### MAINTAIN THE "COLD-CHAIN" WHEN MOVING VACCINES!

# It is critical that vaccine potency is protected by maintaining the cold chain at all times during relocation and transport.

The following procedures should be followed if vaccines need to be transported due to a power failure, short expiration date, or other reasons that require proper packing procedures of vaccine. If relocating large quantities of vaccine due to impending storm or power/unit failure, be sure to document the inventory prior to transfer and upon its return once the emergency scenario has been resolved. Diluents should travel with their corresponding vaccines at all times. Merck diluent should be packed separately (ok to remain at room temperature). To avoid false out of range data or unnecessary alarm triggers- the buffered probe/glycol bottle should be kept in proper storage unit so it "conditioned" for use.

#### **Preparing for Transport**

- The following materials are needed and should be always readily available:
  - ✓ Proper insulated container (e.g. the containers that arrive from McKesson, hard sided insulated containers or styrofoam cooler with at least 2-inch thick walls)
  - ✓ Frozen water bottles (properly conditioned before use for refrigerated vaccine)
  - ✓ Several chux, bubble wrap or other insulator to place as a barrier between water bottles and vaccine. Sheet of cardboard also helps keep contents stable
  - ✓ A continuous temperature monitoring device (data logger)

#### **Refrigerated Vaccine**

- Place conditioned water bottles in the bottom of the insulated container
- Place a layer of insulator on top of the water bottles so the vaccines do not directly touch them (to prevent freezing)
- Place vaccines on top of insulator
- Insert data logger near the center of the vaccines, never in direct contact with water bottles
- Add another layer of insulator over the vaccines
- Add another layer of conditioned water bottles
- Add inventory list
- Secure the lid of the insulated container, attach data logger to outside and seal with strapping tape.
- Clearly label the outside of the container "Vaccine Refrigerate Immediately"
- Upon arrival at destination-read min/max and record current temperature of data logger. If the temperature rises above 8°c or below 2°c, place vaccine in proper storage unit and contact NHIP

**Frozen Vaccine** may be transferred without authorization in an emergency. Always pack frozen vaccine last, and unpack first

- Place frozen water bottles (NOT conditioned) in the bottom of the insulated container
- Place a thin layer of insulator on top of frozen water bottles (to prevent boxes from getting damp)
- Place vaccines on top of insulator
- Insert data logger near the center of the vaccines
- Place a thin layer of insulator
- Add 2 (or more) layers of frozen water bottles on top of insulator until container is full
- Clearly label the outside of the container "Frozen Vaccine-Freeze Immediately"
- Unpack frozen vaccine first when designation site is reached
- Upon arrival at destination-read min/max and record current temperature of data logger. If the temperature rises above -15°c place vaccine in proper storage unit and contact NHIP

#### Follow exact procedures when transporting back to original site

If vaccine is transferred for reasons other than emergency, and will become the permanent inventory of another practice, the transfer must be documented and received the NHIIS by the end of the day.

See detail picture on reverse side

# **MAINTAIN THE "COLD-CHAIN" WHEN MOVING VACCINES!**

LAYER #1 CONDITIONED FROZEN WATER BOTTLES



LAYER #5
INSULATING MATERIAL
BUBBLEWRAP



LAYER #2
INSULATING MATERIAL
CARDBOARD



LAYER #6
INSULATING MATERIAL
CARDBOARD



LAYER #3 INSULATING MATERIAL BUBBLEWRAP



LAYER #7
CONDITIONED FROZEN
WATER BOTTLES
INVENTORY LIST AND
TEMP LOG ENCLOSED



LAYER #4
VACCINES AND
TEMPERATURE
MONITOR (CAN PLACE
MORE VACCINES ON
TOP OF MONITOR)



LID WITH ATTACHED DATA LOGGER FOR EASY VIEW OF INTERNAL TEMP



## **Frozen Vaccine**

Do not "condition" water bottles Pack <u>LAST</u>-Unpack <u>FIRST</u>

See detail instructions on reverse side

- For frozen vaccine- DO NOT condition water bottles
   Fill cooler with as many frozen waters bottles as possible
  - Do not transport Merck diluent in cooler