

Vaccine Management

Refrigerator/Freezer Vaccine Storage Guide

- ✓ Store vaccines in accordance with “Recommendations for Storage and Handling of Selected Biologicals” located in the VFC Provider Manual and Appendix C of the Pink Book
- ✓ Store vaccines in the body of refrigerator/freezer – Not on door, in vegetable bins or in closed containers - Vaccine containers should allow for air circulation
- ✓ Place multiple water bottles in refrigerator and ice packs in freezer to maintain cold temperatures in event of a power outage or mechanical failure
- ✓ Utilize two thermometers placed next to each other to ensure accurate temperatures
- ✓ One thermometer should be certified – see Certified Thermometer handout in VFC Provider Manual
- ✓ Monitor and record temperatures twice daily – upon arrival and before departure
- ✓ Document action taken if vaccine found to be outside of recommended temperature ranges
- ✓ Vaccines should be labeled with vaccine type and age indication (ex. DTaP – Ages 6 wks – 6 yrs)
- ✓ Keep vaccines with shorter expiration dates to front of shelf to be used first
- ✓ Do not store food or beverages in vaccine refrigerator/freezer
- ✓ Separate/identify VFC vaccine from privately purchased vaccine
- ✓ Keep vaccine in original boxes until you are ready to use them
- ✓ Do not mix vaccine with different lot numbers or expiration dates
- ✓ Keep box lid closed on vaccines sensitive to light (MMR, Varicella, Zoster, HPV, Rotavirus)
- ✓ If you have vaccines that will expire in 3 months or less that you will not be able to use, notify the Kentucky Immunization Program at 502-564-4478
- ✓ Perform routine cleaning on vaccine storage units
- ✓ Place a Do Not Unplug sticker at refrigerator/freezer outlet and at circuit breaker (Stickers provided)

Ordering Vaccines

- ✓ See instructions for Vaccine Activity and Order Worksheet in the “Forms” section of this manual
- ✓ Inventory your vaccine at least monthly even if not placing an order
- ✓ Do not order more than a 2 month supply at any one time

Receiving/Transporting Vaccines

- ✓ Be present when vaccine shipments are delivered and process the vaccine shipment into inventory immediately
- ✓ Ensure that the cold chain has been maintained by checking the shipping temperature indicator
- ✓ Check your shipping invoice for accuracy and notify KY Immunization Program within two hours of receiving vaccines if there’s an error in your order or vaccines are too warm
- ✓ Rotate the vaccine inventory so that vaccines with shorter expiration dates are used first
- ✓ Transport refrigerator vaccines in cooler with ice packs and thermometer. Place a barrier between vaccines and ice packs. Temperatures must be maintained at 35-46 degrees Fahrenheit or 2-8 degrees Celsius at all times.

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- ✓ Transport freezer vaccines only in a portable freezer. Temperatures must be maintained at 5 degrees Fahrenheit or -15 degrees Celsius or colder at all times. Contact Merck for further guidance

Vaccine Wastage/Expiration

- ✓ Remove any expired vaccine immediately from stock upon expiration
- ✓ Report wasted doses of VFC vaccine using the Return and Adjustment Form in the “Forms” section of this manual. See handout titled “Non-Viable Vaccine Returns”
- ✓ Return expired VFC vaccine using the Return and Adjustment Form in the “Forms” section of this manual
- ✓ Upon receipt of the Return & Adjustment Form, a postage paid return label will be mailed to provider within 4 weeks
- ✓ After receiving return label, place expired vaccines with a copy of the Return & Adjustment form in a shipping container (no ice packs required) and return via UPS with their routine pick-up.

Borrowing Vaccines

- ✓ VFC-enrolled providers are expected to maintain an adequate inventory of vaccine for their non-VFC-eligible patients.
- ✓ VFC vaccine cannot be used as a replacement system for a provider’s privately purchased vaccine inventory.
- ✓ The provider must assure that VFC vaccine supply is adequate to meet the needs of the provider’s VFC-eligible patients and that borrowing VFC vaccine will not prevent a VFC-eligible child from receiving a needed vaccination because VFC vaccine was administered to a non-VFC eligible child.
- ✓ Borrowing will occur only when there is lack of private-stock vaccine due to unexpected circumstances such as a delayed vaccine shipment, vaccine spoiled in-transit to provider, or new staff that calculated ordering time incorrectly.
- ✓ The reason for borrowing cannot be provider planned borrowing from VFC stock.
- ✓ Borrowing of VFC vaccine should be rare and not a routine occurrence

Since borrowing of VFC vaccine should be a rare occurrence, the Immunization Program must follow-up with providers that submit multiple reports in a single year. Follow-up will include a site visit to provide education and assess the immunization delivery system within the practice to determine if changes must be implemented to eliminate the need for frequent borrowing of VFC vaccine. The state Immunization Program may ask for information validating that borrowed VFC vaccine was replaced by asking for a copy of invoice for the private stock vaccine used to replenish the borrowed VFC vaccine to determine if the invoice date corresponds with the replacement date on the borrowing report.

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Vaccines Power/Equipment Failure Plan

In the event of a power outage or refrigerator/freezer mechanical failure, the following procedure should take place.

Refrigerator/Freezer Mechanical Failure:

- Upon discovery of failure, document the current temperatures and the length of time the temperatures were out of range (data can be obtained from recording thermometers, if available).
- Move vaccines to a backup refrigerator/freezer in your facility that maintains appropriate temperatures and mark "Do Not Use" until viability is determined.
- If no backup unit is available, pack vaccines in a Vaccine Transfer Container with thermometers and take to a predetermined location.

Location: _____

- Contact the Kentucky Immunization Program at 502-564-4478 for instructions or the Vaccine Manufacturers to determine vaccine viability. Report any non-viable vaccine to the Immunization Program using the Vaccine Return & Adjustment Form.

Power Outage < 3 hours in duration (must have ice packs in freezer and multiple water bottles in refrigerator):

- Do not open freezer or refrigerator doors until power is restored. When power is restored, document the current temperatures and the length of time the temperatures were out of range (data can be obtained from recording thermometers, if available).

If temperatures out-of-range:

- Continue to monitor the temperatures until they reach the recommended refrigerator range of 35-46 degrees Fahrenheit (F)/2-8 degrees Celsius (C) and freezer range of 5 degrees Fahrenheit/-15 degrees Celsius or below.
- Contact the Kentucky Immunization Program or Vaccine Manufacturers to determine vaccine viability. Inform the Kentucky Immunization Program if any vaccine is non-viable by using the Return and Adjustment Form
- Do not discard any vaccine. VFC vaccine determined non-viable must be returned to the Kentucky Immunization Program. See "Non-Viable Vaccine Return" handout.

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Power Outage > 3 hours in duration:

- Document the current temperatures and the length of time the temperatures were out of range (data can be obtained from recording thermometers, if available).
- Record the vaccine name, manufacturer, lot #, expiration date and # of doses on the Emergency Response Worksheet.
- Place vaccines in a Vaccine Transfer Container with a thermometer.
- Transfer vaccines to a pre-determined location with power.

Location: _____

- Mark vaccines “Do Not Use” and place in refrigerator/freezer.
- Contact the Kentucky Immunization Program or Vaccine Manufacturers to determine vaccine viability. Inform the Kentucky Immunization Program if any vaccine is non-viable using the Vaccine Return and Adjustment Form
- Do not discard any vaccine. VFC vaccine determined non-viable must be returned to the Kentucky Immunization Program. See “Non-Viable Vaccine Return” handout.

Vaccine Transfer Container packing instructions:

- A Vaccine Transfer Container (cooler, vaccine shipment box) should be ready for use in the event that vaccine needs to be transferred to another location. Make sure container(s) are large enough to transport all vaccines.
- Place refrigerated vaccines in container with a layer of insulation and a layer of ice packs. Place thermometer on top and close lid.

Freezer Vaccines containing Varicella

- Varicella, MMRV and Zostavax should only be moved with a portable freezer that can maintain 5 degrees F or -15 degrees C or colder. Contact Merck for further guidance.

Manufacturers:

Sanofi Pasteur Inc.	800-822-2463
Merck & Co., Inc.	800-672-6372 or 800-637-2590
GlaxoSmithKline	866-475-8222 or 888-825-5249
Wyeth	800-999-9384
MedImmune	877-358-6478
Novartis	800-244-7668

Kentucky Immunization Program: 502-564-4478