

Questions about the COVID-19 Vaccine?

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We are so excited to be providing the Moderna vaccine here at LACHC! We know that there is a lot of information out there about the vaccine, so we wanted to compile several resources here for those with any questions or concerns. There are several videos and an FAQ below, along with links to additional information at the end of the doc.

1. Videos explaining the vaccine and answering common questions

- [CDC short informational video](#)
- [Dr. Z Dagg vaccine safety questions video](#)
- [Explaining mRNA vaccines in 2 minutes](#)

2. Helpful FAQ answering common questions about the vaccine:

[FAQ written by](#) Robin Schoenthaler, a cancer MD who has been writing about COVID since March

Q. Can I get infected from the vaccine?

A. No. Period. No. There is no virus in the injection so you cannot get COVID-19 from getting the vaccine.

Q. How effective are these vaccines?

A. Every vaccine trial has two groups of people — one who **gets** the vaccine and one who **doesn't** (they get a placebo). Then the scientists count up who gets sick.

Here's the results:

Pfizer:

18,000 people RECEIVED the vaccine: **8** got Covid

18,000 people DIDN'T GET the vaccine: **162** got Covid

Moderna:

14,000 people RECEIVED the vaccine: **11** got Covid

14,000 people DIDN'T GET the vaccine: **185** got Covid

So in total:

32,000 people RECEIVED the vaccine: **19** got Covid

32,000 people DIDN'T GET the vaccine: **347** got Covid

It adds up to >94% effectiveness — it's unbelievably fantastic, SPECTACULARLY good. This is why many health care workers are banging down the doors to get this vaccine in their arms as fast as they can.

Q. Can these vaccines change my DNA?

A. No.

Q. Can these vaccines change my chromosomes?

A. No.

Q. Can these vaccines harm the chromosomes of my unborn child?

A. No.

Q. Do these vaccines impact a woman's fertility?

A. No.

Q. Do these vaccines impact a man's fertility or ability to have an erection?

A. No.

Q. Have these vaccines been tested on enough people?

A. Yes. In fact these trials are bigger than most.

Q. What if I have allergies?

A. Tell your doctor, but at this point it is fine to get the vaccine no matter what kind of allergies you have (the only exception being of a history super huge allergic reactions to a past vaccine or components of this vaccine, in which case they'll make special arrangements).

Q. What if I'm pregnant? Or nursing?

A. Talk to your Ob. There's not a lot of data on these women, but so far there's no theoretical reason to think it's unsafe for you or baby. But being pregnant means you have an increased chance of getting bad Covid, so you need to think hard about how high your exposure risk is.

Q. Why did this happen so fast? Isn't that dangerous?

A. This is the fastest vaccine development in the history of the world because a bunch of science went on for years before this and then a bunch of good stuff happened all at once. It's like a "perfect storm" of vaccine development:

1. Because our knowledge about genetic sequencing is about ten gajillion times better than it was a few years ago;

2. Because they figured out Covid's whole genetic code within days and then invented a vaccine in about half an hour (slight exaggeration but not much);
3. Because scientists have been studying other coronaviruses behind the scenes for years;
4. Because scientists have been studying mRNA vaccines behind the scenes for years;
5. Because researchers have figured out how to do really good vaccine trials and have worked out a lot of the kinks;
6. Because there was so much coronavirus around and it's so contagious that trials could finish up quickly;
7. Because the government, industry, and a bunch of charities poured buckets of money into this research;
8. Because the government paid for vaccines to be manufactured before the studies were done and sped all their processes up;
9. Because they've been working on vaccine distribution for months;
10. Because if you spend a ton of money miracles can happen.

Q. Don't scientists need more time to study these vaccines to be sure they're effective?

A. No. These trials were set up to accumulate a certain number of people and cases of Covid. Independent statisticians monitored the numbers throughout the study.

Once the trials hit those numbers, it was time to evaluate, and that's when they saw the big 95% differences in outcomes. There's no reason to think this will change much so boom! What's not to approve?

Q. Don't scientists need more time to study these vaccines to be sure they're safe?

A. They watched these 64,000 people in these trials super carefully:

- They kept close track of the short-term reactions (sore arm, fatigue, etc) and saw they didn't change over time and didn't last.
- Some people got their shots in July and they have been followed ever since (five months) with no new side effects during that time.
- As a rule with viruses you just don't see side effects or reactions more than few weeks after getting a vaccine
- The FDA didn't even look at the data until an average of **two** months after the last dose was given

- It is possible there will be new reactions or allergic reactions seen when the vaccine is given to eight gazillion more people but so far it's all been temporary and easily handled

Q. Could the data be fake?

A. The data has been examined by many different groups of scientists, doctors, statisticians etc., all along the way — independent groups early on and before approval, FDA career scientists, and CDC committee members (not to mention eight gazillion commenters on Twitter). It is probably the most examined data in history.

Q. Do I have to get both shots?

A. Yes. The vaccines are about **50%** effective after one shot but then **95%** effective after the second dose. This is a no-brainer. Do not walk around in a state of 50/50 “maybe you’ll get Covid, maybe you won’t.” **GET BOTH SHOTS.**

Q. Am I safe the day after the first shot?

A. No. It takes a while. You are super safe (94% safe!) a week after the second dose.

Q. Can I stop buying masks once I have my second shot?

A. No, not yet (unfortunately). We don’t know yet about TRANSMISSION. Could you get vaccinated, get infected anyways, stay asymptomatic and then accidentally pass it along to others? Possibly. Since we don’t know yet how often that happens, we need to mask up. We’ll be wearing masks for a long while yet until the data on this critical question is in.

Q. What about the kids?

A. Kids weren’t studied in the Pfizer/Moderna trials (children are never studied early on, they always test adults first). We may have data later in 2021. In the meantime, vaccinate their teachers and janitors and the kids will automatically be safer.

Further information

[PBS video on the vaccine development process](#)

[Instagram post by a physician recommending the vaccine for his pregnant sister](#)

[American Chemical Society: Blog Responding to Vaccine Questions](#)

[CDC information on mRNA vaccines](#)

CDC: Answering Patients' Questions About the Vaccine:

Questions about Vaccine Safety and the Speed of Vaccine Development

The federal government, under the umbrella of [Operation Warp Speedexternal icon](#), has been working since the start of the pandemic to make a COVID-19 vaccine available as soon as possible. This accelerated timeline is unprecedented and has raised concerns for some people that safety may be sacrificed in favor of speed. However, as with all vaccines, safety is a top priority.

Patients may ask: How do we really know if COVID-19 vaccines are safe? To respond, you can explain how:

- The Food and Drug Administration (FDA) carefully reviews all safety data from clinical trials and authorizes emergency vaccine use only when the expected benefits outweigh potential risks.
- The Advisory Committee on Immunization Practices (ACIP) reviews all safety data before recommending any COVID-19 vaccine for use. [Learn how ACIP makes vaccine recommendations.](#)
- FDA and CDC will continue to monitor the safety of COVID-19 vaccines, to make sure even very rare side effects are identified.

Example:

COVID-19 vaccines were tested in large clinical trials to make sure they meet safety standards. Many people were recruited to participate in these trials to see how the vaccines offers protection to people of different ages, races, and ethnicities, as well as those with different medical conditions.

Questions about Whether It Is Better to Get Natural Immunity Rather than Immunity from Vaccines

Because some people with COVID-19 can have very mild symptoms, some may see natural infection as preferable to receiving a new vaccine. Others may be concerned that getting a COVID-19 vaccine could make a later illness worse. Help your patients understand the risks and benefits so they can be confident choosing to get vaccinated.

Patients may ask: Is the vaccine that helpful? I heard getting COVID-19 gives you better and longer immunity than the protection a vaccine can give. Can it actually make my illness worse if I do end up getting COVID-19? **To respond, you can:**

- Explain the potential serious risk COVID-19 infection poses to them and their loved ones if they get the illness or spread it to others. Remind them of the potential for long-term health issues after recovery from COVID-19 disease.
- Explain that scientists are still learning more about the virus that causes COVID-19. And it is not known whether getting COVID-19 disease will protect everyone against getting it again, or, if it does, how long that protection might last.
- Describe how the vaccine was tested in large clinical trials and what is currently known about its safety and effectiveness.

Be transparent that the vaccine is not a perfect fix. Patients will still need to practice other precautions like wearing a mask, social distancing, handwashing and other hygiene measures until public health officials say otherwise.

Example:

“Both this disease and the vaccine are new. We don’t know how long protection lasts for those who get infected or those who are vaccinated. What we do know is that COVID-19 has caused very serious illness and death for a lot of people. If you get COVID-19, you also risk giving it to loved ones who may get very sick. Getting a COVID-19 vaccine is a safer choice.”

question circle solid icon

Questions about Known Side Effects

Some COVID-19 vaccines may be more reactogenic than vaccines that people are familiar with. Information about specific side effects of the COVID-19 vaccine will be available when it is approved. It is important to set this expectation with your patient, in case they experience a strong reaction.

Patients may ask: How much will the shot hurt? Can it cause you to get very sick? ***To respond, you can:***

- Explain what the most common side effects from vaccination are and how severe they may be.
- Provide a comparison if it is appropriate for the patient (for example, pain after receiving Shingrix for older adults who have received it).
- Make sure patients know that a fever is a potential side effect and when they should seek medical care.

- Let them know that symptoms typically go away on their own within a week. Also let them know when they should seek medical care if their symptoms don't go away.
- Explain that the vaccine cannot give someone COVID-19.
- Explain that side effects are a sign that the immune system is working.

Example:

“Most people do not have serious problems after being vaccinated. We will understand more about mild side effects of the COVID-19 vaccine before we start to use it. However, your arm may be sore, red, or warm to the touch. These symptoms usually go away on their own within a week. Some people report getting a headache or fever when getting a vaccine. These side effects are a sign that your immune system is doing exactly what it is supposed to do. It is working and building up protection to disease.”

Questions about Unknown, Serious, Long-term Side Effects

Due to the relative speed with which these vaccines were developed, patients' concerns about long-term side effects are reasonable and to be expected.

Patients may ask: How do we know that these vaccines are safe when they are so new? Couldn't they cause problems that we don't know about yet? What about long-term problems? ***To respond, you can:***

- Explain how FDA and CDC are continuing to monitor safety, to make sure even long-term side effects are identified.
- Reassure patients that COVID-19 vaccines will be continuously monitored for safety after authorization, and ACIP will take action to address any safety problems detected.
- Compare the potential serious risk of COVID-19 infection to what is currently known about the safety of COVID-19 vaccines.

Example:

COVID-19 vaccines are being tested in large clinical trials to assess their safety. However, it does take time, and more people getting vaccinated before we learn about very rare or long-term side effects. That is why safety monitoring will continue. CDC has an independent group of experts that reviews all the safety data as it comes in and provides regular safety updates. If a safety issue is detected, immediate action will take place to determine if the issue is related to the COVID-19 vaccine and determine the best course of action.

How Many Doses Are Needed and Why?

All but one of the COVID-19 vaccines currently in phase 3 clinical trials use two shots. The same vaccine brand must be used for both shots.

Patients may ask: How many shots am I going to need? ***To respond, you can:***

- Explain that two shots are generally needed to provide the best protection against COVID-19 and that the shots are given several weeks apart. The first shot primes the

immune system, helping it recognize the virus, and the second shot strengthens the immune response.

- When applicable, explain the dosing options available in your office and advise the patient that they can set up an appointment before they leave to come back for a second dose.

Example:

Nearly all COVID-19 vaccines being studied in the United States require two shots. The first shot starts building protection, but everyone has to come back a few weeks later for the second one to get the most protection the vaccine can offer.

Other Questions Patients May Have about COVID-19 Vaccination

If you have additional questions from patients, reference [Frequently Asked Questions about COVID-19 Vaccination](#) for regularly updated answers to common questions.