

**POLICY AND PROCEDURE MANUAL  
PHARMACY SERVICES**

SECTION: PROCUREMENT  
SUBJECT: SAFE STORAGE AND HANDLING  
OF VACCINES

CODE: 7.03.0  
DATE: 9/23/11  
REVISED: 4/19/22  
APPROVED: Thinkh Tran, Pharm.D.  
MEC APPROVED:  
PAGES: 1 of 3

---

**PURPOSE:**

Vaccines exposed to temperatures outside the recommended ranges can have reduced potency and protection. Storage and handling errors can cost thousands of dollars in wasted vaccine and revaccination in addition to waste of limited resources. Vaccines must be stored properly from the time they are manufactured until they are administered. The purpose of this policy and procedure is to outline storage and handling procedures according to CDC guidelines.

**PROCEDURE:**

1. Procurement Responsibilities
  - a. Pharmacy Procurement will have the responsibility of coordinating the ordering and receipt of vaccines. The Procurement Assistant will be the primary vaccine coordinator and the Pharmacy Helper under the Pharmacy Procurement section will be the back-up coordinator.
  - b. Both the vaccine coordinator and back-up will have reviewed CDC's storage and handling guidelines or equivalent training offered by the State Health Department's immunization program.
  - c. The Pharmacy Procurement staff will be responsible for logging in new vaccine shipments.
    - i. Vaccine name and number of doses received.
    - ii. Date received.
    - iii. Condition of the vaccine when received including the reading from the temperature monitor.
    - iv. Vaccine manufacturer and lot number.
    - v. Vaccine expiration date.
    - vi. If there are any concerns regarding the proper storage and handling of the vaccine, the vaccine will be stored according to the manufacturer's parameters and quarantined until the concerns are resolved and documented.
  - d. Vaccines will be stored at the correct temperature according to the manufacturer's temperature parameters and in their original packaging with allowance for air to circulate.
  - e. Vaccine stock will be rotated so that vaccine closest to its expiration date will be used first.
  - f. CDC's storage and handling guidelines will be reviewed on an annual basis.

Reviewed 8/11/2014bdk, 12/27/2018bdk, 4/19/2022 TT

Approved By: 

**POLICY AND PROCEDURE MANUAL  
PHARMACY SERVICES**

SECTION:     PROCUREMENT  
SUBJECT:     SAFE STORAGE AND HANDLING  
              OF VACCINES

CODE:         7.03.0  
DATE:         9/23/11  
REVISED:     4/19/22  
APPROVED:    Think Tran, Pharm.D.  
MEC APPROVED:  
PAGES:        2 of 3

---

- g. Vaccine Disposal. Contact the vaccine manufacturer for instructions regarding the disposition of unopened vaccine, expired vaccine, unused doses, doses drawn but not administered, and potentially compromised vaccine due to inappropriate storage conditions.
2. Pharmacy Staff Responsibilities
- a. Review CDC's storage and handling guidelines or equivalent training offered by the State Health Department's immunization program.
  - b. Notify Pharmacy Procurement as soon as a vaccine shipment is received. If Pharmacy Procurement is not available, unpack the vaccine and store according to the manufacturer's temperature parameters noting on the invoice:
    - i. Vaccine name and number of doses received.
    - ii. Date received.
    - iii. Condition of the vaccine when received including reading from the temperature monitor.
    - iv. Vaccine manufacturer and lot number.
    - v. Vaccine expiration date.
    - vi. If there are any concerns regarding the proper storage and handling of the vaccine, the vaccine will be stored according to the manufacturer's parameters and quarantined until the concerns are resolved and documented.
  - c. All medication refrigerators and freezers will be on emergency power (red plugs).
  - d. Temperatures will be taken twice a day; preferably 12 hours apart.
    - i. Refrigerator temperatures will be between 2.2 degrees C to 7.7 degrees C (36 degrees F to 46 degrees F) preferably 5 degrees C or 40 degrees F.
    - ii. Freezer temperatures will not exceed -20 degrees C (-4 degrees F)
    - iii. If temperature should fall out of the above parameters, move the vaccines to the nearest operating refrigerator/freezer per manufacturer's storage parameters and call Facilities Management, place a work order, and log the action taken on the temperature log. The approximate time that the vaccine was out of range will be recorded and directions from the State Health Department immunization program or manufacturer regarding the disposition of the out-of-range vaccines will be followed and logged.
  - e. Clinics are not open on the holidays and weekends. Vaccines will be picked up by Pharmacy personnel prior to the holiday and on Fridays and stored in the medication refrigerator or freezer per manufacturer's storage parameters. Vaccines will be delivered on the first working day following the holiday or

**POLICY AND PROCEDURE MANUAL  
PHARMACY SERVICES**

CODE: 7.03.0  
DATE: 9/23/11  
REVISED: 4/19/22  
APPROVED: Think Tran, Pharm.D.  
MEC APPROVED:  
PAGES: 3 of 3

SECTION: PROCUREMENT  
SUBJECT: SAFE STORAGE AND HANDLING  
OF VACCINES

---

weekend. Pharmacy personnel will transport the vaccines in a cooler contained with a cooling material.

- f. Vaccine stock will be rotated so that vaccine closest to its expiration date will be used first.
  - g. Coils and cleaning beneath the refrigerators/freezers will be performed twice a year by Facilities Management and documented on the temperature log sheet.
  - h. Pharmacy personnel will review CDC's storage and handling guidelines on an annual basis.
3. Unit/Clinic Inspections
- a. Vaccines are stored at the appropriate temperature parameter recommended by the manufacturer and monitored twice a day.
  - b. If temperatures should fall out of the above parameters, the vaccines are to be moved to the nearest operating refrigerator/freezer per manufacturer's storage parameters, Facilities Management called at extension 7600, a work order placed, and the action taken will be logged on the temperature log. The approximate time that the vaccine was out of range will be recorded and directions from the State Health Department immunization program or manufacturer regarding the disposition of the out-of-range vaccines will be followed and logged.
  - c. Vaccines are protected from light and stored in their original container.
  - d. Vaccines are not stored with food or drink.
  - e. Vaccines are stored in the middle of the refrigerator or freezer (never on the doors) with room for air to circulate.
  - f. If a combination refrigerator-freezer unit is used, vaccines are not stored in front of the cold air outlet that leads from the freezer to the refrigerator (often near the top shelf).
  - g. Vaccine stock will be rotated and checked for expires.
4. Pharmacy Supervisors Responsibilities
- a. Employees are educated on the safe handling and storage of vaccines on an annual basis as well as initially for new hires and registry staff.
  - b. Updated and current information of vaccine storage and handling are given to the staff.
  - c. Policy and procedure is adhered to by the staff.