

Vaccine Storage and Handling in Emergencies

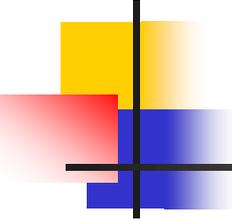
Adult Immunization Conference

May 21, 2013



Disclosures

- I, Bob Morrison, have been asked to disclose any significant relationships with commercial entities that are either providing financial support for this program or whose products or services are mentioned during my presentation. I have no relationships to disclose.
- I will discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration, but in accordance with ACIP recommendations.



Be Prepared

- Know what to do when the refrigerator or freezer temperature is out of range; has been out of range; or you anticipate a power outage
- Have a written Vaccine Management Standard Operating Procedure (SOP) that includes a plan for back up vaccine storage



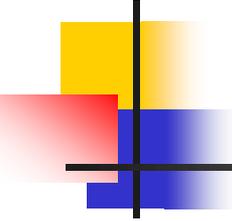
Vaccine Management

Standard Operating Procedures (SOP)

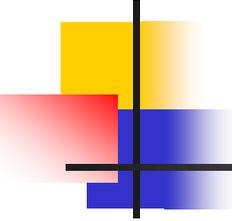
- Providers are required to have written procedures for Vaccine Management.
- A template SOP is available on our web site: www.state.ma.us/dph/imm and selecting Vaccine Management
- This document includes procedures for vaccine relocation in the event of a power outage or equipment failure.

Vaccine Management SOP

cont.

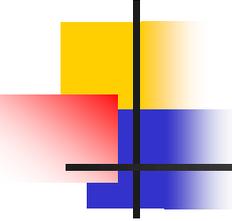


- Don't wait until there is a problem to develop a plan for back up vaccine storage (2 options)
- Make sure all office staff are informed
- Post the SOP in an area that is accessible to everyone (on the refrigerator) in case you are not there.



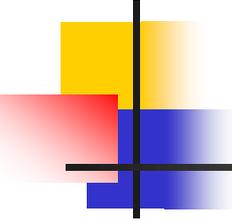
Transporting Vaccines

- Refrigerated vaccines should be transported to and from a back up facility in a cooler using refrigerated cold packs (not frozen).
- Frozen vaccines (Varivax®[®], ProQuad®[®], and Zostavax®[®]) should be transported to and from a back up facility in a separate cooler using frozen cold packs.



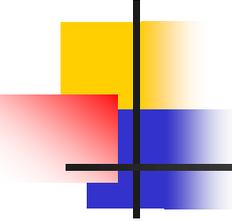
Potential Back Up Facilities

- Site in another town
- Local hospital
- Emergency Shelter
- Fire Department
- Home



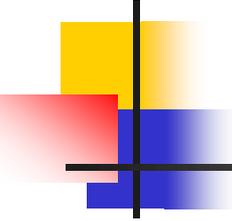
Temperature Control

- If you lose power, and the refrigerator temperature goes above the recommended range, let the compressor do the work.
 - Do not adjust the temperature control.
 - Adjusting the temperature control to the coldest point will not make the refrigerator get colder faster!



Temperature Adjustment

- Never adjust the temperature control with vaccine in the refrigerator or freezer.
 - There is no accurate temperature setting.
 - Adjusting the temperature too much can destroy the vaccine.
- Remove vaccine to another unit before adjusting the temperature control.
- Wait until you have successive readings one hour apart before returning vaccine to the unit.



Vaccine Restitution – Provider Negligence

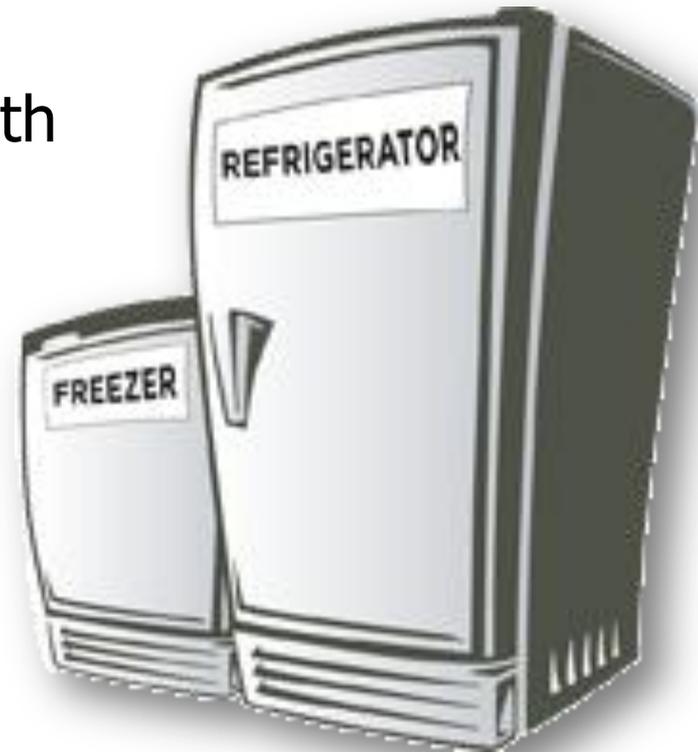
- Adjusting the temperature control with the vaccines in the unit resulting in damaged vaccine is provider negligence.
- Failure to act according to their vaccine storage back up plan resulting in damaged vaccine is provider negligence.
- Each of these incidents could result in the provider making restitution for damaged doses.

Vaccine Storage Units

- Small refrigerator/freezer units (dorm style) that are outfitted with one external door are not acceptable for proper storage including temporary storage.

 Use of combination household refrigerator/freezer units with two doors but one thermostat/compressor is strongly discouraged.

 CDC strongly recommends the use of stand alone refrigerators and stand alone freezers.

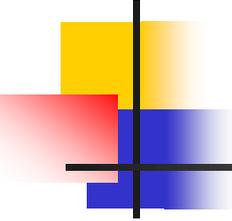


Stabilize Your Refrigerator

- Stabilize your refrigerator temperatures by placing water bottles where vaccine should not be stored (on the door and bottom shelf in the refrigerator).



- ❧ Store cold packs in the refrigerator as part of your emergency preparedness, in case the need arises to transport vaccine during an emergency.



Temperature Recording

- It is very important to record refrigerator and freezer temperatures at least twice daily.
- Make sure you are recording an accurate temperature by referring to the document: *Temperature Recording – Helpful Hints* located on the DPH web site www.mass.gov/dph/imm and selecting Vaccine Management.

New Temperature Monitoring Recommendations

- CDC now recommends the use of NIST certified calibrated data loggers for continuous 24-hour temperature monitoring.
- Data loggers should have a biosafe glycol-encased detachable temperature probe.
- If a data logger is used, providers must still manually document or acknowledge the temperature twice daily because it is a requirement of the federal VFC program.

Data Loggers

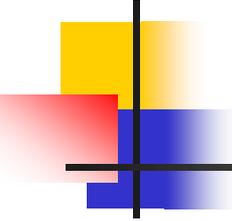
- Come in all shapes and sizes
- Must be NIST certified
- Must be able to measure product temperature with a detachable probe



Data Logger Currently Being Evaluated

- NIST certified
- No software required
- Easy to install
- Easy to use.





Vaccine Storage Questions

- Vaccine Management Direct Line
 - (617) 983-6828
- Always call the Vaccine Management Unit to determine if vaccine is viable after a temperature excursion
- Always consult with the Vaccine Management Unit before removing improperly stored vaccine from the storage unit