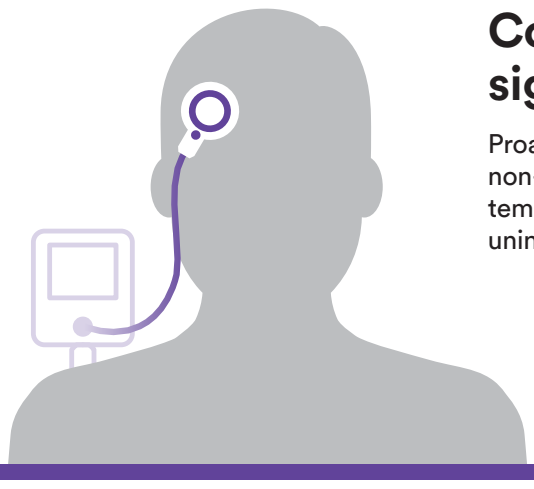

# Consistent. Accurate. Non-invasive.

## The future of temperature monitoring.



# Core body temperature is a critical vital sign that should be monitored.

Proactively monitoring temperature with a consistent, accurate, and non-invasive system is the only true way to own the normothermic temperature zone (36.0°C – 37.5°C)[1] and protect patients from unintended perioperative hypothermia.

## The importance of measuring and monitoring core temperature.

Inadvertent perioperative hypothermia is defined as a core body temperature of less than 36.0°C, which can:

- **Increase the rate of SSIs**[2]
- **Increase surgical blood loss**[3]
- **Lead to increased mortality**[4]
- **Extend recovery time**[5]
- **Cause patient discomfort**[6]

**Inadequate monitoring of core temperature can increase the risk of death associated with malignant hyperthermia (MH).**[7,8]

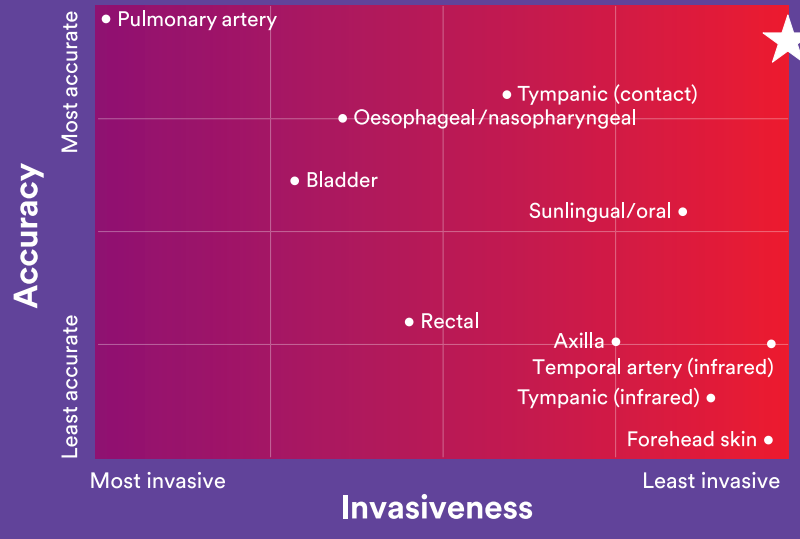

When temperature was not monitored, 30% of patients with an MH episode died.[7,8]




If core temperature monitoring was used, the risk of death was reduced to 2% (P = 0.0012).[7,8]

## Temperature monitoring trade-offs.

Most current technologies are unable to non-invasively and accurately measure core body temperature. The 3M™ Bair Hugger™ Temperature Monitoring System can do both, allowing you to improve active warming practices. You can only manage what you can accurately measure.




Teunissen LPJ. Measurement and manipulation of body temperature in rest and exercise. Amsterdam, Vrije Universiteit - PhD Thesis; 2012.

### Global guidelines

**AORN**[9]
recognises zero-heat-flux as a core temperature modality

**ASPAN**[10]
recommends the use of one modality throughout the perioperative journey

**NICE**[11]
recommends continuous temperature monitoring

**DGAI**[12]
recommends continuous core temperature monitoring with a consistent method

## The future of non-invasive temperature monitoring is here.

The Bair Hugger temperature monitoring system is the first accurate, non-invasive solution that allows you to easily monitor core body temperature consistently throughout the perioperative journey.

**Clinically equivalent**
to invasive methods[13]

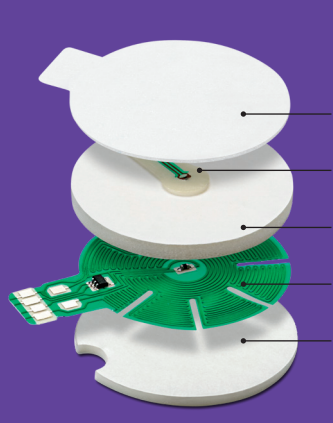
**Displays current and 2-hour**
temperature trends




**Eliminates the potential of trauma**
from invasive modalities[14,15]

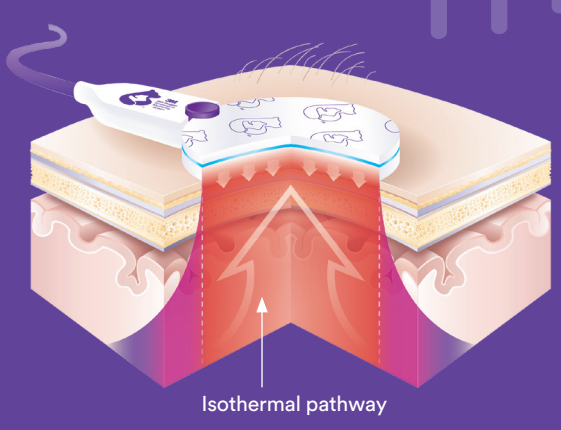
**One modality**
eliminates variability

## Technology that's more than skin deep.




Above image shows the inverse direction of how the product appears when in-use.

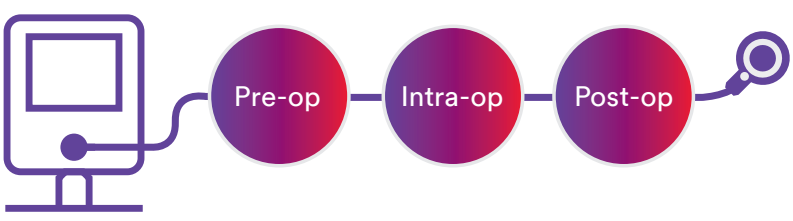
**Zero-heat-flux technology** produces near-perfect insulation, so heat cannot escape from the skin surface, creating an isothermal pathway.




Directly beneath the sensor, an **isothermal pathway** forms, allowing the deep tissue temperature to rise to the skin surface.

## Monitor with confidence.

The Bair Hugger temperature monitoring system makes it possible to get accurate readings throughout the entire perioperative journey with a single sensor.




The sensor remains on the patient throughout the perioperative journey but may be disconnected from and reconnected to the control unit as needed.

## One sensor, one proven solution.

Now that there is one accurate, consistent temperature monitoring solution, **you have the power to Own the Zone.**

**Learn more about the Bair Hugger temperature monitoring system at 3M.co.uk/medical or contact your 3M representative.**

own the zone
36.0°C - 37.5°C
TM


**Fight SSIs from every angle.**

## References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5 Lenhardt R, Marker E, Goll V, et al. Mild intraoperative hypothermia prolongs postanesthetic recovery. *Anesth*. 1997;87:1318-23.

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9 Association of periOperative Registered Nurses.

10 American Society of PeriAnesthesia Nurses.

11 National Institute for Health and Care Excellence.

12 German Society of Anaesthesiology and Intensive Care Medicine.

13 <0.28˚C error between 3M™ Bair Hugger™ Temperature Monitor and a nasopharyngeal probe. <0.28˚C error between Bair Hugger temperature monitor and a pulmonary artery catheter.

14 Insler SR, Sessler DI. Perioperative thermoregulation and temperature monitoring. 2006. *Anesthesiology Clinics*, (24): 823-837.

15 Cereda M, & Maccioli GA. Intraoperative temperature monitoring. 2004. *International Anesthesiology Clinics,* (42)2: 41-54.



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