

Transporting COVID-19 Vaccines

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Guidance for storage, handling, preparing, and administering vaccine is different for each COVID-19 vaccine product. Health care professionals administering COVID-19 vaccines should be knowledgeable about requirements and best practices. **It is critical that health care professionals and other staff are familiar with the COVID-19 vaccine product in their facility's inventory.** Non-clinical staff members who receive vaccine deliveries as well as those who handle vaccines should be trained in vaccine storage and handling requirements and best practices. Training requirements and recommendations are outlined at [COVID-19 Vaccine Trainings for Health Professionals](https://www.health.state.mn.us/diseases/coronavirus/vaccine/training.html) (www.health.state.mn.us/diseases/coronavirus/vaccine/training.html).

Considerations for transporting mRNA vaccines

The mRNA vaccines are more fragile than most of the common vaccines. Take care when transporting them to minimize excessive movement. Vaccines should be securely packed in a cooler with bubble wrap or newspaper protecting them.

General guidelines for transporting COVID-19 vaccines

- Transfer COVID-19 vaccine at 2 to 8 degrees Celsius (36 to 46 degrees Fahrenheit), a refrigerated temperature. Monitor vaccine temperature during transit using a continuous temperature monitoring device in the transport cooler.
 - If vaccine is frozen before transporting, it should still be packed in a cooler at refrigerated temperatures, time in transit can count as thawing time.
 - Do not refreeze vaccines once thawed.
- Try to minimize multiple transports. If a vial is unopened and unused one day after being transported, make sure to use that vial first the next day rather than transporting it again.
- Open (punctured) vials should only be transported in limited circumstances such as vaccinating homebound persons or small group homes. Open vials cannot be transferred between providers or across state lines. Learn more at [CDC: Vaccinating Homebound Persons with COVID-19 Vaccine](https://www.cdc.gov/vaccines/covid-19/clinical-considerations/homebound-persons.html) (www.cdc.gov/vaccines/covid-19/clinical-considerations/homebound-persons.html).

- COVID-19 vaccine products do not contain any preservative and expire hours after the vial is first punctured. To determine the date and time to discard, carefully read and follow the emergency use authorization (EUA) fact sheet for health care providers and/or manufacturers' websites for each vaccine product regarding expiration and beyond-use dates. Any vaccine not used within that time frame, whether in the open vial or drawn-up in a syringe, must be disposed of and reported as wastage. Learn how to report vaccine wastage in the [Interim COVID-19 Vaccine Provider Guide \(www.health.state.mn.us/diseases/coronavirus/vaccine/guide.pdf\)](http://www.health.state.mn.us/diseases/coronavirus/vaccine/guide.pdf) in the "Reporting vaccine wastage and spoilage" section.

Guidelines for proper storage and handling

- Transport vaccine using a portable vaccine refrigerator or qualified pack out.
 - A qualified pack out includes a container and supplies specifically designed for use when packing vaccines for transport. A qualified pack out is "qualified" through laboratory testing under controlled conditions to ensure it can achieve and maintain desired temperatures for a set amount of time.
 - Soft-sided containers specifically engineered for vaccine transport are acceptable. Commercially available soft-sided food coolers are not acceptable because most are poorly insulated and are likely to be affected by room or outdoor temperatures.
- A digital data logger (DDL) should be used to monitor the temperature of the vaccine. Place the probe with or near the vaccine. A DDL with an external readout that can read minimum and maximum (min/max) temperatures is preferred. Learn more at [COVID-19 Vaccine Temperature Monitoring Devices \(www.health.state.mn.us/diseases/coronavirus/vaccine/devices.pdf\)](http://www.health.state.mn.us/diseases/coronavirus/vaccine/devices.pdf).
- Document the min/max temperatures on a temperature log (like the [COVID-19 Vaccine Temperature Monitoring and Documentation Form \[www.health.state.mn.us/diseases/coronavirus/vaccine/offform.pdf\]](http://www.health.state.mn.us/diseases/coronavirus/vaccine/offform.pdf)) when transport begins, every time the container is opened, and when you return to the facility.
 - Providers must report all temperature excursions (any out-of-range temperatures) to MDH in a timely manner.
- A punctured vial may be transported from one site to another by the same health care professional if the cold chain is properly maintained. However, a partially used vial cannot be transferred from one provider to another or across state lines.

Packing vaccines

- Pack loose vials carefully with bubble wrap or similar padding material to prevent them from breaking or moving around.
- The Centers for Disease Control and Prevention recommends transporting vaccine in vials. However, there may be instances when the only option is to transport vaccine in a pre-drawn syringe.
 - Syringes should be transported carefully; make sure the needle is attached tightly. Place the syringe in a zip-lock bag and wrap it securely in bubble wrap before placing it in a cooler. At the destination, inspect the syringe to make sure connections are secure and no vaccine has leaked

out of the syringe. U.S. Pharmacopeia includes guidance for transporting pre-drawn vaccine in syringes in the [COVID-19 Vaccine Handling Toolkit: Operational Considerations for Healthcare Practitioners \(www.usp.org/covid-19/vaccine-handling-toolkit\)](https://www.usp.org/covid-19/vaccine-handling-toolkit).

Transporting vaccines

- Transport vaccines only inside the passenger compartment of a passenger vehicle (not in the trunk or the bed of a truck, which may be too hot or too cold).
- Move transport containers directly into a vehicle that is already at a comfortable temperature.
- Secure transport containers (brace or strap them) to prevent unnecessary movement.
- Keep containers out of direct sunlight.
- Never leave the container unattended in the vehicle.

Additional guidance for transporting vaccines can be found in CDC's COVID-19 Vaccine Storage and Handling Addendum in the [CDC: Vaccine Storage and Handling Toolkit \(www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf\)](https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf).



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