improving patient care with...

MORE EFFECTIVE

...patient warming

THE NEXT WAVE
IN PATIENT WARMING

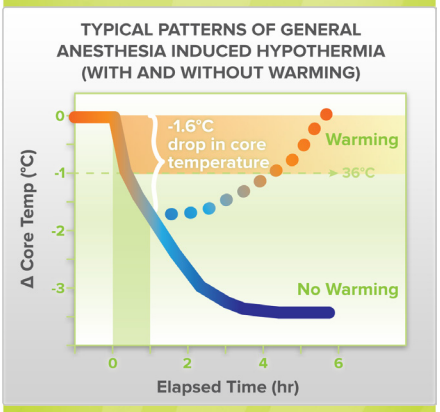
Effective perioperative patient warming improves patient outcomes.

All patients should be warmed.

Nearly all surgical patients become hypothermic during surgery. Anesthetized patients lose the ability to control their own temperature, which typically results in a 1.6°C drop in core temperature in the first 30 minutes after induction.[1]

Hypothermia causes many complications:

- Increased wound infections[2]
- Increased blood loss[3]
- Increased ICU times and hospital stays[2]
- Higher mortality rates[4]



Reference citations available at www.hotdog-usa.com

CLINICALLY SUPERIOR PATIENT WARMING

Published research shows that HotDog® conductive fabric patient warming is equally effective at re-warming patients as forced-air warming (FAW).[1,2]

Customer experience, however, shows that HotDog is often more effective. Here's how:

- **"Head-start warming"** - Since blowing air is disruptive, many clinicians delay FAW until the patient is fully draped, resulting in a steady decline in a patient's core temperature. With air-free HotDog, warming can begin immediately upon arrival to the OR, resulting in better temperature outcomes.
- **Underbody Mattress AND Blankets** - Over-the-body blankets are essential for effective re-warming in most cases, but the underbody mattress is the ideal supplement while providing unrestricted access to the patient. HotDog controllers can power two blankets and a mattress simultaneously.
- **No blowing air** - Blowing air causes evaporative heat loss in wet procedures. This has a particularly profound impact on burn patients and pediatric patients.
- **Surgical site infections** - A goal of warming is reducing infections. FAW has been linked to increased orthopedic infections. HotDog is clearly superior in orthopedic implant surgeries (McGovern, *JBJSbr*, 2011).

1. Kimberger O, et al. Resistive polymer versus forced-air warming: Comparable heat transfer and core rewarming rates in volunteers. Anesth Analg 2008; 107: 1621-26
2. Brandt S, Kimberger O, et al. Resistive-Polymer Versus Forced-Air Warming: Comparable Efficacy in Orthopedic Patients. Anesth Analg 2010; 110:834-8.

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THE NEXT WAVE
IN PATIENT WARMING

SCIP-Inf-10 Approved

SCIP-Inf-10: Use aggressive warming measures during surgery[5]

In an effort to provide the best care for patients, there are a number of healthcare quality initiatives that promote best practices for perioperative temperature management such as SCIP, PQRS, and ASPAN guidelines.

HotDog patient warming meets all of these warming initiatives.

Surface Area Comparison: HotDog vs. Forced-air

HotDog is 2.3x more efficient at transferring heat to the patient than forced-air warming (Sparrow, *Energy*, 2010). In addition, more surface area can be warmed without sacrificing access to the patient.

HotDog patient warming:
Efficient underbody mattress and over-the-body blanket

Forced-air warming:
Inefficient blankets

Summary of Efficacy Studies:

Kimberger et al, *Anesthesia & Analgesia*
Comparable rewarming rates:

The full body HotDog blanket was compared with the full body forced-air warming blanket in re-warming anesthetized hypothermic volunteers in a controlled cross-over study. The warming rates of the two technologies were virtually identical.

Brandt et al, *Anaesthesia & Analgesia*
Comparable efficacy in orthopedics:

Eighty elective orthopedic surgery patients were randomized to upper-body FAW or upper-body resistive polymer warming (HotDog) blankets. The warming rates were comparable for the two groups. No differences in mean skin and mean core temperatures were found.

HOTDOG UNDERBODY WARMING *plus* HOTDOG BLANKETS

...a winning combination!

The published research, blanket-to-blanket comparisons, do not include underbody warming—one of the key reasons why HotDog is *more effective* than other warming technologies.

Underbody warming is ideal in cardiac surgery, burn units, and as auxiliary warming for all surgical procedures.

WHAT ARE USERS SAYING?

"[HotDog] allows us to warm patients we couldn't warm with forced-air warming. With forced-air, 40% of patients went to PACU normothermic, while 90% do with the HotDog patient warming system."

-Tracie, RN, BScN, MSN/ED, CPN(C)
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AUGUSTINE TEMPERATURE MANAGEMENT
patient safety is our passion