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

This content has been prepared in consultation with AAMDSIF Medical Advisory Board Chair Mikkael Sekeres MD, MS of Sylvester Comprehensive Cancer Center, University of Miami and Co-Chair Olatoyosi Odenike MD of the University of Chicago with additional review by Amy DeZern, MD, Johns Hopkins and Carlos De Castro, MD, Duke. (November 2022)

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. 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.

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.

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 a booster 4th dose is recommended for patients as follows:
  1) A second booster dose of the Pfizer-BioNTech COVID-19 Vaccine or Moderna COVID-19 Vaccine may be administered to individuals 50 years of age and older at least 4 months after receipt of a first booster dose of any authorized or approved COVID-19 vaccine.
  2) A second booster dose of the Pfizer-BioNTech COVID-19 Vaccine may be administered to individuals 12 years of age and older with certain kinds of immunocompromise at least 4 months after receipt of a first booster dose of any authorized or approved COVID-19 vaccine. These are people who have undergone solid organ transplantation, or who are living with conditions that are considered to have an equivalent level of immunocompromise.
3) A second booster dose of the Moderna COVID-19 Vaccine may be administered at least 4 months after the first booster dose of any authorized or approved COVID-19 vaccine to individuals 18 years of age and older with the same certain kinds of immunocompromise.

- A 5-day course of Paxlovid for people within the first 48 hours of developing symptoms to help prevent Covid-19 from becoming more serious. For those who cannot receive Paxlovid, outpatient IV remdesivir for 3 days or Molnupiravir should be used.
- 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.

**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.

**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.
Please consult your treating hematologist/oncologist for advice regarding your specific health condition and life circumstances.

**COVID-19 Vaccine Guidance**

**Specific Guidance for Patients Related to Treatment**

**Guidelines from ASH and Other Trusted Resources**

**Infectious Disease Society of America**

These FAQs from the American Society of Hematology are geared toward healthcare providers but patients may find them useful:

- **ASH Guidelines on Use of Anticoagulation in Patients with COVID-19:** ASH has issued recommendations for the use of anticoagulation in critically and acutely ill patients for which the evidence will be re-evaluated in a continual fashion. This webpage will be updated as the evidence for recommendations are evaluated. [https://www.hematology.org/education/clinicians/guidelines-and-quality-care/clinical-practice-guidelines/venous-thromboembolism-guidelines/ash-guidelines-on-use-of-anticoagulation-in-patients-with-covid-19#acute](https://www.hematology.org/education/clinicians/guidelines-and-quality-care/clinical-practice-guidelines/venous-thromboembolism-guidelines/ash-guidelines-on-use-of-anticoagulation-in-patients-with-covid-19#acute)


**Other Trusted Resources**

- **Centers for Disease Control (CDC)**

- **Food and Drug Administration (FDA)**
• National Institutes of Health (NIH)
• World Health Organization (WHO)

AAMDSIF COVID-19 Webinars
COVID-19 Financial Assistance Programs
AAMDSIF COVID-19 Educational Materials

FDA Press Release: FDA Approves First COVID-19 Vaccine