FAQs for the Interim Clinical Considerations

This page has answers to commonly asked questions about the Interim Clinical Considerations for COVID-19 Vaccination.

For information about COVID-19 vaccination storage, preparation, and administration, visit the COVID-19 Vaccine FAQs for Healthcare Professionals.

Vaccination Schedule and Use

Is there a preferred COVID-19 vaccine?

Yes. For primary series vaccination Moderna, Pfizer-BioNTech, and Novavax COVID-19 vaccines are recommended. For booster vaccination, Moderna and Pfizer-BioNTech are recommended; recommendations for booster dose(s) vary based on age, primary series product, and immunocompetence. Janssen COVID-19 Vaccine should only be used in limited situations and cannot be used for the second booster dose.

For more information, see:

- Considerations for Janssen COVID-19 Vaccine
- Contraindications and precautions
- Janssen COVID-19 Vaccine FAQs

Should the same COVID-19 vaccine product be used for all doses in the primary series?

In general, all doses of the primary series should be completed with the same product. Make every effort to determine which vaccine product was administered as the first dose to ensure your patient completes the vaccine series with the same product.

In the following exceptional situations, a different, age-appropriate COVID-19 vaccine may be administered to complete a primary series at a minimum interval of 28 days from the last COVID-19 vaccine dose. No VAERS report is required:

- The same vaccine is not available
- The first dose is unknown
- A person starts but is unable to complete a primary series with the same COVID-19 vaccine due to a contraindication.

Children ages 6 months–4 years who receive different mRNA products for the first 2 doses of an mRNA COVID-19 vaccine series should follow a 3-dose schedule. A third dose of either mRNA vaccine should be administered at least 8 weeks after the second dose to complete the 3-dose primary series.

For more information, see timing, spacing, and interchangeability of COVID-19 vaccines.

My patient received the first dose of a 2-dose COVID-19 vaccination series but cannot complete the series because of a contraindication. Can I vaccinate them with a different product?

If a person starts but is unable to complete a primary series with the same COVID-19 vaccine due to a contraindication, any other age-appropriate COVID-19 vaccine may be administered to complete the series at a minimum interval of 28 days from the last COVID-19 vaccine dose. People who receive Janssen COVID-19 Vaccine after a dose of another COVID-19 vaccine should be considered to have received a valid, single-dose Janssen primary series.

For more information, see:

- Timing, spacing, and interchangeability of COVID-19 vaccines
- Contraindications and precautions

Is there a maximum interval between doses 1 and 2 of a COVID-19 primary vaccination series?

No. You should administer the second dose as close as possible to the recommended interval after the first dose. However, if the second dose is administered after this interval, there is no need to restart the series.

An 8-week interval may be optimal for some people, including males 12-39 years of age because of the small risk of myocarditis associated with Moderna, Novavax, and Pfizer-BioNTech COVID-19 vaccines. Vaccine effectiveness may also be increased with an interval longer than 3 or 4 weeks. Find additional information on the vaccination schedule for:

- People who are **not** moderately or severely immunocompromised
- People who are moderately or severely immunocompromised.

Does the 4-day grace period apply to COVID-19 vaccine?

Yes. Doses administered up to 4 days before the minimum interval, known as the 4-day grace period, are considered valid. This applies to primary series and booster doses of vaccine. Do not use the grace period to schedule doses.

If a booster dose is administered earlier than the grace period, see Appendix C for guidance. This is considered a vaccine administration error. You are required to report COVID-19 vaccine administration errors to the Vaccine Adverse Event Reporting System (VAERS) .

Doses administered at any time after the recommended interval are valid.

For more information, see timing, spacing, and interchangeability of COVID-19 vaccines.

Can COVID-19 vaccines and other vaccines be administered at the same time?

In general, COVID-19 vaccines may be administered without regard to timing of other vaccines. This includes simultaneous administration of COVID-19 vaccine and other vaccines on the same day. However, there are additional considerations for Moderna, Novavax, and Pfizer-BioNTech COVID-19 vaccines if administering an orthopoxvirus vaccine.

In accordance with general best practices, routine administration of all age-appropriate doses of vaccines simultaneously is recommended for children for whom no specific contraindications exist at the time of the healthcare visit.

When deciding whether to coadminister another vaccine(s) with COVID-19 vaccine, providers and parents/guardians may consider:

- Whether a child is behind or at risk of becoming behind on recommended vaccines and the likelihood of the child returning for another vaccination;

- Their risk of becoming infected with a vaccine-preventable disease and their risk for severe disease if infected;
- The reactogenicity profile of the vaccines.

For more information, see timing, spacing, and interchangeability of COVID-19 vaccines.

Can I vaccinate patients with underlying medical conditions?

Yes. COVID-19 vaccination is recommended for everyone ages 6 months and older, including people with underlying medical conditions. COVID-19 vaccines are especially important for people with underlying medical conditions associated with higher risk for severe COVID-19.

Learn more about patient counseling for specific populations.

My patient is sick. Can they receive a COVID-19 vaccine?

As with other vaccines, you can vaccinate patients with a mild illness. A moderate or severe illness is a precaution to receiving any currently FDA-authorized or FDA-approved COVID-19 vaccine. It is not considered a contraindication. Generally, vaccination should be delayed until the acute illness has improved. However, if you and your patient believe the potential benefits of vaccination outweigh the potential risks, they may receive COVID-19 vaccine.

For more information, see contraindications and precautions.

If my patient received a SARS-CoV-2 antibody product (anti-SARS-CoV-2 monoclonal antibodies or convalescent plasma) can they be vaccinated?

People who previously received SARS-CoV-2 antibody products (anti-SARS-CoV-2 monoclonal antibodies or convalescent plasma) as part of COVID-19 treatment, post-exposure prophylaxis, or pre-exposure prophylaxis can be vaccinated at any time; COVID-19 vaccination does not need to be delayed following receipt of monoclonal antibodies or convalescent plasma.

However, people who are moderately or severely immunocompromised and received a COVID-19 vaccination should wait at least two weeks before receiving tixagevimab/cilgavimab (EVUSHELD™) for pre-exposure prophylaxis per the product EUA .

For more information, see COVID-19 vaccination and SARS-CoV-2 infection.

Vaccine Dosage and Formulation

Why are vaccines based on age and not weight?

Vaccine dosages are based on age and not size or weight because they work differently than other medications. This is true for COVID-19 vaccines and other routinely recommended vaccines, like influenza or hepatitis vaccines.

Medications are often based on weight because they are distributed through the bloodstream and work when a certain medication level is present. In this case, a person's weight is important for the dosage. To achieve the same effects, a person weighing more will require more of a medication than a person weighing less.

Vaccines work differently and are not distributed through the bloodstream. Vaccines imitate an infection when administered, activating the body's immune response, which typically occurs at or near the injection site. Immune cells are directed to the injection site to attack foreign cells or proteins and produce antibodies that travel throughout the body and will protect against future infection.

Because of how vaccines work, they typically require low quantities of active ingredients. Different dosages are evaluated during vaccine development to determine the lowest effective dose for the target age group. Clinical trials evaluate various dosing regimens to determine the best dosage and schedule that produces an adequate immune response which is both safe and effective.

Learn more about:

What should I do for a child who is moving from a younger age group with a lower dose formulation to an older age group with a higher dose formulation?

CDC recommends that people should receive the age-appropriate vaccine dosage based on their age on the day of vaccination. If a person moves from a younger age group to an older age group during the primary series or between the primary series and receipt of the booster dose(s), they should receive the vaccine dosage for the older age group for all subsequent doses.

However, Food and Drug Administration (FDA) authorization allows for different dosing for certain age transitions. For more information see:

- Moderna COVID-19 Vaccine for Children who Transition from a Younger to Older Age Group
- Pfizer-BioNTech for Children who Transition from a Younger to Older Age Group
- Interim COVID-19 Immunization Schedule for 6 Months of Age and Older .

Does a child ages 6 months–4 years who received two different mRNA products for the first 2 doses (e.g., one dose Pfizer and one dose Moderna) need a third dose?

Yes, these children should follow a 3-dose schedule. A third dose of either mRNA vaccine should be administered at least 8 weeks after the second dose to complete the 3-dose primary series.

For more information see the Interim COVID-19 Immunization Schedule for 6 Months of Age and Older .

What formulation, dosage, and number of doses can a child receive if they age from 4 years to 5 years before completion of a Pfizer-BioNTech primary series?

CDC recommends children receive the recommended age-appropriate vaccine dosage based on their age on the day of vaccination.

However, FDA authorization of the Pfizer-BioNTech COVID-19 Vaccine allows children who will turn from age 4 years to 5 years between any dose in the primary series to receive:

A 2-dose primary series using the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for children ages 5–11 years

or

A 3-dose primary series initiated with the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for children ages 6 months–4 years. Each of doses 2 and 3 may be with the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for children ages 6 months–4 years, or the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for children ages 5–11

children ages 6 months–4 years, of the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for children ages 5–11 years.

For more information see:

- Pfizer-BioNTech for Children who Transition from a Younger to Older Age Group

What formulation and dosage can a child receive if they age from 5 years to 6 years before completion of a Moderna primary series?

CDC recommends children receive the recommended age-appropriate vaccine dosage based on their age on the day of vaccination.

However, FDA authorization of the Moderna COVID-19 Vaccine allows children who turn from age 5 years to 6 years during primary series vaccination to receive for any dose in the primary series, either: (1) the Moderna COVID-19 Vaccine formulation authorized for children ages 6 months–5 years or (2) the Moderna COVID-19 Vaccine formulation authorized for children ages 6–11 years.

For more information see:

- Moderna COVID-19 Vaccine for Children who Transition from a Younger to Older Age Group

What formulation and dosage can a child receive if they age from 11 years to 12 years before completion of the primary series?

CDC recommends children receive the recommended age-appropriate vaccine dosage based on their age on the day of vaccination.

However, FDA authorization allows children:

- Who receive Pfizer-BioNTech COVID-19 Vaccine and will turn from age 11 years to 12 years during primary series vaccination to receive for any dose in the primary series, either: (1) the Pfizer-BioNTech COVID-19 Vaccine formulation for children ages 5–11 years; or (2) the Pfizer-BioNTech COVID-19 Vaccine formulation authorized for use in people ages 12 years and older.
- Who receive Moderna COVID-19 Vaccine and will turn from age 11 to 12 years during primary series vaccination to receive for any dose in the primary series, either: (1) the Moderna COVID-19 Vaccine formulation authorized for children ages 6–11 years or (2) the Moderna COVID-19 Vaccine formulation authorized for children ages 12 years and older.

For more information see:

- Moderna COVID-19 Vaccine for Children who Transition from a Younger to Older Age Group
- Pfizer-BioNTech for Children who Transition from a Younger to Older Age Group

What should be done if the incorrect vaccine formulation is administered based on a patient's age?

If the incorrect formulation is administered

- Resulting in a higher-than-authorized dose: Do not repeat dose.
- Resulting in a lower-than-authorized dose: Repeat the dose immediately (no minimum interval) with the age-appropriate dose and formulation. Some experts suggest delaying the repeat dose for 8 weeks after the invalid dose based on the potential for increased reactogenicity and the rare risk of myocarditis from mRNA COVID-19 vaccine, especially in males ages 12–17 years.

If a person moves from a younger age group to an older age group during the primary series, FDA allows the formulation for either age group to be administered. See product-specific EUA for more information.

Booster Doses

Who should receive a booster dose?

Most people ages 5 years and older **should** receive 1 booster dose:

- People ages 5 years and older who received Pfizer COVID-19 Vaccine primary series
- People ages 18 years and older who received Moderna COVID-19 primary
- People ages 18 years and older who received Janssen COVID-19 Vaccine primary series

Some people **should** receive a second booster dose:

- People ages 50 years and older
- People ages 12 years and older who are moderately or severely immunocompromised

Some people **may** receive a second booster dose: People ages 18 years and older who have received both a primary and booster dose of Janssen COVID-19 Vaccine.

For the booster dose guidance and schedule, including who is eligible for a second booster dose, see:

- Booster doses for people who are **not** moderately or severely immunocompromised
- Booster doses for people who are moderately or severely immunocompromised

Booster dose recommendations for people who were vaccinated outside the United States may be different.

Can children and adolescents receive a booster dose?

Currently, only children ages 5 years–17 years who received a Pfizer-BioNTech COVID-19 Vaccine primary series are authorized to receive a Pfizer-BioNTech COVID-19 Vaccine booster dose. A booster dose is currently not authorized for children ages 6 months–17 years who receive a Moderna primary series nor for children ages 6 months–4 years that receive Pfizer primary series. Data are not currently available on the safety and efficacy of a booster dose after Moderna COVID-19 Vaccine in children and adolescents nor after Pfizer COVID-19 Vaccine for those ages 6 months–4 years. As more data are collected, clinical guidance for booster doses will be updated.

Can a child who completes a Pfizer primary series at ages 6 months–4 years get a booster dose when they turn age 5?

Yes, a Pfizer-BioNTech COVID-19 Vaccine booster dose is recommended for everyone ages 5-17 years and older who received a Pfizer-BioNTech COVID-19 Vaccine primary series.

Which product should my patient receive for their booster dose(s)?

Which product should my patient receive for their booster dose(s)?

For the first booster dose:

- People ages 5-17 years who received a Pfizer-BioNTech COVID-19 Vaccine primary series can only receive Pfizer-BioNTech COVID-19 Vaccine as a booster dose at this time.
- People ages 18 years and older have the option to receive any age-appropriate FDA-approved or FDA-authorized COVID-19 vaccine for a booster dose (even if they were ages 18 years or younger at the time of the primary series). An mRNA COVID-19 vaccine is preferred over the Janssen COVID-19 Vaccine. Currently, a booster dose using any COVID-19 vaccine is not authorized for adults who receive a Novavax primary series.

For the second booster dose:

- People ages 5-11 are not eligible for a second booster dose.
- Eligible people ages 12-17 years can only receive Pfizer-BioNTech COVID-19 Vaccine as a booster dose at this time.
- Eligible people ages 18 years and older can receive Pfizer-BioNTech COVID-19 Vaccine or Moderna COVID-19 Vaccine. Janssen COVID-19 Vaccine is not authorized as a second booster dose.

People who are Moderately or Severely Immunosuppressed

Are there special considerations for vaccinating people who are moderately or severely immunocompromised?

Yes. For COVID-19 vaccination guidance for people who are moderately or severely immunocompromised people, please refer to:

- Guidance for COVID-19 vaccination for people who are moderately or severely immunocompromised
- COVID-19 Vaccines for Moderately or Severely Immunocompromised People

How do I verify if a person is moderately or severely immunocompromised?

People can self-attest to their moderately to severely immunocompromised status and should be vaccinated according to the schedule for people who are moderately or severely immunocompromised. **Vaccinators and clinic administrators should not deny COVID-19 vaccination to a person because of a lack of documentation.**

Why is the number of doses for children ages 6 months–4 years receiving Pfizer-BioNTech COVID-19 Vaccine the same for both people who are immunocompromised and people who are not immunocompromised?

Data are not currently available on the safety and efficacy of a fourth dose of Pfizer-BioNTech COVID-19 Vaccine for children in this age group that are immunocompromised. At this time, 3 doses are recommended for everyone ages 6 months–4 years who receives Pfizer-BioNTech COVID-19 Vaccine regardless of immune status. As we learn more, additional doses may be authorized in the future.

Why is the number of doses for adults receiving Novavax COVID-19 Vaccine the same for both people who are immunocompromised and people who are not immunocompromised?

Data are not currently available on the safety and efficacy of a third dose of Novavax COVID-19 Vaccine for immunocompromised persons. At this time, 2 doses of Novavax are recommended for adults who receive Novavax regardless of immune status. As we learn more, additional doses may be authorized in the future.

Do I need to wait to administer tixagevimab/cilgavimab (EVUSHELD™) for pre-exposure prophylaxis against COVID-19 after my patient received a dose of COVID-19 vaccine?

Yes. Administration of EVUSHELD should be deferred for at least two weeks after COVID-19 vaccination per the EVUSHELD EUA. You can administer COVID-19 vaccine any time after receipt of EVUSHELD.

For all other passive antibody products for COVID-19, there is no deferral period between receipt of the product and COVID-19 vaccine administration.

Laboratory Testing

My patient is asking for an antibody test to decide whether to get vaccinated (or revaccinated). What do antibody tests tell us about immunity, and should these tests influence the decision to vaccinate or revaccinate?

Antibody testing is **not** currently recommended to assess the need for vaccination in an unvaccinated person or to assess immunity to SARS-CoV-2 following COVID-19 vaccination or after SARS-CoV-2 infection. Antibody tests for SARS-CoV-2 look for the presence of antibodies made in response to a previous infection or vaccination. They are an indicator of the body's efforts to fight off the SARS-CoV-2 virus. None of the currently authorized SARS-CoV-2 antibody tests have been validated to evaluate specific immunity or protection from SARS-CoV-2 infection.

For assistance with patient counseling and education related to COVID-19 testing and vaccination, please see:

- Test for Past Infection [CDC]
- Using Antibody Tests for COVID-19: *Information for Patients and Consumers* [CDC]
- Antibody (Serology) Testing for COVID-19: *Information for Patients and Consumers* [FDA]

For more detailed information, please see: Interim Guidelines for COVID-19 Antibody Testing [CDC].

Vaccination and SARS-CoV-2 Infection

Can people with prior or current SARS-CoV-2 infection receive a COVID-19 vaccine?

CDC recommends COVID-19 vaccination for all people ages 6 months and older, including people with a history of SARS-CoV-2 infection.

Prior infection: Offer vaccination regardless of history of prior symptomatic or asymptomatic SARS-CoV-2 infection, including to people with prolonged post-COVID-19 symptoms and people who experienced SARS-CoV-2 infection (symptomatic or asymptomatic) after vaccination. People who recently had SARS-CoV-2 infection may consider delaying their primary or booster COVID-19 vaccine dose by 3 months from symptom onset or positive test (if infection was asymptomatic).

Current infection: Defer vaccination of people with known current SARS-CoV-2 infection until the person has recovered from acute illness (if the person has symptoms) and until criteria have been met for them to discontinue isolation.

Laboratory testing is not recommended for the purpose of vaccine decision-making.

Learn more about COVID-19 vaccination and SARS-CoV-2 infection.

I have a patient presenting for a COVID-19 test post-exposure and I do not think they will return for vaccination. Are there situations when patients can be vaccinated during their quarantine period?

Yes. Most of the time, unvaccinated people who have been in close contact with someone who had COVID-19 should **not** seek vaccination until quarantine has ended.

However, vaccination **can** be considered in some instances to avoid missed opportunities. Examples include when people:

- Are likely to have repeated exposures (e.g., residing in a congregate or crowded setting or during community outbreaks)
- Will have limited access to vaccination after their quarantine period has ended
- Are unlikely to otherwise seek vaccination after their quarantine period has ended

In such situations, people can receive vaccination during quarantine as long as:

- They do not have symptoms consistent with COVID-19 or current SARS-CoV-2 infection, and
- Appropriate infection prevention and control procedures are employed

COVID-19 vaccines are **not** recommended for post-exposure prophylaxis to prevent SARS-CoV-2 infection. These people should be counseled that, although COVID-19 vaccines are effective and will help protect them from future infection, the vaccine will not prevent them from getting COVID-19 from the current exposure.

Learn more about vaccinating people with a known COVID-19 exposure or during COVID-19 outbreaks.

COVID-19 Vaccine Safety

What are the contraindications and precautions of COVID-19 vaccines?

For information on contraindications and precautions to COVID-19 vaccination, see Contraindications and precautions.

Do I need to observe patients after vaccination?

Yes. CDC recommends the following observation periods after COVID-19 vaccination:

- 30 minutes for people with:
  - People with a contraindication to one type of COVID-19 vaccine who are receiving another type that has been deemed a precaution (for example, people with a contraindication to mRNA COVID-19 vaccines who receive Novavax or Janssen vaccine).
  - History of non-severe, immediate (onset less than 4 hours) allergic reaction after a previous dose of COVID-19 vaccine
  - History of an immediate allergic reaction of any severity to non-COVID-19 vaccines or injectable therapies
  - History of anaphylaxis due to any cause
- 15 minutes for all other people

Learn more about contraindications and precautions.

My patient experienced fever and injection-site swelling after a dose of COVID-19 vaccine. Should they get another dose?

Yes, the patient should get another dose if they are not yet up to date with their COVID-19 vaccination.

Most side effects are not contraindications to another dose of a COVID-19 vaccine. Common side effects after vaccination may include:

- Injection site pain, redness, or swelling
- Axillary or inguinal lymphadenopathy
- Tiredness
- Headache
- Muscle pain
- Chills
- Fever
- Nausea

Common side effects in infants and young children may also include: Irritability, crying, sleepiness, and loss of appetite in infants and younger children.

For most people, side effects last no longer than 1–2 days. Encourage patients to enroll in v-safe to tell CDC about any side effects after getting a COVID-19 vaccine and to receive reminders if they need another dose.

See contraindications and precautions for more information on contraindications and precautions to COVID-19 vaccine.

Considerations Involving Pregnancy, Lactation, and Fertility

Can pregnant or breastfeeding people be vaccinated?

Yes. CDC recommends COVID-19 vaccination for all people who are pregnant, breastfeeding, recently pregnant, trying to get pregnant now, or who might become pregnant in the future. mRNA and Novavax vaccines are recommended for all vaccine-eligible populations, including for people who are pregnant or lactating. Those who are considering receipt of the Janssen COVID-19 Vaccine should see Safety considerations for Janssen COVID-19.

Learn more about vaccination of pregnant or breastfeeding people.

Page last reviewed: July 20, 2022