What Are COVID-19 Vaccines?

COVID-19 is a serious disease that can have a range of symptoms, from very mild to severe. It has caused over 2,500,000 deaths worldwide and over 500,000 deaths in the US since it was first identified in 2019. To date, three vaccines have been developed and authorized for use in the US to help prevent COVID-19. These new vaccines will help prevent illness and may prevent spread of the virus. Additional vaccines are being developed and considered. Other public health measures such as social distancing, avoiding crowds, wearing face coverings, and hand washing still need to be done by everyone to help stop the spread of COVID-19.

This fact sheet provides people living with lung disease and their families the latest information on COVID-19 vaccines and will be updated regularly as new information becomes available.

What vaccines have been approved for COVID-19?
As of early March, 2021, there are three COVID-19 vaccines that have been authorized by the US Federal Drug Administration (FDA) for emergency use: Pfizer/BioNtech, Moderna and Janssen (produced by Johnson & Johnson). Additional vaccines may receive authorization in 2021. To learn more about how a vaccine is evaluated for use by the FDA click here.

Can I choose which vaccine to get?
Right now, there is a limited supply of the COVID-19 vaccines. It is unlikely that you will be able to choose which COVID-19 vaccine you can get. All of the US-authorized vaccines have been found to provide high levels of protection without safety concerns in large clinical trials. For more information about the safety of COVID-19 vaccines and how well they work, go to https://www.vaccines.gov/basics/safety

When can I get vaccinated?
Given that the supply of COVID-19 vaccines at this time is limited, groups of people will be offered COVID-19 vaccine in phases. First in line are people who are at greatest risk for exposure to the virus, including those working in healthcare settings or people living in nursing homes and other long-term care facilities. Who qualifies for vaccine varies from state to state but could include different groups such as: frontline essential workers such as police, firefighters, teachers and others who serve the community, people age 65 and older, and people with medical conditions that put them at higher risk of developing severe COVID-19 illness.

Everyone will have the opportunity to be vaccinated in the near future, perhaps as early as Spring/Summer 2021. If everybody followed CDC guidance, we would decrease community transmission and prevent many severe illnesses in our communities.

COVID-19 vaccine distribution is determined by state and local authorities with guidance from the Centers for Disease Control and Prevention (CDC). Learn more about the CDC’s prioritization process here. To see your state’s plan, go to https://www.cdc.gov/publichealthgateway/healthdirectories/healthdepartments.html

How will I know if a vaccine is safe and effective for me?
All vaccines go through a strict, thorough process before they are authorized for use. For information about this process, see https://www.fda.gov/vaccines-blood-biologics/vaccines. Vaccine clinical development was faster than for other vaccines. This was possible because a lot of past research helped with their design, and massive financial resources allowed many development processes to be done at the same time rather than one after another, as would normally occur. There has been expert and careful review of the science. The data from the vaccine trials were reviewed by both the FDA and independent scientists. The COVID-19 vaccines are not considered experimental. The data from the Pfizer-BioNtech, Moderna, and Janssen COVID-19 vaccines show they are highly effective in preventing severe COVID-19 and have revealed no safety concerns, including in people with chronic diseases.

Most people will tolerate the COVID-19 vaccine well. Side effects are described on page 2 “What are the side effects”. If you have questions, talk to your healthcare provider about benefits, possible risks, and any concerns you may have. For more information on vaccines, go to https://www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html.

I have lung disease. Can family members in my household also get the COVID-19 vaccine to keep me safe?
You should be sure to get your vaccine if you are able. If members of your household meet the priority criteria due to their work, age, or health condition, they may be able to get the COVID-19 vaccine. Others will need to wait until more doses are available.
Children under the age of 16 years of age will need to wait to be vaccinated until studies are completed to ensure safety and efficacy. Only one vaccine currently is approved for 16 years and older. The others are approved for 18 years and older.

**How much will a vaccine cost?**

Most people will be able to get a COVID-19 vaccine without paying out of pocket, including those who do not have health insurance. The cost of the COVID-19 vaccine itself is covered by the U.S. government. If you have questions about whether your insurance will cover any fee a vaccine site may charge for giving a COVID-19 vaccine, contact your insurance provider (private/Medicare/Medicaid/other).

**WHAT TO EXPECT WHEN GETTING VACCINATED**

**Do I need both shots to be fully vaccinated?**

Currently, both the Pfizer/BioNTech and Moderna vaccines require two shots separated by three to four weeks. Timing between the shots varies and should be reviewed with the staff at the vaccine center, clinic, pharmacy or office where you received your shot. It is important that you receive both shots (of the same vaccine) to fully benefit from the protection that the vaccine provides.

The newly authorized Janssen vaccine requires just one shot. This is currently the only authorized vaccine that requires only one shot.

Researchers are also studying whether booster shots may be needed in the future.

**What are the side effects?**

Although side effects from the different COVID-19 vaccines may vary, those commonly reported include pain where the shot is injected, fatigue (feeling tired), muscle aches, chills, and fever. These side effects usually go away within a few days and are a sign that your immune system is working. When you get the vaccine, you should be told about possible side effects and when to seek medical attention if you experience a bad reaction. If you have had an allergic reaction to vaccinations or injectable therapy in the past, talk to your healthcare provider. Allergic reactions are extremely rare. Learn more about precautions associated with severe allergic reactions here.

There is growing information about longer term health problems from COVID-19 infection even in those who did not have initial severe illness. Therefore, getting vaccinated is considered to be a better option than risking infection, especially for people with high-risk conditions who are at the greatest risk of dying from COVID-19 virus.

**WHAT TO EXPECT AFTERWARDS**

**How long will I be protected after I get both shots?**

The long-term protection from the COVID-19 vaccines is currently unknown, since they are so new and the new coronavirus has only been infecting humans for about a year. More data are being collected on people who have received the COVID-19 vaccines in clinical studies. Over time, we will gain a better understanding of long-term effects on how it affects the body’s immune system.

**Why do I still have to wear a mask, wash my hands, and keep physically distanced after I get my COVID-19 vaccine?**

Everyone—even those who have received the COVID-19 vaccine, or those who have had COVID-19—should continue doing what they can to protect their health and the health of everyone around them: washing their hands, wearing a mask, social distancing and avoiding crowds. People who have received the COVID-19 vaccine can still get the virus that causes COVID-19 and infect others, even if they themselves are not ill. The good news is that people who have taken all the doses of COVID-19 vaccines can socialize more safely with others in small groups. To learn more, see the CDC’s new guidance at https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html. The goal now is to get as many people vaccinated as possible to reduce spread. Then we can see how much of a problem this virus continues to be and how safely we can return to normal activities.

**For More Information**

**American Thoracic Society**


**Centers for Disease Control and Prevention**

- [https://www.cdc.gov/vaccines/covid-19/index.html](https://www.cdc.gov/vaccines/covid-19/index.html)

**American Lung Association**

- [https://www.lung.org/getmedia/bd935d0-9ba7-4c79-843c-18c4e520ed50/ala-covid-19-need-to-know-v8.pdf](https://www.lung.org/getmedia/bd935d0-9ba7-4c79-843c-18c4e520ed50/ala-covid-19-need-to-know-v8.pdf)