

Guidelines for frozen vaccine transport in emergency situations

Frozen vaccines are very fragile. Routine transport of varicella-containing vaccines (MMRV, and varicella vaccine) is not allowed. These vaccines should be moved and transported only when absolutely necessary.

- Maintain a Vaccine Emergency Management plan that includes the name and address of the destination site where you can take your frozen vaccine in an emergency.
- If vaccines must be transported, contact your regional VFC representative.
- Varicella-containing vaccines should preferably be transported under frozen conditions (below 5°F). If varicella vaccine is transported under refrigerated conditions (35°F–46°F), it must be used within **72 hours**.
- Do not freeze diluent for vaccines containing varicella.
- Monitor temperatures hourly during transport.
- Vaccines must never be transported in the trunk of a vehicle.
- Vaccines must be placed in a freezer maintaining temperatures below 5°F immediately on arrival at the backup storage facility.

A **Frozen Vaccine Log** must be used to document and report back to the VFC program the timeframe and temperature to which vaccines were exposed during transport.

Assemble packing supplies

Most emergencies happen suddenly. Be sure you are prepared for emergency transport of frozen vaccine by always having the following supplies ready.

1. **Cooler.** Use a hard plastic insulated Igloo-style cooler with at least 2-inch walls.
2. **Frozen cold packs.** Keep enough frozen cold packs in your vaccine freezer to make two layers in the transport cooler. You will need 6–8 frozen packs per cooler. NEVER USE DRY ICE.
3. **Data logger.** Use a digital data logger that has been kept in the vaccine freezer.
4. **Packing materials.**
5. **Temperature log.** You must document the total timeframe and temperatures vaccines were exposed to during transport to and from the back-up facility. Put a copy of the log in each cooler that might be used to transport frozen vaccine.
6. **Frozen Vaccine Transport job aid.** Put one copy in each cooler that might be used to transport frozen vaccine.

Pack the vaccine

- 1. Ice packs.** Place enough frozen ice packs to cover the bottom of the cooler. Do NOT use dry ice.



- 2. Vaccine.** Place vaccine boxes directly on top of the frozen ice packs. Do NOT freeze the diluents.



- 3. Data logger probe.** Place the calibrated data logger probe on top of the layer of vaccine.



- 4. Ice packs.** Place another layer of frozen ice packs directly on top of the vaccine boxes.



- 5. Bubble Wrap.** Use bubble wrap to keep cooler contents from shifting. Fill the cooler to the top with bubble wrap. Do NOT place bubble wrap between the vaccine boxes and the ice packs.



- 6. Form.** Place the Frozen Vaccine Transport Log on top. Then close the cooler and transport the vaccine.



- 7. Transport Log.** Complete the Frozen Vaccine Transport Log and attach it to the outside of the cooler.

- 8. Data logger display.** Secure the data logger's digital display with tape to the outside of the cooler.

- 9. Immediately** upon arrival at the alternate storage facility:

- Place the vaccine in a freezer. Any freezer that has a separate sealed door and reliably maintains a temperature between -58°F and $+5^{\circ}\text{F}$ is acceptable for storage of varicella-containing vaccines.
- Document the time and temperature when the vaccine was removed from the container and placed in the freezer.
- Label the vaccine "Do Not Use"
- Contact the manufacturer at 1-800-672-6372 for further guidance, as this is considered a temperature excursion.
- Do not discard vaccine without contacting the NM Immunization program for guidance.

Adapted from California VFC Program (www.eziz.org) for New Mexico Vaccines for Children Program