



COVID-19 and Nonalcoholic Fatty Liver Disease

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 with nonalcoholic fatty liver disease (NAFLD), including those with the more serious form of fatty liver disease, nonalcoholic steatohepatitis (NASH).

What We Know

Our understanding of COVID-19 in people with NAFLD is evolving. When making decisions about 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.**
- People with underlying cirrhosis of the liver, including cirrhosis caused by NAFLD, have the potential for a higher risk of developing severe COVID-19 illness and/or more problems from their existing liver disease if they get a COVID-19 infection, 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 for screening, diagnosis, and management of NAFLD.
- Little is known about the effect of NAFLD on the course of COVID-19.
- NAFLD, itself, is strongly associated with metabolic syndrome, and features of metabolic syndrome (obesity, diabetes mellitus, and hypertension) are well-established risk factors for severe illness from COVID-19. People who are older than 65 years of age or those who have kidney disease or chronic lung disease are also at a higher risk for severe illness from COVID-19.

- COVID-19 infection and some of the medications for treatment may be associated with liver injury. The effect of NAFLD in these cases is not well understood.
- The safety of returning to work or other in-person activities depends on the severity of your liver disease, whether you have 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. In particular, rates of alcohol use and abuse have increased. Reaching out for mental health and substance abuse 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 medical provider and/or seek medical attention immediately if you think you or someone in your household may have COVID-19. Inform your medical provider that you have NAFLD, 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 unless recommended by your health care provider. 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.
- 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.
- The risks and benefits of any delay in screening, surveillance, or NAFLD management due to COVID-19 infection, exposure, or center capacity limitations.
- 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 NAFLD, 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>
- **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>

