

Frequently Asked Questions COVID-19 Vaccines in Patients with Cancer

What vaccines are available to prevent Coronavirus Disease of 2019 (COVID-19)?

Two vaccines (from Pfizer[®] and Moderna[®]) are available. These are messenger RNA (mRNA) vaccines. The vaccines do not contain DNA and cannot change your DNA. To trigger an immune response, many vaccines put a weakened or inactivated germ into our bodies. However, mRNA vaccines instead teach our cells how to make a protein—or even just a piece of a protein—that triggers an immune response inside our bodies. That immune response, which produces antibodies, is what protects us from getting infected if the real virus enters our bodies. Both vaccines are given as two doses three to four weeks apart. The vaccines are free. Everyone will be able to get them whether you have health insurance or not.

Both the Pfizer[®] and Moderna[®] vaccine have been given Emergency Use Authorization (EUA) by the U.S. Food and Drug Administration (FDA). This means that a limited supply of the vaccine will be given out in the coming weeks.

Are COVID-19 vaccines safe and effective?

The Pfizer and Moderna vaccines are reported to be more than 94% effective in preventing COVID-19 in trial participants with no significant safety concerns. The CDC page Ensuring the Safety of COVID-19 Vaccines in the United States is a helpful resource. When will I be able to get the vaccine?

The Center for Disease Control (CDC) early vaccination is approved for:

- Healthcare personnel
- Residents of long-term care facilities
- People with other health issues at high risk for severe COVID-19 illness
- People 65 years and older
- Essential workers

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People with cancer fall under "People with other health issues at high risk for severe COVID-19." Is it safe for me to get the vaccine?

The Pfizer[®] and Moderna[®] vaccines are the first available mRNA vaccines. Even though there are no other licensed mRNA vaccines, they have been studied since the early 1990s for the treatment and prevention of infections and even cancer. As a result, doctors and scientists have a good understanding about how they work. For the FDA to approve a vaccine, it needs to meet very high standards of effectiveness and safety. To date, the COVID-19 vaccines produced by Pfizer[®] and Moderna[®] have been tested in over 70,000 people. No serious side effects were seen. Serious allergic reactions are rare. Your doctor will review your allergy history before you get the vaccine.

What are side effects of the vaccine?

There is a potential for injection site reactions (redness, swelling and pain) as well as fever, fatigue, headache, chills, vomiting, diarrhea, muscle pain and/or joint pain. These are common side effects seen with other vaccines and are usually mild, occur close to the time of the vaccination, and are more common after the second dose of the vaccine.

Talk to your oncology team about your concerns. Unfortunately, the vaccine trials performed so far have not included people who have cancer. However, based on what we know about the vaccines, we believe it is safe for people who have cancer to receive the vaccine. Since patients with cancer appear to be at higher risk for severe COVID-19 if they become infected, we recommend you receive the vaccine.

Will the vaccine be effective if I get it?

The Pfizer[®] and Moderna[®] vaccines have been studied in healthy adults and have been shown to be over 90% effective in preventing COVID-19 infection. Although some people who have received the vaccine have developed COVID-19, their disease has been mild.

We do not know how effective the COVID-19 vaccines are in people who have cancer. After cancer therapy, the immune system is not as strong and may not be able to provide as much response to vaccines, especially if certain types of medicines are being used. This can mean that the vaccine is less effective in preventing an infection. After vaccination, you should continue to follow all current guidance to protect yourself and others against COVID-19. This includes wearing a mask, staying at least 6 feet away from others, avoiding crowds, and washing hands often.

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Are there any differences in COVID-10 vaccine safety or efficacy based on race or gender?

An FDA briefing document available here was published Dec. 8, 2020 for members of the Vaccines and Related Biological Products Advisory Committee, which recommended that the FDA provide Emergency Use Authorization for the Pfizer vaccine. That document, as reported in numerous news articles including this New York Times article, indicates that the Pfizer vaccine has a similar highly effective rate of preventing COVID-19 in white, Black and Latino people, as well as similar efficacy rates in men and women.

Participants in U.S. clinical trials for the two COVID-19 vaccines now under review by the FDA are more racially and ethnically diverse than for most recent clinical trials. In clinical trials for the Pfizer vaccine, 10% of U.S. participants were Black, 13% were Hispanic, and Asian and American Indian participation was roughly in line with each group's respective share of the country's population. In the Moderna vaccine trials, 20% of participants were Latino, 10% were Black and 4% were Asian. Data on American Indians was not provided. Many public and private sector organizations who operate and regulate clinical trials have acknowledged the need for greater representation of minorities in clinical trials and greater efforts to build trust particularly with Black communities by addressing bias in health care and a history of unethical treatment of Black participants in clinical trials. Source: Newsday, 12/6/20.

When should I get the COVID-19 vaccine?

We recommend that certain patients with cancer who are planning to start chemotherapy or other immune modifying treatment be given the vaccine when feasible at least two to four weeks before the planned therapy. For patients already receiving chemotherapy or other immune modifying treatments, the timing of COVID-19 vaccination will depend on your specific cancer type and the type and stage of treatment you are receiving. Vaccination may occur between cycles of chemotherapy or one to six months after treatment has been completed. Your oncology team will determine the most ideal time for you to receive the vaccine based on rates of COVID-19 in the community and your ability to respond to the vaccine. We recommend all your family members get the COVID-19 vaccine as soon as it is available to them. Radiation treatment does not have a significant impact on the immune system. If your cancer treatment consists of radiation therapy alone, you may be eligible to receive the vaccine at any time during your course of treatment.

I already had COVID-19. Can I still get the vaccine?

Everyone should get the vaccine, even if you had COVID-19 in the past. In general, for people that have been infected with COVID-19, it is recommended that you wait at least one month and until all COVID-19 symptoms have resolved before getting a COVID-19 vaccine.

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Is it ok to take medicine like acetaminophen or ibuprofen after receiving the COVID-19 vaccine?

If allowed by your oncology team, anti-fever or pain-relieving medications such as acetaminophen or ibuprofen are ok to take for post-vaccination side effects such as pain at the injection site, fevers, muscle aches and headaches. However, you should not take these medicines before your vaccination.

Should I take the vaccine if I am pregnant or breastfeeding?

Due to insufficient and unavailable data on the effects of the Pfizer COVID-19 vaccine administered to pregnant women and women who are breastfeeding, please discuss your options with your health care provider. The vaccine will be administered to pregnant or lactating individuals who request it.

Were the vaccines rushed in development?

Although the vaccines were developed quickly, they were built upon years of work in developing vaccines for similar viruses. Development time was cut without cutting corners. There were thousands of volunteers around the world who volunteered to join the vaccine trials which helped complete the trials.

How long do I need to wait for my 2nd dose of the vaccine?

Both the Pfizer and the Moderna vaccines require two doses.

- The Pfizer vaccine requires a second dose three weeks after the first dose, (21 days) apart.
- The Moderna vaccine requires a second dose four weeks after the first dose, (28 days) apart.

Second doses administered within a grace period of less than or equal to 4 days from the recommended date for the second dose are considered valid; however, doses administered earlier do not need to be repeated. The second dose should be administered as close to the recommended interval as possible. However, there is no maximum interval between the first and second dose for either vaccine.

Can I get COVID-19 from the vaccine?

No, the vaccines currently available in the United States do not use the live virus that causes COVID-19.

Will the vaccine cross-react with or create positive COVID-19 tests?

No, the standard testing, where the nose is swabbed for virus, is not impacted by either of the vaccines.

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