

2026

Oregon Vaccine Refrigerator & Freezer Guide



Current Requirements

for Vaccines for Children program (VFC) & Vaccine Access Program (VAP)

It is important your facility has proper storage and monitoring equipment that is set up correctly, maintained appropriately, and repaired as needed. This equipment protects patients from inadvertently receiving compromised vaccine and your facility against costs of revaccinating patients, replacing expensive vaccines, and losing patient confidence in your practice.

Choosing a vaccine storage unit

The U.S. Center for Disease Control and Prevention (CDC) and the Oregon Immunization Program (OIP) recommend separate, biomedical-grade units. We do NOT recommend a household combination unit.

Note:

- **Newly enrolled providers will not be allowed to use the freezer compartment of a household combination unit.**
- **Dorm-style units are NEVER allowed for ANY type of vaccine storage.**

CDC & OIP vaccine storage requirements

Any vaccine storage unit carrying VFC/VAP vaccine must meet these requirements:

- The unit must be able to keep required vaccine storage temperatures:
 - Refrigerator: between 2°C and 8°C (36°F to 46° F).
 - Freezer: between -50°C and -15° C (-58°F to 5° F).
 - Ultracold: between -90°C and -60°C (-130°F to -76°F).
- The unit must be big enough to store the year's largest inventory while keeping the proper temperatures.
 - This includes the addition of seasonal immunizations (e.g., influenza, RSV, etc.).
- The unit must have enough room to store water bottles (unless water bottles are not recommended by the manufacturer). Water bottles keep temperatures stable. This prevents out-of-range temperatures that can impact vaccine potency.
 - Use water bottles in commercial or household refrigerators.
 - Use frozen water bottles in commercial or household freezers.
- The unit must have a centrally located, digital data logger with a buffered probe.
- The unit must be dedicated to storage of immunizations (other pharmaceuticals only as necessary).
- Food and beverages must **NOT** be stored in a vaccine storage unit. This practice results in opening the door too often, which destabilizes temperatures.

Note: Please make sure you are following manufacture guidelines as well, purpose-built or pharmaceutical grade units may have different requirements.

Dorm-style units are not allowed

Small, single door combined units should never be used for vaccine storage. These units have a single exterior door and an evaporator plate/cooling coil, usually located in an icemaker/ freezer compartment. These units pose a significant risk of freezing vaccines, even when used for temporary storage. Additional reasons dorm-style units should not be used for vaccine storage:



- The freezer compartment can't hold the right temperatures for varicella and zoster vaccines.
- Cold air from the freezer vents down into the main compartment, causing unstable refrigerator temperatures.

Note: Not all small storage units are dormitory- or bar-style units. Compact, purpose-built units for biologics can be used to store vaccines.

Household combination unit are not recommended



If using a household combination refrigerator/freezer, it is recommended you upgrade to a biomedical-grade unit.

If an upgrade isn't possible, consider getting a separate countertop freezer. Only the refrigerator section of the household refrigerator can be used unless you enrolled prior to July 1, 2024 and have used your household combination unit continuously since then. By far, the best practice is to choose a separate refrigerator and freezer built for the purpose of storing immunizations.

Enrolled before July 1, 2024?

If you were:

1. Enrolled with a household combination unit before July 1, 2024, and

2. Using both compartments, and
3. Consistently maintaining the required temperature ranges,

Then you may continue to use that unit. **BUT**, if out-of-range temperatures happen that aren't due to another cause (like a power outage), you will have to discontinue use. Even if it requires the purchase of a separate freezer unit.

Any providers enrolled after July 1, 2024, will not be allowed to use the freezer compartment of a household combination unit. When replacing a household combination unit, providers in VFC must either upgrade to separate fridge and freezer units or to a biomedical grade combination unit regardless of enrollment date.

Water bottles

The CDC recommends placing water bottles (in refrigerators) or frozen water bottles (in freezers) in the top shelf, floor, and in the door shelves each storage unit to:



1. Keep temperatures stable during frequently opening and closing a unit or a power outage, and
2. Prevent staff from putting vaccines in areas at higher risk of out-of-range temperatures. Higher-risk areas include doors, vegetable bins, on the floor, and near/under cooling vents.

NOTE: Not all manufacturers recommend using water bottles in their units. Before adding water bottles, check with your manufacturer.

Power Supply

Even with appropriate equipment and temperature monitoring practices in place, power disruption can result in destruction of the entire vaccine supply. Precautions should always be taken to protect the storage unit's power supply.

- Plug in only one storage unit per electrical outlet to avoid creating a fire hazard or triggering a safety switch that turns the power off.
- Use a safety-lock plug or an outlet cover to prevent the unit from being unplugged.
- Post 'Do Not Unplug' warning signs at outlets and on storage units.
- Label fuses and circuit breakers to alert people not to turn off power to a storage unit.
- Use caution when using power outlets that can be tripped or switched off and avoid using:
 - Built-in circuit switches (may have reset buttons)
 - Outlets that can be activated by a wall switch
 - Multi-outlet power strips

Built-in digital data loggers

Some refrigerator and freezer units include built-in digital loggers. Unless these loggers meet VFC requirements, **they should not be used for vaccine monitoring.**

All official temperature readings must only be taken from your VFC-approved, calibrated digital data logger/backup logger.

Choosing the right size storage unit

You need to have enough room to store your current stock to include all seasonal stock without overcrowding. You can work with the supplier to determine the best fit for your clinic.

Choosing the right location

Good air circulation around the outside of the storage unit is important. Place a storage unit in a well-ventilated room, leaving space between the unit, ceiling, and any wall. Nothing should block the cover of the motor compartment. The unit should be firm and level, with the bottom of the unit above the floor. Make sure the unit door opens and closes smoothly and fits squarely against the body of the unit. Pay close attention to manufacturer ventilation guidelines when deciding where to put your units.

Note: As a state agency, we cannot endorse or recommend any specific brand or product. The terms and conditions of your purchase are between you and your vendor.

Equipment Options

This guide is only meant as an overview of the types of storage units to consider during your search. There is no brand recommendations listed in this guide.

As always, OIP is here to help. Don't hesitate to contact our VFC/VAP Help Desk at 1-800-980-9431 or vfc.help@odhsoha.oregon.gov with any questions.

Note: You may see vendors use terms such as “VFC-compliant,” “CDC-compliant,” or “satisfies VFC requirements” in their marketing materials or on their websites. In this context, "compliance" and related terms may lead consumers to incorrectly believe that CDC or the VFC program has independently assessed and verified the quality of these products. CDC/VFC is not authorized to assess, validate, verify, or endorse the products or services of private companies. Should you encounter this type of language in vendor marketing materials, please keep in mind that neither CDC nor the VFC program has validated any product or service for compliance with CDC or VFC program requirements or standards.

Used and refurbished equipment

There are several used and re-manufactured equipment vendors online. Consider calling your manufacture of choice and asking about less expensive used units. Some manufacturers have an inventory of scratch and dent units that come with a much lower price tag and a full warranty.

Under-counter purpose-built or pharmaceutical-grade refrigerators and freezers

Under-counter refrigerators and freezers are a great choice for clinics with limited space. Benefits of under-counter units include:

- **Lower risk:** Separate compressors and condensers decrease the risk of a total vaccine loss that might occur in a single combined unit.
- **Flexibility:** Small and easy to relocate, under-counter units can be positioned in multiple ways depending on the need.
- **No cold air vent:** Traditional combined units use a cold air vent to blow frozen air into the refrigerator compartment. Separate units mean separate compressors and no need for cold air venting.
- **Cost effective:** If you are looking to add refrigerator or freezer capacity, this option allows you to buy only what is needed.



Large stand-alone purpose-built or pharmaceutical-grade refrigerators and freezers

Biomedical-grade refrigerators and freezers are designed specifically for storage of biologics, including vaccines. These units can be compact, under-the-counter style or large.



Full-size, combined purpose-built or pharmaceutical-grade refrigerator and freezers

While they may look like household combination units, biomedical-grade combination units are far superior for vaccine storage in several important ways:

- Separate refrigeration systems for the refrigerator and freezer.
- Improved cabinet insulation to avoid hot and cold spots.
- Built-in, digital temperature display.
- Built to industrial standards and warrantied for industrial use.
- Fan-forced air circulation delivers quick temperature recovery.

Pharmaceutical-grade, combination units are ideal for clinics wanting a best-practice storage solution in a compact package.



Ultra-low temperature freezer

Some vaccines require ultra-cold temperature for storage. If you are considering a unit that holds ultra-cold temperatures, look for a unit with these specifications:

- Digital temperature display,
- Microprocessor control,
- Audible alarms, and
- Ability to hold ultra-cold temperatures from -90°C to -60°C (-130°F to -76°F).

Doorless/vending-style purpose-built or pharmaceutical-grade units

These vaccine refrigerators dispense vaccine without you having to open the door and retrieve an immunization.

Additional Equipment/Information

Additional equipment, add-ons, and services you might consider:

Portable cold storage

These are excellent options for emergency storage, long distance transport, or use during day clinics in the field.

Some units use electricity to run a cooling system. Others use advanced insulation and with propriety cooling packs/phase change panels (make sure you have enough room to store these packs/panels in your units as some can be quite large).

Emergency battery back-up

Other than a generator, one of the best ways to buy time during an emergency is a battery back-up. Ideally, you would use these in combination with an alarm system to add hours to your response window.



Biomedical-grade equipment repair

If your refrigerator or freezer malfunctions, call your manufacturer to check on warranty status. The manufacturer should have a list of local repair shops that can work on your equipment.