Transporting Vaccine

When packing and transporting vaccine, follow storage and handling best practices in CDC’s Vaccine Storage and Handling Toolkit.

All Pfizer-BioNTech COVID-19 Vaccine products, including bivalent vaccine products can be transported at ultracold or refrigerated temperatures.

Transport vaccine using a portal freezer, refrigerator or a container qualified to maintain appropriate temperatures.

Each container should have a temperature monitoring device. Use a digital data logger that displays minimum and maximum (min/max) temperatures.

Use a Transport Temperature Log to record min/max temperature:
- At the start of transport
- Whenever the storage container is opened
- At the end of transport

Time used for transport and at the clinic site counts as part of any beyond-use timeframes (see table).

Place transport container with vaccine in the passenger compartment of the vehicle only (never in the trunk).

At the Clinic Site

Place vaccine in an on-site storage unit that maintains appropriate temperatures, if available.

If no storage unit is available, keep the vaccine in the transport container to maintain the appropriate temperatures.

Ensure there is an adequate number of:
- Storage containers to maintain proper storage temperature for vaccine in the preparation area and vaccine administration stations.
- Administration supplies – diluent (if needed), needles, syringes, etc. for the number of expected recipients.

Only transport/prepare the amount of vaccine needed. Ensure vaccine that is prepared first is administered first.

Best practices for transporting mRNA vaccines

- Transport vials in the tray/carton whenever possible.
- Protect vials as much as possible from drops, shocks, and vibration.
  - Secure storage containers during transport.
- Protect from light. Avoid exposure to direct sunlight and ultraviolet light.
- If individual vials must be transported:
  - Place vials with padding materials like bubble wrap or similar materials to prevent breaking.
  - Keep vaccine vials upright whenever possible.
- Label the container, vials and/or predrawn syringes appropriately including beyond-use date/time.
- CDC recommends transporting vaccine in vials.
- If the only option is to transport vaccine in a predrawn syringe, see additional guidance*

* See guidance for labeling predrawn syringes in U.S. Pharmacopeia COVID-19 Vaccine Handling Toolkit (usp.org)

Resources

- CDC’s Vaccine Storage and Handling Toolkit
- CDC’s Pfizer COVID-19 Vaccine clinical materials
- Pfizer-BioNTech Manufacturer Information
- USP COVID-19 Vaccine Toolkit: Operational Considerations for Healthcare Practitioners
## Summary Table

<table>
<thead>
<tr>
<th>Transport Equipment*</th>
<th>Temperature Range</th>
<th>Applicable Beyond-Use Date/Time</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport Equipment</strong></td>
<td></td>
<td><strong>Unpunctured vials</strong></td>
<td><strong>Punctured vials</strong></td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td></td>
<td>Up to the expiration date</td>
<td>❗️ <strong>DO NOT</strong> store or transport at these temperatures</td>
</tr>
<tr>
<td>1. Portable ultra-cold freezer or qualified container/packout</td>
<td><strong>Between:</strong> -90°C and -60°C (-130°F and -76°F)†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Digital data logger (DDL) with a probe designed to measure ultracold temperatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transport temperature log</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Portable refrigerator or qualified container/packout</td>
<td><strong>Between:</strong> 2°C and 8°C (36°F and 46°F) for up to 30 days</td>
<td>10 weeks</td>
<td>CDC does not recommend transporting punctured vials or predrawn syringes‡</td>
</tr>
<tr>
<td>2. Digital data logger (DDL) with a probe designed to measure ultracold temperatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transport temperature log</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Qualified container/packout</td>
<td><strong>Between:</strong> 8°C and 25°C (46°F and 77°F)</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>2. Digital data logger (DDL) with a probe capable of measuring frozen temperatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transport temperature log</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Vaccine may NOT be redistributed/transported in the shipping container. Exception: Thermal shipping containers delivered to Alaska, Hawaii, and the US-affiliated Pacific Islands may be used. Refer to the manufacturer for more detailed guidance: [www.cvdvaccine-us.com](http://www.cvdvaccine-us.com)

† CDC recommends transporting vaccine in unpunctured vials. However, there may be instances when the only option is to transport vaccine in a punctured vial or a predrawn syringe. Punctured vials must be used within 12 hours. See guidance for transporting punctured vials or predrawn syringes in U.S. Pharmacopeia COVID-19 Vaccine Handling Guides: Operational Considerations for Healthcare Providers [www.usp.org/covid-19/vaccine-handling-toolkit](http://www.usp.org/covid-19/vaccine-handling-toolkit)

‡ Vaccine expires 12 months after the manufacture date. See Pfizer-BioNTech Storage and Handling Summary for additional information at [www.cdc.gov/vaccines/covid-19/info-by-product/pfizer/index.html](http://www.cdc.gov/vaccines/covid-19/info-by-product/pfizer/index.html)