

All About the COVID-19 Vaccines

How many vaccines are currently approved to prevent COVID-19?

Three COVID-19 vaccines have been approved by the federal Food and Drug Administration (FDA) to date. In December 2020, the FDA approved two COVID-19 vaccines made by Pfizer and Moderna which each require two doses. In February 2021, the FDA approved the third vaccine to prevent COVID-19 – the single dose Johnson & Johnson vaccine. Each vaccine has been approved by the FDA at the recommendation of the national Advisory Committee on Immunization Practices (ACIP). New York State's independent Clinical Advisory Task Force also separately approved the vaccines.

How do the vaccines work? How are they different from each other? Which one should I get?

Check out the chart below to learn about the differences between the approved vaccines. Federal and state medical experts recommend getting whichever COVID-19 vaccine is eligible to you first.

Vaccine	Pfizer	Moderna	Johnson & Johnson
Type of Vaccine	mRNA	mRNA	Adenovirus
Recommended Age to Receive	12+	18+	18+
Number of Doses	2 doses 21 days apart	2 doses 28 days apart	1 dose
Effectiveness	95% efficacy in preventing COVID-19 and 100% effective at preventing severe disease	94.1% effective at preventing symptomatic infection	72% overall efficacy and 85% efficacy against severe disease in the U.S.
Peak Immunity	1-2 weeks post second dose	1-2 weeks post second dose	4 weeks post dose

Two of the approved vaccines use mRNA technology. How does mRNA work?

Both the Moderna and Pfizer COVID-19 vaccines use mRNA technology. While mRNA vaccine technology is new it is not unknown. This technology has been studied for more than a decade. These vaccines do not enter the nucleus of cells and do not alter or interact with the DNA of vaccine recipients. Further, there is no "microchip" in the vaccines.

How does the Johnson & Johnson vaccine work? What is adenovirus and can it give me COVID-19?

The Johnson & Johnson vaccine is an adenovirus vaccine. This type of vaccine uses an adenovirus which is a type of virus that causes the common cold, which has been inactivated to carry a gene from the coronavirus into human cells. The cells then produce coronavirus proteins (not the virus itself) to mimic the virus, which helps teach the immune system to fight off later infection if the body encounters the coronavirus. This vaccine uses an inactivated cold virus and cannot give you COVID-19.

I heard the Johnson & Johnson vaccine can cause blood clots. Is this vaccine safe?

After reports of six cases of a rare and severe type of blood clot in individuals following administration of the Johnson & Johnson COVID-19 vaccine, the CDC and FDA paused use of the vaccine for a period of ten days. The FDA and CDC conducted a thorough safety review and determined that the recommended pause regarding the use of the Johnson & Johnson COVID-19 vaccine in the U.S. should be lifted and use of the vaccine should resume. The pause in the use of the vaccine allowed scientists to evaluate each incidence of the clotting disorder. They determined that the level of risk was very low and that the benefits of continued use of the vaccine greatly outweighed any risk associated with it. If you have questions or concerns, consult your doctor.

The vaccines were made so quickly. How do we know they are safe and effective?

Creating a vaccine is a very complex and highly regulated process. Given the worldwide impact of the pandemic, significant resources were devoted both by the federal government and vaccine manufacturers to create vaccines to prevent COVID-19. No safety protocols or testing requirements were bypassed. Instead, experts worked around the clock for several months to develop, test and seek approval for human use through a transparent process. Decades of research from leading medical experts have proven vaccines are safe and effective. Further, vaccines are continuously monitored for safety and possible adverse events by the CDC.

GET THE FACTS ON THE COVID-19 VACCINES

How the COVID-19 Vaccines Work

Are there side effects to these vaccines?

Short-term mild or moderate side effects are normal after receiving vaccines. Side effects can be a sign that your immune system is responding to the vaccine. Common side effects may include a headache, chills, fatigue, muscle pain or a fever lasting a day or two. In rare instances, people can develop an allergic reaction shortly after they have been vaccinated. For this reason, all who receive vaccines are closely monitored for a period afterward by trained vaccine providers. The COVID-19 vaccine is not recommended for those who have had a severe allergic reaction to any ingredient in COVID-19 vaccines or after a previous dose of the vaccine.

Can I get vaccinated and still get COVID-19?

After receiving a COVID-19 vaccine, it takes several weeks before a person is considered fully vaccinated against COVID-19 (please refer to "Peak Immunity" in the chart above). If you are exposed to COVID-19 just prior to or during this window after receiving the vaccines, it is still possible to get the virus.

Can the vaccines cause COVID-19?

No. None of the approved vaccines are activated virus vaccines and cannot give you COVID-19.

Are COVID-19 vaccines a treatment or cure if I do get the virus?

No, while COVID-19 vaccines can prevent you from getting the COVID-19 virus, if you have an active infection, these vaccines are not a treatment or cure.

How will the COVID-19 vaccines affect my body? I've heard rumors that the vaccines can alter DNA and might have long term side effects.

First, the vaccines cannot give you COVID-19. None of the vaccines use the live virus that causes COVID-19. None of the vaccines will affect or alter your genes or DNA. Vaccines generally don't have long-term side effects and there is no reason to believe the COVID-19 vaccine will. To be sure, the FDA and the scientists, health and medical experts, and researchers who developed the vaccine are closely monitoring for side effects and symptoms reported by anyone who is vaccinated, watching out for any patterns that are out of the ordinary. Data will continue to be collected for two years after each vaccine is first administered to ensure that they are safe for the long term.

Am I permanently immune after getting vaccinated?

Because this is a new virus and these are new vaccines, we don't yet know how long immunity will last and whether additional doses will be needed. The FDA, scientists, and health and medical experts who developed the vaccines are continuing to study the virus and vaccines closely to understand how long immunity lasts and how well the vaccines protect against new mutations of the virus.

Do the vaccines protect against the COVID-19 variants?

According to federal and state medical experts, the COVID-19 vaccine is expected to be reasonably effective at preventing against these new variants. Dr. Fauci states, "When you get a variant that diminishes the capability of the vaccine, when you get a good vaccine...you cannot necessarily get the best possible response, but it's still within the cushion of effectiveness."

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Deciding to Get a COVID-19 Vaccine

Why should I get a COVID-19 vaccine?

COVID-19 immunizations hold the best hope for getting our lives and our economy back to normal and bringing an end to the pandemic. All of the approved COVID-19 vaccines are effective at preventing moderate and severe cases of COVID-19 which can lead to hospitalization and/or death.

Is there a cost to receive the COVID-19 vaccine?

The COVID-19 vaccine is free.

If I already had COVID-19, should I still get vaccinated?

Yes, if you previously had COVID-19, whether symptomatic or asymptomatic, you can and should still receive the vaccine.

Can I receive other vaccines at the same time I receive a COVID-19 vaccine?

Initially, COVID-19 vaccines were recommended to be administered alone, with a minimum interval of 14 days before or after administration of any other vaccines. This was out of an abundance of caution. With substantial data now available, the CDC has determined COVID-19 vaccines and other vaccines may now be administered without regard to timing. This includes simultaneous administration of a COVID-19 vaccine and other vaccines on the same day, as well as coadministration within 14 days.

Should children and adolescents get the vaccine?

Children are currently being enrolled in vaccine clinical trials to determine use and efficacy. The Moderna and Johnson & Johnson vaccines are recommended for those aged 18 and older. The federal government has approved the Pfizer vaccine for individuals 12 years and older following clinical trial data from participants ages 12-15 demonstrating 100% efficacy and robust antibody responses.

I'm healthy, why should I bother to get vaccinated?

While older individuals and those with underlying conditions may be more severely impacted by the virus, there are reports of young and healthy individuals being hospitalized and even dying from it. As a result, healthy individuals should be vaccinated when eligible to protect themselves. Further, experts are saying we may need 70-90% of the population vaccinated to reach herd (or community) immunity to prevent its spread and to protect those who cannot be vaccinated.

Should pregnant individuals get the vaccine?

Pregnant women may choose to get a COVID-19 vaccine. Those who are pregnant or breast-feeding should discuss whether to get a COVID-19 vaccine with their health care provider. The American College of Obstetricians and Gynecologists also states that there is no evidence that the COVID-19 vaccines cause infertility and recommends vaccination for anyone who may consider getting pregnant in the future.

Where can I get the vaccine?

There are many locations currently providing COVID vaccines. To find a location near you, please use the following resources.

[CDC Vaccine Finder](#) | [NYS Vaccine Finder](#) | [NYC Vaccine Finder](#)

Where can I go to learn more about the COVID-19 vaccines?

While there are many resources available to learn more about the COVID-19 virus and the recently approved vaccines, we urge you to rely on trusted sources of science and evidence-based information. This includes speaking with a trusted health care provider and also viewing federal and state resources to learn more including the following:

[CDC COVID-19 Vaccine Information](#)

[NYS Department of Health COVID-19 Vaccine Information](#)

[Let's Get Immunized New York](#)

Together we can protect ourselves, our families, and our communities and end this pandemic by getting vaccinated against COVID-19.
Let's Get Immunized New York!

