

Policies, Procedures, Standard Operating Practices

No.PAT-2-01

Title: Warmer: Fluid or Blood –Use of the Level 1 Hotline®	<input checked="" type="checkbox"/> Policy	<input checked="" type="checkbox"/> Procedure	<input type="checkbox"/> SOP
Category: Patient Care Sub-category: Patient Related: IV/CVL	Distribution: ED, ICU, OR, L&D		
Endorsed: EVP, Patient Experience and Chief Nursing Executive Signature:	Approval Date:	Jan.1997	
	Reviewed/Revised Date:	Dec. 7, 2021	
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CROSS REFERENCES: (PAT-2-19) Blood and Blood Products Administration, (M/C-PRO-22) Exchange Blood Transfusion

1. PURPOSE

Guide nurses through the intravenous administration of warmed fluid or blood using the Hotline® Blood and Fluid Warmer.

2. POLICY STATEMENT

The use of the intravenous fluid or blood warmer will reduce the complications of hypothermia and cold agglutinin reactions during administration.

3. SCOPE

Although the blood and fluid warmer are only located in the Emergency Department (ED), Intensive Care Unit (ICU), Operating Room (OR) and Labour and Delivery (L&D), all nurses within the hospital may use the Hotline® Blood and Fluid warmer with the order of a physician and/or on the direction of the blood bank.

4. EQUIPMENT

- Level 1 Hotline® Blood and Fluid Warmer (available in ER, ICU, OR and L&D)
- Hotline disposable fluid warming set (available in stores)
- IV extension tubing with injection port
- IV Continu-flo set or Y-type blood /solution set with standard blood filter
- Fluid or blood product

5. PROCEDURE

- 5.1 Check that the water level is above the minimum level mark on the reservoir. If water level is low contact biomed to add recirculating solution prior to use.
- 5.2 Plug unit into power outlet.
- 5.3 Plug in the twin-tube connector from the Hotline tubing into the socket on the right side of the warming unit (refer to Figure 1).
- 5.4 Turn on power switch located on the left side of the warmer. The green system operational light will illuminate and the water bath temperature will begin to increase. This will reach operating temperature of 41-42°Celsius in approximately 4 minutes (For neonatal use, request biomed to set max temperature to 37°Celsius prior to use and follow *Exchange Blood Transfusion* (M/C-PRO-22). A red indicator light and "Over Temp" alarm will occur if temperatures become greater than 43° Celsius. If this occurs turn off unit and send to Biomedical.
- 5.5 The circulating water path will automatically prime when the unit is turned on.
- 5.6 Attach IV extension tubing to end of Hotline® tubing.
- 5.7 Spike fluid and remove all air from bag.
- 5.8 Hang fluid on IV pole and attach IV administration or blood tubing.
- 5.9 Attach IV tubing to top of Hotline® tubing.
- 5.10 Open roller clamps and prime fluid to end of extension tubing
- 5.11 Connect to patient's intravenous (IV) access then set flow rate using an infusion pump or adjust flow rate using roller clamp.

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- 5.12 If administering blood, follow protocol outlined in *Blood and Blood Products Administration* (PAT-2-19) policy. Hotline® disposable tubing, along with blood tubing must be changed after 2 units of blood.
- 5.13 If required, access the injection ports on the extension tubing using a needleless system. Do not stick the Hotline® tubing with metal needles as this may cause patient injury.
- 5.14 Once administration of fluid is complete, turn off power switch on the left side of the warmer.
- 5.15 Remove the Hotline® tubing from the twin-port socket and dispose of all tubing.

6. CLEANING AND MAINTANENCE

- Between patients, clean surface area with hospital approved germicidal disposable cloth (Sani-cloths)
- Biomedical Department to provide preventative maintenance and water replacement annually using 0.3% Hydrogen Peroxide/Distilled Water solution as recommended by manufacturer.

7. DOCUMENTATION

- Document in patient's chart that fluid or blood was warmed, patient's response and fluid balance
- Document temperature of blood warmer during use
- If administering blood, follow protocol according to *Blood and Blood Products Administration* (PAT-2-19) policy

Figure 1. Hotline® Fluid and Blood Warmer

