COVID-19 Resource Guide

COVID-19 VACCINES EXPLAINED: ADDITIONAL DOSES VS. BOOSTER SHOTS

Last updated on December 7, 2021

With the continued spread of COVID-19 and further variants such as Delta and Omicron, it is critical that every person get vaccinated as soon as they are able. Vaccination remains the best way to protect yourself, reduce the spread of the virus and help prevent new variants from emerging.

Numerous studies have shown that after getting vaccinated against COVID-19, protection from the virus and the ability to prevent infection with variants may decrease over time. This is why public health experts are recommending that everyone who has completed their initial COVID-19 vaccine series also get a booster shot and/or, if deemed necessary, an additional primary dose.

Additional doses and booster shots serve different purposes for different groups of people.

**Additional Primary Doses**

An “additional primary dose” is recommended for people who are moderately to severely immunocompromised because they may not have built enough, or any, protection after the initial mRNA vaccine series (i.e., Pfizer-BioNTech or Moderna).

The immunocompromised population generally includes people who have:
- Initiated active cancer treatment for tumors or cancers of the blood
- Taken medicine to suppress the immune system
- Received an organ transplant or a stem cell transplant within the last 2 years
- Moderate or severe immunodeficiency
- Advanced or untreated HIV infection
- Initiated treatment of high-dose corticosteroids or other drugs that suppress immune response

The details vary slightly based the type of shot an individual previously received.

<table>
<thead>
<tr>
<th>Pfizer-BioNTech</th>
<th>Moderna</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHO SHOULD GET ANOTHER DOSE?</strong> IMMUNOCOMPROMISED PEOPLE AGES 18 YEARS AND OLDER</td>
<td><strong>WHO SHOULD GET ANOTHER DOSE?</strong> IMMUNOCOMPROMISED PEOPLE AGES 12 YEARS AND OLDER</td>
</tr>
<tr>
<td><strong>WHEN TO GET ANOTHER DOSE?</strong> AT LEAST 28 DAYS AFTER COMPLETING THE PRIMARY VACCINE SERIES</td>
<td><strong>WHEN TO GET ANOTHER DOSE?</strong> AT LEAST 28 DAYS AFTER COMPLETING THE PRIMARY VACCINE SERIES</td>
</tr>
<tr>
<td><strong>WHICH DOSE SHOULD YOU GET?</strong> PFIZER-BIONTECH COVID-19 VACCINE</td>
<td><strong>WHICH DOSE SHOULD YOU GET?</strong> MODERNA COVID-19 VACCINE</td>
</tr>
</tbody>
</table>
If the mRNA vaccine product given for the first two doses is not available or is unknown, either mRNA COVID-19 vaccine product may be administered.

**Johnson & Johnson’s Janssen (J&J/Janssen)**

The Centers for Disease Control and Prevention (CDC) does not recommend an additional primary dose for immunocompromised individuals who have received the J&J/Janssen single-dose COVID-19 vaccine. Instead, individuals should get a booster shot of any currently available COVID-19 vaccine at least 2 months after their single-dose J&J/Janssen primary shot.

Patients should talk with their health care provider to discuss their medical conditions and determine whether getting an additional primary dose is appropriate for them.

**Booster Shots**

A “booster shot” refers to another dose of a vaccine that is given to someone who has already built up enough protection after vaccination but whose protection may have decreased over time (also referred to as “waning immunity”). Everyone 18 years of age and older who is fully vaccinated against COVID-19 is eligible for a booster shot.

The details vary slightly based the type of shot an individual previously received.

<table>
<thead>
<tr>
<th>Pfizer or Moderna</th>
<th>Johnson &amp; Johnson</th>
</tr>
</thead>
</table>
| **WHO SHOULD GET A BOOSTER?**
EVERYONE 18 YEARS OR OLDER | **WHO SHOULD GET A BOOSTER?**
EVERYONE 18 YEARS OR OLDER |
| **WHEN TO GET A BOOSTER?**
AT LEAST 6 MONTHS AFTER COMPLETING THE PRIMARY VACCINATION SERIES. | **WHEN TO GET A BOOSTER?**
AT LEAST 2 MONTHS AFTER RECEIVING THE SINGLE-DOSE VACCINE. |
| **WHICH BOOSTER SHOULD YOU GET?**
ANY OF THE COVID-19 VACCINES AUTHORIZED IN THE UNITED STATES. | **WHICH BOOSTER SHOULD YOU GET?**
ANY OF THE COVID-19 VACCINES AUTHORIZED IN THE UNITED STATES. |

Visit the CDC’s website to learn more about who is [eligible for a COVID-19 booster shot](https://www.cdc.gov/vaccines/).

**Frequently Asked Questions**

**Why get an additional primary dose or booster shot?**

People with moderately to severely compromised immune systems are especially vulnerable to COVID-19. Studies indicate that some immunocompromised people don’t always build the same level of immunity after vaccination the way non-immunocompromised people do and may benefit from an additional dose to ensure adequate protection against COVID-19.
For others, the COVID-19 vaccines are working very well to prevent severe illness, hospitalization and death, even against the highly transmissible Delta variant. However, public health experts are starting to see early signs of reduced protection against mild and moderate disease due in part because of the COVID-19 variants. For that reason, the federal government has been working with state and local health departments to expand the availability of booster shots to ensure fully vaccinated individuals can maintain immune protection from COVID-19 for a longer period.

**Where do you get an additional primary dose or booster shot?**

Contact the location that set up your previous appointment. If you need to get your booster shot in a location different from where you received your previous shot, you can visit vaccines.gov or hawaiicovid19.com/vaccine/ to find a vaccination site near you.

Any vaccine provider should be able to provide additional doses for immunocompromised individuals and offer booster shots to individuals who meet Food and Drug Administration and CDC’s requirements. When making an appointment, individuals will be asked to provide the dates of their previous COVID-19 vaccinations (available on vaccination cards).

**Will Omicron cause more severe illness?**

More data is needed to know if Omicron infections, and especially reinfections and breakthrough infections in people who are fully vaccinated, cause more severe illness or death than infection with other variants.

**Will vaccines work against Omicron?**

Current vaccines are expected to protect against severe illness, hospitalizations and deaths due to infection with the Omicron variant. However, breakthrough infections in people who are fully vaccinated are likely to occur. With other variants, like Delta, vaccines have remained effective at preventing severe illness, hospitalizations and death. The recent emergence of Omicron further emphasizes the importance of vaccination and boosters.

**Can I mix or match COVID-19 vaccines as booster shots?**

You may choose which COVID-19 vaccine you receive as a booster shot. Some people may prefer the vaccine type that they originally received, and others may prefer to get a different booster. CDC’s recommendations now allow for this type of mix and match dosing for booster shots.

**Are booster shots the same formulation as existing vaccines?**

Yes. COVID-19 booster shots are the same formulation as the current COVID-19 vaccines. However, in the case of the Moderna COVID-19 vaccine booster shot, it is half the dose of the vaccine people get for their primary series.
What should immunocompromised people who received Johnson & Johnson’s Janssen (J&J/Janssen) vaccine do?

The FDA’s recent emergency use authorization amendment only applies to mRNA COVID-19 vaccines, as does CDC’s recommendation. There is not enough data at this time to determine whether immunocompromised people who received J&J/Janssen COVID-19 vaccine also have an improved antibody response following an additional dose of the same vaccine.

Are additional doses and booster shots safe?

Safety data from other countries and the CDC shows that booster and additional doses are safe. Side effects, which are expected with vaccination, were mostly mild, moderate, and lasted only a few days, similar to the last dose of the primary series. For Pfizer-BioNTech and Moderna, side effects were reported less frequently following a booster dose than the second dose of the primary series.

What are the risks of vaccinating individuals with an additional primary dose?

There is limited information about the risks of receiving an additional primary dose of mRNA COVID-19 vaccine. The safety, efficacy and benefit of the additional primary dose in immunocompromised people continues to be evaluated. So far, reactions reported after the additional primary dose of mRNA COVID-19 vaccine are similar to that of the two-dose primary series: fatigue and pain at the injection site were the most commonly reported side effects, and overall, most symptoms were mild to moderate.