

Beaumont

Origination 6/7/2022
Last Approved 5/23/2022
Effective 6/7/2022
Last Revised 5/23/2022
Next Review 5/22/2024

Document Contact Kelly Sartor
Area Laboratory-Blood Bank
Applicability Dearborn, FH, Troy

Taking the Temperature of a Blood Product - Blood Bank

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

This document will provide policies and procedures for taking the temperature of blood products.

II. CLINICAL SIGNIFICANCE:

- A. Blood products must be stored and transported within defined temperature ranges to maintain their safety and quality. These temperature ranges are defined throughout the procedures. The temperatures of a blood product should be taken at various times. For example:
1. Upon their return from issue as described in Transfusion Medicine procedure, [Return of Blood Products from Issue](#),
 2. Upon their return from issue in a cooler as described in site specific Transfusion Medicine procedure, *Transporting Blood Components in a Cooler*,
 3. Upon their receipt as described in Transfusion Medicine procedure, [Receiving Blood Products from an Outside Source into Inventory](#).

III. POLICIES:

- A. Before taking a blood product's temperature, the contents of the bag should be gently mixed.
- B. When the procedures indicate that a blood product's temperature should be taken, the Infrared (IR) thermometer is used to take the surface temperature.
1. If the surface temperature is within the defined acceptable range then use the surface temperature reading to proceed as described in the applicable procedure.
 2. If the surface temperature is NOT within the defined acceptable range then the blood product should be placed into quarantine or discarded. Refer to Transfusion

IV. EQUIPMENT:

- A. Extech® model IR200, Non-contact Forehead IR Thermometer

V. QUALITY CONTROL (QC):

- A. Each IR thermometer should be calibrated before initial use and annually thereafter, as well as any time there is reason to suspect change or damage.

VI. SPECIAL SAFETY PRECAUTIONS:

- A. The following precautions apply to the Extech® model IR200 thermometer.
 1. Do not immerse the thermometer in water
 2. Avoid touching and/or scratching the infrared sensor lens
 3. Clean the lens area as needed by gently blowing with compressed air and using a damp swab to wipe the lens. Do not use any solvents to clean the lens.
 4. When the low battery symbol appears on the display, replace the thermometer's batteries. The battery compartment is located on the bottom of the handle. Open the compartment by removing one screw and sliding the cover off. Replace the 2 AA batteries and close the battery compartment cover.

VII. PROCEDURE:

- A. Gently mix the contents of the blood product bag before taking the temperature.
- B. Set the Body Surface switch for "Surface" for wide range surface measurements.
Note: The thermometer should already be set to read at Surface and to record in °C. If it isn't, refer to the manufacturer's instructions to set the required parameters.
- C. Hold the thermometer by its handle and point it toward the surface to be measured, no more than 2 inches away from the blood product. Aim the thermometer at a point on the blood product that is not covered by a label, and where the liquid (not air) is present on the inside of the bag; e.g., aim directly at the liquid, not a label or air.
- D. Press the trigger to turn the thermometer on and take the temperature reading. The temperature reading appears in the large display and a logged data number and the temperature appear in the smaller display.
- E. Release the trigger and the reading will hold for approximately 7 seconds after which the thermometer will automatically shut off. Trigger presses can occur up to a rate of one per second.
 1. If the temperature goes above 140°F or 60°C, "HI" will appear in the display.
 2. If the temperature goes below 32°F or 0°C, "LOW" will appear in the display.
- F. Record the temperature in °C in SOFTBANK.
- G. Proceed as follows:

1. If the surface temperature is within the defined acceptable range then use the surface temperature reading to proceed as described in the applicable procedure.
2. If the surface temperature is NOT within the defined acceptable range then the blood product should be placed into quarantine or discarded, refer to Transfusion Medicine procedure, [Blood Product Quarantine or Discard](#).

VIII. EXPECTED VALUES:

- A. Blood products must be stored and transported within defined temperature ranges to maintain their safety and quality. These temperature ranges are defined throughout the procedures.

IX. REFERENCES:

1. Extech® Non-contact Forehead IR thermometer User's Manual, 8/13 v.1.4

Approval Signatures

Step Description	Approver	Date
	Jeremy Powers: Chief, Pathology	5/23/2022
	Vaishali Pansare: Chief, Pathology	5/19/2022
	John Pui: Chief, Pathology	5/18/2022
	Craig Fletcher: System Med Dir, Blood Bank	5/18/2022
	Ryan Johnson: OUWB Clinical Faculty	5/17/2022
Policy and Forms Steering Committee (if needed)	Gail Juleff: Project Mgr Policy	5/9/2022
Policy and Forms Steering Committee (if needed)	Kelly Sartor: Supv, Laboratory	5/6/2022
	Karrie Torgerson: Supv, Laboratory	5/6/2022
	Teresa Lovins: Supv, Laboratory	5/6/2022
	Kelly Sartor: Supv, Laboratory	5/6/2022
	Kelly Sartor: Supv, Laboratory	5/6/2022