**COVID-19 BOOSTER SHOTS:**

**13 Common Questions and Answers Based on the Latest Data**

**July 6, 2022**

1. **Why is a first booster shot needed?**
   * Even if you’ve had COVID-19 and the initial vaccine, your body will lose immunity over time, and you will have an increased risk of severe disease, hospitalization, and death. Vaccine booster shots can restore your protection.
   * Booster shots also increase your protection against COVID-19 variants.
   * Without a booster shot your protection is about 8.8%, with just the original vaccine series

<https://www.nejm.org/doi/full/10.1056/NEJMoa2115926> and <https://www.nejm.org/doi/full/10.1056/NEJMoa2119451>

1. **Who should get a booster shot?**

* **Everyone over 5 years old** can get a booster shot.
  + If you received an mRNA vaccination (Pfizer/Moderna), you can get a booster shot 5 months after your original 2-shot series
* If you received the Johnson and Johnson vaccine, you are recommended to get an mRNA vaccine booster (Pfizer or Moderna) 2 months after your Johnson and Johnson shot.
* If you are **moderately or severely immunocompromised** there is a separate COVID-19 vaccine schedule that is recommended. It includes a total of five shots:
  + the initial mRNA 2-shot vaccination (if you haven’t gotten it already), then
  + shot 3 at 28 days, then
  + shot 4 at three months after third shot, then
  + shot 5 four months after the 4th shot

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html?s_cid=11772:cdc%20booster%20guidelines:sem.ga:p:RG:GM:gen:PTN.Grants:FY22>

1. **Who should get a second booster shot and why?**
   * You are over 50 years old **OR** moderately / severely immunocompromised

**AND** it has been 4 months since your first booster

* + A second booster has been shown to decrease severe disease, hospitalization, and death in people over age 50 and in those who are moderately or severely immunocompromised.

<https://www.nejm.org/doi/full/10.1056/NEJMoa2201570>

1. **Will a booster shot protect me against all the Omicron variants that are circulating now?**
   * Research has shown that booster shots offer profound increase in protection to the circulating variants compared to those who only have the original vaccination series.
   * Booster shots are necessary to have protection against Omicron variants, increasing protection from 8.8% to up to 76%

<https://www.nejm.org/doi/full/10.1056/NEJMoa2119451>

* + Those who are boosted have decreased hospitalization and death, even with the current Omicron variants.

1. **If the vaccine and boosters are so effective, why do we have to keep getting them?** 
   * The vaccine tells your body to focus on fighting COVID-19. Over time and with new COVID variants, this protection weans. Booster shots are needed to restore significant protection against COVID-19 and the current variants
   * The vaccine is chasing a changing virus. Thankfully, our body still recognizing the virus from the vaccine we have, even with these changes. Studies are showing that the booster shots are the key ingredient to keep our protection up to date with this changing virus
   * We are hopeful that the new fall vaccines will give us longer lasting protection
2. **Will a booster shot decrease my risk of long COVID if I get a breakthrough infection?**
   * It may. Current research shows that people who are boosted have a lower incidence of long COVID.
   * In fact, a JAMA article published on 7/1/22 showed that the risk of Long COVID decreased with each dose of the vaccine.

<https://jamanetwork.com/journals/jama/fullarticle/2794072?guestAccessKey=4e00d287-af62-437f-9d50-c8deadc4f454&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_content=olf&utm_term=070122>

1. **Do you need a booster shot if you have had a COVID-19 infection after vaccination (a “break-through” infection)?**
   * The combination of vaccination and protection after infection is powerful, but not perfect.
   * Getting a booster shot will increase your antibody levels and provide the protection that is needed to stay safe.
   * We know that immunity after an early Omicron infection does not provide the protection you need to stay safe from a future COVID 19 infection
2. **Are the COVID-19 vaccine booster shots safe?**
   * YES! Over 105 million people in the United States have had a COVID-19 booster shot and no new safety concerns have been found.
   * The CDC continues to monitor for side effects and safety.
3. **What are the side effects for first and second booster shots?**

* The most common side effects are the same as for the original COVID-19 vaccine, and are:
  + pain, redness and swelling at the injection site
  + fatigue
  + headache
  + muscle or joint pain
  + chills, fever
* Side effects are less severe and less frequent with booster shots

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7107e1.htm?s_cid=mm7107e1_w>

1. **What about mixing and matching vaccinations for booster shots?**
   * It is ok to mix and match mRNA vaccines for your booster shots.

<https://jamanetwork.com/journals/jama/fullarticle/2789151?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jama.2022.1922>

* + If you received the Johnson and Johnson vaccine, an mRNA booster shot is recommended.

1. **Is it safe to get the flu shot at the same time as the COVID-19 booster shot?** 
   * Yes! It is safe and effective to get both shots at the same time.
2. **Can you get a booster shot after COVID-19 treatments (monoclonal antibodies or oral treatments such as Paxlovid or Molnupiravir)?**
   * Yes, you can get a booster shot once you are feeling better and have completed your isolation time.
3. **What can we expect for fall, 2022 for COVID-19 vaccine recommendations?**
   * The FDA has asked both Pfizer and Moderna to produce a bivalent vaccine with half of the original vaccine and half a vaccine specific for Omicron BA.4 and BA.5
   * These updated vaccines should be available in mid fall, 2022.