

Health Advisory

Updated Guidance about COVID-19 Vaccine Booster Shots October 25, 2021

SUMMARY POINTS

- People aged ≥ 50 at high risk of severe disease are advised to receive the Pfizer-BioNTech or Moderna booster shot at least 6 months after completing their primary series (i.e., first 2 doses of Pfizer-BioNTech or Moderna).
- People aged 18-49 with underlying medical conditions or those at high risk of infection based on occupation are also eligible to receive the Pfizer-BioNTech or Moderna booster shot at least 6 months after completing the primary series.
- People aged ≥ 18 years who received a single dose Janssen primary series should receive a single Janssen COVID-19 booster dose at least 2 months after completing their primary series.
- The Pfizer-BioNTech and Janssen boosters are identical to the doses provided in the initial series, while the Moderna booster dose is half the original dose, **50 μ g in 0.25mL**.
- A single booster dose of any FDA approved or authorized COVID-19 vaccine may be administered as a heterologous (“mix and match”) booster following completion of a primary vaccination with a different FDA approved or authorized COVID-19 vaccine.

Ongoing data continues to support protection against infection, severe illness, hospitalization, and death with COVID-19 vaccinations. However, observational studies have found that a booster dose of Pfizer-BioNTech, Moderna (mRNA-1273) or Janssen (Johnson & Johnson) are safe and effective at decreasing the risk of severe disease and infection in specific populations.

Booster Doses for Pfizer-BioNTech and Moderna (mRNA-1273) COVID-19 Vaccines

The Centers for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA) endorse providing booster shots to individuals in the following populations who have received Pfizer-BioNTech or Moderna as their primary vaccine series against COVID-19.

The booster **should** be provided **at least 6 months** after completing the Pfizer-BioNTech or Moderna primary series (i.e., first 2 doses of Pfizer-BioNTech or Moderna) to:

- People aged 65 years and older
- Residents aged 18 years and older residing in long-term care settings
- People aged 50-64 years with underlying medical conditions

The booster **may** be provided **at least 6 months** after completing the Pfizer-BioNTech or Moderna primary series (i.e., first 2 doses of Pfizer-BioNTech or Moderna) to:

- People aged 18-49 years with [underlying medical conditions](#) that put them at increased risk
- People aged 18-64 years at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting

Booster Doses for Janssen (Johnson & Johnson) COVID-19 Vaccines

The Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) endorse providing booster shots to individuals 18 years or older who received a single dose Janssen primary series.

- These individuals **should** receive a single Janssen COVID-19 booster dose **at least 2 months** after completing their primary series.

Heterologous (“Mix and Match”) Booster Dose

- A single booster dose of any of the FDA approved or authorized COVID-19 vaccines may be administered as a heterologous booster dose following completion of primary vaccination with a different FDA approved or authorized COVID-19 vaccine. Individual benefit-risk assessment may inform which booster product to administer.

- The dosing interval of a heterologous booster dose should be the same as authorized for vaccine booster doses for eligible persons (i.e., a heterologous booster dose should be administered **at least 6 months** following a primary series of Pfizer-BioNTech or Moderna and **at least 2 months** following a primary single-dose Janssen vaccine).
- Heterologous dosing is acceptable **for booster doses only**. It should not be considered for primary vaccine series or 3rd doses for moderately to severely immunocompromised persons.

Co-administration of Booster Doses with other Vaccines

- COVID-19 vaccine booster doses (Pfizer-BioNTech, Moderna, or Janssen) may be given with other vaccines, without regard to timing, including co-administration of a COVID-19 vaccine and other vaccines on the same day.
- If multiple vaccines are administered at a single visit, administer each injection in a different injection site.

Of note, the booster dose is **not authorized for anyone under the age of 18**, regardless of medical condition or occupation.

The Pfizer-BioNTech and Janssen booster doses are the same vaccine at the same dose as the primary series. The Moderna booster dose is **50µg in 0.25mL** (half the dose of a primary vaccination of Moderna). Side effects reported from booster shots also remain similar to the primary series. The most commonly reported side effects include soreness at the injection site, tiredness, headache, muscle and/or joint pain, chills, swollen lymph nodes in same arm as the injection, nausea and vomiting, and fever. Swollen lymph nodes in the underarm were observed more frequently following the Pfizer and Moderna booster dose than after the primary two-dose series.

Individuals who qualify for booster doses may receive their vaccine at a PDPH clinic regardless of where they received their primary vaccination series. Individuals may also choose to receive their vaccine at a pharmacy or their healthcare provider's office. PDPH does not require proof of condition qualifying an individual for a booster dose.

At this time, anyone who has completed their primary series of vaccination is considered fully vaccinated, regardless of whether they have received the booster dose. Moderately to severely immunocompromised individuals who received Pfizer or Moderna remain eligible for a 3rd dose of the same vaccine product they initially received, one month after their primary series.

Resources:

- [Emergency Use Authorization \(EUA\) of the Pfizer-BioNTech COVID-19 Vaccine to Prevent Coronavirus Disease 2019](#)
- [Evidence to Recommendation Framework: Pfizer-BioNTech COVID-19 Booster Dose](#)
- [FDA Authorizes Booster Dose of Pfizer-BioNTech COVID-19 Vaccine for Certain Populations](#)
- [Who Is Eligible for a COVID-19 Vaccine Booster Shot? | CDC](#)
- [Coronavirus \(COVID-19\) Update: FDA Takes Additional Actions on the Use of a Booster Dose for COVID-19 Vaccines | FDA](#)
- [Moderna COVID-19 Vaccine | FDA](#)
- [Janssen COVID-19 Vaccine | FDA](#)