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](https://www.cdc.gov/vaccines/)
- [Vaccine Storage and Handling Toolkit-Updated with COVID-19 Vaccine Storage and Handling Information](https://www.cdc.gov/vaccines/)
- [Pfizer-BioNTech COVID-19 Vaccines | FDA](https://www.fda.gov/vaccines)
- [Pfizer-BioNTech COVID-19 Vaccine | cvdvaccine.com](https://www.cvdvaccine.com)

<table>
<thead>
<tr>
<th>Vial cap color</th>
<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>Monovalent</td>
<td>6 months through 4 years</td>
<td>MDV*: 10 doses per vial Requires diluent</td>
<td>MDV*: 10 doses per vial Requires diluent</td>
<td>MDV*: 6 doses per vial No diluent</td>
</tr>
<tr>
<td>Orange Cap</td>
<td>5 through 11 years</td>
<td>MDV*: 10 doses per vial Requires diluent</td>
<td>MDV*: 10 doses per vial Requires diluent</td>
<td></td>
</tr>
<tr>
<td>Gray Cap</td>
<td>12 years and older</td>
<td>No diluent</td>
<td>No diluent</td>
<td></td>
</tr>
</tbody>
</table>

**Storage Temperature: Before Puncture**

- **Do NOT store vaccine in a standard freezer**
- 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**
- Between: 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**
- Between: 2°C and 25°C (36°F and 77°F) for up to 12 hours.
- Discard vial and any unused vaccine after 12 hours.

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* MDV*: multidose vial; SDV*: single-dose vial
† Vaccine expires 12 months after the manufacture date on the vial. Use Pfizer-BioNTech expiration date tool at [lotexpiry.cvdvaccine.com](https://lotexpiry.cvdvaccine.com)
## Preparation and Administration Basics

Find additional guidance on preparing and administering vaccine properly at:  
- [Vaccine Administration Resource Library | CDC](https://www.cdc.gov/vaccines/)  
- [Pfizer-BioNTech COVID-19 Vaccine | cvdvaccine.com](https://www.cvdvaccine.com/)

### Preparation Monovalent Vaccine

<table>
<thead>
<tr>
<th>Vial cap color</th>
<th>MonovalentMaroon Cap</th>
<th>Monovalent Orange Cap</th>
<th>Monovalent Gray Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages</td>
<td>6 months through 4 years</td>
<td>5 through 11 years</td>
<td>12 years and older</td>
</tr>
<tr>
<td>Vial type</td>
<td>Multidose vial (MDV)</td>
<td>Multidose vial (MDV)</td>
<td>Multidose vial (MDV)</td>
</tr>
<tr>
<td>Diluent*</td>
<td>2.2 mL per vial</td>
<td>1.3 mL per vial</td>
<td><strong>No diluent</strong></td>
</tr>
<tr>
<td><strong>Beyond-use date/time</strong></td>
<td>After mixing with diluent, use within 12 hours.</td>
<td>After 1st puncture, use within 12 hours.</td>
<td><strong>Do NOT use a punctured multidose vial after 12 hours</strong></td>
</tr>
</tbody>
</table>

**NOTE:** If using a multidose vial for the 1st time, record the date and time the vial was punctured.

**WARNING:** 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.

### Preparation Bivalent Vaccine

<table>
<thead>
<tr>
<th>Vial cap color</th>
<th>Bivalent Orange Cap</th>
<th>Bivalent Gray Cap</th>
<th>Bivalent Gray Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages</td>
<td>5 through 11 years</td>
<td>12 years and older</td>
<td></td>
</tr>
<tr>
<td>Vial type</td>
<td>Multidose vial (MDV)</td>
<td>Multidose vial (MDV)</td>
<td>Single-dose vial (SDV)</td>
</tr>
<tr>
<td>Diluent*</td>
<td>1.3 mL per vial</td>
<td><strong>No diluent</strong></td>
<td><strong>No diluent</strong></td>
</tr>
<tr>
<td><strong>Beyond-use date/time</strong></td>
<td>After mixing with diluent, use within 12 hours.</td>
<td>After 1st puncture, use within 12 hours.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**WARNING:** If using a multidose 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.

**WARNING:** Vial contains 1 dose

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* 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 multidose vial and any remaining vaccine.
- Withdraw 1 dose from a single-dose vial. After withdrawing the dose, discard the vial and any residual vaccine. Do **NOT** save used single-dose vials.

<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><strong>Monovalent</strong> Maroon cap and maroon bordered label</td>
<td>Primary dose 3 µg/0.2 mL</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></td>
<td><strong>Monovalent</strong> Orange cap and orange bordered label</td>
<td>Primary dose 10 µg/0.2 mL</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>5 – 11 years</td>
<td><strong>Bivalent</strong> Orange cap and orange bordered label</td>
<td>Booster dose 10 µg/0.2 mL</td>
<td>IM injection</td>
<td>22–25 gauge, 1”</td>
<td>Deltoid muscle in the upper arm†</td>
</tr>
<tr>
<td>12 years of age and older</td>
<td><strong>Monovalent</strong> Gray cap and gray bordered label</td>
<td>Primary dose 30 µg/0.3 mL</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><strong>Bivalent</strong> Gray cap and gray bordered label</td>
<td>Booster dose 30 µg/0.3 mL</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/schedules/hcp/interim-covid-19-schedule.html) for detailed clinical guidance when scheduling doses.

### For Most Persons

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

**Pfizer-BioNTech**
- **(Ages 5 years and older)**
  - Primary dose: In 3-8 weeks
  - Primary dose: In at least 2 months
  - Bivalent mRNA Booster

### For Moderately or Severely Immunocompromised Persons

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

**Pfizer-BioNTech**
- **(ages 5 years and older)**
  - Primary dose: In 3 weeks
  - Primary dose: In at least 4 weeks
  - Primary dose: In at least 2 months
  - Bivalent mRNA Booster

* Administer an age-appropriate mRNA bivalent booster (i.e., Pfizer-BioNTech for people age 5 years and either Pfizer-BioNTech or Moderna for people ages 6 years and older). 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.