Follow storage and handling best practices outlined in CDC’s *Vaccine Storage and Handling Toolkit, COVID-19 Vaccine Addendum* to maintain the cold chain when packing and transporting vaccine.

### Basics
- Transport vaccine in a portable refrigerator unit or container qualified to maintain the recommended temperatures.
- Use a digital data logger (DDL) that displays current, minimum, and maximum temperatures to monitor storage temperatures.
- Use a temperature log to record temperatures.
- Ensure sufficient supplies accompany the vaccine such as diluent (maroon and orange capped vials only), needles, syringes, record cards, etc.
- Label the transport container, individual vials or any predrawn syringes appropriately.*
- Ensure there is an adequate number of storage containers to maintain vaccine at proper storage temperature in the preparation and vaccine administration stations.

### 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.*

1. Pack appropriately. If transporting to an off-site clinic, bring only the amount of vaccine needed for the clinic.
2. Place the container in the passenger compartment of the vehicle (never in the trunk). Avoid leaving containers in areas where they are exposed to direct sunlight.
3. Upon arrival at the clinic, place vaccine in an on-site storage unit that maintains recommended temperatures, if available. If there is no storage unit available, keep the vaccine in the transport container.
4. Only prepare the amount of vaccine needed and ensure vaccine that is prepared first is administered first.
5. Ensure vaccine, including individual vials or predrawn syringes, is always stored at the appropriate temperatures and conditions. Using a DDL, record time and minimum/maximum temperatures of the vaccine storage unit/container:
   - At the start of transport
   - Whenever the transport container is opened
   - When transport ends

### Resources
- CDC’s *Vaccine Storage and Handling Toolkit* [www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html](http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html)
The table below summarizes storage guidance and best practices for transporting Pfizer-BioNTech COVID-19 Vaccine products including vaccine vials for persons:

- 6 months through 4 years product (maroon vial cap and maroon-bordered label)
- 5 years through 11 years of age (orange vial cap and orange-bordered label)
- 12 years of age and older (gray vial cap and gray-bordered label)

**NOTE:** This does not apply to purple capped vaccine vials with purple bordered labels.

<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>Unpunctured vials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Portable ultra-cold freezer or qualified container/packout</td>
<td><strong>Between:</strong> -90°C and -0°C (-130°F and -76°F)†</td>
<td>Up to the expiration date</td>
<td>Only full trays of unpunctured vials may be transported at ultra-cold temperatures</td>
</tr>
<tr>
<td>2. Digital data logger (DDL) with a probe designed to measure ultracold temperatures</td>
<td><strong>Between:</strong> 2°C and 8°C (36°F and 46°F) for up to 12 total hours</td>
<td>10 weeks</td>
<td>Transporting punctured vials or predrawn syringes is not recommended</td>
</tr>
<tr>
<td>3. Transport temperature log</td>
<td><strong>Between:</strong> 8°C and 25°C (46°F and 77°F)</td>
<td>12 hours</td>
<td>Anytime used for transport counts against the 12-hour beyond-use time limit. Avoid exposure to direct sunlight or ultraviolet light.</td>
</tr>
<tr>
<td><strong>Punctured vials†</strong></td>
<td></td>
<td><strong>DO NOT</strong> store or transport at these temperatures</td>
<td></td>
</tr>
</tbody>
</table>

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* 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

† 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

‡ 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