Transporting Moderna COVID-19 Vaccine to Off-site Mass Vaccination Clinics

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.

- **Vaccine being transported should begin with the vaccine in the frozen state if possible**, at temperatures minus 25 degrees to minus 15 degrees Celsius or 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, or 36 F to 46 F, for up to 30 days.
  - Once thawed, the vaccine cannot be re-frozen.
  - 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.
  - Punctured vials should not be transported.
  - 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 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, or 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 cautionary statements pertaining to temperature control and prevention of re-freezing.
    - 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.
  - After completion of transport, 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, or 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.

- 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.

**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.

**Scenario 1: 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, or minus 13 F to 5 F.

**Scenario 2: Medium 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.

**Scenario 3: Medium 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).

**Moderna Contact Information**

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

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