

BARD® Temperature Sensing Foley Catheters



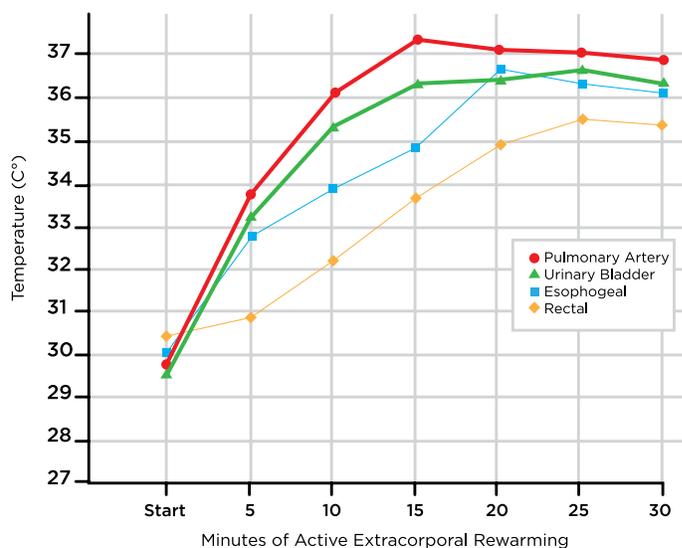
“The most accurate measure of temperature is core temperature taken typically via a bladder catheter or pulmonary artery catheter.”

- Adler, *et al.* 2014⁶

“In most critically ill patients, the urinary bladder technique is preferable because of its accuracy.”

- Lafrant, *et al.* 2003⁷

COMPARISON OF CORE TEMPERATURE MEASUREMENTS⁹



According to Lilly *et al.*, 1980 all monitored temperature sites had similar rates of change during external vascular rewarming after cardiopulmonary bypass. Urine temperature very closely tracked blood temperature.⁹

Core Body Temperature

In the ICU, when careful temperature monitoring is important (e.g. sepsis surveillance, active heating or cooling of patients)^{3,6} temperature measurement is an essential component of patient assessment and management decisions.^{3,7}

For critical patient temperature monitoring, pulmonary artery temperature has long been the standard by which alternative core temperature modalities are measured against.^{1,5}

Bladder thermometers show excellent agreement with pulmonary artery catheters over a wide range of temperatures providing essentially identical readings to pulmonary artery catheters^{1,2,3} regardless of urine flow.^{3,4,5}

Urine temperature monitoring is reliable, safe, convenient² and provides continuous readings.¹

Non-Core Body Temperature

Recent introduction of infrared temporal artery monitoring technology has seen wide adoption in ICUs. A recent publication (Stelfox *et al.*, 2010) found infrared temporal artery temperature technology demonstrated limited agreement for temperatures below 36°C and greater than or equal to 38.3°C. The authors recommended not using the technology in situations where body temperature needs to be measured with accuracy.³

A 2008 *American College of Critical Care Medicine* guideline reviewed available temperature measuring technologies and identified the accuracy by modality (O’Grady *et al.*, 2008). The authors recommend axillary, temporal artery estimates and chemical dot thermometers should not be used in the ICU.¹

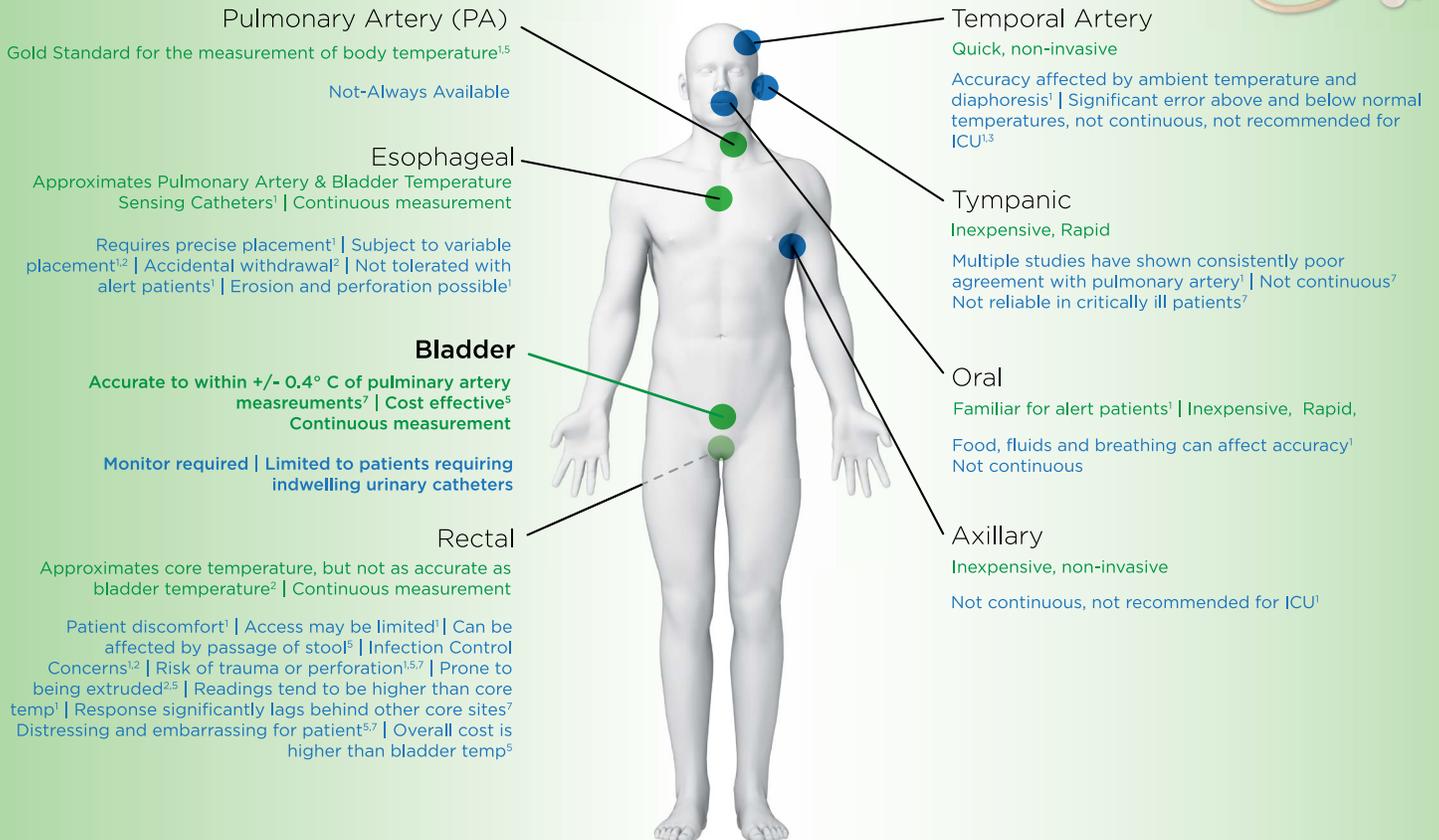
Temperature Modalities

When careful temperature measurement is essential....



CORE

NON-CORE



...choosing the most accurate modality is critical.

- O'Grady NP, et al., Guidelines for evaluation of new fever in critically ill adult patients: 2008 update from the American College of Critical Care Medicine and the Infectious Diseases Society of America, Crit Care Med 2008;36(4):1330-1349
- Lilly JK, et al., Urinary Bladder Temperature Monitoring: A new index of body core temperature; Critical Care Medicine 1980;8(12): 742-744
- Stelfox HT, et al., Temporal Artery versus Bladder Thermometry during Adult Medical-Surgical Intensive Care Monitoring: An Observational Study BMC Anesthesiology 2010;10:13
- Fallis WM, et al., The effect of urine flow rate on urinary bladder temperature in critically ill adults., Heart & Lung 2005;34(3): 209-216
- Wollerich H, et al., Comparison of temperature measurements in bladder, rectum and pulmonary artery in patients after cardiac surgery, Open Journal of Nursing 2012;2:307-310
- Adler AC, et al., Hemodynamic Assessment and Monitoring in the Intensive Care Unit: an Overview, Enliven: J Anesthesiol Crit Care Med, 2014;1(4)
- Lefrant JY, et al., Temperature measurement in intensive care patients: comparison of urinary bladder, oesophageal, rectal, axillary, and inguinal methods versus pulmonary artery core method. Intensive Care Med 2003;29:414-418

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Foley catheters are intended for use in the drainage and/or collection and/or measurement of urine. Temperature sensing Foley catheters provide a measure of core bladder temperature and are intended for use with compatible 400-series temperature sensing monitors.

Please consult product label and insert for any indications, contraindications, hazards, warnings, cautions and directions for use.

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