### COVID-19 vaccine products currently approved or authorized in the United States

#### Pfizer-BioNTech

<table>
<thead>
<tr>
<th>Age indication</th>
<th>Vaccine composition</th>
<th>Vaccine vial cap color</th>
<th>Label border color</th>
<th>Dilution required</th>
<th>Primary series Dose</th>
<th>Injection volume</th>
<th>Booster doses Dose</th>
<th>Injection volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months–4 years</td>
<td>Monovalent</td>
<td>Maroon</td>
<td>Maroon</td>
<td>Yes</td>
<td>3 µg</td>
<td>0.2 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>5–11 years</td>
<td>Monovalent</td>
<td>Orange</td>
<td>Orange</td>
<td>Yes</td>
<td>10 µg</td>
<td>0.2 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>5–11 years</td>
<td>Bivalent</td>
<td>Orange</td>
<td>Orange</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>10 µg</td>
<td>0.2 mL</td>
</tr>
<tr>
<td>12 years and older</td>
<td>Monovalent</td>
<td>Gray</td>
<td>Gray</td>
<td>No</td>
<td>30 µg</td>
<td>0.3 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>12 years and older</td>
<td>Bivalent</td>
<td>Gray</td>
<td>Gray</td>
<td>No</td>
<td>NA</td>
<td>NA</td>
<td>30 µg</td>
<td>0.3 mL</td>
</tr>
</tbody>
</table>

#### Moderna

<table>
<thead>
<tr>
<th>Age indication</th>
<th>Vaccine composition</th>
<th>Vaccine vial cap color</th>
<th>Label border color</th>
<th>Dilution required</th>
<th>Primary series Dose</th>
<th>Injection volume</th>
<th>Booster doses Dose</th>
<th>Injection volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months–5 years</td>
<td>Monovalent</td>
<td>Dark blue</td>
<td>Magenta</td>
<td>No</td>
<td>25 µg</td>
<td>0.25 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>6-11 years</td>
<td>Monovalent</td>
<td>Dark blue</td>
<td>Purple</td>
<td>No</td>
<td>50 µg</td>
<td>0.5 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>6-11 years</td>
<td>Bivalent</td>
<td>Dark blue</td>
<td>Gray</td>
<td>No</td>
<td>NA</td>
<td>NA</td>
<td>25 µg</td>
<td>0.25 mL</td>
</tr>
<tr>
<td>12 years and older</td>
<td>Monovalent</td>
<td>Red</td>
<td>Light blue</td>
<td>No</td>
<td>100 µg</td>
<td>0.5 mL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>12 years and older</td>
<td>Bivalent</td>
<td>Dark blue</td>
<td>Gray</td>
<td>No</td>
<td>NA</td>
<td>NA</td>
<td>50 µg</td>
<td>0.5 mL</td>
</tr>
</tbody>
</table>

#### Janssen

Janssen COVID-19 Vaccine is authorized for adults ages 18 years and older in certain limited situations due to safety considerations. For guidance on respective record review, scheduling and administration of Janssen vaccine see [Interim Clinical Considerations for Use of COVID-19 Vaccines: Appendix A](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html).

<table>
<thead>
<tr>
<th>Age indication</th>
<th>Vaccine composition</th>
<th>Vaccine vial cap color</th>
<th>Label border color</th>
<th>Dilution required</th>
<th>Primary series Dose</th>
<th>Injection volume</th>
<th>Booster doses Dose</th>
<th>Injection volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 years and older</td>
<td>Monovalent</td>
<td>Blue</td>
<td>No Color</td>
<td>No</td>
<td>5×10¹⁰ viral particles</td>
<td>0.5 mL</td>
<td>5×10¹⁰ viral particles</td>
<td>0.5 mL</td>
</tr>
</tbody>
</table>

#### Novavax

<table>
<thead>
<tr>
<th>Age indication</th>
<th>Vaccine composition</th>
<th>Vaccine vial cap color</th>
<th>Label border color</th>
<th>Dilution required</th>
<th>Primary series Dose</th>
<th>Injection volume</th>
<th>Booster doses Dose</th>
<th>Injection volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 years and older</td>
<td>Monovalent</td>
<td>Royal blue</td>
<td>No Color</td>
<td>No</td>
<td>5 µg rS and 50 µg of Matrix-M™ adjuvant</td>
<td>0.5 mL</td>
<td>5 µg rS and 50 µg of Matrix-M™ adjuvant</td>
<td>0.5 mL</td>
</tr>
</tbody>
</table>

* Booster doses are only indicated for recipients 18 years and age and older in limited situations, see: [https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html)
### All currently authorized or approved COVID-19 vaccines

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to vaccination:</td>
<td></td>
</tr>
<tr>
<td>- Provide the vaccine-specific Fact Sheet for Recipients and Caregivers Pfizer-BioNTech (<a href="https://www.fda.gov/media/144413/download">https://www.fda.gov/media/144413/download</a>), Moderna (<a href="https://www.fda.gov/media/144637/download">https://www.fda.gov/media/144637/download</a>), Janssen (<a href="https://www.fda.gov/media/146304/download">https://www.fda.gov/media/146304/download</a>), Novavax (<a href="http://www.novavaxcovidvaccine.com">www.novavaxcovidvaccine.com</a>).</td>
<td></td>
</tr>
<tr>
<td>- Screen for contraindications and precautions. CDC’s Prevaccination Screening Form and Guidance document can be found at <a href="https://www.cdc.gov/vaccines/covid-19/info-by-product/index.html">www.cdc.gov/vaccines/covid-19/info-by-product/index.html</a>.</td>
<td></td>
</tr>
<tr>
<td>- Inform vaccine recipients mRNA or Novavax COVID-19 vaccines are recommended over Janssen COVID-19 Vaccine.</td>
<td></td>
</tr>
<tr>
<td>- Counsel vaccine recipients, parents, or guardians about expected reactions post-vaccination (e.g., pain and swelling at the injection site, fever, fatigue, headaches).</td>
<td></td>
</tr>
<tr>
<td>- Inform mRNA and Novavax vaccine recipients especially males ages 12-39 years, of the rare risk of myocarditis and pericarditis following receipt of these COVID-19 vaccines and the benefit of COVID-19 vaccination in reducing the risk of severe outcomes from COVID-19.¹ Counseling should also include the need to seek care if symptoms of myocarditis or pericarditis occur after vaccination, particularly in the week following vaccination. For more information see: <a href="https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#myocarditis-pericarditis">https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#myocarditis-pericarditis</a>.</td>
<td></td>
</tr>
<tr>
<td>- Inform vaccine recipients interested in or receiving Janssen COVID-19 Vaccine of the risk and symptoms of thrombosis with thrombocytopenia syndrome (TTS), as well as the need to seek immediate medical care should symptoms develop after receiving Janssen vaccine. For more information see: <a href="https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a">https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Interchangeability of vaccines</strong></td>
<td>In general, the same COVID-19 monovalent vaccine product (Pfizer-BioNTech, Moderna, Novavax) should be used for all doses in the primary series. In exceptional situations when the previous product cannot be determined/not available or if a person is unable to complete a series with the same COVID-19 vaccine due to a contraindication any age-appropriate mRNA COVID-19 vaccine may be used (administer at a minimum interval of 28 days).</td>
</tr>
<tr>
<td>- For booster vaccination, any homologous or heterologous age-appropriate mRNA vaccine can be used. Recommendations vary based on age and primary series product. (<a href="https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#timing-spacing-interchangeability">https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#timing-spacing-interchangeability</a>).²</td>
<td></td>
</tr>
<tr>
<td><strong>Coadministration with other vaccines</strong></td>
<td>COVID-19 vaccines may be administered on the same day as other vaccines.</td>
</tr>
<tr>
<td>- Persons, particularly adolescent or young adult males, might consider waiting 4 weeks after orthopoxvirus (monkeypox) vaccination (either JYNNEOS or ACAM2000) before receiving a Moderna, Novavax, or Pfizer-BioNTech COVID-19 vaccine because of the observed risk for myocarditis and/or pericarditis after JYNNEOS.</td>
<td></td>
</tr>
<tr>
<td>- Administer each injection in a different injection site.</td>
<td></td>
</tr>
</tbody>
</table>

¹ See Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States at: [www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#recommendations](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#recommendations) for detailed guidance.

² For booster vaccination, homologous or heterologous mRNA booster is recommended.
All currently authorized or approved COVID-19 vaccines

**Contraindications**

- History of:
  - Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of the COVID-19 vaccine
  - A known diagnosed allergy to a component of the COVID-19 vaccine
  - For the Janssen COVID-19 Vaccine, TTS following receipt of a previous Janssen COVID-19 Vaccine (or other COVID-19 vaccines not currently authorized or approved in the United States that are based on adenovirus vectors, e.g., AstraZeneca)\(^5\)

**Precautions**

- History of anaphylaxis after any other vaccine or injectable therapy (i.e., intramuscular, intravenous, or subcutaneous vaccines or therapies [excluding subcutaneous immunotherapy for allergies, i.e., “allergy shots”])
- History of multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A)
- History of an immediate (within 4 hours of exposure) non-severe allergic reaction after a dose of one type of COVID-19 vaccine have a precaution to the same type of COVID-19 vaccine
- Allergy-related contraindication to one type of COVID-19 vaccine have a precaution to the other types of COVID-19 vaccines.\(^6\)
- Moderate or severe acute illness, with or without fever
- History of myocarditis or pericarditis after a dose of an mRNA or Novavax COVID-19 vaccine
- For Janssen COVID-19 Vaccine, a history of Guillain-Barré syndrome\(^7\)

Considerations for all FDA-authorized or -approved COVID-19 vaccines

**Persons receiving HCT and CAR-T-cell therapy**

- If received doses of COVID-19 vaccine prior to or during HCT or CAR-T cell therapy, should be revaccinated for any monovalent primary series and bivalent booster doses received before or during treatment at least 3 months (12 weeks) after transplant or CAR-T-cell therapy. There is no revaccination for monovalent booster doses.

**Persons who are moderately or severely immunocompromised**

- See the Interim COVID-19 Immunization Schedule for Ages 6 Months or Older at https://www.cdc.gov/vaccines/covid-19/downloads/COVID-19-immunization-schedule-ages-6months-older.pdf

**Persons receiving immunosuppressive therapies**

- Whenever possible, COVID-19 vaccines should be administered at least 2 weeks before initiation or resumption of immunosuppressive therapies

**SARS-CoV-2 infection**

- Current infection
- History of previous infection
- Exposed to an infected person

COVID-19 vaccination is recommended for everyone ages 6 months and older, regardless of a history of symptomatic or asymptomatic SARS-CoV-2 infection.

- Defer vaccination until person has recovered from acute illness and criteria have been met for them to discontinue isolation.
- People who recently had SARS-CoV-2 infection may consider delaying their next COVID-19 dose by 3 months from symptom onset or positive test (if infection was asymptomatic).
- Viral testing to assess for acute SARS-CoV-2 infection or serologic testing to assess for prior infection is not recommended for the purpose of vaccine decision-making.
- Additional information at: https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html
- COVID-19 vaccination is not recommended for post-exposure prophylaxis.

\(^5\) Additionally, people with a history of an episode of immune-mediated syndrome characterized by thrombosis and thrombocytopenia, such as spontaneous or classic HIT, should not receive Janssen COVID-19 Vaccine. These people should receive an mRNA or Novavax COVID-19 vaccine booster dose.

\(^6\) People with a known allergy to polysorbate have a contraindication to both Novavax ad Janssen COVID-19 vaccines.

\(^7\) People who develop GBS within 6 weeks after receipt of Janssen COVID-19 Vaccine should not receive another dose of Janssen COVID-19 Vaccine. These people should receive a booster dose of an mRNA COVID-19 vaccine for subsequent doses.
### Considerations for all FDA-authorized or -approved COVID-19 vaccines

**Persons with history of multisystem inflammatory syndrome (MIS-C and MIS-A) from SARS-CoV-2 infection**
- COVID-19 vaccines can be given; wait until clinical recovery and at least 90 days after an MIS-C or MIS-A diagnosis.
- For persons who have had MIS-C or MIS-A from SARS-CoV-2 infection who have not yet received COVID-19 vaccine or who developed MIS-C or MIS-A after COVID-19 vaccination, a conversation between the vaccine recipient, guardian, and clinical team or specialist to discuss benefits and risks of receiving a COVID-19 vaccine is encouraged.
- Clinical recovery, including return to normal cardiac function, is an important factor when considering COVID-19 vaccination. Additional information at: [https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#covid19-vaccination-misc-misa](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#covid19-vaccination-misc-misa)

**Persons who received passive antibody therapy (convalescent plasma/monoclonal antibodies)**
- COVID-19 vaccination can be given at any interval following receipt of passive antibody therapy.
- Persons should wait 2 weeks after COVID-19 vaccination before receiving tixagevimab/cilgavimab (EVUSHELD) for pre-exposure prophylaxis.

**Persons who are pregnant, breastfeeding, trying to get pregnant, or might become pregnant in the future**
- Are recommended to be vaccinated according to the recommended schedule.

### Considerations for mRNA vaccines and Novavax

**Persons with a history of myocarditis or pericarditis**
- Development of myocarditis or pericarditis after a dose of an mRNA or Novavax COVID-19 vaccine is a precaution to a subsequent dose of any COVID-19 vaccine.
- If after a risk assessment the decision is made to receive a subsequent COVID-19 vaccine dose, the person should wait until after their episode has resolved.
- For information on potential use of Janssen COVID-19 Vaccine in this situation, see Appendix A at [www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a](http://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a)
- Persons who have a history of myocarditis or pericarditis unrelated to mRNA or Novavax COVID-19 vaccination may receive any age-appropriate COVID-19 vaccine after the episode of myocarditis or pericarditis has resolved.
- For more information see: [https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#myocarditis-pericarditis](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#myocarditis-pericarditis)

### Considerations for Janssen COVID-19 Vaccine

Janssen COVID-19 Vaccine is authorized for adults ages 18 years and older in certain limited situations due to safety considerations. For more information, see [https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a)

**Persons with a history of Guillain-Barré syndrome (GBS)**
- A history of GBS is a precaution for receipt of Janssen COVID-19 Vaccine. An mRNA or Novavax vaccine is recommended.
- Persons who develop GBS within 6 weeks of Janssen COVID-19 vaccination should only receive an mRNA COVID-19 vaccine for subsequent doses. These people should receive a booster dose of an mRNA COVID-19 vaccine for subsequent doses.
Summary Document for Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized or Approved in the United States

Considerations for Janssen COVID-19 Vaccine

- **Persons with a history of thrombosis with thrombocytopenia syndrome (TTS)**
  - It is contraindicated to administer Janssen COVID-19 Vaccine to persons with a history of TTS following receipt of the Janssen COVID-19 Vaccine or any other adenovirus vector-based COVID-19 vaccines (e.g., AstraZeneca’s COVID-19 Vaccine).
  - These persons should receive a dose of an mRNA COVID-19 vaccine as a booster dose at least 2 months (8 weeks) following their dose of the Janssen COVID-19 Vaccine and after their clinical condition has stabilized.

- **Persons with a history of heparin-induced thrombocytopenia (HIT)**
  - Persons with a history of an episode of an immune-mediated syndrome characterized by TTS, such as a spontaneous or classic HIT, should not receive Janssen COVID-19 Vaccine.
  - These persons should receive an mRNA or Novavax COVID-19 vaccine.

General COVID-19 Vaccination Information

- **Persons vaccinated outside the United States**
  - The recommendations for people vaccinated outside the United States depend on the number and type of vaccine(s) received for the primary series and booster doses, whether the primary series was completed, and whether a booster dose was received. Current guidance can be found at: [https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-b](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-b)

- **Post-vaccination observation periods**
  - **15 minutes**: Vaccination providers, particularly when vaccinating adolescents, should consider observing vaccine recipients for 15 minutes after vaccination because of the risk of syncope.
  - **30 minutes**: Vaccination providers should consider observing persons with the following medical histories for 30 minutes after vaccination to monitor for allergic reactions:
    - An allergy-related contraindication to a different type of COVID-19 vaccine
    - Non-severe, immediate (onset within 4 hours) allergic reaction after a previous dose of COVID-19 vaccine
    - Anaphylaxis after non-COVID-19 vaccines or injectable therapies

- **SARS-CoV-2 antibody testing**
  - Antibody testing is not recommended for vaccine decision-making or to assess immunity following vaccination.

- **Reporting requirements**
  - Adverse events that occur following COVID-19 vaccination should be reported to VAERS ([https://vaers.hhs.gov/](https://vaers.hhs.gov/)). COVID-19 providers are required to report:
    - Vaccine administration errors
    - Serious adverse events
    - Cases of Multisystem Inflammatory Syndrome
    - Cases of COVID-19 that result in hospitalization or death