



Guidance for Bone Marrow Failure Patients to Protect Against Coronavirus (COVID-19)

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COVID-19 Concerns for Bone Marrow Failure Patients

Many U.S. states and other countries have relaxed or eliminated restrictions for business occupancy, social distancing guidelines and mask wearing. Patients living with bone marrow failure diseases and their families and caregivers should continue to practice social distancing, frequently wash and sanitize hands, wear masks around others, and encourage others to wear masks around you.

As a person with a bone marrow failure condition, such as myelodysplastic syndromes (MDS), aplastic anemia, paroxysmal nocturnal hemoglobinuria (PNH), etc., you are already taking precautions to protect your compromised immune system. Patients with these diseases have been disproportionately affected by the COVID-19 pandemic with concerning mortality rates for patients who contract the virus and concerns about the efficacy of the available vaccines for bone marrow failure patients. Given the contagiousness of the Omicron variant, we also recommend strict precautions even among vaccinated patients or those who have been infected with COVID previously, as immunity to the Omicron variant is not as strong as it was to previous variants such as Delta.

COVID-19 Vaccine Guidance

Patients with a bone marrow failure condition who have not yet been vaccinated, are encouraged to discuss getting a vaccination as soon as possible with their treating hematologist/oncologist. Two of the approved vaccinations available in the United States and much of the rest of the world are mRNA vaccines which do not contain live virus and should be safe for most patients with a bone marrow failure condition. While the efficacy of the vaccine may be lower in people with bone marrow failure conditions, side effects from receiving a vaccine are so low that most doctors recommend that you receive the vaccine. Remember, some efficacy is always better than no efficacy, particularly as more contagious and possibly harmful COVID-19 variants are spreading. Please discuss this important topic with your treating hematologist/oncologist.

Some hematologists/oncologists have reported that a small number of PNH patients are experiencing an increase in hemolysis after vaccination, something that patients should discuss with their healthcare team and carefully weigh the benefits of vaccination against this

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risk. PNH patients should be carefully monitored after vaccination by their treating hematologist/oncologist.

Should other vaccines become available, it is not recommended to get vaccinated with a live virus as this could cause problems for patients. Please consult your treating hematologist/oncologist about vaccinations and if you are pre or post-transplant, it is critically important to discuss this with your transplant team and to strictly adhere to their schedule for vaccinations.

The U.S. Food and Drug Administration has authorized a third dose ("booster") of COVID-19 vaccines from Pfizer Inc and Moderna Inc for people with compromised immune systems. Please check with your doctor to see if you should receive a third dose.

Recommended Precautions

These recommendations are for all patients, but you should consult with your treating hematologist/oncologist for guidance specific to your health conditions:

- Bone marrow failure patients should receive 3 mRNA shots, and if a booster 4th dose is recommended, that they receive that as well.
- Patients who test positive should receive monoclonals such as regeneron to prevent serious infection.
- Continue to wear a mask that covers your mouth and nose when outside your home. This includes going to work, shopping and going to medical appointments. While N-95 masks are best, surgical masks are a good second choice, followed by cloth masks. Masks with vents or “gaiters” are not recommended.
- Avoid close contact with people who are sick, do not attend large gatherings (even outdoors) with unmasked and/or unvaccinated people, and avoid shaking hands or embracing others who are not vaccinated.
- Well-spaced, outdoor activities are safest, and most can be enjoyed without a mask provided that your companions are vaccinated and/or from your immediate household.
- Limit travel and travel companions and be sure to discuss best practices with your treating hematologist/oncologist before making plans. Your risk level may be higher or lower, depending on your specific situation.

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International Travel Precautions

The CDC does not recommend that anyone travel until you are fully vaccinated, however we recognize that international travel poses additional risks due to the rapid spread of COVID-19 variants and the limited availability of vaccines in many countries. If you must travel internationally, please follow all safety precautions and consult with your treating hematologist/oncologist prior to scheduling your travel. Please be aware that you may be required to provide proof of vaccination and/or a negative COVID-19 test.

Specific Guidance for Patients Related to Treatments

- Most healthcare facilities have resumed in-person medical appointments and/or have telehealth options available. You may be required to wear a mask, and to follow extra precautions during your visit including a limit on the number of people who can attend appointments with you. Please consult with your healthcare facility about these requirements.
- While there are not blood shortages at the time of this publication, the blood supply can vary by country, region and state. If you require regular transfusions, it is important to communicate regularly with your healthcare provider(s) and you may need to go a bit longer between transfusions.
- Some bone marrow failure patients are reported as having an incomplete or lower response to the available vaccines which makes them more susceptible to contracting COVID-19 and may necessitate a booster vaccine in the future. Please consult with your treating hematologist/oncologist and follow their guidance to protect yourself from the COVID-19 virus.
- Patients who take immunosuppressive medications may be more susceptible to infections including COVID-19. Your treating hematologist/oncologist will provide you with guidance as to how to protect yourself, however we recommend wearing a mask correctly, social distancing and other precautions.

Returning to School/Work

Many people have worked or attended school remotely during the pandemic and are preparing to return to classrooms and workplaces. While each patient will have different factors to consider, generally:

- In remission + fully vaccinated: Can return to school/work with normal precautions
- In remission + not yet vaccinated: Can return to school/work with mask + social distance. We recommend remote work/learning until vaccination.
- Undergoing treatment + fully vaccinated: Can return to school/work with mask + social distance. We recommend remote work/learning until remission is achieved or a doctor approved status.
- Undergoing treatment + not yet vaccinated: Remote work/learning only.

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Other Trusted Sources:

- Centers for Disease Control (CDC): <https://www.cdc.gov/coronavirus/2019-ncov/>
- Food and Drug Administration (FDA): <https://www.fda.gov/emergency-preparedness-and-response/counterterrorism-and-emerging-threats/coronavirus-disease-2019-covid-19>
- National Institutes of Health (NIH): <https://www.nih.gov/coronavirus>
- World Health Organization (WHO): <https://www.who.int/emergencies/diseases/novelcoronavirus-2019>

Guidelines from the American Society of Hematology (ASH)

ASH has released a number of guidelines that are geared toward healthcare providers but patients may find them useful and can be found at <https://www.hematology.org/covid-19> including specific information for patients with aplastic anemia, MDS, AML and MPNs.

AAMDSIF Website Resources

AAMDSIF has a number of webinars about COVID-19 and the specific concerns of bone marrow failure patients available on our website along with updated guidance, financial resources and Frequently Asked Questions at: www.aamds.org/education/covid-19