

Moderna COVID-19 Vaccine Transporting Checklist

NOTE: Every line should be marked YES. If any of the following are missing or are answered NO – STOP IMMEDIATELY. Contact Bureau of Immunization at 573-751-6124 for further instruction.			
Step	Instructions	Yes	No/ STOP
1	Have an approved portable vaccine freezer, refrigerator, hard-sided or soft-sided cooler	<input type="checkbox"/>	<input type="checkbox"/>
2	Have freezer packs, cooling packs, or conditioned water bottles if using cooler (See attached document regarding conditioned water bottles)	<input type="checkbox"/>	<input type="checkbox"/>
3	Have bubble wrap and corrugated cardboard for insulation and protection (if using freezer packs, cooling packs, or conditioned water bottles)	<input type="checkbox"/>	<input type="checkbox"/>
4	Have Digital Data Logger (DDL) for temperature monitoring (1 per vaccine storage container plus 1 extra for back-up)	<input type="checkbox"/>	<input type="checkbox"/>
5	Have temperature log sheet	<input type="checkbox"/>	<input type="checkbox"/>
6	Notify the Vaccine Coordinator at the pick-up facility location of your ETA	<input type="checkbox"/>	<input type="checkbox"/>
7	Record vaccine temperature (& time) in facility storage device	<input type="checkbox"/>	<input type="checkbox"/>
8	Perform unopened vial count (do not accept open/used vials) & document doses received	<input type="checkbox"/>	<input type="checkbox"/>
9	Transfer vaccine quickly and carefully into transfer freezer or cooler	<input type="checkbox"/>	<input type="checkbox"/>
10	Place DDL temp probe as close to vaccine as possible and the monitor outside container	<input type="checkbox"/>	<input type="checkbox"/>
11	Document number of ancillary kits received (see info sheets for detail list of contents)	<input type="checkbox"/>	<input type="checkbox"/>
12	Place vaccine storage container inside vehicle and out of direct sunlight (do not place in trunk or truck bed)	<input type="checkbox"/>	<input type="checkbox"/>
13	Keep vaccine storage container sealed during transport	<input type="checkbox"/>	<input type="checkbox"/>
14	Document temperature every 30 minutes during transport	<input type="checkbox"/>	<input type="checkbox"/>
15	Notify the Vaccine Coordinator at the receiving facility of your ETA	<input type="checkbox"/>	<input type="checkbox"/>
16	Document temperature and time the vaccines are removed from transport container	<input type="checkbox"/>	<input type="checkbox"/>
17	Ensure copy of vaccine transfer documentation is sent to Bureau of Immunizations	<input type="checkbox"/>	<input type="checkbox"/>

Moderna COVID-19 Vaccine

Storage and Handling Summary



Basics

- Store vaccine in a freezer or refrigerator. See guidance below for each storage unit.
- Each box contains 10 multidose vials. Vaccine is supplied in two presentations:
 - Maximum of 11 doses per vial
 - Maximum of 15 doses per vial
- Each box is approximately 2 inches by 2 inches by 5.4 inches
- Use vaccine vials stored in the refrigerator before removing vials from frozen storage.
- Check and record storage unit temperature each workday. See guidance below for each type of temperature monitoring device. Save storage records for 3 years, unless your jurisdiction requires a longer time period.

Deliveries

Vaccine

1. The vaccine will arrive frozen between -50°C and -15°C (-58°F and 5°F).
2. Examine the shipment for signs of damage.
3. Open the box and remove TagAlert Temperature Monitor from box (placed in the inner box next to vaccine).
4. Check the TagAlert temperature monitoring device by pressing the blue “start and stop” button.
 - Left arrow points to a **green checkmark**: The vaccine is ready to use. Store the vaccine at proper temperatures immediately.
 - Right arrow points to a **red X**: The numbers 1 and/or 2 will appear in the display. Store the vaccine at proper temperatures and label **DO NOT USE!** Call the phone number indicated in the instructions or your jurisdiction's immunization program **IMMEDIATELY!**
5. The expiration date is NOT printed on the vaccine vial or carton. To determine the expiration date:
 - Scan the QR code located on the outer carton, or
 - Go to www.modernatx.com/covid19vaccine-eua/.

Ancillary Supply Kit

An ancillary kit with supplies will be provided for administering the vaccine. It includes enough supplies to administer 100 doses of vaccine (10 doses per vial).

Administration supplies include needles, syringes, sterile alcohol prep pads, vaccination record cards (shot cards), and some PPE.

The kit is delivered separately from the vaccine. Unpack the kit and check for receipt of the correct administration supplies and quantities.



Freezer

Unpunctured vials may be stored in the freezer between -50°C and -15°C (-58°F and 5°F).

- Store in the original carton.
- Protect from light.
- Do not store with dry ice or below -50°C (-58°F).

Moderna COVID-19 Vaccine

Storage and Handling Summary



Refrigerator

Unpunctured vials may be stored in the refrigerator between 2° to 8°C (36° to 46°F) for up to 30 days.*

- Do NOT refreeze thawed vaccine.
- Thawed vaccine can be handled in room light.
- Monitor how long the vaccine has been in the refrigerator using CDC's beyond-use date labels.
 - Remove the box from frozen storage.
 - Complete the information on the storage label.
 - Attach it to the box holding the vaccine vials.
 - Once labeled, place vaccine in the refrigerator.

Punctured vials may be stored between 2°F and 25°C (36°F and 77°F) for up to 12 hours.

Temperature Monitoring

Storage unit temperatures must be monitored regularly and checked and recorded at the beginning of each workday to determine if any excursions have occurred since the last temperature check. For accurate temperature monitoring, use a digital data logger (DDL) with a detachable probe that best reflects vaccine temperatures (e.g., probe buffered with glycol, glass beads, sand, or Teflon®). Check and record the temperature daily using a temperature log and one of the options below:

- **Option 1: Minimum/Maximum Temperatures (preferred)**
Most DDLs display minimum and maximum (min/max) temperatures. Check and record the min/max temperatures at the start of each workday.
- **Option 2: Current Temperature**
If the DDL does not display min/max temperatures, check and record the current temperature at the start and end of the workday. Review the continuous DDL temperature data daily.

For CDC temperatures logs, see <https://www.cdc.gov/vaccines/covid-19/info-by-product/moderna/index.html>.

Transporting Vaccine

Moderna COVID-19 vaccine may be transported at frozen and refrigerated temperatures using a portable unit or container qualified to maintain appropriate temperatures.

Detailed guidance can be found in CDC's Storage and Handling Toolkit COVID-19 addendum and Transporting Vaccine for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations

Disposal

Once vaccine has reached its expiration or beyond-use date, contact the manufacturer for guidance on whether it can still be used. If instructed to dispose of vaccine, dispose of the vial (with any remaining vaccine) and packaging as medical waste according to your local and state regulations. Contact your jurisdiction's immunization program for guidance (<https://www.cdc.gov/vaccines/imz-managers/awardee-imz-websites.html>).

*Unpunctured vials may be stored between 8° to 25°C (46° to 77°F) for a total of 24 hours.

For additional information, refer to the manufacturer's product information at <https://www.modernatx.com/covid19vaccine-eua/>.
CDC's Moderna COVID-19 materials <https://www.cdc.gov/vaccines/covid-19/info-by-product/moderna/index.html>
CDC's Vaccine Storage and Handling Toolkit <https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf>
CDC's Moderna Beyond-Use Date (BUD) label <https://www.cdc.gov/vaccines/covid-19/info-by-product/moderna/downloads/bud-tracking-labels.pdf>
Moderna COVID-19 Vaccine Transporting Vaccine for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations <https://www.cdc.gov/vaccines/covid-19/info-by-product/moderna/downloads/Moderna-Vaccine-Transport.pdf>



Moderna COVID-19 Vaccine

Store vaccine between 2°C and 8°C (36°F and 46°F) for up to 30 days.

Lot number(s): 123456A

Today's date: 4/01/2021 **USE BY*** Date: 5/01/2021

*After this date/time, do NOT use. Contact the manufacturer for guidance. If directed to discard the vaccine, follow the manufacturer's and your jurisdiction's guidance on proper disposal.

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Vaccine may be transported for 12 cumulative hours.

Transport date	4/5/21		
Time in transport:	2 hrs		
Time remaining:	10 hrs		

Name: Amy Nurse RN

Packing Vaccines for Transport during Emergencies

Be ready BEFORE the emergency

Equipment failures, power outages, natural disasters – these and other emergency situations can compromise vaccine storage conditions and damage our vaccine supply. **It's critical to have an up-to-date emergency plan with steps you should take to protect your vaccine.** In any emergency event, activate your emergency plan immediately, and if you can do so safely, follow the emergency packing procedures for refrigerated vaccines.

1. Gather the Supplies

a. Hard-sided coolers or Styrofoam™ vaccine shipping containers

- i. Coolers should be large enough for your location's typical supply of refrigerated vaccines.
- ii. Can use original shipping boxes from manufacturers if available.
- iii. Do NOT use soft-sided collapsible coolers.

b. Conditioned frozen water bottles

- i. Use 16.9 oz. bottles for medium/large coolers or 8 oz. bottles for small coolers (enough for 2 layers inside cooler).
- ii. Do NOT reuse coolant packs from original vaccine shipping container, as they increase risk of freezing vaccines.
- iii. Freeze water bottles (can help regulate the temperature in your freezer).
- iv. Before use, you must condition the frozen water bottles. Put them in a sink filled with several inches of cool or lukewarm water until you see a layer of water forming near the surface of bottle. The bottle is properly conditioned if ice block inside spins freely when rotated in your hand.

c. Insulating material — You will need two of each layer

- i. Insulating cushioning material – Bubble wrap, packing foam, or Styrofoam™ for a layer above and below the vaccines, at least 1 in thick. Make sure it covers the cardboard completely. Do NOT use packing peanuts or other loose material that might shift during transport.
- ii. Corrugated cardboard – Two pieces cut to fit interior dimensions of cooler(s) to be placed between insulating cushioning material and conditioned frozen water bottles.

d. Temperature monitoring device – Digital data logger (DDL) with buffered probe. Accuracy of +/-1°F (+/- 0.5°C) with a current and valid certificate of calibration testing. Pre-chill buffered probe for at least 5 hours in refrigerator. Temperature monitoring device currently stored in refrigerator can be used, as long as there is a device to measure temperatures for any remaining vaccines. Cardboard

Why do you need cardboard, bubble wrap, and conditioned frozen water bottles?

Conditioned frozen water bottles and corrugated cardboard used along with one inch of insulating material such as bubble wrap keeps refrigerated vaccines at the right temperature and prevents them from freezing. **Reusing vaccine coolant packs from original vaccine shipping containers can freeze and damage refrigerated vaccines.**

This information has been taken from the CDC's guide located here:

<https://www.cdc.gov/vaccines/hcp/admin/storage/downloads/emergency-transport.pdf>

2. Pack for Transport

- a. **Conditioned frozen water bottles** – Line bottom of the cooler with a single layer of conditioned water bottles.
- b. **Insulating material** – Place 1 sheet of corrugated cardboard over water bottles to cover them completely.
- c. **Insulating material** – Place a layer of bubble wrap, packing foam, or Styrofoam™ on top (layer must be at least 1 in. thick and must cover cardboard completely).
- d. **Vaccines** – Stack boxes of vaccines and diluents on top of insulating material.
- e. **Temperature monitoring device** – When cooler is halfway full, place DDL buffered probe in center of vaccines, but keep DDL display outside cooler until finished loading.
- f. **Vaccines** – Add remaining vaccines and diluents to cooler, covering DDL probe.
- g. **Insulating material** – Cover vaccines with another 1 in. layer of bubble wrap, packing foam, or Styrofoam™
- h. **Insulating material** – Another sheet of cardboard may be needed to support top layer of water bottles.
- i. **Conditioned frozen water bottles** – Fill the remaining space in the cooler with an additional layer of conditioned frozen water bottles.
- j. **Close lid** – Close the lid and attach DDL display and temperature log to the top of the lid.

Conditioning frozen water bottles

- Put frozen water bottles in sink filled with several inches of cool or lukewarm water or under running tap water until you see a layer of water forming near surface of bottle.
- The bottle is properly conditioned if ice block inside spins freely when rotated in your hand.
- If ice “sticks,” put bottle back in water for another minute.
- Dry each bottle.
- Line the bottom and top of cooler with a single layer of conditioned water bottles.
- Do NOT reuse coolant packs from original vaccine shipping container.

3. Arrive at Destination

- a. **Before opening cooler** – Record date, time, temperature, and your initials on vaccine temperature log.
- b. **Storage** – Transfer boxes of vaccines quickly to storage refrigerator
- c. **Troubleshooting** – If there has been a temperature excursion, contact vaccine manufacturer(s) and/or your immunization program before using vaccines. Label vaccines “Do Not Use” and store at appropriate temperatures until a determination can be made.