COVID-19, the disease caused by SARS-CoV-2, continues to affect people across the United States. COVID-19 is a preventable and treatable disease. There are currently three vaccines the Food and Drug Administration (FDA) has granted Emergency Use Authorization for, manufactured by Pfizer, Moderna and Johnson and Johnson (Janssen). Each of these vaccines underwent extensive clinical trials and continues to undergo post-marketing surveillance by the FDA.

Vaccine efficacy in people with compromised immune systems is not fully understood, so it’s uncertain if they’ll have the same protective response as people with normally functioning immune systems. The Rhode Island Department of Health (RIDOH) defines immunocompromised as:

- Currently receiving chemotherapy for cancer
- Untreated HIV infection with CD4 T lymphocyte count lower than 200
- **Primary immunodeficiency (PI)**
- Taking more than 20 mg a day of prednisone, for more than 14 days
- Other condition(s) as determined by the treating healthcare provider

As we learn more about how patients with compromised immune systems respond to COVID-19 vaccines, RIDOH issues the following guidance for healthcare providers.

1. Routine testing for antibodies to a COVID-19 vaccine is not recommended. It’s not known whether a negative antibody test after vaccination means someone is not protected from COVID-19, and whether a positive antibody test after vaccination is protective from COVID-19. In addition, different antibody tests evaluate for different antibodies (i.e., nucleocapsid versus spike protein) and the characteristics of antibody tests differ by manufacturer and methodology. It’s important to remember that clinical trials regarding vaccines did not assess the presence or absence of antibodies, they instead assessed symptomatic disease.

2. Giving additional doses of vaccine, other than those authorized by each Emergency Use Authorization, to any patient is not recommended. If a healthcare provider administers an extra dose, they should only do so after a risk/benefit conversation and should document this clearly in the medical record.

3. Giving patients booster vaccines from additional manufacturers is not recommended.

4. High-quality masks (N-95, KN-95, KF-94) are effective in preventing the spread of SARS-CoV2. People who are immunocompromised, regardless of their vaccination status, should consider and wear these within six feet of others indoors and in crowded outdoor settings.

5. Unvaccinated family members and close associates of people who are immunocompromised should consider wearing high-quality masks indoors when within six feet of others and in crowded outdoor settings.

6. People who are immunocompromised should be vaccinated against SARS-CoV2, **as there are no conditions that cause anyone to be immunocompromised, or medications that weaken the immune system, that are a contraindication to vaccination.**
Conclusion

While we await more research on the effectiveness of vaccines against COVID-19 among people with compromised immune systems, it’s important that healthcare providers adhere to these guidelines.

RIDOH Resources

- Flyer: Wear a mask that protects your household from COVID-19
- Poster: A mask must be worn here—at all times
- Web pages:
  - COVID-19 and Mask Wearing
  - Protect Your Household from COVID-19