Anyone 5 and older can now get vaccinated for COVID-19

The Vaccine
Real Talk

The FDA and CDC has authorized the Pfizer/BioNTech COVID-19 vaccine for anyone 5 and older. This is an exciting and important step in the fight to end the pandemic. COVID-19 vaccines are FREE to anyone who lives in the U.S, even if you don't have health insurance or are not a U.S. citizen. **The Pfizer vaccine is the only COVID-19 vaccine authorized for children at this time.** The Moderna and Johnson & Johnson/Janssen vaccines are authorized for people ages 18 and older.

COVID-19 vaccines are not only incredibly effective at preventing sickness, hospitalization, and death[1] but will help us return to our normal activities. The vaccines work against the new variants of the virus identified so far.[2] People who choose to get vaccinated not only protect themselves from the virus, but also help protect those they care about such as grandparents, teachers, or siblings who are immunocompromised.

Key things to know

- Children need to be vaccinated. COVID-19 is more dangerous to your child than the potential risks from the vaccines. We encourage you to get your child vaccinated as soon as you can.
- Your child should get vaccinated, even if they had COVID-19 before.
- Side effects, like a sore arm or headache, are normal and common after vaccination.
- Severe and serious side effects, like anaphylaxis, are rare.
- Myocarditis is rare. Your child is more likely to get myocarditis if they are infected with a virus, like flu or COVID-19, than they are to get it from a vaccine.
- There is no evidence the vaccines cause infertility or miscarriages.
- No deaths have been directly caused by the vaccines.
- Your child can get the COVID-19 vaccine at the same time as other vaccines.
- The FDA and CDC continue to monitor vaccine safety.
- You can report any concerns to the CDC through V-safe.

1 https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-05-12/04-COVID-Oliver-508.pdf
2 https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/fully-vaccinated-people.html

Why do children need to get vaccinated for COVID-19?

There is a **common misunderstanding** that children don't get COVID-19 or aren't at risk for severe illness from the virus. This is not true. COVID-19 is far more dangerous than any potential risks from getting a vaccine. Children are infected with the virus at rates similar to adults and some children do get sick enough to require treatment in the hospital. About 30% of children hospitalized for COVID-19 had **no** underlying medical condition[3].

More than 600 children in the U.S. have died from COVID-19. Although the number of deaths in children seems low compared to the number of adults who have died, **COVID-19 is a top 10 cause of death for children in the U.S.**

We also don't know how being infected with COVID-19 will impact children long-term. Many people—including children—who have been infected with the virus continue to suffer severe symptoms long after they were first infected. Children report "long COVID" symptoms which impact their daily life for many weeks after being infected with COVID,[4] even if they weren't very sick while they had COVID-19. Children may suffer from fatigue, headaches, abdominal pain, muscle and joint pain, and difficulty with memory and processing information.

Since the beginning of the pandemic, more than 104,000 Utah children ages 0-17 have been diagnosed with COVID-19. Of these children, almost 90% were school-aged (5-17 years old). More than 900 Utah children needed to be hospitalized from COVID-19. Of those requiring hospitalization, 104 developed multisystem inflammatory syndrome in children (MIS-C). MIS-C is a serious condition that can lead to death.

When should my child get the COVID-19 vaccine?

Most children and all teens are now able to get the COVID-19 vaccine. We encourage you to get your child vaccinated as soon as you can. The CDC recommends everyone ages 5 and older get a COVID-19 vaccine to help protect against COVID-19.

Authorized for	Pfizer-BioNTech	Moderna	J&J / Janssen
4 years and under	No	No	No
5-11 years old	**Yes**	No	No
12-17 years old	**Yes**	No	No
18 years and older	**Yes**	**Yes**	**Yes**

3 https://yourlocalepidemiologist.substack.com/p/pediatric-vaccines-top-8-parental (Dr. Katelyn Jetelina, Your Local Epidemiologist)
4 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7927578/

Vaccine providers cannot use the same Pfizer vaccine for children ages 5-11 years as they do for adults and teens. The Pfizer vaccine for children ages 5-11 has the same active ingredients as the vaccine given to adults and teens, but the doses are smaller. Smaller needles, designed specifically for children, are also used.

The vaccine for children ages 5-11 is given as a 2-dose series, 3 weeks apart, just like it is for adults and teens. This means your child needs to get their 2nd dose at least 3 weeks after they got their 1st dose.

The vaccine dose for children ages 5-11 years is based on how old your child is on the day they receive their vaccine, not weight. If your child turns 12 in between their 1st and 2nd dose, they should receive the child dosage for their first dose and then the adult dosage for the second dose. We encourage you to get your child vaccinated as soon as you can, and to not wait for your child to turn 12 years of age to get an adult dosage of the vaccine.

Should my child get vaccinated if he or she already had COVID-19?

Yes. Right now, we recommend that your child get vaccinated even if he or she had COVID-19 before. We can't predict who will get severely ill from COVID-19 or suffer long-term health effects from it. Vaccination is a much safer and effective way to develop immunity than having COVID-19 as a disease.

We know people can get immunity from both infection and vaccination. The vaccines provide additional protection from COVID-19 and keep your child from being infected again[5]. Right now, we don't have good tests that can tell us how immune someone is from COVID-19 and for how long. Immunity from vaccination provides a much more consistent and predictable level of immunity across people and communities.

Studies[6] show varying levels of immunity after infection with COVID-19. For some people, protection may last up to 8 months (because we have 8 months of data). However, for others, natural immunity gets weaker within weeks. Natural immunity protection is random. This means some people's bodies will create strong protection against the virus and some people won't get enough natural immunity to protect them at all or for very long. A person's age and medical conditions can also have an impact on their level of immunity. It's estimated that only 43% of children in the U.S. younger than 12 years old have some level of natural immunity.[7]

Data shows the Delta variant may cause more reinfections than other strains of the virus we've seen. According to the CDC, people get better protection by being fully vaccinated compared with having had COVID-19. Studies[8,9] show that you are 2 to 5 times more likely to be reinfected, or get infected again after you've already had COVID-19, if you are unvaccinated compared to someone who is fully vaccinated. People who have had COVID-19 and been vaccinated have the strongest levels of immunity.

5 https://yourlocalepidemiologist.substack.com/p/vaccine-for-5-11-year-olds-acip-cliff
6 https://yourlocalepidemiologist.substack.com/p/natural-immunity-protection-and-variants
7 https://yourlocalepidemiologist.substack.com/p/pediatric-vaccines-top-8-parental (Dr. Katelyn Jetelina, Your Local Epidemiologist)
8 https://www.cdc.gov/mmwr/volumes/70/wr/mm7032e1.htm
9 https://www.cdc.gov/mmwr/volumes/70/wr/mm7044e1.htm?s_cid=mm7044e1_w

Could my child have side effects from getting the vaccine?[10]

COVID-19 vaccines are safe and effective. It's normal to get side effects after getting a vaccine, like a fever or sore arm. Severe side effects from vaccines are rare, but it's important to be aware of what those are and things to watch for.

Common side effects

You may feel sick after getting vaccinated or have other side effects, for a few days. These are normal signs the body is starting to build protection and the immune system is doing what it's supposed to do. These side effects usually go away in a day or two. More children reported side effects after the 2nd dose than after the 1st dose. However, some children may have no side effects at all or have different side effects after their 2nd dose than they did after their 1st. You should still get your 2nd dose of mRNA COVID-19 vaccine if you had mild or moderate side effects after your first dose. You need both doses to be fully protected.

On the arm where you got the shot:

- Pain
- Redness
- Swelling

Throughout the rest of your body:

- Chills
- Diarrhea
- Fever or feeling sweaty
- Headache
- Muscle pain
- Nausea, or feeling sick to your stomach
- Tiredness

Less common side effects

Some children may experience skin sensitivity or swollen and tender lymph nodes. This swelling is called lymphadenopathy and usually happens in the armpit or neck area.

Some people may have a red, itchy, swollen, or painful rash where they got the shot, often called "COVID arm." These rashes can start a few days to more than a week after the 1st shot. If your child has "COVID arm" after getting the 1st dose, they should still get the 2nd dose. Ask your child's doctor about treating this with an antihistamine to help with itchiness, or acetaminophen or a non-steroidal anti-inflammatory drug (NSAID) for pain.

10 https://www.cdc.gov/vaccines/covid-19/info-by-product/pfizer/reactogenicity.html

Helpful tips to manage side effects

It's best to wait as long as you can to take any pain medicine after you get a vaccine. Talk to your doctor about giving your child an over-the-counter medicine, like ibuprofen, acetaminophen (often called Tylenol), or naprosyn, to help with pain or discomfort from any side effects.

It's important to keep taking any long-term daily medications after vaccination, unless your doctor has told you not to.

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 water.
- Dress lightly, in clothes that won't make you hot.

When to call a doctor

In most cases, your child will only experience normal side effects. Call a doctor or healthcare provider:
- If the redness or tenderness where your child got the shot starts to get worse after 24 hours (or 1 day).
- If you are worried about any unusual symptoms your child may have, or have questions about a combination of side effects from getting more than one vaccine at the same time.
- If you are worried about your child's side effects or the side effects don't seem to be going away after a few days.

Severe or serious side effects after getting a vaccine are rare[11]

Severe, allergic reactions are rare.
Allergic reactions are considered severe if someone needs to be treated with epinephrine, or an EpiPen©, or go to the hospital. These types of reactions are called anaphylaxis, and almost always happen within 30 minutes after getting the vaccine. These types of reactions are rare (about 2 to 5 people per million who are vaccinated). People may have trouble breathing, have swelling of the face and throat, a fast heartbeat, a bad rash all over the body, or dizziness and weakness. This is why it's important to stay for 15-30 minutes after getting vaccinated, so your doctor can watch you and make sure everything is okay. Medicines are available to treat anaphylaxis. Anyone who has an anaphylactic reaction after their 1st dose of the vaccine should not get the 2nd dose.

Stay
15-30
Minutes

11 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/allergic-reaction.html

Non-severe, immediate allergic reactions are also rare.

Allergic reactions that do not require emergency care or hospitalization are called a non-severe, immediate allergic reaction. These types of reactions happen within 4 hours after getting vaccinated. People may get hives, swelling, or wheezing. If your child has a non-severe, immediate allergic reaction after getting a dose of the COVID-19 vaccine he or she should not get a 2nd dose, even if the reaction was not severe enough to require emergency care or hospitalization.

The chance of long-term side effects is extremely low.

While it's true we don't have decades of information on potential side effects of COVID-19 vaccines, we have many years of knowledge of the human body and mRNA. Based on this information, we don't expect to see long-term side effects from the vaccines.

If you look at the history of all vaccinations, almost every long-term side effect from vaccination shows up within 6 weeks after the vaccine is given. That's why the FDA requires a wait time of at least 60 days after the end of a clinical trial before an emergency use authorization (EUA) can be given. We have more than a year of follow up data from the first people who got the vaccines and there is no evidence of any long-term side effects.

Vaccine ingredients are cleared from our bodies very quickly after vaccination. mRNA is fragile and breaks down in the body in a few days. The ingredients in the vaccines don't stay in your body.

The FDA and CDC will keep monitoring any possible rare side effects.

The vaccines were developed with decades of research and by cutting red tape and bureaucracy, not by cutting corners or skipping any safety precautions. Scientists have been working for more than a decade with the technology used to develop the vaccines. The millions of cases of COVID-19 across the world allowed scientists to quickly study the virus to develop a vaccine that was safe and effective. Millions of people in the U.S. have received COVID-19 vaccines under the most intense safety monitoring in history.

The FDA, CDC, Vaccines and Related Biological Products Advisory Committee (VRBPAC),[12] and Advisory Committee on Immunization Practices (ACIP)[13] have carefully reviewed all available data and are confident the vaccines are safe and effective to prevent COVID-19. Before the COVID-19 vaccine was authorized for 5-11 year olds, the FDA added an additional independent review of the data by a committee of pediatricians, immunologists, virologists, epidemiologists, and other scientists across the nation.This additional review is not required to get emergency use authorization. It was done to make sure independent medical experts from across the country felt confident the vaccine was safe and effective for young children. **The chance you'll have a life-threatening case of COVID-19 is much higher than your potential risk of ever getting a serious side effect from the vaccine.**

The U.S. has one of the best systems in the world[14] to look for rare side effects that can only be found when vaccines are administered widely to many people. The CDC reports to the public whenever someone has reported an illness after getting a vaccine, whether or not the illness is caused by the vaccine. Anyone can report an illness or side effect after getting a vaccine, not just doctors. This information is reported through the Vaccine Adverse Event Reporting System (VAERS). VAERS data shows the number of things reported to VAERS—by anyone. It's important to remember that if a health problem is reported to VAERS, it doesn't mean that the vaccine caused the problem. It simply warns scientists, vaccine safety experts, and doctors of any potential problems that may need to be looked at more carefully. VAERS is our early warning system.

12 https://www.fda.gov/advisory-committees/blood-vaccines-and-other-biologics/vaccines-and-related-biological-products-advisory-committee
13 https://www.cdc.gov/mmwr/volumes/70/wr/mm7020e1.htm?s_cid=mm7020e1_w
14 https://www.cdc.gov/vaccinesafety/index.html

To make sure that COVID-19 vaccines are safe, the CDC expanded and strengthened the country's ability to monitor vaccine safety[15]. The CDC created new ways to gather more information about the safety of COVID-19 vaccines. These web-based platforms give CDC scientists information about the safety of COVID-19 vaccines in real time.

As a result, vaccine safety experts can monitor and find any issues that may not have been seen during the COVID-19 vaccine clinical trials. If any vaccine safety issues—also called adverse events— are reported, CDC scientists can quickly study them and determine if there is a safety concern with a particular vaccine.

An example of how well the system works was finding out so quickly that the Johnson & Johnson COVID-19 vaccine was associated with a very rare type of blood clot (thrombosis with thrombocytopenia syndrome or TTS) that needed to be treated differently than other types of blood clots. The CDC and FDA identified 48 confirmed reports of people who got the Johnson & Johnson vaccine and later developed TTS out of 15.5 million doses of this vaccine given in the U.S. The VAERS system was able to identify the rare side effect and the CDC was able to tell doctors the best way to treat these blood clots. Now, even if someone were to get this rare side effect, doctors can effectively treat it. It is important to point out that the Johnson & Johnson vaccine is a different type of vaccine than the mRNA vaccines by Pfizer and Moderna. There has been no association with blood clots in more than 200 million doses of the Pfizer and Moderna vaccines. The Pfizer vaccine is the only COVID-19 vaccine authorized for children.

Myocarditis

The vaccine safety system has received some reports of myocarditis (swelling and inflammation of the heart muscle) or pericarditis (inflammation of the membrane surrounding the heart) after vaccination with mRNA vaccines.[16] This usually happens after the 2nd dose, and is most likely to happen in males 12-17 years of age.[17] These are serious health conditions, but are conditions that can be treated. Most patients with myocarditis or pericarditis responded well to medicine and rest and felt better quickly. If you've been diagnosed with myocarditis, talk to your cardiologist (heart doctor) before you start exercising or participate in sports.

Myocarditis and pericarditis are very rare after a vaccination (only about 54 cases per 1 million doses[18]), but are not uncommon after being infected by a virus. About 10 to 20 people out of every 100,000 people in the U.S. are diagnosed and successfully treated for myocarditis each year after getting sick from a virus, like Lyme disease, flu, or COVID-19.

Symptoms of myocarditis or pericarditis usually appear within 7 days of vaccination:
- Chest pain
- Shortness of breath
- Feelings of having a fast-beating, fluttering, or pounding heart

No children have died after vaccination from these rare illnesses, but the majority of those cases needed to be hospitalized. All of the children fully recovered in about 34 days. The CDC presented data to the safety review committees about the investigations into myocarditis deaths among people younger than 30 who had been vaccinated. In the 86 million doses of COVID-19 vaccine administered, there have been 9 reports of vaccine-induced myocarditis deaths. Among these 9 cases, 6 have been fully investigated thus far. Three deaths were confirmed as myocarditis. **Most importantly, all 3 were due to classic myocarditis (caused from infection of a bacteria or virus) and not due to the vaccine. No myocarditis deaths have been linked to the vaccine in the U.S.**

The American Academy of Pediatrics[19] and the American Heart Association[20] have stated the benefits of COVID-19 vaccines outweigh any potential risk of myocarditis from vaccination.

15 https://www.cdc.gov/coronavirus/2019-ncov/downloads/vaccines/323652-A_COVID-19_VaccineSafety_MonitoringSystems_v9.pdf
16 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/myocarditis.html
17 https://www.fda.gov/news-events/press-announcements/fda-authorizes-pfizer-biontech-covid-19-vaccine-emergency-use-children-5-through-11-years-age
18 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/children-teens.html
19 https://publications.aap.org/aapnews/news/16738?autologincheck=redirected
20 https://newsroom.heart.org/news/covid-19-vaccine-benefits-still-outweigh-risks-despite-possible-rare-heart-complications

Have the COVID-19 vaccines caused any fertility issues?

There is absolutely no data showing that any of the COVID-19 vaccines cause infertility or miscarriages. The American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine,[21] CDC,[22] MotherToBaby,[23] and many other reputable medical organizations recommend pregnant women get vaccinated for COVID-19. It's also not biologically possible that the tiny spike on the coronavirus spike protein can puncture the uterine lining and cause bleeding. It is safe to get vaccinated during pregnancy or while breastfeeding. Pregnant women have an increased risk for severe illness and being hospitalized from COVID-19. Talk to your doctor if you have questions.

Have the COVID-19 vaccines caused any deaths?

There have been no deaths directly caused by the vaccines, out of more than 423 million doses of COVID-19 administered in the U.S. from December 14, 2020 to November 1, 2021[24]. During this time, VAERS received 9,367 reports of death (0.0022%) among people who got a COVID-19 vaccine.

The FDA requires healthcare providers to report all deaths after COVID-19 vaccination to VAERS, even if the vaccine wasn't the cause. **Reports of adverse events to VAERS, including deaths, do not necessarily mean that a vaccine caused the health problem.** Medical professionals, doctors, scientists, and vaccine experts review medical records, death certificates, and autopsy reports for each report of a death in VAERS. **After careful review, there have been no deaths directly caused by the vaccines.** However, reports show that the Johnson & Johnson COVID-19 vaccine can cause a rare and serious adverse event —blood clots with low platelets—in a very small number of people. Many doctors were not aware that these rare blood clots needed to be treated differently than they would treat other blood clots. Unfortunately, treating these rare blood clots with the same medicine as other blood clots can have very serious side effects—and a few individuals died— because their blood clots were not treated with the correct medicine. There has been no association with blood clots and the mRNA vaccines (Pfizer or Moderna).

There have been no deaths from any side effects (even rare ones) for the mRNA vaccines (Pfizer and Moderna). Pfizer is the only vaccine authorized for children younger than 18.

21 https://www.acog.org/news/news-releases/2021/07/acog-smfm-recommend-covid-19-vaccination-for-pregnant-individuals
22 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html
23 https://mothertobaby.org/fact-sheets/covid-19-vaccines/
24 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/adverse-events.html

Who shouldn't get the Pfizer COVID-19 vaccine?[25]

The Pfizer/BioNTech COVID-19 vaccine is authorized for people 5 years of age and older. Your child should **not** get this vaccine if he or she:

- Had a severe allergic reaction (anaphylaxis) or immediate allergic reaction after the 1st dose of the vaccine.
- Had a severe allergic reaction (anaphylaxis) or an immediate allergic reaction even if it was not severe to any ingredient in the vaccine.

An allergic reaction is severe when a person needs to be treated with epinephrine or EpiPen© or if the person must go to the hospital. Severe allergic reactions are called anaphylaxis. An immediate allergic reaction happens within 4 hours after getting vaccinated and could include symptoms such as hives, swelling, and wheezing (respiratory distress).

Talk to your child's doctor before getting a COVID-19 vaccine if they've had an allergic reaction to another type of vaccine or injectable therapy for another disease.

Your child can get vaccinated even if they have a history of allergic reactions that are not related to vaccines or injectable medications, such as a food, pet, venom, environmental, or latex allergy. Your child can also get vaccinated if he or she has a history of allergies to oral medications or a family history of severe allergic reactions[26].

Can my child get other vaccines at the same time as the COVID-19 vaccine?

When you get your COVID-19 vaccine, it is a good time to make sure you and your child are up-to-date on other vaccinations. **COVID-19 vaccines and other vaccines can be given on the same day.**[27] Ask your child's doctor about the potential side effects of each vaccine, so you know what to watch out for. It's possible your child may experience side effects from BOTH vaccines at the same time.

25 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html
26 https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/specific-groups/allergies.html
27 https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html#Coadministration

Should I report any side effects my child has after getting a COVID-19 vaccine?

If you think your child has a side effect after getting vaccinated, you can report it to the CDC's Vaccine Adverse Event Reporting System (VAERS). You can also ask your doctor to report it to VAERS for you. VAERS helps scientists and medical experts quickly detect unusual or unexpected patterns of health problems (also called "adverse events") that might indicate a possible safety problem with a vaccine.
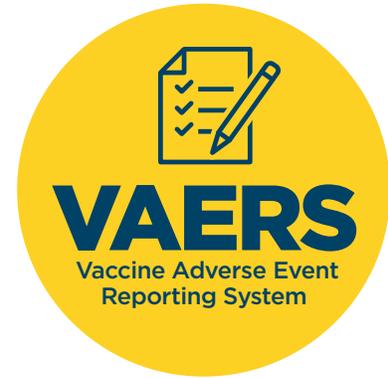
Sign up with V-safe

V-safe is an online tool that lets you tell the CDC if you get any side effects after getting the COVID-19 vaccine. You can also get reminders if you need a 2nd dose. Learn more about v-safe at www.cdc.gov/vsafe.