Information regarding COVID-19 continues to change rapidly. This document will be updated with new information whenever possible. Please contact your transplant center with specific concerns. A PDF version of this information can be found here.

To access this resource in Spanish, please click here.

**What is Coronavirus and what is COVID-19?**

Coronaviruses are common viruses that cause the common cold, and do not usually cause serious symptoms. When new strains of viruses emerge, they can cause more severe diseases, as seen with the recent novel coronavirus called the Severe Acute Respiratory Syndrome 2 virus (SARS-CoV-2). This new coronavirus causes the disease called Coronavirus disease 2019 (COVID-19). This coronavirus appeared in December 2019 and has quickly spread all over the world.

**How is COVID-19 Spread?**

This new coronavirus, SARS-CoV-2, spreads from person to person through close contact, most often by respiratory droplets that are spread when an infected person coughs, sneezes or talks. It can also be spread by close contact interactions like hand shaking and hugging. It may be possible to catch the virus from a contaminated surface (such as door handles, tabletops, shopping carts) if you subsequently touch your mouth, nose or eyes. People are thought to be most contagious when they have symptoms, but even those who are not experiencing symptoms or have mild symptoms can spread the virus. Recent studies indicate that COVID-19 can be transmitted before infected individuals begin to show symptoms.

**What are the symptoms of COVID-19?**

- Fever
- Cough
- Shortness of breath or difficulty breathing
- Chills/repeated shaking
- Muscle pains
- Headache
- Sore throat
- Fatigue
- Nausea, diarrhea, abdominal pain
- New loss of smell and/or taste
Some transplant recipients may develop pneumonia
- Rash

This list is not all-inclusive. If you develop symptoms concerning for COVID-19, contact your transplant center right away.

**How is COVID-19 treated?**

Most people with COVID 19 who have mild to moderate symptoms will recover on their own with supportive care. Less commonly, COVID-19 may be severe and have serious complications requiring hospitalization or death.

Currently, there are no treatments approved by the U.S. Food and Drug Administration (FDA) for COVID-19. There are many ongoing clinical trials for potential antiviral and immune based therapies for the treatment of COVID-19 and some therapies have been approved for emergency use. There is some experience with the therapies listed below in transplant recipients.

Dexamethasone, a glucocorticosteroid, has shown benefit in hospitalized patients who needed oxygen. It is currently recommended as a treatment option for COVID-19 patients who are in the hospital.

Remdesivir, an antiviral medication to treat COVID-19, may be beneficial and the FDA has issued an Emergency Use Authorization (EUA), which allows for emergency use of remdesivir for the treatment of COVID-19.

Most people who recover from COVID-19 develop antibodies, which are proteins that the immune system produces to fight infections. These antibodies are found in plasma, the yellow liquid portion of blood. Plasma that is collected from a person who has recovered from the virus, is known as COVID-19 convalescent plasma. The FDA recently issued an emergency use authorization for use of COVID-19 convalescent plasma to make it available for patients at all hospitals. If given early after diagnosis, it may offer some benefit.

- For information on COVID-19 Treatment, visit [https://www.covid19treatmentguidelines.nih.gov/whats-new/](https://www.covid19treatmentguidelines.nih.gov/whats-new/)
- For information on specific clinical trials underway for treatment of patients with COVID-19 infection, visit [clinicaltrials.gov](https://clinicaltrials.gov).

**Frequently Asked Questions**

**Q: What can I do to protect myself and others from COVID-19?**

**A:** There are several things you can do to protect yourself. Some examples include:

- Wash your hands or use hand sanitizer frequently

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- Avoid touching your eyes, mouth, and nose
- Avoid large crowds
- Practice social distancing by staying at least six feet from other people and groups
- Frequently clean and disinfect high contact surfaces such as tables, doorknobs, and faucets
- Stay at home if you are sick
- Wear a face covering when you leave the house
- Practice cough and sneeze etiquette (see figure below)
- Get vaccinated against the flu (see question about influenza vaccine below)

Here is some additional advice from the CDC to protect the spread of COVID-19 in children.

Q: Is it safe for me to go outside or should I avoid public spaces? Should I wear a mask? Should I wear gloves? Should I wear a face shield?

A: In most areas of the country, it is safe to be outdoors provided you follow basic safety guidelines. Local and state public health authorities will determine many of these, so it is important to stay up to date. Transplant recipients should avoid crowds and large gatherings (especially indoors), practice social distancing, and wash their hands often.

Wearing cloth face coverings in all public settings is also mandatory or highly recommended for all individuals, and transplant candidates and recipients should follow that guidance.

The cloth face coverings recommended by the CDC are not surgical masks or N-95 respirators and they are not designed to protect the person wearing them. Rather, masks or cloth face coverings will prevent
someone who does not know they are infected from spreading the virus to others. It is important to remember that the wearing of a mask should continue to be combined with good hand hygiene and social distancing.

The CDC does not specifically recommend wearing gloves under most circumstances. Instead, transplant candidates and recipients should wash their hands often. Gloves can be worn when cleaning surfaces or caring for a sick individual but it is important to remember to wash your hands carefully after
removing gloves. The CDC also does not recommend the use face shields, as the effectiveness of these face coverings is unknown at this time. You should still wear a mask even if you use a face shield. Find more information here.

Q: What is social distancing and who should be doing this?

A: Social distancing is thought to be the best way to limit the spread of coronavirus and is recommended for everyone. It means keeping space, at least 6 feet apart, between yourself and other people outside of your home, even when no one in that space has symptoms. This includes both indoor and outdoor places. You should practice social distancing even while wearing a mask.

Q: Will a COVID-19 Vaccine be available?

A: Studies on several types of COVID-19 vaccines are ongoing, some already in advanced stages of research. Although the results so far on the safety and basic immune response seem promising, we do not know yet which vaccine will work best or how soon it will be available.

Q: Am I at higher risk of getting COVID-19?

A: We do not know whether COVID-19 infection will spread more easily among transplant candidates or recipients. However, experts are worried that this may be the case since chronic disease or immunosuppression usually lowers the amount of virus needed to cause infections. Most reports so far indicate transplant recipients are getting COVID-19 from the community, although frequent contact with the health care system may also be a risk. This is why it is important for you to take every precaution possible to avoid being infected.

Q: What should I do if I have COVID or flu-like/respiratory symptoms?

A: The first step is to separate yourself from others. There are many different causes for fever, cough, shortness of breath, stomach upset, and flu-like symptoms, but if you any concerning symptoms, you should get tested for COVID-19. It is important to remember that most people, including transplant candidates and recipients, experience only mild to moderate symptoms and recover from COVID-19 without problems. Many do not need hospitalization but are able to stay at home in isolation.

Other steps to take include:

- Contact your transplant center FIRST before going to a hospital or clinic.
- If you must leave home, wear a surgical mask or cloth covering when in public to avoid the spread of infection to anyone else.
- Wash your hands often with soap and water for at least 20 seconds. This is especially important after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- Clean and disinfect high-touch surfaces* in your “sick room” and bathroom; wear disposable gloves while disinfecting.
- If you are in home isolation, monitor your symptoms and seek emergency attention if you have trouble breathing, chest pain, confusion, severe fatigue.

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**High-touch surface include phones, remote controls, counters, doorknobs, bathroom fixtures, toilets, keyboards, bedside tables**

**Q: How can I get tested to see if I have COVID-19?**

**A:** Testing availability has improved throughout the United States and is available through different mechanisms in different locations. If you believe you need to be tested for COVID-19, call your transplant team for further instructions, as they will be aware of what is available in your area.

There are three types of testing available at this time: the direct viral test (PCR), the antibody (serology) test, and the rapid antigen test. These tests tell providers different things about a person’s exposure to COVID-19. The PCR test tells providers whether someone is currently infected, and it is performed by placing a swab into the nostril. The antibody test informs providers if someone was previously infected with COVID-19. It takes about 1-3 weeks after the initial exposure for our bodies to develop antibodies. In transplant recipients, we do not know if having antibodies to this coronavirus protects from reinfection or how long that protection may last. We also do not know if everyone infected with SARS-CoV-2 will make the antibodies.

The FDA has also granted emergency use authorization for rapid antigen tests that can identify SARS-CoV-2. Antigen tests for SARS-CoV-2 are generally less sensitive than viral tests that detect nucleic acid using PCR. There are limited data to guide the use of rapid antigen tests as screening tests to detect or exclude COVID-19, although there may be a role for more timely screening. The currently authorized devices can return results in approximately 15 minutes. Find more information from the CDC [here](https://www.cdc.gov).

**Q: Is it safe for me to go to the hospital for appointments?**

**A:** Healthcare facilities, including transplant centers, have put a lot of effort into keeping patients safe from COVID-19. A few examples of this include isolating patients with or suspected to have COVID-19 as well as limiting routine doctor and laboratory visits. Most centers are conducting telemedicine clinic visits to maintain safety when COVID-19 is heavily circulating in their area. In addition, many centers are screening staff, patients, and visitors when they come into the building and ensuring everyone is wearing a mask. Please contact your transplant team for further information on these efforts.

**Q: Should I get the influenza vaccine? Is it safe?**

**A:** The American Society of Transplantation has issued a statement in support of the CDC’s Advisory Committee on Immunization Practices recommendation that all individuals who do not have contraindications to vaccination, including organ transplant candidates and recipients, receive a routine annual influenza vaccination.

It is extremely important to get your flu vaccine this year, as we will all be facing the continued risk of COVID-19 infection in addition to the seasonal risk of the flu. A flu vaccination will reduce a person’s risk or severity of illness for influenza and can also reduce symptoms that might be confused with those of COVID-19. Prevention of and reduction in the severity of the flu will also alleviate stress on our health care system and prevent the potential worse outcomes if people develop both COVID-19 and influenza at the same time.
If you have not already, please get vaccinated as soon as possible. Flu season is upon us! See this flyer for more info: Flu Facts

**Q: I am awaiting a transplant. Could I get COVID-19 from my donor?**

**A:** The risk of acquiring COVID-19 from organ donation is unknown at this time but thought to be low. Organ procurement organizations are screening all potential donors for COVID-19 symptoms and exposure history. Most potential donors are also tested for COVID-19.

The majority of transplant centers have also taken careful steps to screen living donors, including checking for symptoms, exposures and even viral testing. At some centers, living donors are being asked to not travel to high-risk areas and to isolate themselves before donation and monitor for symptoms.

**Q: I had COVID-19. When can I stop self-isolating?**

**A:** Even after recovering from COVID-19, you should stay home as much as possible, and practice social distancing. There are still many unanswered questions about COVID-19, including how long the virus remains in the body and whether it is possible to get sick with COVID-19 again. Contact your transplant center for guidance on when it will be safe to leave home for essential care, basic needs, and/or solitary exercise. Some basic parameters might include:

- your symptoms have resolved
- it has been at least 10 days* since your symptoms first started
- you have not had a fever for 24 hours without the use of fever reducing drugs like acetaminophen or ibuprofen
- your transplant center may require you to have a negative PCR test prior to re-entering the clinic

* Some people with severe illness or who are immunocompromised (including transplant recipients) may shed virus beyond 10 days, and that may warrant extending duration of isolation for up to 20 days after symptom onset. Please discuss with your transplant doctor for more info

**Q: I had COVID-19. When can I be cleared for transplant?**

**A:** Transplant centers have different policies on this, and you should contact your specific center for more details once you are symptom free.

**Q: Are there any travel or other restrictions for transplant recipients?**

**A:** Travel increases your chances of getting and spreading COVID-19. Traveling may be especially dangerous if you, your travel companions, or those at your destination are at high-risk for contracting COVID-19. In response to increased rates of COVID-19 transmission within the United States, many states and local health authorities have issued travel advisories for anyone returning from travel to states that have a significant community-wide spread of COVID-19. Please check with your local department
of health regarding the specific regulations in your state as these recommendations are constantly changing as the rates vary throughout the country.

We currently recommend that transplant recipients:

- **Avoid all travel unless absolutely necessary** (Avoid all cruises, consider air travel only in essential circumstances). We also highly suggest that transplant recipients’ immediate household contacts should postpone non-essential travel.
- **Stay home** as much as possible and put distance between you and other people if you must be out (stay 6 feet away from others, which is about two arm lengths).
- **Avoid crowds both indoors and outdoors** (places of worship, concerts, movie theaters, shopping malls, and other places with large gatherings of people).

Travel restriction recommendations are likely to change over time. Check frequently for updated recommendations:

- U.S. Department of State
- Centers for Disease Control and Prevention (CDC)
- World Health Organization (WHO)
- Public Health Agency of Canada

**Q:** I am a transplant recipient and my partner/spouse/a household member is going back to work at a high risk job. What precautions should we take?

**A:** As some regions reopen, the CDC has issued extensive recommendations for people to safely go back to work. Regardless, transplant candidates and recipients should stay vigilant and continue safe practices to avoid infection from a family member. While there are no specific recommendations, some actions to consider include cleaning hands often, avoid sharing personal items (utensils, dishware), and for everyone in the household to closely monitor their symptoms. Your family member should also stay tuned to any reports of coworkers with suspected or confirmed COVID-19.

**Q:** My family member/co-worker is diagnosed with COVID-19, what should I do?

**A:** If a close contact is diagnosed or presumed to have COVID-19, you should:

- Avoid all further contact this person if possible (sleep in separate rooms, use separate bathrooms, avoid sharing food and dishes). Minimize shared spaces as much as possible and ensure good airflow in your home. If this is not possible, ensure you are both wearing masks when within 6 feet of each other. Frequently clean and disinfect high contact surfaces such as light switches and doorknobs.
- Let your transplant coordinator know that you have been in contact with someone diagnosed with COVID-19.
- Monitor for symptoms (see above) and contact your transplant coordinator immediately if you develop fever, cough or shortness of breath.
● Those with suspected or confirmed COVID-19 (including those awaiting test results) should stay at home and try to separate themselves from other people and animals in the household.

More detailed recommendations on home management of patients with COVID-19 can be found on the WHO and CDC websites.

**Q: What do I do if my community/workplace is “re-opening” or loosening stay at home orders?**

**A:** If you are asked to return to work where you will have close interactions with people, you may be able to get a medical exemption and should discuss with your workplace and/or transplant team. You can also inquire about reassignment to an area with fewer person-to-person interactions. We recommend that you continue to practice social distancing and continue wearing face coverings or masks when leaving the house until COVID-19 infections are not reported in your area.

**Q: I am a transplant recipient and my child is going back to school. What precautions should we take?**

**A:** While there are no specific recommendations on this issue, transplant candidates and recipients should stay vigilant and continue with safe practices. Please check with your school administrator regarding the local safety measures and options for both virtual and in person learning. Some actions to consider include wearing masks at school, helping your child to clean their hands often, avoid sharing personal items, and closely monitoring for symptoms. Also, stay tuned to any reports of students or teachers with suspected or confirmed COVID-19.

**Q: How do I cope with stress and take care of my mental health?**

**A:** We understand the uncertainty associated with the pandemic may be stressful for you. We suggest the following to support yourself:

● Take breaks from watching, reading, or listening to news stories and social media.
● Take care of your body. Take deep breaths, stretch, or meditate. Try to eat healthy, well-balanced meals, exercise regularly, get plenty of sleep.
● Make time to unwind. Try to do some other activities you enjoy.
● Connect with others. Talk with people you trust about your concerns and how you are feeling.
● Call your healthcare provider if stress gets in the way of your daily activities for several days in a row.

**Get immediate help in a crisis**

● Call 911
● Disaster Distress Helpline: 1-800-985-5990, or text TalkWithUs to 66746
● National Suicide Prevention Lifeline: 1-800-273-TALK (8255)

**Q: Where can I get up-to-date information about COVID-19?**

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A: The CDC and WHO are working hard to maintain up to date information about the spread of COVID-19 including changing conditions in the United States. Below is a list of some resources that may be helpful.

**Resources for Patients**

1. Get the latest public health information from CDC or WHO:
   - [https://www.coronavirus.gov](https://www.coronavirus.gov)

2. Get the latest research information from NIH: [https://www.nih.gov/coronavirus](https://www.nih.gov/coronavirus)

3. For information on COVID-19 Treatment:

4. For information on specific clinical trials underway for treatment of patients with COVID-19 infection: [clinicaltrials.gov](https://clinicaltrials.gov).

5. Information from the American Society of Transplantation: [https://power2save.org/](https://power2save.org/)


7. COVID-19 information for parents from Pediatric Infectious Disease Society: [COVID-19 Resources](https://www.pedsinfect.org/covid-19-resources)