Considerations for COVID-19 Vaccination in Immunocompromised Patients



Immunocompromised individuals are at an increased risk for severe COVID-19 infection and therefore, adequate protection with COVID-19 vaccination is very important. Moderately or severely immunocompromised individuals may not be able to mount the same immune response against COVID-19 as someone with a healthy immune system. This resource outlines CDC's age-specific recommendations for moderately or severely immunocompromised individuals. CDC also provides more information on <u>COVID-19 Vaccines for Moderately or Severely Immunocompromised People</u>.

What immunocompromising conditions or treatments are considered moderate or severe?

Moderate and severe immunocompromising conditions and treatments include, but are not limited to

- · Active treatment for solid tumor and hematologic malignancies
- · Receipt of solid-organ transplant and taking immunosuppressive therapy
- Receipt of chimeric antigen receptor (CAR)-T-cell or hematopoietic stem cell transplant (HCT) (within 2 years after transplantation or taking immunosuppression therapy)
- · Moderate or severe primary immunodeficiency (e.g., DiGeorge syndrome, Wiskott-Aldrich syndrome)
- Advanced or untreated HIV infection (people with HIV and CD4 counts <200 cells/mm3, history of an AIDS-defining illness without immune reconstitution, or clinical manifestations of symptomatic HIV)
- Active treatment with high-dose corticosteroids (i.e., ≥20 mg prednisone or equivalent per day when administered for ≥2 weeks), alkylating agents, antimetabolites, transplant-related immunosuppressive drugs, cancer chemotherapeutic agents classified as severely immunosuppressive, tumor-necrosis factor blockers, and other biologic agents that are immunosuppressive or immunomodulatory

Patients may self-attest that they are immunocompromised. APhA has several patient attestation documents in our Know the Facts: <u>COVID-19 Resources</u> <u>library</u> or you can use CDC's <u>Prevaccination Checklist for COVID-19 Vaccination</u>.

What are the age-specific COVID-19 vaccine recommendations for moderate and severely immunocompromised individuals?

The following key points are represented in the diagram on the next page.

- Colors in the following diagram correspond to the packaging colors of the vaccine formulations.
- All time intervals listed in the diagram below indicate the minimum time interval between doses. Be aware that on a case-by-case basis, CDC guidance allows providers who care for moderately or severely immunocompromised patients to administer mRNA COVID-19 vaccines based on clinical judgment, outside FDA and CDC dosing intervals.
- mRNA COVID-19 vaccines (Moderna and Pfizer-BioNTech) are preferred over the Janssen (J&J) COVID-19 vaccine. Individuals who received a first dose of Janssen (J&J) COVID-19 vaccine should receive an additional dose and booster dose of an mRNA vaccine, if possible.



Age-specific COVID-19 vaccine recommendations for moderate and severely immunocompromised individuals



Considerations for COVID-19 Vaccination in Immunocompromised Patients (continued)



When might revaccination be considered?

HCT and CAR-T-cell recipients who received doses of COVID-19 vaccine prior to or during treatment with an HCT or CAR-T-cell therapy should be revaccinated with a primary vaccine series at least 3 months (12 weeks) after transplant or CAR-T-cell therapy. An mRNA vaccine is preferred for revaccination with a primary vaccine series. An additional primary dose of an mRNA COVID-19 vaccine is recommended 28 days after the second dose as part of revaccination for people who continue to have moderate or severe immune compromise. A patient's clinical team is best positioned to determine the degree of immune compromise and appropriate timing of vaccination. Consult the patient's hematologist/oncologist regarding any deviations from these guidelines.

When should a patient receive vaccination in relation to immunosuppressive therapies?

When possible, COVID-19 vaccines should be administered at least 2 weeks before starting or resuming immunosuppressive therapies. Timing of COVID-19 vaccination should take into consideration current or planned immunosuppressive therapies. A patient's clinical team is best positioned to determine the degree of immune compromise and appropriate timing for administration. Serologic or cellular immune testing is not recommended at this time.

What additional considerations should pharmacists counsel on?

Vaccinated people who are immunocompromised should be counseled about the potential for a reduced immune response to COVID-19 vaccines and the need to continue to follow current prevention measures (including wearing a mask, staying 6 feet apart from others they don't live with, and avoiding crowds and poorly ventilated indoor spaces). Close contacts of immunocompromised patients should also be strongly encouraged to be vaccinated against COVID-19 to protect the immunocompromised patients.

Disclaimer: Information related to the COVID-19 pandemic is changing rapidly and continuously. The material and information contained in this publication is believed to be current as of the date included on this document. The American Pharmacists Association assumes no responsibility for the accuracy, timeliness, errors or omission contained herein. Links to any sources do not constitute any endorsement of, validity, or warranty of the information contained on any site. The user of these materials should not under any circumstances solely rely on, or act based on this publication. Pharmacy professionals retain the responsibility for using their own professional judgment and practicing in accordance with all rules, regulations, and laws governing the pharmacy practice within their jurisdiction.