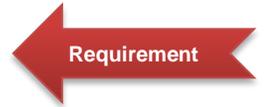


## 12. VACCINE MANAGEMENT AND EMERGENCY PLAN

Customize your plan by filling in the information below and posting a copy of this section (Section 12) on each vaccine storage unit. Use the information in this section to respond to emergencies that threaten your vaccine supply. A stand-alone version of this section that can be edited on a computer is available on our website under the VFC link ([www.immunization.mt.gov](http://www.immunization.mt.gov)).



### Provider Information

Provider/Facility Name	VFC #
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### Designated Vaccine Manager

Designate one person primarily responsible for VFC vaccine management and one alternate responsible person for when the primary is not available. A second alternate is optional.



Vaccine Manager (Primary person responsible for vaccine management)	Phone
Alternate Vaccine Manager (Person responsible for vaccine management when primary is unavailable)	Phone
Second Alternate Vaccine Manager (Optional) (Person responsible for vaccine management when primary and alternate are unavailable)	Phone

### Emergency Phone Numbers

As appropriate for your facility, provide the phone numbers listed below:

<b>Montana Immunization Program</b>	<b>444-5580</b> <b>hhsiz@mt.gov</b>	Backup Generator Repair	Phone
Utility Company	Phone	Vaccine Transport	Phone
Building Maintenance	Phone	Other	Phone
Building Alarm Company	Phone	Other	Phone
Refrigerator/Freezer Repair	Phone	Other	Phone

## Emergency Power Outage Plan

### Backup Generator

Does your facility have a backup generator?

Yes (Provide contact information below)  No (Provide alternate vaccine storage locations, next section).

Contact person for generator maintenance	Phone
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### Alternate Vaccine Storage Locations

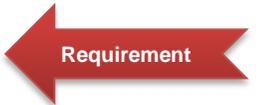
If you have no backup generator, identify at least one alternate vaccine storage facility that has proper refrigerator and freezer units, temperature monitoring capabilities, and backup power where vaccine can be stored in the event of a power outage or equipment failure. Designate two locations, if possible.



Alternate Location #1	Contact Name	Phone
Alternate Location #2 (Optional)	Contact Name	Phone

### Vaccine Inventory Management

You must check expiration dates and remove expired vaccine on a weekly basis. Briefly describe the method you use to ensure that short-dated vaccines are used first:



System for ensuring short-dated vaccines are used first and expired vaccines are removed
--

### Vaccine Management Plan Updates and Reviews

Update Section 12 as needed. Document updates in columns one and two below by listing the date and the signature and title of the preparer. Review your Vaccine Management Plan with staff annually and anytime Section 12 is updated or you have a change in staff. Document staff reviews in columns three and four.



#### Updates

#### Staff Reviews

Update Date	Staff Signature and Title	Staff Review Date	Staff Initials
Update Date	Staff Signature and Title	Staff Review Date	Staff Initials
Update Date	Staff Signature and Title	Staff Review Date	Staff Initials
Update Date	Staff Signature and Title	Staff Review Date	Staff Initials

## ***Packing and Transporting Vaccine***

The CDC discourages the regular transport of vaccines. Transporting vaccines may be necessary, however, during emergencies, off-site immunization clinics, or to prevent spoiled vaccine due to expiration. The preferred method of transporting vaccine is to use electric coolers that maintain appropriate vaccine storage temperatures. If an electric cooler or electricity is not available, you can use non-electric coolers.

### **Vaccine Pack-out Supplies/Equipment**

#### **Storage Location**

To prepare for an emergency, store your vaccine pack-out materials in the location designated below. Quantities should be sufficient to handle your entire vaccine supply.

Location of Vaccine Pack-Out Materials
--

#### **Supply/Equipment List**

- Data logger with glycol-buffered probe – You can use your backup data logger. If you are moving your vaccine out of the original storage unit and temperature monitoring is no longer required in that unit, you can move the data logger with the vaccine.

##### **Electric Option:**

- Portable electric coolers that can maintain temperatures between -58°F and +5°F (-50°C and -15°C) for frozen vaccine and **36°F** and 46°F (2°C and 8°C) for refrigerated vaccine
- Thin, insulating material to prevent vaccines from touching the interior walls of the cooler (e.g., cardboard, crumpled paper, plastic or wire baskets)

##### **Non-Electric Option:**

- Hard-sided cooler with ≥2-inch thick walls (can re-use Styrofoam® shipping containers)
- Cardboard cut to the exact interior, horizontal dimensions of the cooler (2 layers)
- ≥1-inch thick insulating material cut to the exact interior, horizontal dimensions of the cooler (2 layers). DO NOT USE loose material such as packing peanuts that may shift during transport.
- Conditioned, frozen plastic water bottles, enough for 2 layers inside the cooler  
DO NOT RE-USE cold packs from vaccine shipments.

#### **Steps Common to Electric and Non-Electric Pack-Outs**

- Contact your destination storage location to confirm that the storage units have temperature monitoring (continuously monitoring, if possible) and are equilibrated to the proper temperature.
- Start a separate paper temperature logs for your transport coolers and destination storage units (if they don't have logs already).
- Whenever loading or unloading vaccines from a storage unit or cooler always record the date, time, and current temperature on a unit-specific paper temperature logs.

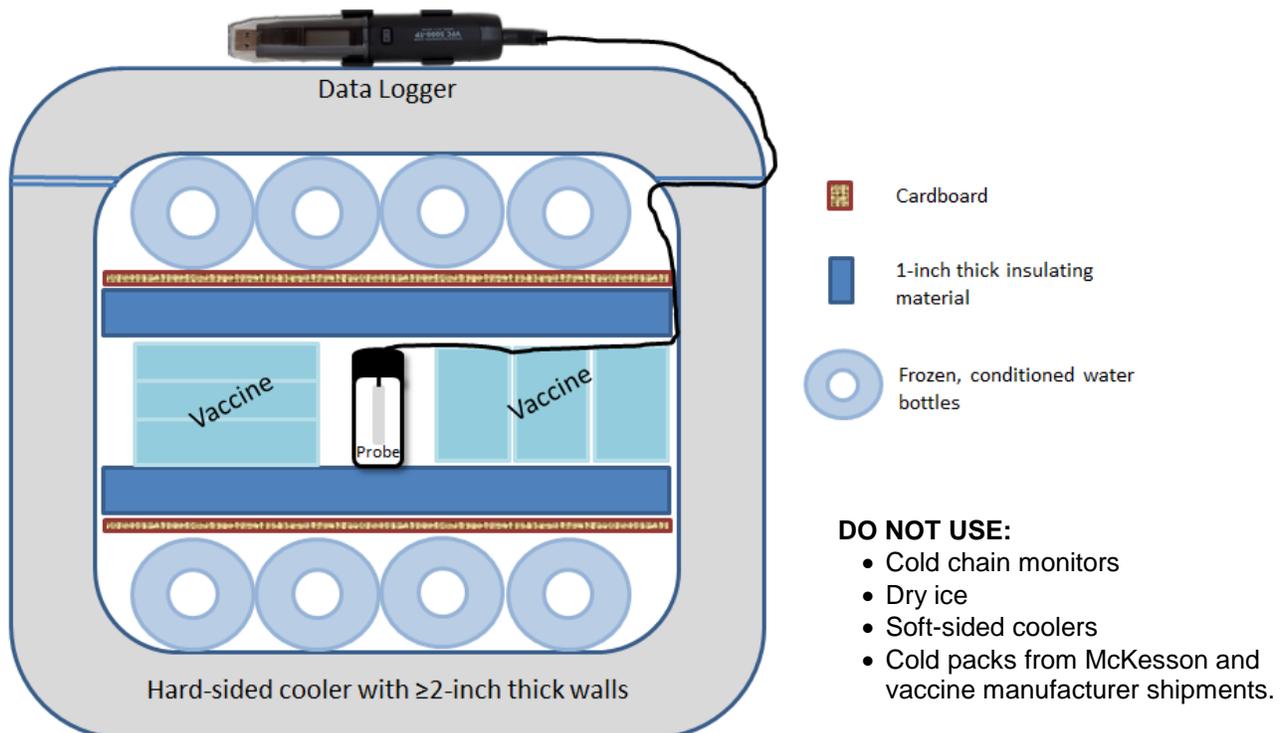
- Do not open storage unit doors until coolers are prepared and ready to receive vaccine.
- Pack refrigerated vaccine first.
- Keep vaccine in its original packaging during transport.
- Diluent packaged separately from vaccine should be transported in refrigerated coolers or at room temperature. Diluent packaged with vaccine should remain with vaccine during transport.

**Electric Coolers**

- Plug the cooler into an electrical supply, set the thermostat to the appropriate temperature, and allow to equilibrate. This may take one to two hours.
  - Maintain refrigerated vaccine coolers between 36° and 46°F (2° and 8°C).
  - Maintain frozen vaccine coolers between -58°F and +5°F (-50°C and -15°C).
- Install data logger and equilibrate to the proper temperature. Only the probe vial should be inside the cooler.
- Line the floor and sides of the cooler so that the vaccine boxes are not in contact with the interior surfaces of the cooler. Cardboard, crumpled paper, bubble wrap, Styrofoam®, or wire or plastic baskets work well.
- Once the data logger shows the temperature is in-range, load vaccine.

**Non-Electric Coolers – Refrigerated Vaccine**

- Condition frozen water bottles by soaking them in cold water until there is a thin layer of water around the ice and the ice “spins” in the bottle. This takes between three to five minutes.  
**Caution:** Using unconditioned, frozen water bottles right out of the freezer will result in freezing temperatures in your cooler and will destroy refrigerated vaccines.
- Pack the cooler according to Figure 1.



**Figure 1 Packing vaccine for transport in non-electric coolers**

## During Transport

- Monitor the temperature in the transport container hourly if possible, but at least when you load and unload the vaccine. Log temperatures on the cooler-specific paper temperature log.
- Transport containers inside vehicles (not in the trunk) and take the quickest route possible. Do not leave vaccine unattended in vehicles during very hot or very cold weather.

## After Transport

- Upon arrival at the destination storage facility, immediately place the vaccine in a storage unit with continuous temperature monitoring maintaining proper temperatures.
- Log temperatures of the alternate storage unit twice daily on the unit-specific paper temperature log.
- Download and review the Data Logger data recorded during the transport.

## Reporting Transport Temperature Excursions

- If transport temperatures were outside recommended storage temperatures this is a temperature excursion and must be reported to the Immunization Program. DO NOT USE OR DISCARD the vaccine until you hear from the Immunization Program.
  - Segregate the affected vaccine
  - Mark "Do Not Use"
  - Store under appropriate temperatures
  - Contact the Montana Immunization Program by submitting an online Vaccine Incident Report ([www.immunization.mt.gov](http://www.immunization.mt.gov) and click on "Vaccine incident Report"). Attach data logger data
  - Wait for further instructions from the Immunization Program.

## Transporting Varicella-Containing Vaccines

Varicella-containing vaccines must be stored frozen, and Merck does not recommend transporting these vaccines (Varivax<sup>®</sup>, Proquad<sup>®</sup>, Zostavax<sup>®</sup>). If you must transport, the best option is to use an electric cooler set to frozen vaccine temperatures. If an electric cooler or electricity is not available, the following options may be used.

**PLEASE NOTE:** These pack-outs will expose your frozen vaccines to out-of-range temperatures that must be reported to the Immunization Program (see section above).

- Pack a separate, non-electric cooler only for frozen vaccines. Use unconditioned frozen water bottles straight out of the freezer. DO NOT USE dry ice. After transport, report the temperature excursion to the Immunization Program and wait for further instructions before using the vaccine.
- Pack frozen vaccine in the same electric or non-electric cooler as refrigerated vaccines with a secure layer of insulating material around the frozen vaccine so that it does not come in contact with the refrigerated vaccines. After transport, report the temperature excursion to the Immunization Program and wait for further instructions before using the vaccine.

## Opened, Multi-dose Vials

- Only transport opened, multi-dose vials in an emergency and then only within the same organization/provider.
- NEVER transport opened, multi-dose between organizations/providers or across state lines.