



Department  
of Health

# NYS Vaccines for Children (VFC) Program

## *Guidance for Performing a Manual Freezer Defrost*

Standalone freezers which require manual defrost (or are not frost-free) are acceptable but are not recommended due of the complexity involved in moving vaccines to defrost the freezer. If the defrost is not properly done, or is not done often enough, the freezer may not maintain appropriate temperatures.

The following instructions are intended to give general guidance on how to perform a manual defrost. Always refer to the manufacturer's guidance/product user manual for complete instructions on how to defrost your freezer.

### ***How often do I need to defrost?***

- It is normal for ice and frost to accumulate inside the freezer. A thin layer of frost does not affect cooling performance, but a thick layer will affect a unit's ability to efficiently maintain temperatures and will eventually cause failure. The more the freezer is opened/closed, the faster frost will accumulate.
- Monitor the inside of your unit at least weekly to check for ice buildup. When frost has accumulated to a thickness of approximately 1 cm, the freezer should be defrosted.
- If you notice you are needing to defrost once a month or more, check the door seals of your freezer for any problems. It is also recommended that you call to have the freezer serviced.

### ***What will I need to defrost the freezer?***

- Alternate or backup freezer:
  - Must have sufficient capacity for primary freezer's vaccine supply
  - Must be able to maintain in-range temperatures
  - Must be monitored by a calibrated temperature monitoring device (Digital Data Logger [DDL])
- A container filled with warm water.
- Towels to dry and clean the inside of the freezer.

## ***How do I defrost the freezer?***

- Check temperature in alternate or backup freezer to ensure temperature is in range: between -50° C and -15° C (-58° F and +5° F).\*
- Move vaccines to the alternate/backup freezer unit.
- Move all frozen water bottles to the alternate/backup unit.
- Disconnect temperature monitoring device in the freezer that needs to be defrosted.
- Turn off power and unplug the freezer.
- Keep the freezer door open and allow ice to melt. Remove loose ice by hand (do NOT use a sharp tool).
  - Place open container of warm (NOT boiling) water in freezer to speed melting.
  - It is recommended you place towels on the bottom of the unit to absorb melting ice and avoid damaging flooring.
- Clean and dry the freezer when all ice is melted.
- Reconnect to power and set thermostat to the correct setting (0°F/-18°C).
- Monitor the temperature with a calibrated temperature monitoring device (DDL) every hour for several hours until the temperature is stable and within appropriate range.
- Restock with vaccines and water bottles (if applicable) once the temperature is stable.
  - Always check freezer user manual to ensure frozen water bottles are recommended for your storage unit.

\*Always refer to the vaccine package insert for specific storage and handling guidance, as some vaccines have more restrictive temperature ranges. For example, the recommended temperature range for frozen storage of Jynneos is between -25°C and -15°C (between -13°F and +5°F).

## **Resources**

[Centers for Disease Control and Prevention \(CDC\), Vaccine Storage and Handling Toolkit](#)

[Immunization Action Coalition, Monthly Care of Vaccine Storage Units](#)

For questions or concerns, contact the NYS VFC Program at [nyvfc@health.ny.gov](mailto:nyvfc@health.ny.gov)