

Perioperative temperature regulation in adults

The following guidance is based on best available evidence including NICE guideline CG65 and local audit.

Perioperative care

1. Patients should be informed that the hospital may be colder than their own home and they should bring in additional clothing to keep comfortably warm.
2. When using any temperature recording or warming device, healthcare professionals should be trained in their use and comply with local infection control policies.
3. When using any device to measure patient temperature, healthcare professionals should be aware of any adjustments that need to be made to estimate core temperature.

Preoperative phase

1. Each patient should be assessed for their risk of perioperative hypothermia. Patients should be managed as higher risk if two or more of the following apply:
 - a. ASA grade II or above
 - b. Preoperative temperature less than 36°C
 - c. Undergoing combined general and regional anaesthesia
 - d. Undergoing major or intermediate surgery
 - e. At risk of cardiovascular complications
2. Patients should be kept comfortably warm using blankets or duvets. Special care must be taken when patients are given premedication.
3. The patient's temperature must be measured and documented on the ward, preferably in the hour before surgery and recorded on the preoperative checklist.
4. If the patient's temperature is below 36°C, forced air warming should be considered.
5. Patients should be encouraged to walk to theatre where appropriate.

Intraoperative phase

1. Patients should be kept comfortably warm in Theatre Reception and the Anaesthetic Room.
2. The patient should be adequately covered and exposed only during surgical preparation.
3. Ambient temperature should be at least 21°C while the patient is exposed.
4. Forced air warming and continuous temperature monitoring should be considered for anaesthesia lasting more than 1 hour¹ or if the patient is a higher risk of hypothermia.
5. Warming of intravenous fluids to 37°C should be considered if more than 1 litre is likely to be infused.
6. Using forced air warming and warmed intravenous fluids should be considered earlier in higher risk patients.
7. All irrigation fluids used intraoperatively should be warmed in a thermostatically controlled cabinet to a temperature of 38-40°C.

Postoperative phase

1. The patient's temperature should be measured and documented on admission to recovery.
2. Forced air warming and warmed intravenous fluids must be available in the recovery room and should be used if the patient's temp <36°C.
3. Patients may be discharged to the ward once they are comfortably warm and core temperature is more than 36°C.
4. On the ward, temperature must be measured and documented as part of routine 4-hourly observations and patient warming measures introduced if the patient's temperature falls below 36°C.

¹ NICE guideline CG65 recommends using forced air warming for all anaesthetics lasting more than 30 minutes and warming of intravenous fluids if more than 500ml are being transfused. The trust guideline is based on best evidence including local audit.