

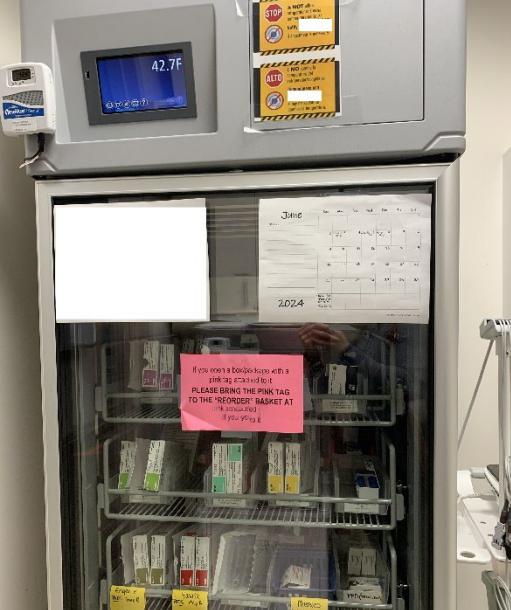
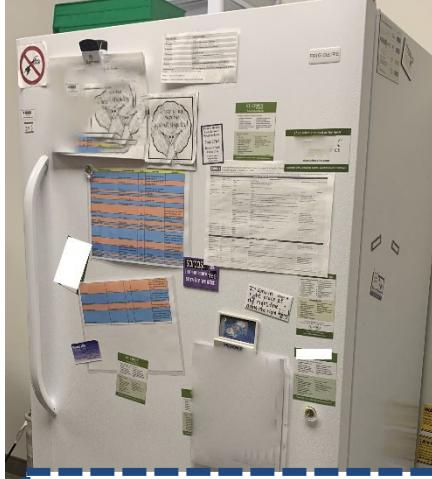
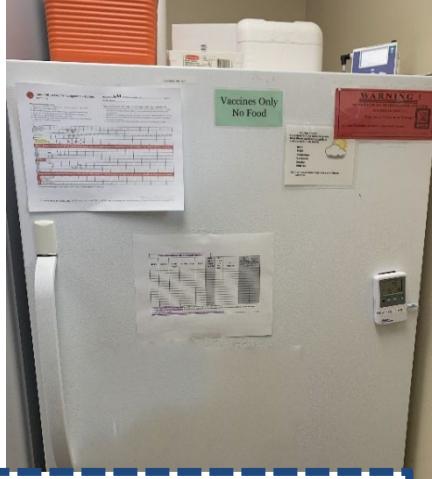


## Vaccine Storage Unit and Setup

All VFC providers are required to properly store and handle vaccines. This starts by having the proper storage and monitoring equipment that is set up correctly, maintained appropriately, and repaired as needed.

### Vaccine storage unit type

The VFC program recommends the following vaccine storage unit types (in order of preference): pharmaceutical grade/purpose-built units, commercial units, and household units. A dorm-style may never be used to store vaccine.

Pharmaceutical Grade	Commercial	Household
Best	Good	Discouraged
Designed for storage of biologics, including vaccines, they maintain temperatures more consistently.	Units not built for vaccine storage and instead intended for commercial food use.	Unit built for food storage with compressors less powerful than commercial units.
		

Commercial and household units can look similar. You can use the manual to distinguish between the two by looking at compressor size and performance.

### Pharmaceutical grade units

- These units can be stand-alone or combination units. The units can vary in size from a compact, under-the-counter style to a large stand-alone unit.
- These units have good temperature recovery when the unit has been opened to get vaccines and nearly all the internal space in the unit can be used to store vaccines. Use water bottles in open space unless the manufacturer states not too.
- Pharmaceutical grade units do include vending or doorless style units. Please contact the VFC program to see if your unit meets VFC program requirements.

## Commercial grade units

- These are acceptable but may not provide consistent temperatures as well as purpose-built units, and they are not built for vaccine storage.
- Vaccine cannot be stored in the doors, vegetables bins, or on the floor of these units and water bottles must be used for temperature maintenance.

## Household units

- If you are using a combination household unit, only the refrigerator section can be used for vaccine storage. A separate, stand-alone freezer must be in use.
- Vaccine cannot be stored in the doors, vegetables bins, or on the floor of these units and water bottles must be used for temperature maintenance.
- If a temperature excursion occurs the program may request a provider obtain a new vaccine storage unit that is either a purpose-built or commercial unit.

## Dorm-style units

- Not an acceptable unit for vaccine storage at any time.
- A dorm-style refrigerator is defined as a small combination refrigerator/freezer unit that is outfitted with one exterior door and an evaporator plate (cooling coil), which is usually located inside an icemaker compartment (freezer) within the refrigerator.

## Storage unit size

Storage units must have enough room to store the largest inventory a provider location might have at the busiest point in the year without crowding to promote good airflow. The unit should have enough room to store routine vaccine plus additional room for seasonal vaccines when applicable.

The following guidance can be used to estimate size needs:

<b>Public (on-hand) + private (on-hand) = Current Inventory X1.25 = maximum doses</b>	> 2,000 doses	May need two units
	1000-2000 doses	40 cu ft
	900-1000 doses	36 cu ft
	801-900 doses	23 cu ft
	701-800 doses	17-19.5 cu ft
	400-700 doses	11-16.7 cu ft
	100-399 doses	4.9-6.1 cu ft

## Storage unit location

The storage units should be in a well-ventilated location where there is good air circulation. The ideal room temperature is between 68°F and 77°F.

# Storage unit setup

## Basic setup requirements

- All storage units must have a temperature monitoring device that is a digital data logger.
- Protect the power source for all storage equipment by using "Do Not Disconnect" warning labels at the electrical outlet and circuit breaker.
- Storage units must be plugged into an electrical outlet. Power strips are not allowed to be used.
- Never store food or beverages in the unit with vaccine.



Example of a labeled outlet

## Temperature requirements

- Refrigerator: Store between 2°C to 8°C or 36°F to 46°F
- Freezer: Store between: -15°C to -50°C or 5°F to -58°F

## Vaccine placement requirements

- Keep private and public vaccines clearly labeled and separated.
- Vaccine must be stored in the original packaging or amber colored bags with the following information: vaccine name, lot number, expiration date, and the NDC number from the box.
- Place vaccines with the earliest expiration date in front of those with a later date.

The picture on the right gives an example of what proper vaccine storage looks like in a pharmaceutical-grade unit.

- Vaccine is stored in the original packaging.
- Vaccine is separated by stock-type
  - o Private vaccine labeled yellow.
  - o Public vaccine labeled red.
- Vaccine is well organized.
- Vaccine is stored in bins that allow for airflow.



# New storage unit setup and routine maintenance

## New unit setup

It may take two to seven days to stabilize the temperature in a newly installed or repaired refrigerator and two to three days for a freezer.

Before using a unit for vaccine storage, check and record the minimum and maximum temperatures each workday. Once you have two consecutive days of temperatures recorded within the recommended range, your unit is stable and ready for use.

## Recommended routine maintenance

Regular maintenance of vaccine storage units is recommended to ensure proper operation and to maintain temperatures suitable for vaccine storage. Suggested maintenance includes:

- Clean the inside of the storage unit.
- Check door seals and hinges.
- Clean coils or remove dust as needed according to manufacturer's recommendations.
- Prevent frost build-up, defrost freezer according to manufacturer's recommendations.
- Check drain pans, if applicable.
- Test back-up generator, if applicable.