



It is important that everyone has correct medical information so they can make the best decision for themselves and their families about COVID-19 vaccination. It isn't always easy to sort out what information is true and what is false. Accurate vaccine information is critical and can help stop myths and rumors. It can be difficult to know which sources of information you can trust. Learn ways to [check for false information](#).

If you are trying to make up your mind about getting the COVID-19 vaccine or are helping a friend who is uncertain, visit these [trusted sources](#) for accurate vaccine information and see the facts below:

Myth #1: The vaccines were developed too fast, and they don't know if they are safe.

The Facts: These vaccines could be made quickly and still be safe for several reasons.

- Scientists had a head start because they had already studied other coronaviruses like SARS and MERS. They had also studied both mRNA and viral vector vaccines. These are the types of COVID-19 vaccines that are used in the United States.
- The government provided a lot of money and resources for vaccine development. This made it easier for scientists to work together.
- Researchers used existing networks to conduct COVID-19 vaccine trials. The trials could start quickly because people were eager to take part.
- The review and authorization of COVID-19 vaccines was prioritized by the Food and Drug Administration (FDA) and the Centers for Disease Control (CDC).
- mRNA vaccines (the Pfizer and Moderna vaccines) are faster to make than traditional vaccines.
- Some of the stages to develop and produce the vaccines were done at the same time instead of one after another. For example, manufacturing began while clinical trials were still being done. What is important is that every step that must be followed to make a new vaccine and make sure it is safe was followed. No steps were skipped.

Myth #2: We don't know enough about the long-term effects.

The Facts: Scientific understanding of how vaccines work tell us that it is very unlikely that the COVID-19 vaccines will cause any long-term side effects.

Based on what we know from other vaccines, any side effects usually begin to appear within six weeks of getting vaccinated. For this reason, the Food and Drug Administration (FDA) required each of the COVID-19 vaccines that they authorized to be studied in clinical trials for at least eight weeks. In addition, the CDC continues to closely monitor COVID-19 vaccines after they are authorized or approved and are used in more and more people. It has been a year since COVID-19 vaccines were authorized (and over a year since the start of the vaccine trials). Billions of people have received COVID 19 vaccines and no long-term side effects have been noted.

In contrast, we do know that the virus that causes COVID-19 can cause several long-term effects in both adults and in children. For example, some people can continue to have symptoms such as feeling very tired, having difficulty sleeping, headaches, and shortness of breath for months after their initial COVID-19 infection, often





referred to as long-COVID, post-COVID, or long-haul COVID. Post-COVID can even happen in people who had mild symptoms of COVID-19 initially or in those who did not have any symptoms at all. Furthermore, a severe condition called Multi-System Inflammatory Syndrome in Children (MIS-C) has affected thousands of children weeks after their initial infection, resulting in hospitalization and death. Vaccination offers protection against these “long-term” effects of the virus.

You can learn more by visiting the CDC webpage [Safety of COVID-19 Vaccines](#).

Myth #3: The vaccines have the virus that causes COVID-19 and can make you sick.

The Facts: None of the vaccines contain the virus that causes COVID-19 in any form. They cannot give you COVID-19.

If you get COVID-19 right after getting vaccinated, it is because you were infected by someone with COVID-19 around the same time you were vaccinated. It can take up to 14 days for symptoms to show after you have been infected. So, if you get infected right before getting vaccinated, you might not get sick until after you get your vaccine.

It is also possible to get infected after you get vaccinated. This is because it takes time for your body to build immunity. Even though the vaccines are very effective, no vaccine is 100% effective.

Sometimes people get a fever or feel tired for a day or two after getting a vaccine. These are normal vaccine side effects, as the body is building immunity, and not illness caused by the virus. They do not last long and go away within a few days.

Myth #4 When someone gets a COVID-19 vaccine it causes them to shed the COVID-19 virus and infect people who are nearby.

The Facts: None of the three vaccines authorized in the U.S. contain the COVID-19 virus in any form. Getting the vaccine cannot cause you to shed the virus.

There is no way that the COVID-19 vaccines can infect someone with the virus that causes COVID-19 or make them infectious. Vaccine shedding can only happen when a vaccine contains a weakened version of the virus. None of the three vaccines authorized in the U.S. contain the COVID-19 virus in any form. There is no virus for them to shed. Getting a COVID-19 vaccine helps reduce your chance of getting infected with COVID-19. And if you are not infected with the COVID-19 virus, you can't shed it or spread it to others.

Myth #5: These vaccines use genetic material to fight the virus. That means they can affect our genes.

The Facts: These vaccines use genetic material that teach your body how to fight the virus. But the genetic material does not change your genes.

The DNA or RNA in the COVID-19 vaccine tells our body's cells how to build part of the spike protein found on the COVID-19 virus. This step is needed for our body's immune system to build a response. The immune





system then develops antibodies and prepares immune cells to fight against the COVID-19 virus if we are exposed to it in the future.

The Pfizer and Moderna vaccines contain mRNA (messenger RNA). The mRNA never enters the cell nucleus where our DNA is located so it can't alter our DNA. The J&J vaccine is an adenovirus vaccine that contains DNA. An adenovirus vaccine uses a virus that has been changed so that it can't make us sick, and it can't replicate. The DNA in the vaccine cannot combine with our DNA (or chromosomes) because the vaccine doesn't have the enzyme (called integrase) that connects DNA together.

Myth #6: The vaccines contain a microchip that is used to track my movements.

The Facts: There are no microchips or any kind of tracking device in the COVID-19 vaccines.

The needle that is used to give a COVID-19 vaccine is much smaller than even the smallest microchip. This myth started on social media and claims Microsoft co-founder, Bill Gates, wants to track people by implanting them with microchips. The Bill and Melinda Gates Foundation has gone on record to state this claim is [false](#). Like many online myths, this story is hard to stop even after it has been shown to be false over and over.

Myth #7: The needle stays in your arm after you get a vaccine.

The Facts: The needle does not stay in your arm after getting a vaccine. The needle "disappears" because it retracts into the syringe or safety chamber after the injection.

You may have seen a video that appears to show a needle stays inside a person's arm after getting a vaccine. What you are actually seeing is a retractable needle at work. [Syringes with retractable needles](#) work by pulling the needle into the barrel of the syringe, or into a safety chamber on the side of the syringe, after the vaccine is given. Health care workers use these types of syringes to avoid getting poked by needles.

The needle used for COVID-19 vaccines is very thin and the amount of vaccine is tiny. Because both the needle and dose are so small, you might not feel the needle or the vaccine going into your arm. Before you get the vaccine, you can see the clear fluid inside the syringe and the needle on the end. After getting the vaccine, you will see that there is no fluid left and the needle is inside the barrel (or safety chamber).

Myth #8: The "magnet test" is proof that a microchip or needle is left in your arm after you get a vaccine.

The Facts: It is just a trick that is meant to fool you.

There are videos on social media showing magnets sticking to people's arms where they got a vaccine. This is to try to prove that the vaccines contain microchips or that a needle is left behind. This is just a trick.

Magnets can easily be made to stick to the skin with tape or ointment. Even pressing a magnet or coin firmly to your skin can make it stick. Plus, the amount of metal needed to attract a magnet is too large to fit in the needle used to give a COVID-19 vaccine.





Myth #9: You can't trust the people who made these vaccines. "Big Pharma" is just out to make money and pays doctors to say their products are safe.

The Facts: The process for developing these vaccines has been transparent. More information and data are available to independent scientists and the public than ever before.

While there are terrible examples of drug companies putting profit before safety, the development of these vaccines has been carried out in the public eye. Reviews of vaccine safety and efficacy (a term used to mean that the vaccines work) have been published for anyone to read.

The people reviewing the research include medical leaders from diverse settings all over the country. They represent a wide range of medical groups, including some that have fought hard against medical racism. They are not paid for this work and are involved to verify the quality of the research and to assure that equity is protected throughout the process. For a list of names of the reviewers and the places they work, visit the Advisory Committee on Immunization Practices (ACIP) [website](#). You can learn more about these people by looking them up online. You can also watch some of the ACIP meetings online.

Myth #10: Black and Latinx communities are being singled out to get the vaccine because there is no real proof it is safe.

The Facts: Black and Latinx communities are not being singled out. But they are being encouraged to get the vaccine because they have higher rates of infection, hospitalization, and death from COVID-19.

This concern is understandable. In the past, people of color have been lied to or forced to test drugs or medical procedures under unethical practices, placing their health at risk.

The three vaccines that are available in the U.S. were tested on diverse populations. Efforts were made to include Black and Latinx volunteers in numbers that reflect the population. This was done to make sure that the vaccines are safe and effective in those groups. It was also done to prevent these groups from becoming victims of medical neglect or racism.

Doctors and public health programs work hard to make sure Black and Latinx communities have equal access to COVID-19 vaccines. Black and Latinx residents, along with Native Americans and Native Hawaiians, experience the highest rates of infection, hospitalization, and death from COVID-19. This is why you may see billboards or hear advertising encouraging these communities to get vaccinated.

LA County wants these hardest hit communities to have the opportunity to be vaccinated as soon as possible. The stakes for Black and Latinx residents of LA are high. Please read what you can about the vaccines from reliable sources. Talk to well-informed people you trust – your doctor, a science teacher, or pharmacist – and ask them about your questions and concerns. Your questions are important and deserve answers from knowledgeable and trusted individuals.





Myth #11: I don't need the vaccine if I already had COVID-19.

The Facts: Doctors and scientists recommend that you get vaccinated even if you already had COVID-19. This is because the vaccine provides better and longer protection

Natural immunity is the protection that you get after you've had COVID-19. Getting vaccinated will boost your immunity for better and longer protection against COVID-19. In fact, a recent study found that people who were not vaccinated were more than twice as likely to get infected again compared to people who were vaccinated. Vaccination also helps protect against more infectious forms of the virus such as the Delta variant that might not have been around when you first got infected. Getting vaccinated will reduce your chances of getting COVID-19 again.

Myth #12: COVID-19 vaccines contain aborted fetal cells. I do not approve of abortion. It is not right to get vaccinated since the vaccines contain aborted fetal cells.

The Facts: None of the vaccines authorized in the United States contain any fetal cells or tissue.

Fetal cell lines that were made in laboratories from cells from 2 abortions done in 1973 and 1985 were used in development, testing, or production of COVID-19 vaccines. None of the fetal cells used came from a recent abortion or from an abortion done for the sole purpose of vaccine development.

- **Pfizer and Moderna** did not use any fetal cell lines to develop or produce their COVID-19 vaccines. They did use a fetal cell line in laboratory testing, before testing their vaccines on people.
- **Johnson & Johnson** used a fetal cell line to develop and test their COVID-19 vaccine. They also use it for vaccine production.
- The Catholic Church has reviewed the use of fetal cells for the purpose of COVID-19 vaccine production. It has stated that "it is morally acceptable to receive COVID-19 vaccines that have used cell lines from aborted fetuses in their research and production process."

If this issue is of concern to you, review the document [COVID-19 Vaccine and Fetal Cell Lines](#) carefully so you can make an informed decision about getting vaccinated.

Myth #13: We don't know what is in the COVID-19 vaccines

The Facts: The vaccine ingredients are available for anyone to see

The ingredients in the 3 vaccines that are available in the U.S. vary by manufacturer. Ingredient lists for each vaccine are on appendix C of the [CDC's Interim Clinical Considerations for Use of COVID-19 Vaccines](#) webpage. Aside from the genetic material to stimulate your immune system, the ingredients are pretty basic. Some of the ingredients have scientific chemical names, but if you looked them up, you would find that they are salts, sugars, and fats. They are safe unless you are allergic to any of the ingredients.

None of the vaccines available in the U.S. contain eggs, gelatin, latex, or preservatives. They are free of any metals such as iron, nickel, cobalt, lithium, and rare earth alloys. The vaccines also do not contain any manufactured products such as microelectronics, electrodes, carbon nanotubes, or nanowire semiconductors.





Myth #14: VAERS, the Vaccine Adverse Event Reporting System, shows that thousands of people, including children, have died from the COVID-19 vaccine.

The Facts: VAERS reports alone cannot and should not be used to determine if a vaccine caused an adverse event. Serious adverse events after COVID-19 vaccination may occur but are rare. There have been no confirmed deaths in children that were caused by COVID-19 vaccine. In contrast, hundreds of children have died from COVID-19 infection.

There has been confusion about the number of reported deaths in the publicly available data from VAERS. People have misinterpreted reports of deaths from VAERS as deaths caused by the vaccines. That is not accurate. VAERS accepts all reports of adverse health events following vaccination. Anyone can submit a [report to VAERS](#), including members of the public. Some reports to VAERS represent true vaccine reactions. Others are coincidental adverse health events and not related to vaccination. For example, if a person dies in an accident a couple days after getting vaccinated, it may be reported into VAERS. In VAERS, the death would look like a vaccine-related event because it happened soon after the person was vaccinated even though it might have had nothing to do with the vaccine. Some reports may contain information that is incomplete, inaccurate, coincidental, unverifiable, or even bogus.

To learn more about the limitations of VAERS data, visit the CDC [VAERS webpage](#) or watch the video [VAERS and Vaccine Safety: How It Works](#).

For more information on vaccine safety visit the CDC [Safety of COVID-19 Vaccines](#) webpage.

Additional Resources

For other myth busters visit:

- CDC: [Myths and Facts about COVID-19 Vaccines](#) and [Myths and Facts about COVID-19 Vaccines for Children](#)
- Children' Hospital of Philadelphia: [COVIDVaccineAnswers.org](#)
- Johns Hopkins: [COVID-19 Vaccines: Myth Versus Fact](#)
- FactCheck.org: [COVID-19 Misconceptions](#)

