

**February 9, 2023 - UPDATED**

## **COVID-19 Vaccines and Treatments Information and Resources**

The Pulmonary Fibrosis Foundation Medical Team continues to monitor the development of vaccines and treatments for COVID-19.

Four vaccines have been approved or authorized by the FDA.

- The Pfizer-BioNTech COVID-19 vaccine, monovalent, marketed as Comirnaty, has received full approval from the FDA for initial 2-dose series use in individuals 5 years of age and older, for a 3<sup>rd</sup> dose use in individuals with certain types of immunocompromising conditions, and the first two doses of an initial 3-dose series for children 6 months to 4 years of age.
- The Pfizer-BioNTech COVID-19 vaccine, bivalent, has received emergency use authorization (EUA) for a single booster dose at least 2 months after completion of initial series or latest monovalent booster vaccine dose for individuals 5 years of age and older and for the 3<sup>rd</sup> dose in an initial 3-dose series for children 6 months to 4 years of age.
- The Moderna COVID-19 vaccine, monovalent, using the brand Spikevax, has received full FDA approval for initial 2-dose series use in people 18 years and older and for 3<sup>rd</sup> dose use in individuals with certain types of immunocompromising conditions. It has received EUA for initial 2-dose series use in individuals 6 months through 17 years of age and 3<sup>rd</sup> dose use in individuals aged 6 months to 17 years with certain types of immunocompromising conditions.
- The Moderna COVID-19 vaccine, bivalent, has received EUA for single booster dose at least 2 months after completion of initial series or latest monovalent booster vaccine dose for individuals 6 months or older.
- The Janssen (Johnson & Johnson) COVID-19 vaccine has received EUA for use as a single primary vaccination dose and as a single booster dose after completion of primary dose or series for individuals aged 18 or older who cannot receive other FDA authorized COVID-19 vaccines. FDA guidance regarding the Janssen COVID-19 vaccine has been updated to include contraindication in individuals with a history of thrombosis (development of blood clots) with thrombocytopenia (low blood platelet count) following the Janssen COVID-19 Vaccine or any other adenovirus-vectored COVID-19 vaccine.

- The Novavax COVID-19 vaccine is a protein subunit vaccine that has received EUA for use as a 2-dose primary series in individuals who are age 12 years of age and older and for use as a single-dose booster at least 6 months after primary series for individuals 18 years and older who receive the Novavax vaccine and for those whom a bivalent booster is not accessible or appropriate.

In accordance with [Recommendations issued by the Centers for Disease Control and Prevention](#), the Pulmonary Fibrosis Foundation strongly encourages vaccination for COVID-19, as the benefits far outweigh the risks. To ensure that you are not part of the limited population for whom vaccination is not recommended at this time, reach out to your primary care physician and pulmonologist for more information.

COVID-19 variants have emerged around the world and in the U.S., and some of these strains of the virus are known to spread more easily. This may mean that for those who are exposed to these variants, immunity from a previous COVID-19 infection or from a COVID-19 vaccination may not be as effective at preventing infection, though more research needs to be done to fully understand the impact of the new COVID-19 variants.

### **The Delta and Omicron Variants**

The Omicron variant became the leading COVID-19 strain in the U.S. in 2022. Omicron is more transmissible than the Delta variant. Evidence suggests that while vaccines have reduced activity against the Omicron variant, a bivalent booster vaccine dose improves protection against infection.

The Delta variant was the predominant variant of the virus in 2021, The [Delta variant](#) is more infectious and is leading to higher transmissibility than earlier forms of COVID-19, even in some vaccinated individuals.

As a result, the CDC has released [updated guidance](#) on the need for COVID-19 vaccination. [Mask-wearing](#) indoors in public places and in areas of high transmission can reduce the risk of COVID-19 infection, even if a person is fully vaccinated. Masks and respirators that are high-quality and properly fitted offer the highest levels of protection. While mask guidance may vary in different areas of the country, wearing a mask in public provides important protection. Learn more about how your mask protects you [here](#).

People who are eligible to receive the COVID-19 vaccine should proceed with vaccination, as the currently authorized vaccines and boosters are highly effective in reducing the severity and spread of disease. Strategies that are known to reduce the spread of infection, such as wearing a mask and frequent hand washing, remain crucial in limiting the spread of COVID-19, especially as new variants of the disease are discovered.

The CDC recommends using a [self-test](#) before gathering indoors with others, regardless of vaccination status, even if you do not have symptoms and have not been exposed to anyone with COVID-19. Self-testing is especially important before meeting [older individuals](#), those who are [immunocompromised](#), or individuals at risk of severe disease, including children who are

too young to be vaccinated. Free at-home COVID-19 tests are available by mail at [COVIDtests.gov](https://www.covidtests.gov).

### **Three-dose initial series for immunocompromised Individuals and Transplant Recipients**

Lung transplant recipients and people taking medications that suppress their immune system may have a lower immune response to the COVID-19 vaccine according to a [recent study](#) by Johns Hopkins University. The study suggests that a substantial proportion of transplant recipients likely remain at risk for COVID-19 after 2 doses of mRNA vaccine.

Individuals who have received a lung transplant, their loved ones, and people with compromised immune systems should get vaccinated and continue to take precautions to prevent infection from COVID-19. To provide additional protection for transplant recipients and those with a compromised immune system, the CDC recommends an additional dose of the Moderna or Pfizer BioNTech mRNA COVID-19 vaccine be given no fewer than 28 days after the initial two doses. They should also receive a booster dose and the updated bivalent booster.

### **Boosters**

The CDC recommends a bivalent booster dose for —

- Everyone age 5 years and older if it has been at least two months since your last dose.
- Children ages 6 months – 4 years who completed the Moderna primary series and if it has been at least two months since their last dose.

The bivalent COVID-19 booster includes components of the original virus strain and the omicron variant to provide better protection against COVID-19. Individuals may choose which vaccine they receive as a booster dose. There may be reasons for using the same brand or a different one in individual cases, so questions should be directed to your physician.

### **Treatments**

The U.S. Food and Drug Administration (FDA) has issued emergency use authorization of [COVID-19 treatments](#) for patients experiencing symptoms at home, in the hospital, and for individuals who are at high risk for serious complications from COVID-19.

For non-hospitalized patients, the [NIH recommends COVID-19 specific therapies](#) for those who are at increased risk for progressing to severe disease. The initiation of these treatments is time-sensitive, so it is important to test early and notify your doctor if you test positive for COVID-19. Be sure to talk to your doctor and develop a plan for accessing treatment. [This map](#) shows locations that offer testing, medical visits, and treatments all in one place (test-to-treat). Note that when you enter an address or zip code, you will be given two lists of results. The first list provides test-to-treat locations, and the second list includes places where you can fill a prescription sent by your doctor.

**Monoclonal antibody treatments** can help the immune system attack the virus that causes COVID-19. These treatments have been previously authorized for patients with mild to moderate cases of COVID-19, although none are currently in use due to lack of effectiveness against circulating variants.

**Antiviral medications** may be used for patients with mild to moderate symptoms of COVID-19 who are at high risk for serious illness but not hospitalized.

**Hospital treatments** for patients with serious COVID-19 include the antiviral Remdesivir (Veklury), Tocilizumab (Actemra), convalescent plasma, Baricitinib (Olmiant), and corticosteroids. These treatments are used to slow or reduce the virus' ability to spread in the body, and to help with breathing and other symptoms.

You can access up-to-date information about vaccine types, authorized and recommended vaccines, and vaccines in Phase 3 clinical trials on the [Centers for Disease Control and Prevention \(CDC\) website](#), which will be updated as additional information is available. You can access other general information about vaccines for COVID-19 on the CDC's website [here](#).

To find out where vaccines are available in your area, contact your physician, your healthcare facility, or your state department of public health. You can also use the [Vaccine Finder](#) tool to find additional locations in your community that have reported to the CDC that they offer the COVID-19 vaccine.