

Frequently asked questions (FAQs): Radiant Warmer

Q1. What are indications for use of manual mode in a warmer?

Manual mode is used for following situations

1. When you are anticipating a new baby to be brought under warmer care . Keep warmer on with 100 % heater output, once the baby is arrived shift to servo mode.
2. If baby is having fever , move to manual mode and make heater output minimum . If the baby continues to be in servo mode alarm will get activated time and again.
3. When rapid warming of hypothermic baby has to be undertaken do using manual mode.
4. In labour room when attending delivery , the manual mode alarms every 10 to 15 minutes indicating the bed is warm and ready .If alarm is silenced, again it will reactivate after another 10-15 minutes.

Q2. What practical tips should be followed for the use of open care system?

Tips for use:

1. Connect the unit to the mains. Switch it on
2. Select manual mode.
3. Select heater output to 100% for some time to allow quick pre- warming of the bassinet covered with linen.
4. Select servo mode.
5. Select the desired set temperature of baby as 36.5°C.
6. Place baby on the bassinet.
7. Connect skin probe to the baby's abdomen with sticking tape.
8. If you want the manual mode to be used in the baby, select the desired heater output.
9. In manual mode, record baby's axillary temperature at 30 minutes and then 2 hrly.
10. Respond to alarm immediately. Identify the fault, rectify it.

Q3. What precautions should be followed for application of skin probes?

1. Do not apply to bruised skin.
2. Do not apply over clear plastic dressings.
3. Do not use fingernails to remove skin surface probes.
4. Do not reuse disposable probes.
5. Shield skin probes with reflective pad, if possible, under radiant warmer.
6. When using servo-control mechanisms for environmental control, take intermittent temperatures at other sites to monitor effect.
7. Ensure that the area where probe is applied is not wet.
8. Check sensor probe regularly so as to ensure that it is in place.

Q4. What is the technique for application of skin probes?

1. Prepare the skin using an alcohol/spirit swab to ensure good adhesion to the skin.
 2. Apply probe over the right hypochondrium area in the supine position.
 3. Apply probe to the flank in the prone position.
 4. Ensure that skin probe is free of contact with bed.
- Cover probe with a reflective cover pad (foil covered foam adhesive pad).

Q5. What are the advantages & disadvantages of using a radiant warmer ?

Advantages

1. Easy accessibility
2. Easy to connect the tubes of ventilated baby and do procedures
3. Better monitoring specially if baby has respiratory distress
4. Less risk of infection as compared to closed incubator
5. Can be used as resuscitation trolley in the labor room

Disadvantages

1. More insensible water losses
2. Not uniform heating as compared to closed system
3. More risks of episodes of hypothermia

Q6. Do one need to record baby temperature if baby is under radiant warmer?

Yes, the axillary temperature must be recorded and documented as per nursery policy. Compare this with the depicted display temperature. This gives the opportunity to be sure that the warmer is working all right and baby is not over or under heated.

Q7. If baby is having higher temperature, how one can be sure that this is due to illness in the baby or overheating by warmer ?

If baby is having fever, examine the baby carefully. A baby who is overheated due to warmer will have his skin red flushed, the temperature of sole/ palms will be warm to touch by dorsum of hand in addition to warm abdomen. Malfunction of equipment – probe getting disconnected or keeping baby in manual mode with high heater output can explain this situation. On the other hand fever due to illness will result in warm abdomen to touch but palms/ soles will be cold to touch (gradient between abdomen and palms/ soles temperature). In addition clinical examination will reveal features that point towards sepsis in the baby.

Q9. What all precautions you should take for safety of the equipment?

1. Do not use the Warmer in the presence of flammable anesthetics; a possible explosion hazard exists under these conditions.

2. Use caution when rotating the cabinet to avoid damage to the drawers. Always ensure the drawers are fully closed before rotating the cabinet.
3. Never oil or grease oxygen equipment. Oils and grease oxidize readily, and in the presence of oxygen, will burn violently.
4. Do not move the warmer by pushing or pulling on the bed side panels. This action may lead to the deterioration and breakage of the components which form a safety barrier around the infant.

Q10. What all precautions one should take for safety of patient under radiant warmer?

1. Do not place any accessories including phototherapy lights directly over the bed surface. This may block radiant heat and lead to cooling of the infant.
2. Do not place items on top of the heater assembly. Items placed on top of the heater assembly can fall and injure the patient, prevent adequate ventilation of the heater assembly, and may pose a fire hazard.
3. Do not perform the Checkout Procedures (Mechanical and Control Unit) while a patient occupies the Warmer.
4. Inspect all patient connected tubes or wires before and after moving or tilting the bed. Tilting or moving the warmer bed up or down can pull on tubing or leads connected to the patient. This may disconnect tubes or leads, restrict gas or liquid flow, or move sensors out of position.
5. Prolonged exposure to the light emitted by the observation lamp in this unit may harm the unprotected eyes of the infant. For safety, cover the infant's eyes.
6. When using intravenous tubing systems for delivery of blood components to patients occupying a warmer, shield any tubing with aluminum foil.
7. When using a radiant warmer, change the patient's diapers frequently. Radiant energy causes more rapid urine evaporation, and may lead to inaccurate urine diagnostic test/analysis and inaccurate weight measurements.
8. Ensure that the bedside panels are locked in position when a patient occupies the bed.
9. Do not leave the patient unattended when the side panels are lowered.

Q 11. What all you should remember for safety of yourself while using radiant warmer?

1. Do not touch the protective grill under the radiant heater or the top of the heater assembly. These surfaces may be hot and a burn could result.
2. Disconnect power to the Warmer and allow the heater rod to cool before cleaning to avoid the possibility of a burn.
3. Disconnect the Warmer power cord and allow the unit to cool before replacing the alarm or observation lights.

Q 12. What all precautions you should take while doing x ray on a radiant warmer?

1. To place the heater housing in the X-ray position rotate the heater to a side.
2. An X-ray cassette can be placed on the tray and slid into the cavity beneath the bed without disturbing the patient.
3. Never place an infant directly on the X-ray cassette tray.
4. Do not place any foreign objects on the warmer bed or in the under bed cavity while performing X-ray procedures. Incompatible materials in the path of the X-ray may adversely affect the quality of the X-ray image.
5. Do not forget to rotate the heater housing to the normal position.