

COVID-19 Vaccine Providers Guidance

How to transport Moderna vaccine for off-site vaccinations

The Moderna COVID-19 vaccine has complex qualities and requires strict adherence to storage and handling guidelines. Below, providers will find requirements for the care and handling of the Moderna [COVID-19 vaccine to supplement the Moderna COVID-19 Vaccine Storage and Handling Summary](#) provided by the Centers for Disease Control and Prevention (CDC). **This information is vital for planning and preparing COVID-19 off-site vaccination clinics and vaccinations for homebound Ohioans.**

Transportation guidelines

- **Vaccine being transported should begin with the vaccine in the frozen state if possible**, at temperatures minus 25 degrees to minus 15 degrees Celsius (minus 13 degrees Fahrenheit to 5 degrees Fahrenheit).
 - Once a vial of vaccine has been thawed, it may be stored refrigerated at 2 C to 8 C (36 F to 46 F) for up to 30 days.
 - Once thawed, the vaccine cannot be refrozen.
 - When thawed, the vaccine should be handled with care and protected from shocks, drops, vibration, and excessive movement.
 - The transport container should be labeled prominently with cautionary statements: “Fragile: Handle with Care, Do Not Drop.”
- If you must transport vaccine that **has been thawed**, follow these general principles:
 - All vaccine must have a continuous temperature monitoring device.
 - Care must be taken to ensure vaccine does not re-freeze during transport.
 - Vaccine must be protected as much as possible from drops, shocks, and vibration, whether in the carton, vial, case, cooler, or a portable refrigerator.
 - Vaccine should be transported in the carton in which it arrived whenever possible.
 - If transport must be conducted at the vial level, the vial should be placed with dunnage (padding material, such as bubble wrap or similar padding) to minimize movement during transport.
 - Take measures to ensure that the thawed vaccine does not come into contact with any frozen packs added to maintain temperature.
 - The vaccine should always be transported in insulated containers qualified to maintain temperatures of 2 C to 8 C (36 F to 46 F) for the duration of transport.
 - Examples of such containers include molded EPS foam shippers or hard plastic vacuum insulated shippers (e.g., Credo).
 - The transport container should be labeled prominently with warnings about temperature control and prevention of refreezing.
 - Containers, cartons, and vials of Moderna COVID-19 vaccine must be protected from being dropped.

- The transport containers must be secured when being transported to prevent unnecessary movement.
- Upon arrival at the destination, Moderna COVID-19 vaccine should immediately be inspected, inventoried, and placed into a vaccine storage unit, such as a refrigerated unit, at 2 C to 8 C (36 F to 46 F).
- Vaccine should only be transported once and should not be transported back again to the point of origin or to a new location.
- Any set of cartons/vials should not be subjected to repeat instances of transport. If a carton/vial has been on a transfer once, it should not be sent out again and instead used locally, even if the vial has not been in transit for the maximum allowable period. This is a precautionary measure because it will be difficult to keep track of the transportation time “used up” for any specific vial.
- Punctured vials may be transported when following COVID-19 Vaccine guidance to Transport to Homebound Ohioans [link]. Please see the linked guide and scenarios below for detailed directions, including guidance that **a punctured vial may be transported from one home 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.
- Special circumstances may allow transport of vaccine-filled syringes, but providers must follow directions in the COVID-19 Vaccine guidance to Transport to Homebound Ohioans [link] and scenarios listed below.
- Allowable timelines for transport of thawed vaccine are shown below. Total transport time should not exceed 12 hours total.
 - Vehicle transport: not to exceed 12 hours.
 - Transport while walking or using a hand cart: not to exceed one hour.
 - Airplane transport (rotary-wing aircraft not allowed): not to exceed three hours.

Guidelines for different transportation scenarios

Below are transport scenarios that vary in nature and time. Transporting, storing, and handling the Moderna COVID-19 vaccine requires careful planning to maintain vaccine viability.

- **Short-duration transport on a medical, commercial or university campus-like setting:**
Transport in a qualified container, as defined above, may be carried out using a well-functioning wheeled cart on a relatively smooth pathway. Transport may also be conducted by hand (walking, no running). Follow the general precautions described above. These methods of transport may be conducted for up to one hour. If the cumulative time for this local transport (walked/pushcart) will exceed one hour, the user should transport vaccine in a frozen state at minus 25 C to minus 15 C (minus 13 F to 5 F).
- **Medium-duration and long-duration ground transport:** Transport in qualified container, as defined above, may be carried out using a car, van, or truck on paved, smooth gravel, or smooth dirt roads, following the general precautions described above. Such transport may be conducted for up to 12 hours.
- **Medium-duration and long-duration ground plus air transport:** Transport in qualified container, as defined above, may be carried out using a combination of ground transportation (car, van, or truck on paved, smooth gravel, or smooth dirt roads) for up to nine hours plus a flight for up to three hours. Total travel should not exceed 12 hours. Airplane may not be a rotary-wing aircraft.

- **Transport of open vials and pre-drawn syringes:** Moderna COVID-19 vaccine vials that have been punctured may be transported. All principles regarding transport of thawed vaccine, outlined in this document, must be carefully followed.
 - Open vials must be packed with dunnage, and the vial must remain upright during transit.
 - Time must be noted when the vial is first punctured, and the six-hour viability window begins.
 - The container of vial(s) may then be placed into an approved insulated container qualified to maintain temperatures of 2 C to 8 C (36 F to 46 F) for the duration of transport.
 - Care must be taken to prevent re-freezing.
 - Protect vials from sunlight.
 - The CDC recommends transporting vaccine in vials. However, there may be instances when the only option is to transport vaccine in a pre-drawn syringe. U.S. Pharmacopeia includes guidance for transporting pre-drawn vaccine in syringes in the [USP COVID-19 Vaccine Toolkit: Operational Considerations for Healthcare Practitioners](#).
 - Syringes must be secured in a container with dunnage to prevent movement and inadvertent dispensing of vaccine.
 - Syringes must be inspected prior to administration to ensure proper dosage of 0.5mL.
 - Syringes must reach room temperature prior to administration.

Moderna Contact Information

For general questions, send an email or call the telephone number provided below.

- Email: medinfo@modernatx.com.
- Telephone: 1-866-MODERNA (1-866-663-3762).

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For more information on COVID-19, please visit coronavirus.ohio.gov

For answers to your COVID-19 questions, call 1-833-4-ASK-ODH (1-833-427-5634).