



DEPARTMENT OF THE NAVY

NAVAL MEDICAL CENTER  
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PORTSMOUTH, VIRGINIA 23708-2197

NAVMEDCENPTSVAINST 6710.23  
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10 FEB 2012

NAVMEDCENPTSVA INSTRUCTION 6710.23

From: Commander, Naval Medical Center, Portsmouth, Virginia

Subj: TEMPERATURE MONITORING STANDARDS FOR REFRIGERATORS  
AND FREEZERS

Ref: (a) Joint Commission Comprehensive Accreditation Manual  
For Hospitals  
(b) NAVMED P-5010, Manual of Naval Preventive Medicine,  
Chapter 1, Food Safety  
(c) CDC Control Epidemiology and Prevention of Vaccine-  
Preventable Diseases, April 2011  
(d) Laboratory Medicine Services Policy Manual

Encl: (1) Medication Refrigerator and Freezer Temperature  
Monitoring Record, NMCP 6710/9 (Rev 1/12)  
(2) Food Refrigerator Temperature Monitoring Record, NMCP  
6710/13 (Rev 8/08)  
(3) Temperature Log for Refrigerator and Freezer -  
Celsius (CDC Immunization Form)

1. Purpose. To publish Naval Medical Center (NAVMEDCEN),  
Portsmouth requirements for sanitation standards and the  
monitoring of temperatures of all medication, immunization, and  
patient food refrigeration and freezer units.

2. Cancellation. NAVMEDCENPTSVAINST 6710.18F

3. Scope. This instruction applies to the core medical center  
and all outlying clinics which comprise the NAVMEDCEN command.

4. Background. Maintaining high standards of sanitation and  
closely monitoring temperatures in medication, immunization, and  
patient food refrigerators and freezers is critical for ensuring  
product integrity and food wholesomeness. This instruction  
details the necessary guidelines for the proper storage of  
medications, immunizations, and food intended for patient use.

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5. Procedures. To ensure safety, and to comply with references (a) through (c), the following monitoring procedures and sanitation standards will be implemented.

6. Medication Refrigerators and Freezers.

a. Spaces staffed 24-hours daily. All spaces that are staffed 24-hours, daily, all days of the week (e.g., active inpatient ward, Intensive Care Unit (ICU), Neonatal Intensive Care Unit (NICU), Emergency Medical Department) must have (1) or (2) below.

(1) Refrigerators that have external audible alarm devices with temperature ranges defined. An alarm that will sound whenever the temperature falls outside of a preset range. Manual monitoring by log sheet is not required.

(2) An analog (alcohol column or bimetallic) or digital thermometer will be used to monitor temperatures at a minimum every 24 hours, with the reading, time, and the monitor's initials recorded on a standard temperature log provided by the Pharmacy Department and designed for this purpose (Medication Refrigerator and Freezer Temperature Monitoring Record, NMCP 6710/9 (Rev 1/12), enclosure (1)). Log sheet entries will be verified monthly by the Pharmacy Department staff for medication storage areas during inspections and must be archived by the department maintaining the refrigerator or freezer per Navy regulations. Archived log sheets must be maintained for at least 1 year or as required by Navy regulations.

(3) Designated actions for resetting temperature controls, alternate storage of contents, etc., will be taken immediately when temperatures are noted to be out of range and documented in work area log.

b. Spaces staffed only during clinic hours. Spaces that are only manned during clinic hours, (e.g., Branch Clinics, medical center outpatient clinics), may be unmanned overnight or for extended periods (e.g., over a weekend or holiday), and must have either (1), (2) or (3) below.

(1) Remote monitoring of medication refrigerators in areas that are unmanned for extended periods of time is strongly recommended. Such a system must alert responsible staff of refrigerator malfunction via pager, phone call, pop-up, or other reliable notification method.

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(2) Refrigerator will have an external audible alarm device with temperature range defined, alarm will sound when temperature is out of range and monitoring device must show (flashing display/audible) that temperature has been out of range at some time while unmanned. A manual monitoring log sheet is not required.

(3) An analog (alcohol column or bimetallic, not mercury) or digital thermometer will be monitored at a minimum of every 24 hours when spaces are manned with the reading, time, and initials recorded on a standard temperature log provided by the Pharmacy Department and designed for this purpose. Log sheet entries will be verified monthly by the Pharmacy Department staff for medication storage areas during inspections and must be archived by the department maintaining the refrigerator for a minimum period of 1 year or as required by Navy regulations. In addition, the thermometer must show the maximum and minimum temperatures reached during unmanned periods.

(4) Designated actions for resetting temperature control, alternate storage of contents, etc., will be taken immediately when noted and documented in the work area's log. If the temperature has fallen outside of range for any length of time, the on-duty pharmacist must be consulted to determine product integrity and suitability for use, or if the product needs to be replaced.

c. Workspaces with high value, critical products. These areas may also be covered under paragraphs 6.a. or 6.b. (e.g., Pharmacy Department, Laboratory, or Immunizations). Because these areas have large quantities and/or high-cost medications, it is critical to know when/if the temperature has fallen out of prescribed range and also the period of time it was out of range to avoid unnecessary waste and expense. These work areas must have either (1) or (2) below.

(1) The refrigerator must be designed for medication storage with a built-in audible alarm and electronic or paper record of temperature and time. A circular temperature graph showing constant temperature monitoring over 7 days is typical. Paper documentation of recorded temperatures must be archived by the department maintaining the refrigerator for a minimum period of 1 year or as required by Navy regulations.

(2) The refrigerator must have an external audible alarm device as described above, with time/temperature monitor as

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described. These may be combined as a single device or two separate devices.

(3) Designated actions for resetting temperature control, alternate storage of contents, etc., will be taken immediately when temperatures are noted to be out of range. If the temperature has fallen outside of range for any period of time the on duty pharmacist must be consulted to determine if the contents are compromised and need to be returned for replacement.

d. Refrigerators and freezers designated for medication use will have a label indicating "MEDICATIONS ONLY, NO FOOD" as provided by the Pharmacy Department. Food refrigerators in patient care areas will be labeled "FOOD ONLY, NO DRUGS", using a label provided by the Pharmacy Department.

e. Refrigerators for medication storage must have separate refrigerator and freezer compartments. Use of "dorm style" refrigerators with internal freezers are not approved for this purpose due to wide intra-compartment temperature variation and lack of reliability.

f. Log sheets for the purpose of recording temperatures of refrigerators and freezers are on the Information Management Department (IMD) eForms Central. <https://webapps.mar.med.navy.mil/forms/viewinfo/subjectlist.asp?keyword=temp> titled NMCP 6710/13 and NMCP 6710/9. The temperature log sheet for units containing immunizations is found at <http://www.cdc.gov/vaccines/recs/storage/default.htm>. Logs must be archived by the department maintaining the refrigerator or freezer for a minimum period of 1 year or as required by Navy regulations. Logs must not be modified without Pharmacy Department assistance.

g. Devices and Sources. The following are examples of devices and sources, but are not considered exclusive sources:

- (1) Analog thermometer with minimum/maximum indicators.
- (2) Digital thermometer with audible alarm.
- (3) Digital thermometer with graph capability.
- (4) Digital thermometer with electronic storage of graph.

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7. Patient Food Refrigerators.

a. "Food Only" will be conspicuously posted on the outside of all patient food refrigerators. Medications and laboratory specimens are strictly prohibited from storage in any food refrigerators.

b. Refrigerators will be maintained in a clean, sanitary condition at all times. Particular attention will be paid to gaskets and internal food contact surfaces.

c. Refrigerated foods will be stored between 32-41°F. All frozen food will be stored at 0°F or below. An easily readable analog (alcohol column or bimetallic, not mercury) or digital thermometer will be maintained in each patient food refrigerator.

d. A temperature log will be posted on the outside of the refrigerator and internal temperatures recorded twice daily. See enclosure (2). Any prolonged deviation (more than four hours) from the recommended storage temperatures must be promptly reported to the Food Service Officer and Preventive Medicine for appropriate action. Temperature logs must be archived by the department maintaining the refrigerator for a minimum period of 1 year or as required by Navy regulations.

e. Prepared food items from the Nutrition Department will be labeled with the date and time of preparation, and date and time to discard. Potentially hazardous foods must be consumed within 24 hours of preparation as per reference (b).

f. Prepackaged foods held and refrigerated for patient use (i.e., dairy products and juices) will not be kept beyond the expiration or pull date.

g. Individual condiment packages may be held for both patient and staff use. Bulk containers are not authorized. In the event of an All Food Activity (ALFOODACT) recall, all condiments will be pulled and discarded.

h. Food items brought in by a patient or patient's family may be stored in the food only refrigerator and items must be labeled with the patient's name and date. Such foods must not be stored for greater than 24 hours unless in an unopened original container with specific shelf life information printed thereon.

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i. Staff personnel will not utilize patient food refrigerators for storing personal food items. Staff personnel use of refrigerators maintained in staff lounges is permitted, provided contents are supervised for leak-proof containers which are securely covered, conspicuously labeled, and removed at expiration of contents.

j. Freezers will be defrosted when ice and frost accumulation exceeds 1/4 inch.

8. Immunization Refrigerators and Freezers.

a. All refrigerators and freezers that contain immunizations will be remotely electronic monitored with a system such as TempTrak. All storage units containing immunizations will have the temperatures visually verified a minimum of twice per business day. The paper immunization log, Temperature Log for Refrigerator and Freezer - Celsius (Center for Disease Control (CDC) Immunization Form (enclosure (3)) will not be required unless the remote electronic system is down/not available. In cases of temperature excursion the electronic system will be the definitive source (unless offline.)

b. In the event of an individual sensor, device, or system failure, sites will implement manual temperature monitoring every 4 hours using enclosure (3) and will implement actions contained in the regional immunizations standard operating procedures.

c. In cases of a temperature excursion of immunizations, the site will sequester and maintain proper storage of the affected vaccine, mark "DO NOT USE", and notify the Regional Immunization Program Manager to initiate mandated reporting and evaluation of release for use by higher headquarters.

9. Laboratory Storage. Laboratory reagents, blood products, and other items are stored per the manufacturer's guidelines and regulatory requirements. Refer to reference (d).

10. All medication, immunization, and patient food refrigeration or freezer storage units will be subject to inspection and review during routine zone inspections.

11. Forms

a. The Medication Refrigerator and Freezer Temperature Monitoring Record, NMCP 6710/9 (Rev 1/12) is available from the

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Pharmacy Department and on the Information Management Department (IMD) eForms Central at:  
<https://webapps.mar.med.navy.mil/forms/viewinfo/subjectlist.asp?keyword=temp> titled NMCP 6710/9.

b. The Food Refrigerator Temperature Monitoring Record, NMCP 6710/13 (Rev 8/08) is available on the IMD eForms Central at:  
<https://webapps.mar.med.navy.mil/forms/viewinfo/subjectlist.asp?keyword=temp> titled NMCP 6710/13.

c. The Temperature Log for Refrigerator and Freezer - Celsius (Center for Disease Control (CDC) Immunization Form) is available on the CDC website at:  
<http://www.cdc.gov/vaccines/recs/storage/default.htm>.



D. VIA  
Deputy

Distribution:  
NAVMEDCENPTSVAINST 5215.1F (List B)



NAVAL MEDICAL CENTER PORTSMOUTH  
FOOD REFRIGERATOR TEMPERATURE MONITOR RECORD  
CLINIC/WARD \_\_\_\_\_ FOR THE MONTH OF \_\_\_\_\_ 20

NMCP 6710/13 (REV 8/08)

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	DATE *	
A.M.																																	
P.M.																																	
RECHECK																																	
TEMP °C	10	9.4	8.9	8.3	7.8	7.2	6.7	6.1	5.6	5	4.4	3.9	3.3	2.8	2.2	1.7	1.1	0.6	0	-0.6	-1.1												
TEMP °F	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30												
TAKE ACTION IF TEMP IN SHADED AREA (Lower temperature control)																																	
TAKE ACTION IF TEMP IN SHADED AREA (Raise temperature control)																																	
RECORD ACTIONS TAKEN ON REVERSE FOR TEMPERATURE OUTSIDE THE ACCEPTABLE RANGE (32-41 F OR 0-5°C). SIGN AND DATE ALL ENTRIES																																	

RECOMMENDED ACTIONS:

1. IF TEMP IS LOW RAISE TEMP CONTROL AND RE-CHECK AFTER 2 HOURS
2. IF TEMP IS HIGH LOWER TEMP CONTROL AND RE-CHECK AFTER 2 HOURS
3. IF STILL OUT OF RANGE, TRANSFER FOOD TO ANOTHER REFRIGERATOR
4. CALL FACILITIES MAINTENANCE TROUBLE DESK AT 3-5664

Supervisor: \_\_\_\_\_  
Verified by: \_\_\_\_\_

A.M.  SLK  38 A  
P.M.  SOT  35 P

1 0 FEB 2012

Month/Year: \_\_\_\_\_ Days 1-15

# Temperature Log for Refrigerator and Freezer — Celsius

**Completing this temperature log:** Check the temperatures in both the freezer and the refrigerator compartments of your vaccine storage units at least twice each working day. Place an "X" in the box that corresponds with the temperature and record the ambient (room) temperature, the time of the temperature readings, and your initials. Once the month has ended, save each month's completed form for 3 years, unless state or local jurisdictions require a longer time period.

**If the recorded temperature is in the shaded zone:** This represents an unacceptable

temperature range. Follow these steps:

1. Store the vaccine under proper conditions as quickly as possible.
2. Temporarily mark exposed vaccine "do not use" until you have verified whether or not the vaccine may be used.
3. Call the immunization program at your state or local health department and/or the vaccine manufacturer to determine whether the vaccine is still usable: ( )
4. Document the action taken on the reverse side of this log.

Day of Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Staff Initials															
Room Temp.															
Exact Time															
°C Temp	am	pm	am												
≥11°															
10°															
9°															
8°															
7°															
6°															
5°															
4°															
3°															
2°															
1°															
0°															
≤-1°															
Take immediate corrective action if temperature is in shaded section*															

≥-12°															
-13°															
-14°															
-15°															
-16°															
≤-17°															
Take immediate corrective action if temperature is in shaded section*															

\*Some frozen vaccines must not be stored colder than -50°C. Check the Prescribing Information on the vaccine manufacturer's website for specific storage temperature instructions.

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### Vaccine Storage Troubleshooting Record

Use this page to record the details of the vaccine storage incident, including the date and time of the last known temperature within the appropriate vaccine storage range.

Date	Time	Storage Unit Temp	Room Temp	Incident	Action Taken	Results	Initials

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Month/Year: Days 16-31

### Temperature Log for Refrigerator and Freezer — Celsius

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**If the recorded temperature is in the shaded zone:** This represents an unacceptable

temperature range. Follow these steps:

1. Store the vaccine under proper conditions as quickly as possible.
2. Temporarily mark exposed vaccine "do not use" until you have verified whether or not the vaccine may be used.
3. Call the immunization program at your state or local health department and/or the vaccine manufacturer to determine whether the vaccine is still usable.

4. Document the action taken on the reverse side of this log.

Day of Month	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Staff Initials																
Room Temp.																
Exact Time																
°C Temp	am	pm														
*** ** ** ** ** **																
≥ 11°																
10°																
9°																
8°																
7°																
6°																
5°																
4°																
3°																
2°																
1°																
0°																
≤ -1°																
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px;">Refrigerator Temperature</div> <div style="border: 1px solid black; padding: 2px;">Freezer Temp</div> </div>																
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px;">Take immediate corrective action if temperature is in shaded section*</div> <div style="border: 1px solid black; padding: 2px;">Take immediate corrective action if temperature is in shaded section*</div> </div>																

≥ 12°																
-13°																
-14°																
-15°																
-16°																
≤ -17°†																
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px;">Take immediate corrective action if temperature is in shaded section*</div> <div style="border: 1px solid black; padding: 2px;">Take immediate corrective action if temperature is in shaded section*</div> </div>																

\*Some frozen vaccines must not be stored colder than -50°C. Check the Prescribing Information on the vaccine manufacturer's website for specific storage temperature instructions.

Adapted by the Immunization Action Coalition courtesy of the Michigan Department of Community Health and the California Department of Health Services.

