VFC Refrigerator and Freezer Buying Guide

Overview

One important aspect, if not one of the most important aspects, of enrollment in VFC is Vaccine Management. It is imperative that providers invest in units capable of maintaining viability of your vaccine stock. Purchasing a refrigerator unit requires knowledge of recommendations by the CDC and the information included in this guide. CDC encourages that you think of your storage unit purchase as an insurance policy to protect patients' health and safeguards your facility against costly vaccine replacement, inadvertent administration of compromised vaccine, and other potential consequences (e.g., the costs of revaccination and loss of patient confidence in your practice). Reliable, properly maintained equipment is critical to the vaccine cold chain.

We encourage you to carefully review equipment specification requirements outlined below to assist with selecting the appropriate unit for your practice. We advise that you research several available options and consult with the units' manufacturer before making your final purchase, especially if buying a commercial unit. For more details, please refer to the CDC's Storage and Handling Toolkit by clicking on the link below:

http://www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf

Checklist: General Vaccine Storage Unit Recommendations

☐ Maintain required vaccine storage temperatures
- Refrigerator: between 35°F and 46°F (2°C and 8°C)
- Freezer: between -58°F and +5°F (-50°C and -15°C)

☐ Frost-free or preferably have an automatic defrost cycle
- If a manual defrost is used, the provider should be diligent in periodic defrosting according to manufacturer recommendations or if there is a 2 inch or greater ice buildup in the freezer. Ice buildup in the freezer will diminish the equipment's capability to maintain correct storage temperatures. Even manual defrost combination refrigerator/freezers cycle. Cycling can affect storage unit temperatures.

☐ Have enough room to store the year's largest inventory and accommodate preferred method of storing vaccines by funding split without crowding.

☐ Have enough room to store water bottles (in the refrigerator) and frozen coolant packs (in the freezer) to stabilize the temperatures and minimize temperature excursions that can impact vaccine potency

☐ Have a calibrated thermometer with a current Certificate of Calibration and Traceability inside each storage unit

☐ Reliably maintain the appropriate vaccine storage temperatures year-round

☐ Dedicated to the storage of vaccines. Food and beverages should NOT be stored in a vaccine storage unit

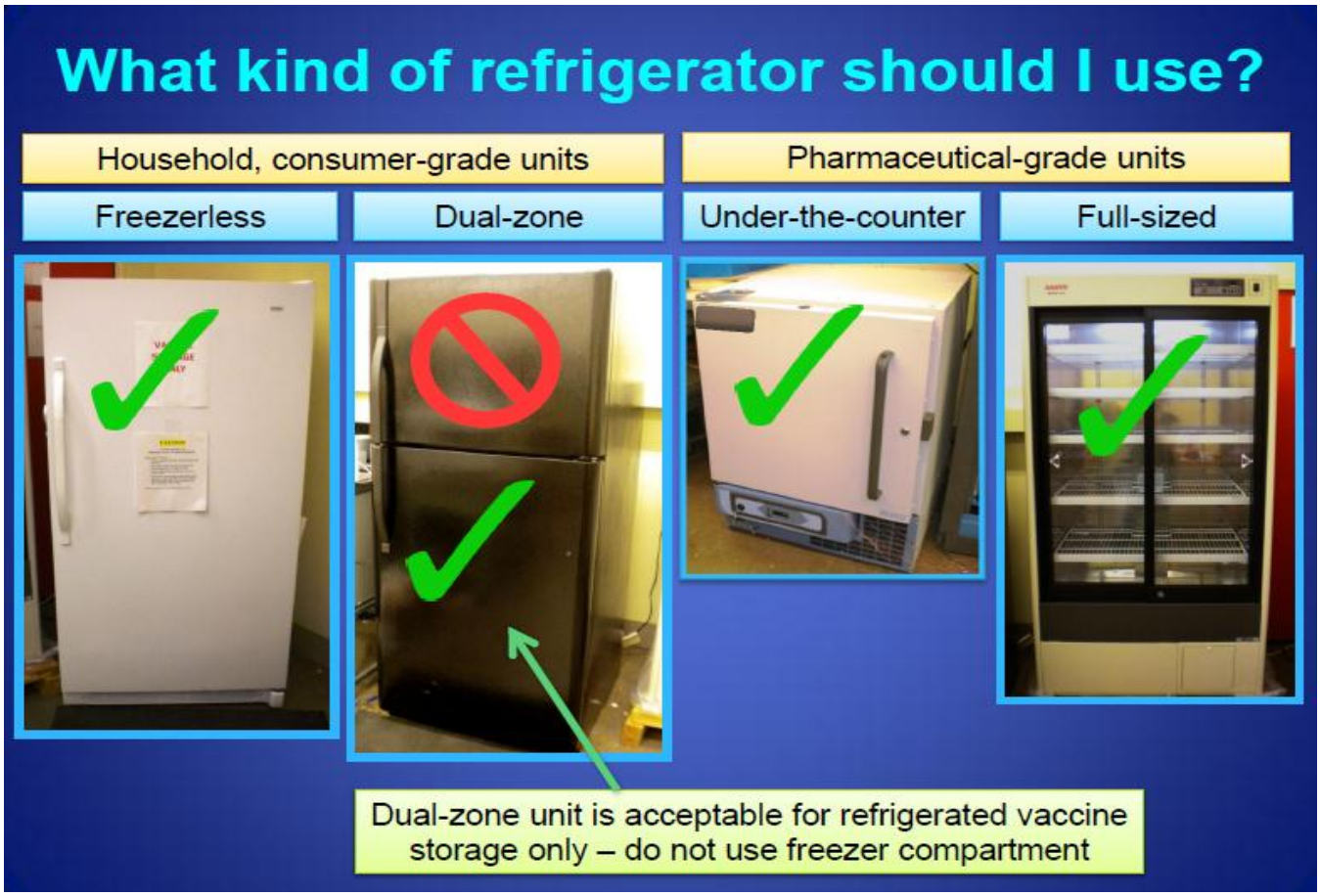
☐ Vaccine storage unit door must close securely and tightly against the unit. There should be no gaps between the seal and the body of the unit when the door is closed.

Separate vs. Combined Refrigerators and Freezers

CDC and Georgia VFC strongly recommend that clinics purchase stand-alone, biologic-grade refrigerator and freezer units for vaccine storage. Experience has shown that separate units remove the risk of freezing refrigerated vaccine, increases storage space and reduces compressor wear associated with a dual zone system.

Note* although Georgia's VFC Program currently does not require providers to purchase stand-alone units, the program plans to implement this requirement during the 2015 re-certification period. VFC also requires malfunctioning household units to be replaced with stand-alone units per current CDC recommendations.

Acceptable Units



Unacceptable units

Dorm-style units are not allowed

Unit Size

First determine the size of your practice. Calculate inventory of public and private doses currently stored in your unit or for new practices, consider the estimates submitted for your VFC and private pay patient estimates. Remember to consider doses stored during high peak seasons, such as flu season or back-to-school.

Low volume providers (may use smaller Pharmacy-grade or Biologic-grade under-the-counter refrigerator units.

Office Size	Required Equipment
Very High Volume 10,000 doses/year	Pharmacy-grade or biologic-grade refrigerator-only units and stand-alone freezer units
High Volume 2,000-10,000 doses/year	Refrigerator-only (16.7 cubic feet minimum) and stand-alone freezer units
Medium Volume 500-2,000 doses/year	Refrigerator-only (16.7 cubic feet minimum) and stand-alone freezer units ***OR*** Pharmacy-grade or biologic-grade under the counter units.
Low Volume Less than 500 doses/year	

Setting Up Your New Unit

Before placing vaccines in your new unit, follow these simple steps to ensure success:

- Plug your vaccine storage units directly into the outlets. Never use extension cords.
- Place a VFC provided DO NOT UNPLUG label on the socket where the unit is plugged in and on the circuit breaker for the unit.

- If your unit comes with vegetable bins or deli-crispers, remove them from the unit, or fill them with bottles of water.
- Determine your method for separating vaccine by funding type. If using baskets, create labels and place the baskets in the unit.
- Place certified thermometers. Data loggers may be attached using command strips, Velcro, or by any method chosen by your practice. Glycol probes should be placed in the middle of the unit.
- Set refrigerator temperatures to 40°F.
- Prior to placing vaccines in your unit, record temperatures twice a day for at least 3-5 days. Vaccines should be temporarily stored in an alternate unit until the temperature in the new unit is stable within the recommended range.
- Record temperatures for 5 days. You may begin to store vaccines in the unit once temperatures have been recorded in range for 5 consecutive days.
- Installation of pharmacy- or biologic-grade refrigerators should be done professionally by a Refrigeration Specialist. They will level the unit and identify the coldest and warmest zones in the device. They will also determine when the unit is ready for use and provide training to staff on the unit

Resources

Vaccine Storage and Handling Toolkit	http://www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf
CDC Pink Book	http://www.cdc.gov/vaccines/pubs/pinkbook/index.html
NIST Storage and Monitoring of Vaccines	http://www.nist.gov/pml/div685/grp01/vaccines.cfm
Immunization Action Coalition	http://www.immunize.org/

*Storage and handling guidance will be revised as needed based on CDC updates and programmatic changes.