3,950 study participants in eight U.S. locations from December 14, 2020, to March 13, 2021. Participants self-collected specimens weekly regardless of symptoms and collected additional specimens if they became sick.  
† Fully vaccinated = 2 weeks after 2nd dose

CDC.GOV      bit.ly/MMWR32921      MMWR

### ***I'm not in a high-risk group. Why should I take the vaccine?***

This virus is highly contagious; therefore, even people who are not considered high risk should strongly consider being vaccinated. Furthermore, new variants have emerged that are even more highly transmitted, and some may cause more serious infection even in healthier people. ***A vaccine is not the cure for COVID-19, widespread immunization is, and all the vaccines are showing effectiveness against these newer variant strains. Success in eradicating the pandemic and shortening the time it takes to return to 'normal' is completely dependent upon the acceptance of the science and data and a widespread willingness to be vaccinated.*** For many of us it is an opportunity to help keep our clinics fully staffed, our patients safer, and enable us to protect our communities, our families, including our grandparents, and those at high risk due to predisposing conditions, estimated to include as many as 1 out of 3 Americans.

### ***I have other health conditions. Is it safe for me to take the vaccine?***

Individual health decisions are best made in conjunction with the advice of your physician. As with some other vaccines, some people are not good candidates for the COVID vaccine.

As a precautionary measure, it is advised that people with a history of severe allergies receive the vaccine under guidance of their physician. There were two instances of allergic reactions during the first day of the vaccine rollout in the United Kingdom. These individuals were National Health Services workers who had known significant allergies and were equipped with adrenaline auto-injectors to deal with their allergies.

Anaphylaxis after COVID vaccines is rare and occurred in approximately 2 to 5 people per million vaccinated in the U.S. This kind of allergic reaction almost always occurs within 30 minutes after vaccination, therefore, all vaccination sites monitor patients before leaving for any allergic reaction.

Women who are pregnant, lactating or plan to soon become pregnant should discuss vaccination options with their OB/Gyn but the Obstetric specialty societies are recommending vaccination to pregnant women and those who may be planning a pregnancy. Furthermore, new studies show that **protective antibodies from both a prior infection AND a vaccination are transferred to the baby** in utero and in breast milk, providing additional protection to the newborn.

***There are several versions of the vaccine from different manufacturers. Which one is right for me?***

Each FDA-approved vaccine will work well across all populations. In some locations, individuals will not be able to choose which vaccine they receive. Some vaccines, like Pfizer and Moderna, will require a booster dose 3-4 weeks after the initial dose, while the Johnson & Johnson does not. Whichever vaccine you get, please follow the recommendations for boosters, if applicable, and any other directions provided by your medical provider.

**COVID-19 vaccines: What you need to know**

The U.S. now has three vaccines in its arsenal against the coronavirus. Here's how they compare.

	Johnson & Johnson	Pfizer	Moderna
<b>Type of vaccine</b>	Viral vector	RNA	RNA
<b>How it works</b>	Teaches the immune system to attack the protein the virus uses to infect other cells. The instructions are carried by a non-dangerous virus.	Uses RNA to teach the immune system to target the virus's surface, preventing infection.	Uses RNA to teach the immune system to target the virus's surface, preventing infection.
<b>Effectiveness*</b>	66%	95%	94.5%
<b>Storage conditions</b>	At least three months at refrigerator temperatures	Two weeks at freezer temperatures (-4°F), five days in the refrigerator (36° to 46°F)	One month at refrigerator temperatures
<b>Doses needed per person</b>	One shot	2 shots, three weeks apart	2 shots, four weeks apart
<b>Status of availability</b>	FDA authorized	FDA authorized	FDA authorized

\*Note: The Johnson & Johnson vaccine was tested at a time when faster-spreading viral variants were common and in countries where these strains are known to exist.

Sources: Pfizer; Moderna; Johnson & Johnson; U.S. Food and Drug Administration; World Health Organization

***When will I be able to get the vaccine?***

All 50 states are now offering vaccines to any resident age 16 or above and generally they are widely available. Currently, only the Pfizer vaccine is approved for usage in people ages 12 - 15 years old.

Many U.S. pharmacies are now accepting walk-ins for COVID-19 vaccines, given high supply. Rideshare companies Uber and Lyft will offer all Americans free rides to and from COVID-19 vaccination sites beginning on May 24 through July 4, in order for the country to reach a goal of hitting a 70% vaccination rate by Independence Day.

### ***Will I get COVID if I take the vaccine? Will the vaccine alter my DNA?***

No. None of the vaccines currently available in the US have active viruses in them. Therefore, there is no possibility of getting infected with COVID-19 by taking the vaccine.

COVID vaccines will not alter your DNA, which is found in your chromosomes inside the cell nucleus. The new COVID vaccines are based on RNA technology, which has no impact on your DNA. The human body is already full of messenger RNA (mRNA), which translates the genes from your DNA to build proteins that our bodies need. These proteins stimulate antibodies to the virus to protect the recipient against contracting the disease.

### ***There is a lot of conflicting information about the vaccine. How do I know what to trust?***

There is no shortage of information, opinions and falsehoods about the COVID vaccines. To ensure you are getting the most accurate information, we recommend that you rely on licensed medical professionals as well as local, state and federal healthcare agencies and other resources that are experienced in evidenced-based science and medicine.

The CDC keeps a regularly updated COVID vaccine FAQ on their website. You can access that information here:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>

### ***Patient Safety is Our Priority***

As the country begins to move toward normalcy, we ask for your help a while longer. The CDC strongly recommends that medical practices continue to follow the current safety protocols. This is in order to protect our vulnerable patients and staff who are not able to be vaccinated. Our mission is to provide ALL patients with the highest quality, safest care possible – right now, that necessitates:

- Continuing to recommend our staff get vaccinated to join the majority of staff who have already been immunized
- Screening all staff, patients and visitors
- Rescheduling patients who have been exposed to or are experiencing COVID-19 symptoms
- Requiring staff to wear face masks and asking patients to do the same
- Thoroughly and frequently sanitizing the entire office and exam rooms
- Limiting visitors according to the most recent local and federal guidelines
- Promoting physical distancing in waiting areas and minimizing in-office wait times
- Offering telehealth appointments to high-risk patients and others, as needed

Here are some ways you can reduce your risk and avoid exposing others if you have been exposed or contracted COVID-19:

- Get vaccinated
- Talk to your primary care physician about getting a COVID-19 vaccine if you have questions or concerns
- Stay at home if you have tested positive for COVID-19, have been exposed to the virus or exhibit symptoms
- Frequently wash your hands
- Wear a mask
- Follow appropriate physical distancing protocols

***Thank you for trusting us with your care.***

Usage of the Johnson & Johnson vaccine has been approved by the CDC and FDA to resume. For more information about the *Johnson & Johnson* vaccine side effects, please click [HERE](#).