



## New York State Vaccines for Children (NYS 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 because of the complexity involved in moving vaccines in order to defrost the freezer. If the defrost is not properly done or is not done often enough, the unit may not maintain appropriate temperatures.

**The instructions that follow are intended to give general guidance on how to perform a manual defrost. Always check the manufacturer's guidance for complete instructions on how to defrost your unit.**

### *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 unit 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 unit should be defrosted.
- If you notice you are needing to defrost once a month or more, check the door seals of your unit for any problems. It is also recommended that you call to have your unit serviced.

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

1. Alternate or backup freezer
  - a. Must be able to maintain in-range temperatures (e.g., cannot be a dorm-style unit)
  - b. Must be monitored by a calibrated temperature monitoring device
2. A container filled with warm water
3. Towels to dry and clean the inside of the unit

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

1. Check temperature in alternate or backup freezer to ensure temperature is in range.
2. Remove all vaccines and place in alternate/backup freezer unit.
3. Remove any frozen water bottles or ice packs and place in an alternate unit.
4. Disconnect temperature monitoring device in unit that needs to be defrosted.
5. Turn off power and unplug the unit.
6. Keep the freezer door open and allow ice to melt, remove loose ice by hand (do NOT use a sharp tool).
  - a. Place open container of warm (NOT boiling) water in freezer to speed melting.
7. Clean and dry the unit when all ice is melted.
8. Reconnect the unit to power and set thermostat to the correct setting (0°F/-18°C).
9. Monitor the temperature with a calibrated thermometer every hour for several hours until the temperature is stable and within appropriate range.
10. Restock with vaccines once the temperature is stable.

## Resources

### **Centers for Disease Control and Prevention (CDC)**

Vaccine Storage and Handling Toolkit, page 29

<http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf>

### **California Department of Public Health's EZIZ Website**

Monthly Care of Vaccine Storage Units

<http://eziz.org/assets/docs/IMM-970.pdf>