

## RADIANT WARMERS FOR NEONATES/INFANTS

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### Critical Points

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1. Radiant warmers should be considered in, but not limited to, the following clinical situations:
  - Critically ill or clinical unstable patients requiring multiple interventions.
  - Infant's requiring an independent heat source in addition to accessibility.
2. Radiant warmers will be used in the Servo mode only, unless the infant is able to be fully dressed.
3. Premature infants should be transitioned as soon as medically stable to an incubator to reduce fluid losses through evaporation. Consider a Neowrap in low birth weight infants until this can be accomplished.
4. Set temperature should be initially 36.5° C and adjusted as needed to maintain the infant in the normal range.
5. Sides of the warmer will be in the up position to reduce the risk of infant falls and excessive heat loss. Sides may be down only when caregiver is actively providing care for patient.

### Supplies

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- Radiant warmer
- Skin temperature probe (PMM: 261221)
- Reflective probe cover (regular size PMM: 42361, small size PMM: 36723)

### Procedure

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#### USE OF RADIANT WARMER

1. Obtain radiant warmer from ICN Clean Bed Supply Room.
2. Plug in and turn on bed. Lights on the panel should go through a self-check.
3. Obtain skin temperature probe and probe cover.
4. Place skin temperature probe below the infants armpit at the nipple, midaxillary line. Cover probe with reflective temperature cover. Connect probe to warmer.
  - If armpit is not accessible, an alternate placement location is the right lower quadrant of the abdomen, preferably over the liver.
  - Avoid bony prominences.
5. Set radiant warmer to Servo Mode with SET temperature beginning at 36.5° C.
6. Check infant's temperature 30 minutes after probe is attached. Adjust SET temperature as needed.
  - Normal variance between skin temperature and axillary temperature may be 0.5 -1.0 ° C. Adjust SET temperature to maintain patient in desired axillary temperature range.
  - **Warming:** If the axillary temperature is less than 37.2° C, set the radiant warmer 0.5° C higher than the infant's temperature. Continue this procedure until desired temperature is achieved.

## RADIANT WARMERS (*continued*)

- **Cooling:** If the infant's temperature is greater than 37.2° C, set the radiant warmer to 0.5° C lower than the skin temperature. Continue the procedure until the desired skin temperature is achieved. **DO NOT TURN OFF THE WARMER** since this may cause a precipitous fall in the infant's temperature.
7. Check probe position with each set of vital signs and as needed.
  8. Use the x-ray cassette tray to avoid moving the patient during x-rays.

## DOCUMENTATION

1. Document SET temperature, skin temperature reading, and patient's axillary temperature in NCC Vitals Flowsheet with each set of cares and in accordance with the [ICN Standards of Care](#).

## Troubleshooting

Problem	Suspected issue	Action
Inaccurate temperature reading	<ul style="list-style-type: none"> <li>• Probe not adhering to patient well; probe soiled; probe faulty</li> </ul>	<ul style="list-style-type: none"> <li>• Check probe placement and that it is properly adhered to patient</li> <li>• Ensure probe is clean and free of sticky residue. May clean with alcohol if needed.</li> <li>• Reapply probe and reassess</li> </ul>
Difficulty keeping probe adhered to patients skin	<ul style="list-style-type: none"> <li>• Preterm skin</li> </ul>	<ul style="list-style-type: none"> <li>• May use silicone tape (i.e. Mepitac or 3M Silicone blue tape) to adhere the probe to skin, then place hydrogel reflective probe cover over</li> </ul>
Skin probe failure alarm	<ul style="list-style-type: none"> <li>• Skin probe not connected properly or not functioning properly</li> </ul>	<ul style="list-style-type: none"> <li>• Attempt to reconnect the skin probe. If this does not work, obtain a new skin probe.</li> </ul>
Skin temperature alarm HIGH or LOW	<ul style="list-style-type: none"> <li>• When in servo mode, the warmer will alarm when the patient temperature differs from the SET temperature by &gt; 0.5° C</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm patient temp by checking axillary temperature, notify provider if temp is out of ordered range.</li> <li>• Apply new temp probe and adjust probe site</li> </ul>

## References

Level of Evidence (FAME*)	Level*	Reference
	E4	Joseph, R. A., Derstine, S., & Killian, M. (2017). Ideal site for skin temperature probe placement on infants in the Nicu. <i>Advances in Neonatal Care</i> , 17(2), 114–122. <a href="https://doi.org/10.1097/anc.0000000000000369">https://doi.org/10.1097/anc.0000000000000369</a>
E4	Merenstein, G. B., & Gardner, S. L. (2021). <i>Merenstein and Gardner's Handbook of neonatal intensive care handbook of neonatal intensive care</i> . Elsevier.	

\* FAME Scale details: See nursing policy [Policy, Procedure, & Competency Development, Review, & Approval](#)

## RADIANT WARMERS (*continued*)

### Procedure History

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