**FCI NFH January 19 Webinar: Question and Answer Responses**

**General Information:**

The best vaccine is the one that goes into your arm. National immunization technical advisory group (NITAGs) and vaccine safety groups at national level and at regional and global level at WHO and other CDCs have been evaluating vaccine safety and efficacy data and all vaccines provided through COVAX are proven to be both safe and effective.

**Discussion Questions:**

* **Why should people get a booster? Does that mean the original vaccine doesn’t work?**

[COVID-19 vaccines are working well](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/effectiveness/work.html) to prevent severe illness, hospitalization, and death. However, public health experts are starting to see reduced protection over time against mild and moderate disease, especially among certain populations. *Source:* [*COVID-19 Vaccine Booster Shots | CDC*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html)

* **Why are people who are fully vaccinated still getting sick, does that mean the vaccine doesn’t work?**

Vaccine breakthrough infections are expected. COVID-19 vaccines are effective at preventing most infections. However, like other vaccines, they are not 100% effective. Because vaccines are not 100% effective, as the number of people who are fully vaccinated goes up, the number of vaccine breakthrough infections will also increase. However, the risk of infection remains much higher for unvaccinated than vaccinated people. Fully vaccinated people with a vaccine breakthrough infection are less likely to develop serious illness than those who are unvaccinated and get COVID-19. Even when fully vaccinated people develop symptoms, they tend to be less severe symptoms than in unvaccinated people. This means they are much less likely to be hospitalized or die than people who are not vaccinated. It is important to note, however, that people who get vaccine breakthrough infections can be contagious. *Source:* [*Vaccine Breakthrough Infections: The Possibility of Getting COVID-19 after Getting Vaccinated (cdc.gov)*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/effectiveness/why-measure-effectiveness/breakthrough-cases.html)

* **Why is there not one vaccine, and instead many different kinds (Astra Zeneca, Pfizer, etc.) and is mixing and matching OK?**

Bringing a new vaccine to the public involves many steps including vaccine development, clinical trials, authorization or approval, manufacturing, and distribution. Typically, many vaccine candidates will be evaluated before any are found to be both safe and effective. This starts in a laboratory and continues with a rigorous clinical trial process. While COVID-19 vaccines were developed rapidly, all steps have been taken to ensure their safety and effectiveness. In general, the same mRNA vaccine product (i.e., the same manufacturer) should be used for all doses in the primary series, including an additional primary dose. However, use of heterologous booster doses (mix and match) is authorized for those 18 years and older in the U.S.

Every country has a NITAG, a national immunization technical advisory group (in the US, it’s ACIP). NITAGs evaluated vaccine safety and efficacy data to develop policies and recommendations on whether specific vaccines should be added to the immunization schedule. The NITAG will be responsible for evaluating new data as it relates to breakthrough infections, local epidemiological picture and vaccine safety and efficacy, and consider supply constraints and other health systems and policy factors to shape their recommendations. If a recommendation is made to mix vaccines, it will be based on such a discussion. When in doubt, seek the latest guidance from the country’s NITAG or equivalent of the Food and Drug Administration (often a pharmaceutical regulatory or food and medicines agency) on the latest policies and rationale for vaccine recommendations. Your healthcare provider should also be able to advice you on what vaccines you should get when.

*Source:* [*Developing COVID-19 Vaccines (cdc.gov)*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/distributing/steps-ensure-safety.html)*,* [*The different types of COVID-19 vaccines (who.int)*](https://www.who.int/news-room/feature-stories/detail/the-race-for-a-covid-19-vaccine-explained)*,* [*Interim Clinical Considerations for Use of COVID-19 Vaccines | CDC*](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html)

* **Why are elderly and those with health conditions prioritized for vaccination? But should everyone get vaccinated now?**

In many countries elderly people and those who were immunocompromised may have been prioritized—often health workers were prioritized early on too in light of limited vaccine supply and the need to protect the health of the most medically fragile people and those who care for them. As vaccine supply grows and as eligibility for age range or eligibility for booster doses widens, it’s important to follow Ministry of Health and other local health authority guidance on which vaccines to get and what other mitigations measures one should continue (e.g. masking).

[WHO just made a statement about not prioritizing children for boosters and focusing instead on most vulnerable populations getting their first doses.](https://www.who.int/news/item/24-11-2021-interim-statement-on-covid-19-vaccination-for-children-and-adolescents) In addition, many countries still do not have enough supply to make vaccines available to a wider age range. It will come down to the national health authority to make determinations on who should be eligible for vaccines and boosters when.

In the United States, a phased approach to vaccine rollout was launched. In the beginning of the process, when limited vaccine doses were available, vaccines were made available to priority populations. These were the people who were at highest risk for COVID-19. Now, COVID-19 vaccines are available to much more of the population.

*Source:* [*ACIP December 2020 Presentation Slides | Immunization Practices | CDC*](https://www.cdc.gov/vaccines/acip/meetings/slides-2020-12.html)*,* [*Key Things to Know About COVID-19 Vaccines (cdc.gov)*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/keythingstoknow.html)

* **What is the likelihood to have the immunity boosted after a COVID-19 infection for a fully vaccinated person?**

CDC recommends that people get vaccinated even if they have already had COVID-19. COVID-19 vaccination causes a more predictable immune response than infection with the virus that causes COVID-19. Getting a COVID-19 vaccine gives most people a high level of protection against COVID-19 and can provide added protection for people who already had COVID-19. One study showed that, for people who already had COVID-19, those who do not get vaccinated after their recovery are more than 2 times as likely to get COVID-19 again than those who get fully vaccinated after their recovery.

*Source:* [*Preparing for Your COVID-19 Vaccination | CDC*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/prepare-for-vaccination.html)*,* [*Myths and Facts about COVID-19 Vaccines | CDC*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html)

Please note: observations were prior to emergence of omicron and didn’t account for booster shots. Please refer to CDC’s statement on this. [*CDC Statement on MMWR: COVID-19 Cases and Hospitalizations by COVID-19 Vaccination Status and Previous COVID-19 Diagnosis — California and New York, May–November 2021 | CDC Online Newsroom | CDC*](https://www.cdc.gov/media/releases/2022/s0120-covid-19-cases.html).

* **What's the turnaround time between the initial vaccination and the booster shot? and what could be the adverse effects of late or non-administration of a booster shot?**

In the United States, CDC recommends that people who received the Pfizer-BioNTech or Moderna vaccines receive a booster dose at least 5 months after completing their primary COVID-19 vaccination series. For people who received the Johnson & Johnson’s Janssen vaccine, CDC recommends a booster dose (with Pfizer-BioNTech or Moderna, in most situations) at least 2 months after receiving their J&J/Janssen COVID-19 vaccination. CDC’s COVID Data Tracker contains data on rates of laboratory-confirmed COVID-19 hospitalizations by vaccination status. In December 2021, compared to fully vaccinated persons with additional or booster doses in the U.S., the monthly rates of COVID-19-associated hospitalizations were 44 times higher in unvaccinated adults between the ages of 50 and 64 and 49 times higher in adults age 65 and older (compared to rates 17 times higher for those who were fully vaccinated only). The COVID Data Tracker also contains data on rates of COVID-19 cases and deaths by vaccination status. The data show that people who were fully vaccinated with an additional or booster dose had lower case rates compared with those without an additional or booster dose. Both of these groups had much lower risk of testing positive for COVID-19 and a lower risk of dying from COVID-19 compared with people who were unvaccinated.

*Source:* [*COVID-19 Vaccine Booster Shots | CDC*](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html)*,* [*CDC COVID Data Tracker*](https://covid.cdc.gov/covid-data-tracker/#covidnet-hospitalizations-vaccination)*,* [*CDC COVID Data Tracker*](https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status)

* **Please provide your comments regarding the article on the association between menstrual cycle and COVID vaccine:**

Thank you for the question.  The evidence confirms that WHO-approved COVID vaccines are safe and effective, and that they protect from severe disease, and that these approved vaccines also greatly reduce the risk of death.

As for the study you refer to: [Association Between Menstrual Cycle Length and Coronavirus D... : Obstetrics & Gynecology (lww.com)](https://journals.lww.com/greenjournal/Fulltext/9900/Association_Between_Menstrual_Cycle_Length_and.357.aspx), the findings of the new study on changes in menstrual cycle can be considered from two perspectives:  first, from the perspective of meaningfully significant, and second, from the perspective of statistically significant. This is true for any research study.

* The study on changes in menstrual cycle did show a very small statistically significant increase in menstrual cycle length of little over half a day, among women under age 45 who received the vaccine, compared to those who under age 45 who did not receive the vaccine.
* However, it is likely that for most women, the life-saving benefit of the COVID vaccine in protecting them from severe disease and death, would be meaningfully significant, and it is likely that the slight increase in menstrual cycle length of half a day would not be meaningfully significant.