PFF Coronavirus FAQs

To members of the pulmonary fibrosis community,

The Pulmonary Fibrosis Foundation has been closely monitoring the impact of coronavirus (COVID-19) and its spread throughout the United States. People who have chronic medical issues may be at higher risk for serious illness from COVID-19, including those with pulmonary fibrosis. Public health officials recommend patients in the higher risk category should reduce the risk of being exposed to COVID-19.

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 has become 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 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 released updated guidance on the need for COVID-19 vaccination and a recommendation for everyone to wear a mask indoors in public and in areas of high transmission, even if they are fully vaccinated. Masks and respirators that are properly fitted offer the highest levels of protection.
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 with unvaccinated children, older individuals, those who are immunocompromised, or individuals at risk of severe disease. Free at-home COVID-19 tests are available by mail at COVIDtests.gov.

To limit or prevent the spread of COVID-19, the Centers for Disease Control (CDC) has provided recommendations including:

1. **Get a COVID-19 vaccine. If you have not been vaccinated, find a vaccine near you.**
2. **If you have been fully vaccinated, you can:**
   a. Resume many activities you participated in prior to the pandemic.
   b. To maximize protection from the Delta and Omicron variants and to prevent the possibility of spreading it to others, wear a mask in public indoor spaces, in areas of high transmission, and as required by local regulations and guidelines.
   c. **Travel in the U.S. without testing or self-quarantine.**
   d. While infection happens less often in people who are fully vaccinated, these individuals can become infected and spread the virus to others. To reduce the risk of becoming infected with the COVID-19 and potentially spreading it to others, fully vaccinated people should:
      ● Get tested and follow the CDC’s guidelines on quarantine and isolation.
      ● If you have been in close contact with someone with COVID-19, get tested and wear a mask in public settings or until a negative test result.
      ● Wear a mask in public even in areas of lower transmission if you are at higher risk of serious illness or complications from COVID-19 infection.
3. **If you have NOT yet been fully vaccinated, you should:**
   a. Wear a mask that fully covers your nose and mouth whenever you are in public.
   b. Avoid crowds and poorly ventilated indoor spaces.
   c. Physically distance by staying six feet apart from others who don’t live with you.
   d. Wash your hands often and with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer if soap and water are not available.
   e. If you have symptoms or have been exposed to someone with suspected or confirmed COVID-19, get tested or take a self-test.
Common Questions

What are the symptoms of COVID-19 infection?

While symptoms may vary from few or no symptoms to severe breathing difficulty, more common symptoms include:

- Fever (Temperature over 100.4°F)
- Muscle pain or body aches
- Worsening cough
- Increased shortness of breath
- Chills
- Repeated shaking with chills
- Headache
- Sore throat
- New loss of taste or smell
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

What should I do if I have been exposed to someone with COVID-19?

If you have been exposed to someone with COVID-19, you should get tested and follow the latest CDC guidance on quarantine and isolation. Do not go to your local emergency room for a COVID-19 test.

If you are unvaccinated or vaccinated and immunosuppressed, exposed to COVID-19, and at high risk for severe illness from COVID-19, contact your physician early to discuss steps you can take to reduce your risk of becoming ill.

What should I do if I think I have been infected with COVID-19?

If you are sick, stay home and take a test for COVID-19. Call your pulmonologist. If he/she is not available, contact your primary care physician. Let your doctor know about your symptoms and that you may have COVID-19. Get medical attention immediately if you have:

- More difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face
- Increased oxygen requirement
If you are unvaccinated and at high risk for severe illness from COVID-19 or fully vaccinated and immunosuppressed, talk with your doctor early about measures that can be taken to reduce your risk of worsening illness. Monoclonal antibody therapy or antiviral therapies for COVID-19 may be available to reduce risk of hospital admission and more severe disease from COVID-19 in certain circumstances.

**Where should I get tested for COVID-19?**

Take a [viral test](#) at home, in a laboratory, or at a testing site. Visit your local health department’s website for the latest local information on testing. Do not go to your local emergency room for a COVID-19 test. Free at-home COVID-19 tests are now available to all U.S. residents at [covidtests.org](https://covidtests.org).

**How does COVID-19 impact patients with interstitial lung disease (ILD)?**

Emerging studies indicate that ILD patients who are hospitalized with COVID-19 have worse outcomes than matched COVID-19 patients without ILD. (Source: [https://www.atsjournals.org/doi/pdf/10.1164/rccm.202007-2794OC](https://www.atsjournals.org/doi/pdf/10.1164/rccm.202007-2794OC)).

It is important to note that more research is needed to gain a better understanding of the impact of COVID-19 on patients with ILD.

**Should I get vaccinated for COVID-19?**

Yes, you should get vaccinated and boosted as soon as possible. In accordance with [Recommendations issued by the Centers for Disease Control and Prevention](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/eligibility.html), the PFF strongly encourages vaccination for COVID-19, as the benefits far outweigh the risks. The authorized vaccines have been demonstrated to be safe and extremely effective in preventing COVID-19 and/or limiting the development of severe COVID-19. Once you are fully vaccinated, individuals should continue to adhere to safe practices, including the use of face coverings, hand washing, and physical distancing until the prevalence of the SARS-CoV-2 virus in the community is significantly reduced. To ensure that you are not part of the limited population for whom vaccination is not recommended at this time, we encourage you to reach out to your primary care physician and pulmonologist for more information.

COVID-19 variants, including Delta and Omicron, have recently 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.

People who are eligible to receive the COVID-19 vaccine should proceed with vaccination, as the currently authorized vaccines 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,
social distancing, and frequent hand washing, remain crucial in limiting the spread of COVID-19, especially as new variants of the disease are discovered.

_I’m immunocompromised. Should I get vaccinated?_

Yes, 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.

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.

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 at least 28 days after the initial two doses. They should also receive a booster dose, consistent with CDC recommendations.

The U.S. Food and Drug Administration (FDA) has issued emergency use authorization of AstraZeneca’s long-acting monoclonal antibody therapy (Evusheld) to help protect certain immunocompromised individuals from COVID-19 infection. Evusheld is given for pre-exposure prevention of COVID-19.

Contact your doctor immediately if you have been exposed to someone who tests positive for COVID-19.

_Should I get an additional vaccine dose or booster?_

The CDC recommends boosters for all three available COVID-19 vaccines in the U.S.

Everyone ages 5 years and older who received a Pfizer-BioNTech or Moderna COVID-19 vaccine should get a booster dose at five months or more after their initial series. Those who received the Johnson & Johnson vaccine, are age 18 and older, and have been vaccinated for two or more months should also get a booster.

A second booster is recommended for adults ages 50 years and older and some people ages 12 years and older who are moderately or severely immunocompromised. The second booster dose must be given at least four months after the first booster.

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.

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Is it safe to travel for routine clinic visits and take pulmonary function tests (PFTs)?
Should I continue traveling to my pulmonary rehabilitation appointments?

If you have been fully vaccinated, it is considered safe to resume many of your normal activities including clinic visits and routine testing. For those who have not yet been vaccinated, the risk of traveling for clinic appointments is dependent upon the spread of COVID-19 in your area and the clinic in which you are seen. Healthcare environments continue to require universal mask wearing for patients and staff, and many are requiring employees to be fully vaccinated against COVID-19 to help protect patients. If you have concerns about traveling for a clinic appointment, you should discuss your specific situation and risks with your care center. There have been expansions in telemedicine during the COVID-19 pandemic, so you should talk to your doctor to determine if telehealth visits are an option. Home exercise programs may be developed in discussion with your pulmonary rehab center and physician during the COVID-19 pandemic. Several online resources are available to assist patients with exercise training. Discussing the use of these tools with your physician is recommended prior to initiating a home program.

How can I prevent the virus from entering my portable oxygen concentrator (POC)?

The filters in POCs are not designed to filter viruses. Oxygen equipment should be cleaned, and filters replaced as specified by the manufacturer for routine maintenance. It is now more important than ever to clean and disinfect frequently touched objects, including POCs. Also, wash your hands frequently and adhere to social distancing guidelines.

Should I wear a mask with an exhalation valve or vent?

It is important to wear a face covering when indoors in areas of high transmission to help reduce the spread of COVID-19. Wearing a face covering can prevent the wearer’s respiratory droplets from reaching other people.

The CDC has provided updated guidance on face coverings. Some masks and respirators provide higher levels of protection than others. Those that are properly fitted offer the highest levels of protection. Learn more about how your mask protects you here.

Note that masks with one-way valves or vents allowing the wearer to exhale through the valve can result in the wearer’s respiratory droplets reaching others. This type of mask is not recommended by the CDC, as it does not prevent the person wearing the mask from transmitting COVID-19 to others.

I am enrolled in a clinical trial. Should I continue going to study appointments?

The FDA has issued guidelines for clinical trial investigators in response to the COVID-19 outbreak. In addition, the FDA has developed information for patients who are enrolled in a clinical trial. If you are enrolled in a current trial, contact your trial center for information about any changes in visits.
How can I get involved in a clinical trial related to COVID-19?

The PFF Clinical Trial Finder has been updated to include clinical trials related to COVID-19, in addition to PF-related clinical trials. Typing “COVID-19” in the “Keyword” filter of the PFF Clinical Trial Finder will show studies related to COVID-19. If you are interested in participating in any of these trials, you should contact the listed site coordinator for the trial via phone or email. You can also find clinical trials investigating COVID-19 on the website of the National Institutes of Health at https://clinicaltrials.gov.

I am a lung transplant recipient. How can I protect myself from infection?

Lung transplant recipients 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 and their loved ones 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.

These individuals should monitor viral rates in their community to help judge their activities based on the exposure.

The U.S. Food and Drug Administration (FDA) has issued emergency use authorization of AstraZeneca’s long-acting monoclonal antibody therapy (Evusheld) to help protect certain immunocompromised individuals from COVID-19 infection. Evusheld is given as pre-exposure prevention and is not a substitute for vaccination.

I am on the lung transplant waiting list. What should I do?

Patients on the waiting list for a lung transplant should maintain contact with their transplant center. According to the American Society of Transplantation, the risk of acquiring COVID-19 from an organ donor is low. However, transplant surgery may be delayed due to the threat of exposure in the hospital and the current strain on medical personnel and resources.

Are there treatments for COVID-19?
Yes, 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 immediately 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 authorized for patients with mild to moderate cases of COVID-19. They may also be used as a preventive treatment for individuals who are at high risk for serious illness from COVID-19.

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 Remdesivir, Actemra, convalescent plasma, Baricitinib, 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.

Can COVID-19 lead to pulmonary fibrosis?

The impact of SARS-CoV-2 infection on the development of chronic and progressive lung disease is under study, and much remains unknown.

Pulmonary fibrosis (PF) or interstitial lung disease (ILD) has been reported in some patients following COVID-19 infection, however the rates of development of PF after severe, moderate, mild, or asymptomatic COVID-19 infection are undefined. Severe COVID-19 pneumonia with Acute Respiratory Distress Syndrome (ARDS) appears to present the highest risk for subsequent PF.

While COVID-19 patients are being followed after infection, data does not yet exist to understand whether post-COVID-19 abnormalities in lung function or chest imaging will improve, stay stable, or progress over time. The medical community is working to determine how to best care for patients who have lung abnormalities following COVID-19 infection.

Post-acute sequelae of SARS-CoV-2 (PASC) is a term to describe a prolonged constellation of symptoms, including breathlessness and cough, that some individuals experience after COVID-19 illness. Treatment of PASC is being studied, and currently involves supportive care, symptom management, and treatment of serious complications.
In patients with a history of COVID-19, the diagnosis of PF is made in the same way as in other forms of PF: by evaluation of a patient's medical, environmental and occupational history; a physical examination; pulmonary function tests; a high-resolution CT scan; and sometimes, a lung biopsy.

What should I do if I had COVID-19 and have been diagnosed with pulmonary fibrosis?

Discuss with your doctor how he or she plans to follow your disease course. If your doctor is not affiliated with a post-COVID center, consider going to one in order to access to the most current care, treatments, and opportunities to participate in research. The PFF has released a statement about [lung fibrosis resulting from COVID-19](https://pulmonaryfibrosis.org/). The PFF also provides educational resources on supportive care including supplemental oxygen, pulmonary rehabilitation, pulmonary function tests and the PFF Care Center Network.

Will my anti-fibrotic treatment help prevent me from contracting COVID-19? Is the medication being used as a treatment for COVID-19?

While a tremendous amount of research and clinical trials for coronavirus treatments are underway, there is currently no clinical evidence that anti-fibrotic therapies approved to treat forms of pulmonary fibrosis are safe or effective in preventing and/or treating patients infected with coronavirus. Several studies are investigating the use of anti-fibrotics approved for various forms of PF to treat patients who have developed lung fibrosis as a result of COVID-19. If you're interested in learning more, you can visit [clinicaltrials.gov](https://clinicaltrials.gov) for a complete list of COVID-19 studies worldwide.

What is known about immunity to COVID-19 in those who were previously infected?

The latest research on COVID-19 indicates that people can continue to test positive by a PCR test for up to three months after diagnosis and not be infectious to others. However, if you had COVID-19, you should be vaccinated as soon as possible after quarantining. You will not have enough immunity to skip the vaccine. In addition to getting fully vaccinated, those who have recovered from COVID-19 should continue to follow everyday preventive actions.

The Pulmonary Fibrosis Foundation is monitoring the dynamic situation with COVID-19 and will address additional questions and future plans for PFF events and programs depending on the evolving situation throughout the United States.