

Beaumont

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 Applicability All Beaumont Hospitals

Shipping Container Temperature Monitoring - Blood Bank

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

This document will provide policy and procedure for the temperature monitoring of the shipping containers between the hospitals.

II. INTRODUCTION:

Beaumont Health transports blood components between hospitals. All containers used to transport blood components have been qualified by the blood suppliers before use to ensure that the proper component transport temperature is maintained. The temperature of the boxes used to ship red blood cells, thawed/liquid plasma and platelets following shipment is monitored regularly to determine if these products are properly packed to maintain the red blood cell or platelet temperature within acceptable range.

III. POLICY:

- A. This monitor should be completed twice a year, preferably within the first and third quarters, for each site blood products are sent to and for each product the site receives.
- B. Whole blood, red blood cells, and thawed/liquid plasma products must be transported at a temperature of 1°C to 10°C.
- C. Platelets, thawed cryoprecipitate, and granulocytes must be transported at a temperature of 20°C to 24°C.
- D. This temperature monitor may be performed during the normal transfer of blood products between sites. If there are no blood products to transfer when the monitor is due, it is acceptable to place expired blood products in the shipping box. The face labels of expired

products must be clearly defaced /marked to indicate that they are expired and not intended for transfusion.

IV. DEFINITIONS:

- A. **Containers:** Supplier blood component boxes
- B. **Designee:** Lead Medical Technologist

V. EQUIPMENT:

- A. Calibrated Thermometer

VI. SUPPLIES:

- A. Wet ice
- B. Red blood cell unit or platelet unit (may be expired)
- C. Blood and platelet shipping boxes
- D. Room temperature gel packs
- E. Insulated platelet envelopes

VII. PROCEDURE:

- A. Red Blood Cells
 1. Pack units to be transferred per applicable Transfusion Medicine policies and add a thermometer to the inside of the shipping box.
 2. Fill out the top portion of the *Shipping Container Temperature Monitor Form*, insert form into the shipping box and seal.
 3. Call and instruct the receiving hospital to fill out the bottom portion of the *Shipping Container Temperature Monitor Form*, and return the completed form, container and the thermometer as soon as possible.
 4. Upon receipt, review the completed form to see the temperature was between 1° and 10°C.
 - a. If the temperature is outside of the acceptable range, quarantine the blood products and document a variance. The supervisor or designee will investigate the cause of deviation and consult with the medical director for final disposition of the blood product(s).
 5. Submit completed form to the supervisor or designee for review.
- B. Platelets
 1. Pack units to be transferred per applicable Transfusion Medicine policies and add a thermometer to the inside of the shipping box.
 2. Fill out the top portion of the *Shipping Container Monitor Form*, insert form into the shipping box and seal.

3. Call and instruct the receiving hospital to fill out the bottom portion of the *Shipping Container Temperature Monitor Form*, and return the completed form and the thermometer as soon as possible.
4. Upon receipt, review the completed form to see the temperature was between 20° and 24°C.
 - a. If the temperature is outside of the acceptable range, quarantine the blood products and document a variance. The department supervisor or designee will investigate the cause of deviation and consult with the medical director the final disposition of the blood product(s).
5. Submit completed form to the supervisor or designee for review.

VIII. EXPECTED VALUES:

Red blood cell boxes are to remain between 1°C and 10°C. Platelet boxes are to remain between 20°C and 24°C.

IX. REFERENCES:

1. AABB, *Technical Manual*; current edition.
2. AABB, *Standards for Blood Banks and Transfusion Services*, current edition
3. College of American Pathologists, *Transfusion Medicine Checklist*, current edition.

Attachments

[Shipping Temperature Monitor Form](#)

Approval Signatures

Step Description	Approver	Date
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