

COVID-19 vaccine FAQs for people with cancer



The most important information about the COVID-19 vaccines

Q What COVID-19 vaccines are available in the U.S.?

A There are currently 3 vaccines authorized by the FDA (Food and Drug Administration) in the U.S. to protect people against COVID-19. They are the Pfizer, Moderna, and Johnson & Johnson (J&J) vaccines.



Learn more about **FDA authorization** on page 9.

Q Should I get a COVID-19 vaccine if I have cancer or am a cancer survivor?

A Many cancer-related medical and professional societies recommend that most cancer patients and survivors get the COVID-19 vaccine, such as American Association for Cancer Research, American Society of Clinical Oncology, American Cancer Society, Society for Immunotherapy of Cancer, and European Society for Medical Oncology. Also, the COVID-Lung Cancer Consortium (CLCC) strongly recommends that lung cancer patients need to be among the groups allowed to be vaccinated early in the process.

As a lung cancer patient, **you are at higher risk (chance) of severe illness from COVID-19**, and the vaccines are very effective in protecting you.



Q Do the COVID-19 vaccines give complete protection?

A Currently, the science shows that the vaccines are highly effective (work very well) in preventing people from getting seriously ill from COVID-19. However, no vaccine is 100% effective. To ensure complete protection even after you get a vaccine, continue to use safety measures such as wearing a mask, **social distancing**, and washing your hands often.



Social distancing is staying 6 feet away from others.

Q Are COVID-19 vaccines safe?

A Yes, all 3 FDA-authorized vaccines are considered to be safe. They were all tested in thousands of people who took part in **clinical trials** so researchers could make sure the vaccines were safe and worked well.

Trials for the 3 FDA-authorized vaccines have had fully independent safety monitoring boards. The safety monitoring boards are made up of research experts, doctors, and patient advocates who check the safety as the trial is taking place. And the FDA and expert panels continue to review safety data after the clinical trials.

A **clinical trial** is a type of research designed



to learn more about how our bodies respond to drugs or other treatments.

Q Did clinical trials test the vaccines in people with cancer?

A Patients with cancer made up a small fraction of participants in the vaccine clinical trials, representing 4% of participants in [Pfizer's trial](#). Despite this, there is no concern that the vaccines are unsafe for cancer patients.

Q Did clinical trials test the vaccines in people of all races and ethnicities?

A Yes. All vaccine clinical trials included people of diverse races and ethnicities. Doctors have not seen differences in the way the vaccines work in people of diverse groups. None of the vaccine trials has reported any serious safety concerns.

Researchers made sure that trial participants represented about the same amount of diversity as in the U.S. population. The Pfizer, Moderna, and J&J vaccine clinical trials included African Americans, Hispanics, Asian Americans, Native Hawaiians, Pacific Islanders, and Native Americans.

Q How can I find out where I can get a COVID-19 vaccine?

A As vaccine availability increases nationwide, some places are beginning to offer the option of walk-in vaccinations, though most places still require an appointment. For cancer patients, it's best if you first call your cancer doctor or look at the online patient portal at your hospital or VA for information on scheduling an appointment. For all other people, you can use the links below to find out where to get scheduled.

When you schedule a vaccination time, you should receive an email or text that confirms your appointment time. Keep that email or text on your phone or print it out as proof to take with you at your scheduled time. **It's important to have this proof that you scheduled an appointment** wherever you decide to get a vaccine. It's important to bring your insurance card with you, too.



Links with information on how to schedule an appointment

- WebMD state-by-state guide to COVID-19 vaccine Information at [webmd.com/vaccines/covid-19-vaccine/default.htm](https://www.webmd.com/vaccines/covid-19-vaccine/default.htm)
- NBC News plan your vaccine at [nbcnews.com/specials/plan-your-vaccine/](https://www.nbcnews.com/specials/plan-your-vaccine/)
- Find a COVID-19 Vaccine Shot to find an appointment at a pharmacy near you at [findashot.org](https://www.findashot.org)



Who should get the COVID-19 vaccine

Q Who should get a COVID-19 vaccine?

A Nearly all adults, including lung cancer patients, should get a COVID-19 vaccine.

Q I am in cancer treatment. Can I still get a COVID-19 vaccine?

A Talk with your doctor to see if you can get a vaccine during active cancer treatment, such as during chemotherapy, immunotherapy, or radiation therapy. In general, patients getting cancer treatment may get the COVID-19 vaccine:

- If substances in that vaccine would not be harmful or disruptive to cancer treatment
- If you and your doctors can time the vaccination for when your immune system is active, such as between cycles of therapy and after a waiting period if you have received a stem cell transplant or immune globulin treatment

You need an active immune system for the vaccine to work. Chemotherapy or radiation therapy can weaken the immune response and make the vaccine less effective.

Q Should I get the vaccine if I have already had COVID-19 and recovered?

A Yes. Doctors recommend you get a vaccine even if you have already had COVID-19. However, you should wait about 90 days after your COVID-19 diagnosis to get a vaccine.

People who get COVID-19 do build **antibodies** that provide some protection against reinfection. However, doctors don't know exactly how long that protection lasts after a person recovers.

Antibodies are proteins made by your immune system.



Q Should caregivers get a COVID-19 vaccine?

A Yes. If your caregiver is eligible to get a vaccine, they should get it.

Q Are the COVID-19 vaccines effective if I am overweight or obese?

A Yes. The data released by the FDA shows that the 3 vaccines are effective in patients who are overweight or obese.

Some people should talk with their doctor before getting the COVID-19 vaccine

Q Can I get a COVID-19 vaccine if I've had allergic reactions in the past?

A Maybe not. You should ask your doctor first if:

- You have had severe allergic reactions to other vaccines or medicines
- You are known to have had **anaphylaxis**

Anaphylaxis is a severe, possibly life-threatening allergic reaction.



Q Can I get the vaccine if I am allergic to eggs?

A Yes, you can get the vaccine. The COVID-19 vaccines do not contain eggs.

Q Can I get a COVID-19 vaccine if I am pregnant?

A Maybe. Talk with your doctor first. The actual risks of mRNA vaccines (the type of vaccines by Pfizer and Moderna) to a pregnant woman and her unborn baby are unknown because these vaccines have not been studied in pregnant women.

Pregnant women who get COVID-19 are at higher risk for severe illness and might be at higher risk of problems such as preterm birth.



The CDC and the independent Advisory Committee on Immunization Practices (ACIP) have provided information to help pregnant women decide whether to get a COVID-19 vaccine.

• [cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html)

Q Can I get a COVID-19 vaccine if I am breastfeeding?

A Maybe. Talk with your doctor. Doctors don't yet know about the safety of any COVID-19 vaccines in women who are breastfeeding or the effects of COVID-19 vaccines on breastfed babies.

Who should not get the COVID-19 vaccine yet

Q Can I get the vaccine if I currently have COVID-19 or think I might have it?

A No. Do not get the vaccine if you are in quarantine (isolation) after being exposed to someone with COVID-19 or if you currently have COVID-19 symptoms.

You can get the vaccine 90 days after your COVID-19 diagnosis.



Q Can my children get a COVID-19 vaccine?

A Not yet. These vaccines were not tested in children. Doctors recommend that people 16 years and older may get the Pfizer vaccine, while people 18 years and older may get the Moderna or J&J vaccine.

About the 3 types of COVID-19 vaccines

Q What are the differences between the 3 COVID-19 vaccines?

A The table shows the differences between the 3 vaccines:

Features	Pfizer vaccine	Moderna vaccine	Johnson & Johnson (J&J) vaccine
Doses required	2 doses given 21 days apart	2 doses given 28 days apart	1 dose
Vaccine type	mRNA	mRNA	Inactivated adenovirus
Storage required	Very cold freezer	Very cold freezer	Cold refrigerator

mRNA vaccines (Pfizer, Moderna) for COVID-19 work differently than traditional vaccines because they do not put a weakened or inactivated live virus into your body. Instead, they use material from the virus that tells your cells how to make a protein that triggers an immune response. This immune response protects you from getting infected if you are exposed to the real, live virus that causes COVID-19 in the future.

The J&J vaccine uses an **inactivated adenovirus** (a common virus that is dead) that can carry information into your cell to help protect your body from the virus that causes COVID-19.

Q Why are 2 shots needed for Pfizer and Moderna vaccines?

A You need 2 shots of these vaccines because the 1st shot helps your immune system create a response against the virus that causes COVID-19. Then, the 2nd shot further boosts your immune response to ensure long-lasting protection.

Q Why does the J&J vaccine need only one shot?

A The J&J clinical trials were designed to see if the vaccine worked well and was safe with just one dose. The quick impact of the J&J vaccine's effectiveness against severe illness from COVID-19 happened as early as 7 days after getting the vaccine and rose over time.

Q Will I need to get a COVID-19 vaccine every year?

A Doctors don't yet know if you will need to get a COVID-19 vaccine every year. You will be notified if you need to get a vaccine in the future.

You will get a record card when you get your vaccine. Keep it in a safe place.



Q What is not yet known about the protection of COVID-19 vaccines?

A Doctors and researchers need to understand more about the protection that COVID-19 vaccines provide in real-world conditions. [A recent study](#) conducted by the CDC in a real-world setting among healthcare workers, first responders and essential workers found a 90% decrease in infection following the second vaccine dose. There is also growing evidence that vaccination reduces the risk of spreading the virus but further study is needed in both cases.

This is why it's **important to keep using the protective measures**

such as wearing a face mask, socially distancing (especially indoors), and washing your hands often.



Q How did COVID-19 vaccines get developed so quickly?

A Several agencies within the U.S. federal government coordinated an effort to help vaccine development go faster. This included:

- Allowing vaccine makers to hold clinical trials more quickly than in the past
- Using the technology of the Pfizer and Moderna mRNA vaccines, which existed decades before COVID-19
- For the J&J vaccine, using broad previous experience with adenovirus vaccine technology to decide on the best dose. J&J used the same technology to create the European Commission-approved Ebola vaccine.

The U.S. FDA will not and has not approved a vaccine unless there are data to show that the vaccine is:

- Safe for use following a series of **randomized, placebo-controlled clinical trials** in thousands of people
- Effective at preventing the disease
- Proven to be produced or made consistently, safely, and at a high quality

Randomized, placebo-controlled clinical trials

mean that participants were randomly assigned to get the vaccine or a placebo, which is a look-alike that contains no actual vaccine.



Q How long have the vaccines been studied in people? Is safety still being reviewed?

A In July 2021, it will be one year since the start of both the Moderna and Pfizer vaccine clinical trials. That is when people started to get the vaccines. Together, the trials enrolled over 40,000 adult volunteers who got a COVID-19 vaccine.

In September 2021, it will be one year since the start of the J&J vaccine trial, in which 22,000 volunteers got the one-shot COVID-19 vaccine.

All 3 vaccine makers are continuing to provide safety surveillance (watch and review) after FDA authorization in the U.S. The Centers for Disease Control (CDC) also does separate safety checks.

Myths about COVID-19 vaccines

Q Can I get COVID-19 from a COVID-19 vaccine?

A No. The vaccines cannot give you COVID-19.

Q Can a COVID-19 vaccine change my genetic information?

A No. COVID-19 vaccines do not affect or change your DNA in any way.

Q Do COVID-19 vaccines contain microchips?

A No. This is a misunderstanding that spread in the media after Bill Gates of Microsoft referred to “digital” certificates (record cards). He meant that after getting the vaccine, some people get a type of vaccine certificate in which they get a digital copy of it to print out at home.

Before you get the COVID-19 vaccine

Q If I get a Pfizer or Moderna vaccine, do my 1st and 2nd doses need to be the same brand? How do I keep track?

A Yes, the 2nd dose needs to be the same vaccine brand as the 1st dose. When you get a vaccine, you will get a vaccine record card. If you get the Pfizer or Moderna vaccine, the record card will show which brand of vaccine you got.

Also, the place where you got the vaccine may include your information in a system that keeps track of vaccinations, such as your state or local health department’s Immunization Information System (IIS). This will help make sure that you get the same vaccine when you return for the 2nd dose.

Q How much will the vaccine cost?

A The COVID-19 vaccine is offered at no cost to you. U.S. taxpayer dollars bought the vaccines as a national public health priority. However, vaccination providers can charge an administration fee to your public or private insurance company or, for uninsured patients, to the Health Resources and Services Administration’s Provider Relief Fund.

Getting a COVID-19 vaccine may affect timing of other health care

Q Should I stop taking my medicines or tests before getting a COVID-19 vaccine?

A Keep taking your medicines unless your doctor tells you to stop or delay them. Call your doctor if you want to make sure. It’s important to share decisions with your doctor to guide your use of medicines, testing, and treatments during the pandemic.

Q Should I wait to schedule imaging tests, such as a mammogram?

A Yes. Some people who get a vaccine may have swelling or tenderness in their **lymph nodes**. It is also possible that this swelling will show up on imaging tests and could be mistaken for certain cancers — such as breast, head and neck, melanoma (skin), and lymphoma. The swelling usually happens within 2-4 days after getting a vaccine and can last for about 10 days. On imaging tests, lymph node swelling may show up for even longer.

Lymph nodes are tiny, bean-shaped organs that help your body fight infection.



For these reasons:

- If you develop swollen lymph nodes after you get a vaccine, talk to your doctor. Most of the time, they will recommend that you wait at least 4 weeks before getting tests so the swelling has time to disappear.

- If possible, schedule any routine imaging for before you get a COVID-19 vaccine. If you are due for a mammogram, schedule the mammogram either 6 weeks before your 1st COVID-19 vaccine dose or 6 weeks after the 2nd dose.
- If you've had cancer, ask for your COVID-19 vaccine to be given in the arm on the other side of your body from where the cancer is located, if possible.

Q Can I get a COVID-19 vaccine at the same time as other vaccines, such as the flu vaccine?

A No. You should get a COVID-19 vaccine alone with at least 14 days before or after getting any other vaccine, such as a flu or shingles vaccine. Also, doctors do not recommend getting other vaccines between the 1st and 2nd doses of the Pfizer or Moderna COVID-19 vaccines.

On the day you get the COVID-19 vaccine

Q Will getting a COVID-19 vaccine hurt? How can I avoid a sore arm?

A You may have muscle soreness at the place where the needle goes into your arm. The best position during the shot is to keep your arm relaxed, with your elbow at your side.

Q Can I take Tylenol or ibuprofen (Advil, Motrin) BEFORE getting the vaccine?

A No. It's important that you do not take these pain relievers before getting your vaccine. Doctors think that some pain relievers may interfere with the body's immune response to the vaccine — meaning it may lower your amount of protection against COVID-19. It's also unclear if taking pain relievers before getting a vaccine actually works to lower vaccine side effects.

Q Can I leave right away after I get a COVID-19 vaccine?

A Not right away. When you get a COVID-19 vaccine, the health care workers will ask you to stay for at least 15 minutes before you leave. This is to make sure you don't have an allergic reaction or feel sick.

If you have had severe allergic reactions or any type of immediate allergic reaction to a vaccine or shot in the past, tell the health care workers when you arrive. They will check on you for at least 30 minutes after you get the vaccine.

After you get the COVID-19 vaccine

Q What are some common side effects of a COVID-19 vaccine?

A You may have pain, redness, or swelling on the arm where you got the shot. Some people may have fever, chills, tiredness, headache, or body aches.

These side effects are more common after the 2nd dose of the Pfizer and Moderna vaccines, but they can also happen after the 1st dose.

Q What if I get a side effect that I believe is caused by a COVID-19 vaccine? Can I take Tylenol or ibuprofen (Advil, Motrin) AFTER getting a vaccine?

A Contact your primary care doctor or cancer doctor if the place on your arm where you got the shot gets more red or painful after 24 hours. Also call if other side effects are worrying you and do not seem to be going away after a few days.

Side effects may feel like the flu, but they should go away in a few days. Talk with your doctor about your side effects and whether the time is right for you to take Tylenol or ibuprofen (Advil, Motrin).

If you have a severe allergic reaction after leaving the vaccination site, **call 911 right away** to get medical care. A severe reaction may include:



- Trouble breathing
- Hives (large, raised red patches or rashes) on your skin
- Swollen lips and tongue

What will I be able to do differently after I have gotten all vaccine doses?

Q Do I still need to isolate myself if I come into contact with an infected person?

A Not always. After you're done getting vaccinated, if you come into contact with someone who may have COVID-19, you won't need to quarantine or isolate (stay away from other people for 10-14 days) as long as both of these are true:

- You're not showing symptoms of COVID-19
- Your contact with an infected person came at least 2 weeks after, and within 3 months of, getting the 2nd of the 2-shot (Pfizer or Moderna) vaccine

Q When can I pet my dog, cat, or other pet after I get the vaccine?

A If you get the COVID-19 vaccine, you will be able to pet your pet with confidence 14 days after your vaccination is complete. There's probably a low chance of getting COVID-19 from pets, but it has been shown that COVID-19 can be spread from people to animals.

If you have COVID-19 and your pet is sick, please contact your vet.



Words you should know

Q What is herd immunity? What is the goal for people living in the U.S.?

A Herd immunity is a term used to describe the situation when enough people have immune protection—from either having previous infection or getting a vaccine—that it is unlikely a virus can spread and cause illness.

With herd immunity, everyone within the community is protected even if some people have not been infected or gotten a vaccine themselves. The percent (number out of the whole group) of people who need to have protection to achieve herd immunity is different for different diseases.

Doctors and researchers still do not know what percent of people need to be vaccinated to achieve herd immunity to COVID-19. However, Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases and chief medical adviser on COVID-19 to President Biden, has estimated this percent to be 70%-85% (at least 7 in 10 people).

Q What is “emergency use authorization”?

A The FDA may issue an emergency use authorization (EUA) that allows for certain health companies and providers to supply people with an unapproved medicine or medical product during public health emergencies. EUA is different than FDA approval. Currently, all 3 COVID-19 vaccines have EUA.

Q What is the difference between efficacy and effectiveness?

A Efficacy refers to a result acquired under ideal or controlled conditions. Vaccine efficacy is defined as how well a vaccine performs under the best of conditions, such as in a clinical trial. Effectiveness refers to a result acquired in settings outside of clinical trials, such as doctor’s offices, hospitals, or other real-world settings.

Learn more about COVID-19 vaccines

Pfizer: Pfizer-BioNTech COVID-19 Vaccine EUA Fact Sheet for Recipients and Caregivers at www.cvdvaccine.com

Moderna: Vaccine Recipient Fact Sheet | EUA | Moderna COVID-19 Vaccine at www.modernatx.com/covid19vaccine-eua

J&J: Janssen COVID-19 Vaccine - EUA Fact Sheet for Recipients and Caregivers at www.janssencovid19vaccine.com

For a list of references for these FAQs, visit lungevity.org/covid-19-vaccine-faqs

