Respiratory Viruses and People with Weakened Immune Systems

What to know
In addition to CDC’s Respiratory Virus Guidance, there are several specific considerations for people who are at higher risk for severe illness, including people with weakened immune systems.

Overview
People with weakened immune systems (immunocompromise) have lower defenses against infections, and their bodies may have a harder time building lasting protection from past immunization or infection. People can be immunocompromised either because of a medical condition or because they receive immunosuppressive medications or treatments. Examples of medical conditions or treatments that may result in moderate to severe immunocompromise include, but are not limited to, cancer treatment, organ transplant with immunosuppressive therapy, and primary immunodeficiency.

Why prevention is important
Studies have shown that:

- Among people who had either a solid organ transplant or a stem cell transplant, about 65 percent of those who got flu were hospitalized. [Learn more.]
- Risk of death among hospitalized people with COVID-19 was about 1.44 times greater among those who were immunocompromised than those who were not. [Learn more.]

Reducing risk
If you have, or someone you spend time with has, a weakened immune system using the prevention strategies described in CDC’s Respiratory Virus Guidance is especially important. In addition, there are several specific considerations for people with weakened immune systems.

- **Immunizations**
  - **COVID-19**
    - Everyone ages 6 months and older who is moderately or severely immunocompromised should receive at least 1 dose of a 2023-2024 updated COVID-19 vaccine. Depending on the number of doses you've previously received, you may need more than 1 dose of updated vaccine:
      - If you have not gotten any COVID-19 vaccines (not vaccinated), you should get 2-3 doses of updated COVID-19 vaccine.
      - If you got 1 previous Pfizer-BioNTech or Moderna COVID-19 vaccine you should get 1-2 doses of updated COVID-19 vaccine.
      - If you got 2 or more previous COVID-19 vaccines, you should get 1 updated COVID-19 vaccine.
      - Additional information on COVID-19 vaccines for people who are immunocompromised is available [here.]

- **Flu**
  - Immunocompromised persons should receive an age-appropriate flu vaccine.
    - Live attenuated influenza vaccine (the nasal spray flu vaccine) should not be used.
    - Note that timing flu vaccination relative to a specified period before or after interventions that compromise immunity may be appropriate.

*CDC offers separate, specific guidance for healthcare settings ([COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/index.html), [flu](https://www.cdc.gov/flu/index.html), and [general infection prevention and control](https://www.cdc.gov/ncidod/dhqp/infectioncontrol.html)). Federal civil rights laws may require reasonable modifications or reasonable accommodations in various circumstances. Nothing in this guidance is intended to detract from or supersede those laws.*
• Additional information on flu vaccines for people who are immunocompromised is available [here](#).

• **Masks**
  - Note that better fitting masks (for example, N95 or KN95 respirators) are more effective at protecting you from inhaling germs than other types of masks are (for example, cloth masks or surgical/disposable masks).

• **Treatment**
  - If you have COVID-19, antiviral treatments are recommended for people with weakened immune systems. If you have a weakened immune system, have received antiviral treatment, and continue to experience COVID-19 symptoms, your healthcare provider may recommend additional treatment.
  - If you have flu, antiviral treatments are recommended for people with weakened immune systems.
  - To learn more about if treatment is right for you, speak with a healthcare provider.

• **When Sick**
  - It can take longer than average for people with weakened immune systems to recover from respiratory viruses. This includes a possible longer duration during which you can spread a respiratory virus to others. If you are immunocompromised, be aware of this when choosing precautions after you return to normal activities following time at home sick.