



# Transport / Redistribution FAQs

(Updated 04-07-2021)

This document refers to the secondary transport of vaccine from one provider location to another. It does not cover shipping from manufacturers to clinics.

In general, there is a strong preference for direct shipping from manufacturer to point of use rather than redistribution. However, redistribution will be necessary to avoid waste and to cover some locations.

- Redistribution should not be done via USPS mail or common carrier.
- For all vaccine transport, care should be taken to avoid shaking and vibration of vaccine.
- Vaccine can only be transported to locations that are enrolled with the Oregon Health Authority as COVID-19 vaccine providers.

## ALERT IIS



### Q1: For the transfer: what do we do in ALERT IIS?

A1: Follow the steps in [this](#) document.

## Transport



### Q2: Is it okay to transfer vaccine to another location?

A2: **Short answer:** yes, if the receiving clinic is enrolled with the State as a COVID-19 program clinic. Redistribution agreement required for routine transfers.

**Full answer:** Before transporting any vaccine, confer with the receiving institution to ensure that they can administer all of the redistributed vaccine before it expires.

As needed to accelerate vaccine access, hospitals and other sites that have received COVID-19 vaccine through the state may transfer excess doses to a LPHA or other fully enrolled COVID-19 vaccine provider registered with the state to receive vaccine, as long as the transferring hospital or other site is tracking the transfer in the Oregon Health Authority’s ALERT IIS. This notice is the only advance permission that is required.

This permission is not a substitute for redistribution agreements, but rather, a clarification that one-off, occasional, unplanned transfers are acceptable as long as the transfer recipient is approved to receive COVID-19 vaccine and can properly store and handle the specific COVID-19 vaccine being transferred.

Formal redistribution agreements are required for organizations with routine plans to receive COVID-19 vaccine at a main site and redistribute to smaller facilities.

Redistribution of COVID-19 vaccine must meet all technical storage and handling requirements to ensure safe and effective vaccine.

**Q3: At what temperature should I transport vaccine?**

**A3:** See the table below for scenario-based temperature guidance:

Storage / transport scenario	Moderna	Pfizer	Johnson & Johnson
<b>Prior to transport (Standard storage range)</b>	-20°C ( -4°F) The range is -50 to -15°C (-58 to +5°F)	-80 to -60°C / -113 to -76°F (Ultracold) - can be stored for up to 2 weeks at -25 to -15°C (-13 to +5°F)	2 to 8°C (36 to 46°F)
<b>Transport</b>	Frozen (or one single transport event at refrigerator temps)	<ul style="list-style-type: none"> <li>Frozen Ultracold (full trays only) <u>or</u></li> <li>At regular freezer temps: -25 to -15 °C (-13 to +5°F) <u>or</u></li> <li>Refrigerated: 2 to 8°C (36 to 46°F)</li> </ul>	Refrigerated
<b>After transport</b>	Same as it <u>arrived</u> at receiving location: frozen if it arrived still under -15°C (+5°F) <u>or</u> refrigerated if thawed or thawing during transit	<ul style="list-style-type: none"> <li><u>If Transported ultracold (-80 to -60C)</u>: Store ultracold until expiration date, <u>or</u> frozen up to 2</li> </ul>	Refrigerated

		<p>cumulative weeks, <u>or</u> refrigerated up to 120 hours;</p> <ul style="list-style-type: none"> <li>• <u>If transported at regular freezer temperatures: (-25 to -15°C):</u> You may return one time to ultralow freezer <u>or</u> continue single 2-week period at -25 to -15°C <u>or</u> step down to 2 to 8°C;</li> <li>• <u>If transported refrigerated (2 to 8°C),</u> store at 2 to 8°C and do not refreeze</li> </ul>	
<b>Refrigerator Temperature range</b>	2 to 8°C (36 to 46°F)	2 to 8°C (36 to 46°F)	2 to 8°C (36 to 46°F)
<b>Maximum time at refrigerated temps</b>	30 days	5 days (120 hours)	3 months

#### Q4: Is there additional guidance for transporting the COVID-19 vaccines?

A4: Yes, below are some key guidelines for transporting any type of COVID vaccine:

- Transport with a data logger (required)
- Pack per instructions (listed below)
- For offsite clinics: ensure combined transport time and clinic workday amount to 8 hours or less
- Transport equal amounts of vaccine, diluent and ancillary supplies
- Store vaccines properly and immediately upon arrival at destination
- Review transport temperatures and report any excursions to vaccine manufacturer
- Do not re-freeze thawed COVID-19 vaccine.
- A data logger must accompany the vaccine to record vaccine temperature remain within range during transport. Check for excursions before administering the transported vaccine.

#### **Additional Pfizer-specific redistribution requirements:**

- If frozen vaccine thaws (warmer than  $-15^{\circ}\text{C}$  ( $+5^{\circ}\text{F}$ ) during transport, it should be stepped down to the refrigerator, stored refrigerated at  $2$  to  $8^{\circ}\text{C}$  ( $36$  to  $46^{\circ}\text{F}$ ) for up to 5 days, and [marked with Beyond Use](#) dates 5 days out.
- Only complete trays of vaccine should be redistributed at ultra-cold temperatures.
- Transport of incomplete trays (out of the vaccine tray or in one with fewer than the original number of vaccine vials) may take place at refrigerated temperatures ( $2^{\circ}$  to  $8^{\circ}$  Celsius /  $36^{\circ}$  to  $46^{\circ}$  Fahrenheit) or at temperatures in the regular freezer ( $-15$  to  $-25^{\circ}\text{C}$  /  $-13$  to  $+5^{\circ}\text{F}$ ) range. Pfizer vaccine may be stored for a maximum of 2 weeks at those regular frozen temperatures before being thawed or returned (one time only) to the ultralow temperatures. Once thawed, it may not be refrozen in either the regular or ultracold freezer range.
- Thawed Pfizer COVID-19 vaccine can be transported for a **maximum of 12 hours total**.
- Punctured vials must be used or discarded within 6 hours including transport time and should be transported with the same careful packaging and attention temperature as individual unpunctured vials.
- For thawed Pfizer vaccine, after completion of transport, vaccine should immediately be placed into a vaccine storage unit at  $2$  to  $8^{\circ}\text{C}$  ( $36$  to  $46^{\circ}\text{F}$ ).

### **Additional Moderna-specific redistribution requirements:**

- The preferred temperature range for transport is the frozen range -50 to -15°C (-58 to +5°F)
- If frozen vaccine thaws (warmer than -15°C (+5°F)) during transport, it should be stepped down to the refrigerator, stored refrigerated at 2 to 8°C (36 to 46°F) for up to 30 days, and [marked with Beyond Use](#) dates 30 days out.
- Once thawed, the vaccine cannot be re-frozen.
- When thawed, the vaccine should be handled with care and protected from shocks, drops, vibration, etc.
- Care must be taken to ensure vaccine does not re-freeze during transport.
- Vaccine should be transported in the carton whenever possible.
- If transport must be conducted at the vial level, the vial should be placed with dunnage (padding material like bubble wrap or similar padding) to minimize movement during transport.
- Thawed vaccine should always be transported in insulated containers qualified to maintain 2 to 8°C (36 to 46°F) for the duration of transport. Frozen vaccine in containers that will maintain -50 to -15°C (-58 to +5°F).
- The transport containers must be secured when being transported to prevent unnecessary movement.
- After completion of transport, thawed vaccine should immediately be placed into a vaccine storage unit at 2 to 8°C (36 to 46°F). Frozen vaccine that has remained at frozen temperatures may be stored at -50 to -15°C (-58 to +5°F) or stepped down to fridge temperatures: 2 to 8°C (36 to 46°F).
- Allowable timelines for transport of **thawed** Moderna vaccine are shown below. **Total transport time should not exceed 12 hours.**
  - Transport while walking or using hand cart: not to exceed 1 hour
  - Vehicle transport: not to exceed 12 hours
  - Airplane transport (rotary wing aircraft not allowed): not to exceed 3 hours
- Punctured vials must be used or discarded within 12 hours including transport time and should be transported with the same careful packaging and attention temperature as individual unpunctured vials.

### **Additional Johnson & Johnson-specific redistribution requirements:**

- There is no time limit given for how long unpunctured Johnson & Johnson vaccine vials may be transported at refrigerated temperatures
- Once multidose vials are punctured, Johnson & Johnson vaccine must be used or discarded within:

- 6 hours if vaccine is stored at refrigerated temperatures: 2 to 8°C (36 to 46°F)
- 2 hours if vaccine is stored at room temperature: 9 to 25°C (47 to 77°F)

**Q5: What if we are taking vaccine to in home vaccine recipients?**

**A5:** Follow the [CDC published guidance](#). This guidance is for all COVID-19 vaccines and gives special instructions for moving punctured multidose vials (or if necessary, predrawn syringes) in limited circumstances. All of the general transport requirements should still be followed for these transports, where they are compatible with the special instructions.

## Equipment



**Q6: Do I need any special equipment to ship COVID-19 doses to another location?**

**A6:** Yes, COVID-19 vaccine is different from traditional vaccine and requires special handling. See below for manufacturer-specific details:

### Transporting Ultracold Vaccine (Pfizer)

Specialized equipment is essential to move Pfizer vaccine at ultracold temperatures. Only complete trays of Pfizer vaccine can be moved at ultracold temperatures. In general, Pfizer vaccine should be redistributed at refrigerated temperatures for use within 5 days (120 hours) of removal from ultralow freezer or thermal shipping container.

### Transporting Frozen Vaccines (Moderna and Pfizer)

If frozen vaccines must be transported, use a portable vaccine freezer unit or qualified container and packout that maintains temperatures between -50 to -15°C (-58 to +5°F) for Moderna and between -25 to -15°C (-13 to +5°F) or -80 to -60°C (-112 to -76°F) for Pfizer.

Follow these steps for transporting frozen vaccines:

- Place a pre-chilled digital data logger (preferably with a buffered probe) in the container as close as possible to the vaccines.
- Immediately upon arrival at the destination, unpack the vaccines and place them in a freezer at a temperature range between -25 to -15°C (-58 to +5°F) or -80 to -60°C (-112 to -76°F) for Pfizer and -50 to -15°C (-13 to +5°F) for Moderna.

Moderna. Any stand-alone freezer that maintains these temperatures is acceptable. Vaccines must spend under one minute at room temperature when moving between the frozen environments.

- Record the time vaccines are removed from the storage unit and placed in the transport container, the temperature during transport, and the time at the end of transport when vaccines are placed in a stable storage unit.
- Do not use dry ice, even for temporary storage. Dry ice might expose the vaccines to temperatures that are too cold.

### **Transporting COVID-19 vaccine (all brands) at refrigerated temperatures:**

This temperature range is disfavored for Moderna vaccine (see “Additional Moderna redistribution requirements” in the Vaccine Management Guide found on the [Training webpage](#)).

If refrigerated vaccines must be transported, use a portable vaccine refrigeration unit or qualified container and packout that maintains temperatures between 2°C and 8°C (36°F and 46°F).

Follow these steps for transporting refrigerated vaccines:

- Place a pre-chilled digital data logger (preferably with a buffered probe) in the container as close as possible to the vaccines.
- Immediately upon arrival at the destination, unpack the vaccines and place them in a refrigerator at a temperature range between 2°C and 8°C (36°F and 46°F). Any stand-alone refrigerator that maintains these temperatures is acceptable.
- Record the time vaccines are removed from the storage unit and placed in the transport container, the temperature during transport, and the time at the end of transport when vaccines are placed in a stable storage unit.

If thawed Moderna or Pfizer vaccine must be redistributed without specialized equipment use the equipment described in the Emergency Relocation instructions below. This is a last resort when the decision is between transporting vaccine without specialized equipment or letting vaccine go to waste.

For more information on equipment, see the [VFC Refrigerator Freezer Guide](#), page 8: Portable Cold Storage.

## Emergency Relocation



### Q7: What if I need to relocate COVID-19 vaccine in an emergency (i.e. power outage) but don't have any special equipment?

A7: The following steps are for emergency transport or if vaccine must be transported without purpose-built equipment.

**Note** Moderna COVID-19 vaccine should be redistributed frozen (see “Additional Moderna redistribution requirements” above). Have a digital data logger pre-chilled and check it when it arrives at the receiving location. If the temperature was ever warmer than -15°C / +5°F, the Moderna vaccine must be treated as refrigerated vaccine that will now expire in 30 days. See instructions for [labeling](#) thawed Moderna vaccine.

Step 1: Gather materials	
Preferred: purpose-built transport unit. Acceptable: Hard-sided coolers or foam vaccine shipping containers	Insulating material
Conditioned frozen water bottles or phase change material cold packs for refrigerated vaccine; frozen water bottles for frozen vaccine	Cardboard
Digital data logger	Current vaccine inventory – ALERT IIS printout
Step 2: Arrange delivery with accepting clinic	
Contact alternate storage facility with estimated time of arrival and approximate length of storage time.	
Step 3: Pack for transport	
Use a Styrofoam or hard-sided cooler that is at least 2 inches thick and designed for transporting vaccines.	
Place a layer of conditioned frozen water bottles (for refrigerated vaccine) or fully frozen water bottles (for regular frozen vaccine) in the bottom of the transport container. To condition frozen water bottles, run them under warm water for a few minutes until they begin to thaw and the ice spins freely inside the bottle. Use fully frozen water bottles for frozen vaccine. This means of transport is for relatively short times and short distances.	



Cover water bottles with a layer of cardboard.

Cover the layer of cardboard with 1–2 inches of filler material (e.g., bubble wrap or crumpled paper), to ensure that vaccines do not touch water bottles and do not shift during transport.

Place the vaccine in a plastic bag with a calibrated digital data logger (the display goes on the outside of the container) and place the bag on top of the filler material.

Place another layer, 1–2 inches, of filler material on top of vaccines and cover with another layer of cardboard.

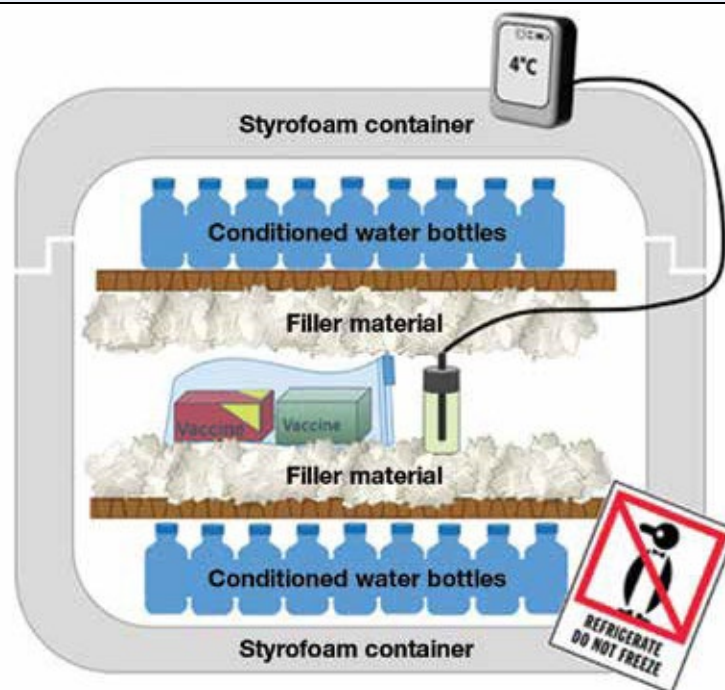
Place another layer of conditioned frozen water bottles or frozen water bottles (depending on refrigerated or frozen state of vaccines) on top of cardboard.

Add vaccine inventory printout from ALERT IIS.

Secure any gaps in the container with filler material and seal with packing tape.

Affix digital data logger display on the outside of the container, on top of the lid.

Affix “Rush!! Vaccine Perishable” and “Do Not Freeze” stickers to the transport container.



#### Step 4: Arrive at destination

Unpack and properly store vaccines.

Record minimum and maximum temperatures for the transport period.

## Step 5: Document the event

When the vaccine is safely back at your clinic, document the transport in your vaccine storage troubleshooting record.

Contact the vaccine manufacturer if there were any out-of-range temperatures. (see below) Contact Oregon Immunization Program Help Desk with any questions: 971-673-4832.

- When external temperatures are below 20°F or above 85°F, only transport if necessary. Before doing so, contact the Oregon Immunization Program.
- Do NOT leave insulated container in an unconditioned location such as the trunk of a vehicle.
- Drive directly to the receiving site to minimize transport time.
- DO NOT use non-phase change gel cold packs ice to transport vaccine.
- Always use digital data loggers to monitor temperatures during transport.
- Frozen vaccine must be transported separately from refrigerated vaccine.

## Receiving vaccine following redistribution

Once vaccine is received, check the data logger that was with the vaccine for any temperatures outside of the range. Store it immediately at the appropriate refrigerated or frozen temperature. However, if frozen vaccine has at any point become any warmer than the acceptable frozen temperature range, it must be treated as thawing: store it in refrigerated storage (2 to 8°C / 36 to 46°F) and mark it as expiring in 30 days (Moderna) or 120 hours (Pfizer).

## Excursions (out of range temperatures)

If frozen vaccine became warmer than the acceptable range during transport, but not warmer than 8°C / 46°F, follow the instructions above under “Receiving vaccine following redistribution”)

Whether transported frozen or refrigerated, if vaccine became warmer than 8°C / 46°F put the vaccine in the refrigerator, label it “DO NOT USE” and contact the appropriate organization for vaccine viability.

IF the vaccine was Pfizer inside of the thermal shipper it arrived in (full trays only), contact Controlant: 1 (855) 442-6687.

If the vaccine was Pfizer and not in the original thermal shipper, (because it is at refrigerated temperatures or for any reason), contact Pfizer here:  
[CVGovernment@pfizer.com](mailto:CVGovernment@pfizer.com)

If the vaccine was Moderna, contact 1 (866) 663-3762 (5:00 a.m. to 5:00 p.m. Mon-Fri) and outside those hours [COVIDVaccineSupport@McKesson.com](mailto:COVIDVaccineSupport@McKesson.com)

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