Guidance for Receiving and Handling the Moderna COVID-19 mRNA Vaccine

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This guide details all user processes and procedures that must be followed upon receiving the Moderna COVID-19 vaccines.

**Temperature requirements for shipping and storage upon receipt of the vaccine**

To maintain the integrity of the COVID-19 Moderna vaccines, they must be stored frozen between -50°C to -15°C. **Do not store on dry ice or below -50°C.** The vaccines are shipped in a thermal shipping container to keep the vaccine frozen. It's critical that the vaccine is maintained under these temperature conditions during shipment and after it arrives until it is thawed prior to use.

**Cold Chain Maintenance**

It’s important to regularly monitor the temperature of the vaccine at the start and end of each work day. If storing in a freezer, record the temperature using the [freezer temperature form](#). If storing the vaccine in a refrigerator prior to use, use the [refrigerator temperature form](#).

If a cold chain break occurs fill out the [cold chain incident form](#) (available as [PDF](#) and [Excel](#)) and fax it to your [local public health unit](#).

**Equipment**

The following equipment is required for receiving and storing the vaccine:

- Freezer
- Temperature monitoring device

**Shipping containers**

The vaccines are shipped in a thermal shipping container. **Do not discard the original shipping container or any of its components including the box it arrived in as the box will be used to return the shipping container and components to Moderna.**
Unpacking shipping containers

Vaccine delivery to health units

Vaccine shipments require immediate attention.

Frozen storage

- Place vaccine cartons directly into freezer
- The vaccine can be stored frozen (at -50°C to -15°C) until the expiration date
- Do not store vaccines on dry ice or below -50°C
- Store the vaccines in the original carton to protect from light

Thaw each vial before use

The Moderna COVID-19 vaccine vial contains a frozen suspension that does not contain a preservative and must be thawed prior to administration. Remove the required number of vial(s) from storage and thaw each vial before use.

There are 2 presentations of the Moderna vaccine:

- 5 mL vial of 0.2 mg/mL for those 6 years of age and older (Red Vial Cap)
- 2.5 mL vial of 0.1 mg/mL for children 6 months to 5 years of age (Royal Blue Vial Cap)

The vaccines can be thawed in the refrigerator (+2°C to +8°C) or at room temperature (+15°C to +25°C).

<table>
<thead>
<tr>
<th>Thawing Environment</th>
<th>5 mL vial of 0.2 mg/mL for those 6 years of age and older (Red Vial Cap)</th>
<th>2.5 mL vial of 0.1 mg/mL for children 6 months to 5 years of age (Royal Blue Vial Cap)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator (+2°C to +8°C)</td>
<td>2 hours and 30 minutes</td>
<td>2 hours</td>
</tr>
<tr>
<td>Room Temperature (+15°C to +25°C)</td>
<td>1 hour</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>

Vials of thawed vaccine removed from the refrigerator should be placed at room temperature for at least 15 minutes prior to administration. Note that this recommendation is intended for patient comfort only and is not a requirement.

Thawed shelf life

Unpunctured vial – maximum shelf life

- Refrigerator (+2°C to +8°C): 30 days
- Room temperature (+8°C to +25°C): 24 hours

Never refreeze thawed vaccine
Returning shipping containers
After receipt, the shipping container, including the temperature-monitoring device, must be returned to Moderna.

When the shipping container is ready to be returned:

- Remove the returns air waybill
- Ensure the SenseAware temperature device and probe are in the box
- Seal the box with tape
- Affix returns air waybill over existing air waybill on the box
- Return box to delivery agent/courier

Note: If unable to return box and temperature monitoring device immediately, call 1-800-GoFedEx/1-800-463-3339 to schedule a FedEx Express pick up at a later time.

Resources
Cold Chain

- Appendix E – Management of Biologicals for more information on routine practices for the management of biologicals at refrigeration temperatures (+2°C to +8°C)
- Freezer temperature log form
- Refrigerator temperature log form | instructions
- Cold chain incident form PDF | Excel

Moderna Vaccine

- Moderna COVID-19 vaccine website
- Moderna COVID-19 product monograph