Guidance below summarizes basic storage, preparation, scheduling, administration, and dosage for ALL Pfizer-BioNTech COVID-19 Vaccine products.

### Storage and Handling Basics

Find additional guidance on storing the vaccine properly at:
- Storage and Handling of Pfizer-BioNTech COVID-19 Vaccines | CDC
- Pfizer-BioNTech COVID-19 Vaccines | FDA
- Vaccine Storage and Handling Toolkit-Updated with COVID-19 Vaccine Storage and Handling Information

<table>
<thead>
<tr>
<th>Vial cap color</th>
<th>Monovalent</th>
<th>Bivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages</td>
<td>6 months</td>
<td>5 through</td>
</tr>
<tr>
<td>through 4 years</td>
<td>through 11 years</td>
<td>and older</td>
</tr>
<tr>
<td>MONOVALENT</td>
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<td>MONOVALENT</td>
</tr>
<tr>
<td>(Maroon capped vial and bordered label)</td>
<td>(Orange capped vial and bordered label)</td>
<td>(Gray capped vial and bordered label)</td>
</tr>
<tr>
<td>MONOVALENT</td>
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<td>BIVALENT</td>
</tr>
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<td>(Gray capped vial and bordered label)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(Gray capped vial and bordered label)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Storage Temperature: Before Puncture

- **Do NOT store vaccine in a standard freezer**

  - **Monovalent**
    - 6 months through 4 years: 10 doses per vial
      - Requires diluent
    - 5 through 11 years: 10 doses per vial
      - Requires diluent
    - 12 years and older: 6 doses per vial
      - **No diluent**

  - **Bivalent**
    - 12 years and older: 6 doses per vial
      - **No diluent**

- **Between**: 
  - -90°C and -60°C (-130°F and -76°F) until the expiration date*
  - 2°C and 8°C (36°F and 46°F) for up to 10 weeks

- **NOTE**: The beyond-use date (10 weeks) replaces the manufacturer’s expiration date but NEVER extends it. Always use the earliest date. Do NOT use vaccine if the expiration date or beyond-use date has passed.

### Thawing Frozen Vaccine

- **Do NOT refreeze thawed vaccine**

  - **Monovalent**
    - 2°C and 8°C (36°F and 46°F)
    - OR
    - Up to 25°C (77°F)
    - Amount of time needed to thaw vaccine varies based on temperature and number of vials.

### Storage Temperature: After 1st Puncture

- **Do NOT use after 12 hours**

  - 2°C and 25°C (36°F and 77°F) for up to 12 hours.
    - Discard vial and any unused vaccine after 12 hours.

*Vaccine expires 12 months after the manufacture date on the vial. Use Pfizer-BioNTech expiration date tool at [lotexpiry.cvdvaccine.com](http://lotexpiry.cvdvaccine.com)
### Preparation and Administration Basics

Find additional guidance on preparing and administering vaccine properly at:
- [Pfizer-BioNTech COVID-19 Vaccines](https://www.fda.gov/vaccines-blood-biologics/pfizer-biontech-covid-19-vaccines) | FDA
- [Pfizer-BioNTech COVID-19 Vaccine](https://cvdvaccine.com) | cvdvaccine.com

### Preparation

<table>
<thead>
<tr>
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<th>Monovalent</th>
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<th>Monovalent</th>
<th>Bivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap color</td>
<td>Maroon Cap</td>
<td>Orange Cap</td>
<td>Gray Cap</td>
<td>Gray Cap</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ages</th>
<th>6 months through 4 years</th>
<th>5 through 11 years</th>
<th>12 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diluent*</td>
<td>2.2 mL per vial</td>
<td>1.3 mL per vial</td>
<td>No diluent</td>
</tr>
<tr>
<td>Beyond-use date/time</td>
<td>After mixing with diluent, use within 12 hours.</td>
<td>After 1st puncture, use within 12 hours.</td>
<td></td>
</tr>
<tr>
<td>Do NOT use a punctured vial after 12 hours</td>
<td>If using a vial for the 1st time, record the date and time the vial was punctured. NOTE: The beyond-use time (12 hours) replaces the manufacturer’s expiration date but NEVER extends it. Always use the earliest date. Do NOT use vaccine if the expiration date or beyond-use time has passed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Diluent: Use sterile 0.9% sodium chloride (normal saline, preservative-free) included in the ancillary supply kit. Do not use bacteriostatic 0.9% sodium chloride or any other diluent.

### Administration

- COVID-19 vaccine may be administered at the clinical visit as other vaccines.
- **Do NOT** "pool vaccine" from more than 1 vial to obtain a dose. If a full dose cannot be withdrawn, discard the vial and any remaining vaccine.

<table>
<thead>
<tr>
<th>Recipient’s Age</th>
<th>Use</th>
<th>Administer</th>
<th>Route</th>
<th>Needle gauge and length</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months through 4 years</td>
<td><a href="#">Monovalent Maroon cap and maroon bordered label</a></td>
<td>Primary dose</td>
<td>IM injection</td>
<td>22–25 gauge, 1”</td>
<td>6 months – 2 years of age: Vastus lateralis muscle in the anterolateral thigh†</td>
</tr>
<tr>
<td>5 – 11 years</td>
<td><a href="#">Monovalent Orange cap and orange bordered label</a></td>
<td>Primary dose</td>
<td>IM injection</td>
<td>22–25 gauge, 1”</td>
<td>3 years and older: Deltoid muscle in the upper arm‡</td>
</tr>
<tr>
<td>12 years of age and older</td>
<td><a href="#">Monovalent Gray cap and gray bordered label</a></td>
<td>Primary dose</td>
<td>IM injection</td>
<td>22–25 gauge, 1 – 1½”</td>
<td>Deltoid muscle in the upper arm‡</td>
</tr>
<tr>
<td></td>
<td><a href="#">Bivalent Gray cap and gray bordered label</a></td>
<td>Booster dose</td>
<td>IM injection</td>
<td>22–25 gauge, 1 – 1½”</td>
<td>Deltoid muscle in the upper arm‡</td>
</tr>
</tbody>
</table>

† The deltoid muscle in the upper arm may be used if the muscle mass is adequate.
‡ Vastus lateralis muscle in the anterolateral thigh may be used.
Scheduling Doses
Graphics below provide an overview for the number of doses of vaccine based on the type of dose (primary versus booster), recipient’s age and health status. Review [CDC's Interim COVID-19 Immunization Schedule](https://www.cdc.gov/vaccines/covid-19/interim-guidance/index.html) for detailed clinical guidance when scheduling doses.

For Most Persons

**Pfizer-BioNTech (ages 6 months–4 years)**
- PRIMARY → PRIMARY → PRIMARY
  - PRIMARY: In 3-8 weeks
  - PRIMARY: In at least 8 weeks

**Pfizer-BioNTech (Ages 5 through 11 years)**
- PRIMARY → PRIMARY → MONOVALENT BOOSTER
  - PRIMARY: In 3-8 weeks
  - PRIMARY: In at least 5 months
  - MONOVALENT BOOSTER

**Pfizer-BioNTech (Ages 12 years and older)**
- PRIMARY → PRIMARY → BIVALENT BOOSTER
  - PRIMARY: In 3-8 weeks
  - PRIMARY: In at least 2 months
  - BIVALENT BOOSTER

For Moderately or Severely Immunocompromised Persons

**Pfizer-BioNTech (ages 6 months–4 years)**
- PRIMARY → PRIMARY → PRIMARY
  - PRIMARY: In 3 weeks
  - PRIMARY: In at least 8 weeks

**Pfizer-BioNTech (ages 5–11 years)**
- PRIMARY → PRIMARY → PRIMARY → MONOVALENT BOOSTER
  - PRIMARY: In 3 weeks
  - PRIMARY: In at least 4 weeks
  - PRIMARY: In at least 3 months
  - MONOVALENT BOOSTER

**Pfizer-BioNTech (ages 12 years and older)**
- PRIMARY → PRIMARY → PRIMARY → BIVALENT BOOSTER
  - PRIMARY: In 3 weeks
  - PRIMARY: In at least 4 weeks
  - PRIMARY: In at least 2 months
  - BIVALENT BOOSTER

*The bivalent booster dose is administered at least 2 months after completion of the primary series. For people who previously received a monovalent booster dose(s), the bivalent booster dose is administered at least 2 months after the last monovalent booster dose.*