A baby is hypothermic when axillary temperature is below 35.5°C or core temperature (rectal) is below 36°C. Cold babies have a high morbidity and mortality.

Who is at risk?

- Wet infants (after delivery or bathing)
- Low birth weight infants
- Infants requiring resuscitation
- Sick infants, particularly if there is infection
- Infants who are in a cold room
- Infants who are not fed
- Hypoglycaemic infants
- Infants undergoing medical procedures

Prevention is the cornerstone of management

- Dry the infant well after birth and wrap in a second warm and dry towel
- Keep the baby with the mother in the kangaroo position (KMC)
- Nurse babies less than 1.8kg in KMC or in an incubator (at appropriate temp)
- Feed all babies within 30 minutes after birth (unless contra-indicated e.g. severe respiratory distress)
- Ensure that there is a good overhead heater in the infant resuscitation area
- Keep the room warm i.e. at 25-26°C, but not higher
- Dress babies in incubators in a vest, nappy, booties and a woollen cap. Do not wrap in a blanket
- Keep the baby away from windows and draughts
- Keep incubators and resuscitaires warm, even when not in use

Temperature settings for closed incubators

Check the temperature of manual incubators every hour and keep them at the following temperatures according to the baby’s weight and age. Record the temperature on the incubator, using the “Basic Neonatal Care Nursing Observations” chart.

<table>
<thead>
<tr>
<th>Birth weight</th>
<th>Days after delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>&lt; 1000g – 1500g</td>
<td>35.5</td>
</tr>
<tr>
<td>1500g – 2000g</td>
<td>35.0</td>
</tr>
<tr>
<td>2000g – 2500g</td>
<td>34.0</td>
</tr>
<tr>
<td>2500g – 3000g</td>
<td>33.5</td>
</tr>
<tr>
<td>&gt; 3000g</td>
<td>33.0</td>
</tr>
</tbody>
</table>

Note: These settings are a guide. They must be increased or decreased according to baby’s temperature. Never increase more than 1°C higher than the baby’s temperature at a time.

Clinical signs of hypothermia

Initially there may be no signs. You and the mother may think that the baby is asleep.

Cold, lethargy, apnoea, peripheral oedema, sclerema. In severe cases, bleeding and pulmonary haemorrhage may occur.

Treatment of hypothermia

1) Give oxygen until the baby’s temperature is normal (longer if indicated by respiratory problem)
2) Ensure an adequate glucose level:
   - monitor and record the blood glucose levels
   - feed the baby with breastmilk, milk or IVF
   - if temperature is less than 35°C, start IVF (neonatolyte)
3) Warm up as quickly as possible
   - place baby in the KMC position
   - in an incubator, set the temperature to 1°C higher than the baby’s temperature, and increase as baby warms up. Cover baby with a plastic sheet to protect radiant heat loss. Do not cover with blankets or tin foil
   - check the temperature ½ hourly until it is normal
   - you will need to decrease the incubator temperature as baby’s temperature returns to normal (use the table as a guide)
4) Identify and treat the underlying cause