

# BE A HERO!

## UNDERSTAND THE COVID-19 VACCINE

Vaccines are the safest and most effective measures we have against infectious diseases. Think about some of the world's most devastating diseases, like smallpox, measles, and polio. Today, we are protected from these diseases by vaccines.

In fact, these vaccines have been successful for such a long time that you may not even know anyone who has had the diseases they prevent. That's the long-term goal of any vaccination program: to put diseases out of sight and out of mind.

It's natural to have questions and concerns about the COVID-19 vaccine. In this publication, we hope to give you the answers you need, based on science.

It's important to understand the science behind the vaccine, so that you can protect yourself and everyone you care about from COVID-19.

### Why should I get a vaccine?

COVID-19 is a serious disease. It is caused by a coronavirus that is changing rapidly to become even more contagious and cause more severe disease.

Getting the vaccine is an individual decision that can affect the whole community. Unvaccinated people can become infected and spread the disease to their loved ones, their neighbors, and others in their community. The more the virus spreads, the more chances it has to mutate or change. Future mutations, or variants, could be even more contagious and cause more serious illness than those we know right now.

Millions of people in the United States and around the world have received the vaccines. Data from both the original research trials and the real-world use of the vaccine has shown that the coronavirus vaccines are safe and effective, even safer and more effective than the annual flu vaccines.

### Why did the vaccine get approved so quickly?

The vaccine was developed and approved so quickly for four basic reasons:

- Medical science has become so advanced that scientists around the world could quickly apply and share some of the newest techniques to create a vaccine that would work. We can do things now in months that used to take years.
- In the past, the steps or stages of vaccine development had to happen one after the other. In developing the COVID-19 vaccine, some of the later steps could happen at the same time, so that the overall process was much shorter.
- The U.S. government provided funding to some companies to help with the costs of developing the vaccine.
- The companies developing the vaccine were able to provide extremely convincing data about the effectiveness of the vaccine.



## Was the development and approval process for the vaccine too fast to be safe?

While the process happened very quickly, none of the steps were skipped. The vaccines were tested in tens of thousands of people, and the data on safety and effectiveness were very carefully reviewed by scientists working for the vaccine companies, the federal government, and other agencies.

Also, while COVID-19 is new, the basic science behind both types of vaccines has been around for years. The “messenger RNA” or “mRNA” technique that the Pfizer and Moderna vaccines are based on has been in use for more than 10 years. The Johnson & Johnson vaccine uses disabled cold viruses to deliver a coronavirus protein to cells. This technique has been in use for decades.

## How does the vaccine work?

Like any other vaccine, the COVID-19 vaccines contain ingredients that make the cells in your body react just as they would to the real virus. This reaction is your immune response. That means that, if you are exposed to the actual virus in the future, your cells will recognize it and defeat it, so you won't get sick.

## Will I catch COVID-19 from the vaccine?

No. The versions of the vaccine from Pfizer and Moderna do not contain the virus. They contain just a part of the virus, its “messenger RNA,” which is just enough to cause the cells in your body to develop immunity. The Johnson & Johnson vaccine contains a gene for the coronavirus “spike protein,” which is carried into your cells by a disabled cold virus. It cannot give you COVID-19 or a cold.

## Is the vaccine safe for me to take?

Yes! The vaccine has been through extensive trials that have shown that it is very safe. In fact, it has been through the same rigorous trials as other vaccines we routinely take. Findings from these trials show that there is a very small chance the vaccine could cause

a reaction in a very few people within an hour of receiving the shot, but that those reactions are likely to be mild and not life-threatening.

Some people have had serious allergic reactions shortly after receiving the vaccine. These people were known to have severe allergies to other substances. If you have severe allergies, talk to your doctor before getting the vaccine.

If you are not sure whether the vaccine is right for you, talk to your doctor or other health care provider.

## Will the vaccine change my DNA?

No. The vaccine will not change anyone's DNA. DNA is located in the nucleus of your cells, and the vaccines work on parts of the cells outside of the nucleus. So they never get near the DNA in your cells.

## Does the vaccine contain microscopic robots?

No. You may have heard some versions of the vaccine described as using “nanotechnology,” but that doesn't mean robots. The Pfizer vaccine, for example, uses very tiny fat particles, called “nanoglobules,” to carry the messenger RNA into your cells. “Nano” just means very small.

## Does the vaccine contain things that will allow people to track my movements?

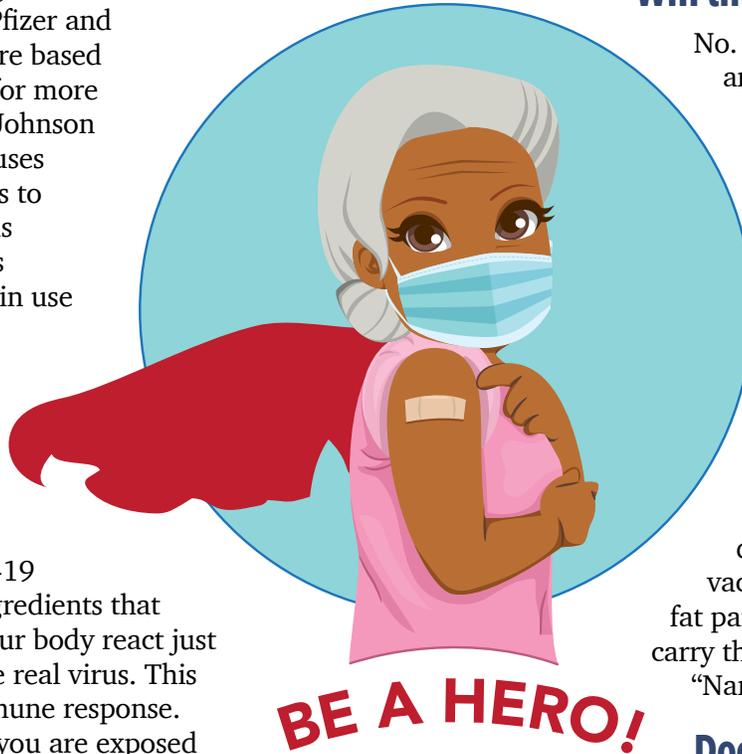
No. The vaccine does not have anything other than the active ingredients, which have been shown to have up to 95% effectiveness in preventing COVID-19.

## When can I get the vaccine?

In the beginning, the vaccines were administered in phases. But now vaccines are widely available for all adults and children 12 years old and over. For up-to-date information on availability, check the Mississippi State Department of Health website at [bit.ly/35NtrOr](https://bit.ly/35NtrOr).

## Where can I get the vaccine?

You should get your vaccination only from your doctor, a hospital or clinic, a licensed pharmacy, the Mississippi State Department of Health, or a site set up by one of these trusted sources. Do not respond to emails, phone calls, or online ads from people or organizations you



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don't know who are trying to sell or send you a vaccine. There will be no do-it-yourself versions of the vaccine.

However, if you or someone you know is unable to leave their home, contact your doctor, pharmacist, or other health care provider. It may be possible to arrange for a home visit to have a professional give you the vaccine.

If you don't have a doctor's office, pharmacy, or hospital in your community, check with your city or county government or your church or community center. You might be able to arrange for a temporary vaccination clinic to bring the vaccine to people in your community.

To find out more about where you can get the vaccine, check the Mississippi State Department of Health website at [bit.ly/35NtrOr](https://bit.ly/35NtrOr).

## How much will the vaccination cost?

It shouldn't cost you anything. The federal government has paid for all the doses that will be distributed in the U.S. If someone tries to charge you money for the vaccine, that may be a sign they are not a distributor you can trust. However, your doctor's office or clinic may charge you for an office visit.

You should not be asked to pay just to make an appointment or to get on a "priority list" to receive the vaccine. Don't trust phone calls, emails, or online ads that try to get you to pay to get on a list for the vaccine. Don't share any of your personal information with people you don't know.

## There is more than one company producing a vaccine. What are the differences?

The Pfizer and Moderna vaccines both use messenger RNA (mRNA), which travels to your cells and makes proteins from the coronavirus. Those proteins cause an immune response, which basically "teaches" your body how to fight the virus. This means that, if you encounter the virus, you'll be able to fight it off. To be fully effective, two doses of these vaccines are needed.

The Johnson & Johnson vaccine uses a gene for the spike protein on the outside of the coronavirus. This gene is carried into your cells by a cold virus that

has been altered so it can't make you sick. Your cells create copies of the spike protein, which will teach your immune cells how to recognize and defeat the coronavirus if you are exposed to it.

The big difference is that the Johnson & Johnson vaccine requires only one dose, while the Pfizer and Moderna vaccines require two doses.

In the end, they all do the same thing—they help your body develop immunity to the virus. They just work in slightly different ways.

## Will I know which vaccine I'm getting?

Yes. You will receive a card with information about the vaccine you received, which will include the manufacturer.

## If I already had COVID-19, do I still need to get the vaccination?

Yes! It is possible to get COVID-19 more than once. The second infection can cause illness that is just as bad as or even worse than your first infection.

Also, some of the vaccine research has shown that the vaccine produces a stronger and more lasting immune response than was seen in people who had actually had COVID-19.

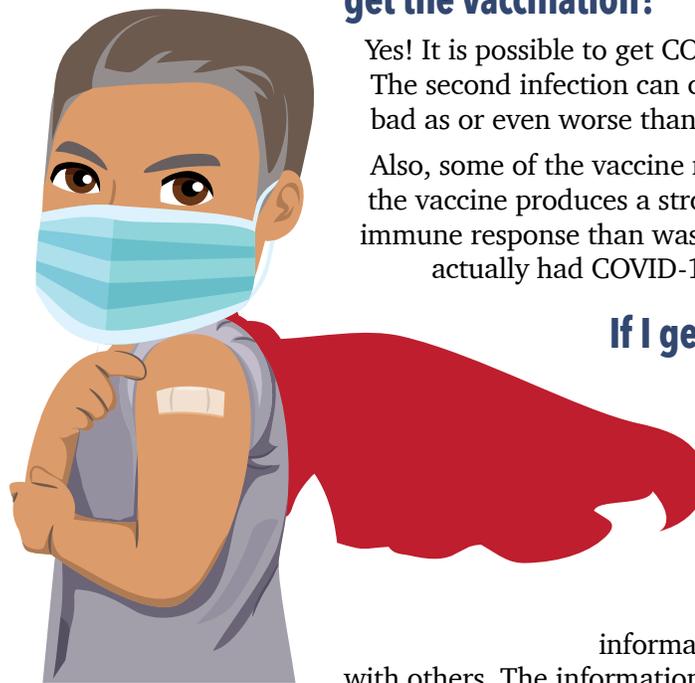
## If I get a vaccination, will that information be shared with other people and businesses?

Your private health information may not be shared with others. The information will be documented in your health record.

## If I get a vaccination, what can I expect?

After getting your vaccination, you may feel pain at the site of the shot. You might also feel tired or have a headache, and your lymph nodes might swell. You might even have a fever. This does not mean you're getting COVID-19. Instead, it means that your immune system is doing what it is supposed to do and developing a response to fight off the disease. These symptoms should last only a day or two.

Some people have had serious allergic reactions shortly after receiving the vaccine. These people were known to have severe allergies to other substances. If you have severe allergies, talk to your doctor before getting the vaccine.



## If I get a vaccination, what should I do?

Pay attention to how you're feeling. If you have a severe allergic reaction that causes swelling in your face or neck or difficulty breathing, go to the emergency room. If you feel sick, stay home if you can. If your symptoms last for more than 2 days, check with your doctor.

If you receive the Pfizer or Moderna vaccine, be sure to return to receive your second dose at the right place and time.

At any time after you are fully vaccinated, if you think you are getting a cold because you have a runny nose, cough, and/or sore throat, talk to your doctor about getting tested for COVID-19. Even though the vaccines are extremely effective, it is still possible for a vaccinated person to catch the virus.

## If I get a vaccination, will I still need to wear a mask and socially distance?

If you are fully vaccinated, you don't necessarily have to wear a mask and follow social distancing guidelines. You are considered fully vaccinated 2 weeks after your single dose of the Johnson & Johnson vaccine or 2 weeks after the second dose of the Pfizer or Moderna vaccine. Just be sure to follow the guidelines from your local, state, or federal government or your school, workplace, or other businesses in your community.

If you are not fully vaccinated, then you need to continue wearing a mask and staying 6 feet away from people who do not live in your household.

If you plan to travel, be sure to check the requirements for the airlines, bus lines, and your destination before you leave. Some may require negative COVID test results, proof of vaccination, and/or masks.

## If I get a vaccination, will I need a booster shot?

At this time, the Centers for Disease Control says that the current vaccines are enough to protect you from the original coronavirus and from all the mutations or variants that we know of right now. For that reason, boosters are not needed.

However, as the coronavirus continues to mutate, a booster could be needed in the future. Please pay attention to reliable news outlets, your local health department, and other trusted sources for information about the need for booster shots.

## How can I help?

Trust the science and get the vaccine! Let your family and friends know you have received the vaccine and encourage them to get it, too!

Make sure you have the most current and most accurate information about the vaccine and its availability. Check the Mississippi State Department of Health website at [msdh.ms.gov](https://msdh.ms.gov). And check trusted local media outlets, your local health department, and your local health care providers.

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