

COVID-19 and Liver Transplantation

Important Information for Patients and Their Families

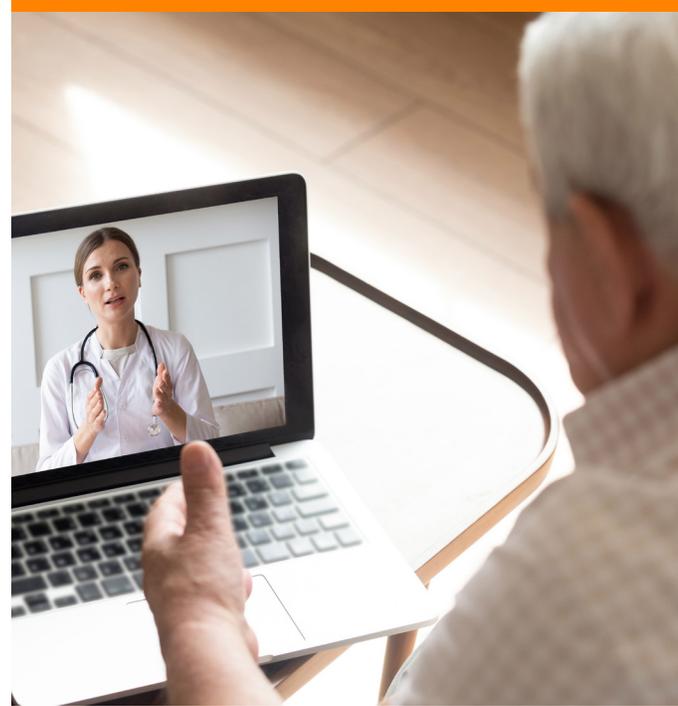
The American Association for the Study of Liver Diseases (AASLD) is committed to helping you understand coronavirus disease 2019 (COVID-19) infection and prevention in people who have undergone liver transplantation.

What We Know

Our understanding of COVID-19 in liver transplant recipients is evolving. When making decisions related to COVID-19 infections or prevention, having up-to-date information is critical.

- Symptoms of COVID-19 infection include any of the following: **fever, chills, drowsiness, cough, congestion or runny nose, difficulty breathing, fatigue, body aches, headache, sore throat, abdominal pain, nausea, vomiting, diarrhea, and loss of sense of taste or smell.**
- Recent reports suggest that liver transplant recipients may not have a greater risk of developing severe illness from COVID-19 infection. However, most require hospital admission and approximately 15% intensive care unit admission; mortality has been observed only in patients 60 years of age or older and was higher among males. More epidemiologic data of COVID-19 in transplant recipients will be forthcoming.
- Patients awaiting liver transplantation with advanced cirrhosis and/or liver cancer are at a higher risk of severe illness from COVID-19 and/or developing more problems from their existing liver disease, with prolonged hospitalization and increased mortality. These patients need to take careful precautions to avoid COVID-19 infection. COVID-19 may affect the processes and procedures connected with liver transplantation.

- Most programs are continuing to perform liver transplants with appropriate testing of both donors and recipients.
- The safety of returning to work or other in-person activities depends on the severity of your liver disease, how strongly immunosuppressed you are, whether you have any other medical problems, current COVID-19 transmission in your community, and whether measures to prevent transmission are being practiced (physical distancing, wearing face coverings, handwashing or using a hand sanitizer, isolating COVID-19 cases). **Note:** All hand sanitizers are NOT safe and effective. Please follow the Food and Drug Administration's guidance at <https://www.fda.gov/consumers/consumer-updates/safely-using-hand-sanitizer>.
- The COVID-19 pandemic has increased stress and anxiety for many people—around health, family, economic security, and other issues. Reaching out for mental health support and maintaining healthy habits, such as exercising regularly, getting fresh air, eating wholesome foods, and getting regular sleep, remain very important during the pandemic.



What We Recommend

- Contact your transplant program and/or seek medical attention immediately if you think you or someone in your household may have COVID-19. Inform your medical providers that you are a liver transplant recipient, as this may impact recommendations for your care.
- If you are experiencing **difficulty breathing, chest pain or pressure, confusion, inability to wake up or stay awake, bluish lips, face, or toes, or any severe or concerning symptoms**, seek medical attention immediately.
- Do not stop or change your prescribed medications, including immunosuppressants, unless recommended by your transplant program. Stopping or changing medications could cause a flare of your

liver disease or other health problems. Make sure your prescriptions are up-to-date and you have several months of medications on hand.

- Keep yourself safe, and help prevent COVID-19 transmission in your community:
 - Practice physical distancing (at least 6 feet), and avoid crowds—especially indoors.
 - Wear a cloth face covering over your nose, mouth, and chin when outside your home.
 - Frequent handwashing is also very important; however, wearing a face covering and practicing physical distancing appear to be the most effective methods for preventing COVID-19 transmission.
- If you have been referred for liver transplantation, do not delay your evaluation.
- If you have liver cancer and are referred for liver transplantation, do not delay any bridging therapies to control the liver cancer.
- If you have someone who is willing to serve as the live donor, do not delay that donor's evaluation.
- Contact your program immediately if you test positive for COVID-19. If hospitalization is required, they likely will request you be hospitalized at the transplant center. No consistent drug-drug interactions have been reported in the medications that have shown efficacy against COVID-19.
- If you are infected with COVID-19, transplant should be deferred until you are clinically improved with no detectable virus. Documentation of two negative COVID-19 tests at least 24 hours apart is recommended before a candidate should be cleared for transplant unless the need is urgent.
- Alcohol should be strictly avoided, as it can exacerbate any underlying liver disease, regardless of the cause.
- Review your medical/legal documents, including medical power of attorney, to be certain they are up-to-date and reflect your current wishes.

What You Should Discuss With Your Health Care Provider or Team

- Recommendations for your routine health care, including blood tests, x-rays, cancer screenings, endoscopies, and medically necessary treatments, as well as medical visits (telehealth, remote, or special procedures for in-person visits). Minimize routine blood tests and, if possible, schedule blood tests as close to home as possible or at home.

- Changes to your medications (do not change medication dosages or stop medications unless recommended by your health care team).
- Your prognosis and plans for future treatment.
- Safely returning to work, essential travel, and participating in other activities.
- Staying up-to-date on vaccines, including the flu vaccine this fall/winter, to protect you from other infections.
- Any new “medicine,” “natural” or not, that you are considering taking (before taking the first dose).

Where to Find More Information

Much is still unknown about the relationship between COVID-19 and liver transplantation, and new information is accumulating rapidly. Keep checking back to this website as well as the Centers for Disease Control and Prevention (CDC) and AASLD sites for further updates.

- **COVID-19 and the liver from AASLD:**
<https://www.aasld.org/about-aasld/covid-19-and-liver>.
- **Liver disease and COVID-19 from the CDC:**
<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/liver-disease.html>.
- **Coronavirus (COVID-19):**
<https://www.coronavirus.gov/>.
- **Protecting yourself and others from COVID-19:**
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html>.
- **Mental health and coping during COVID-19:**
<https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html>.