



HYPOTHERMIA

Prevention is better than a cure.
Thermoflect is about prevention.

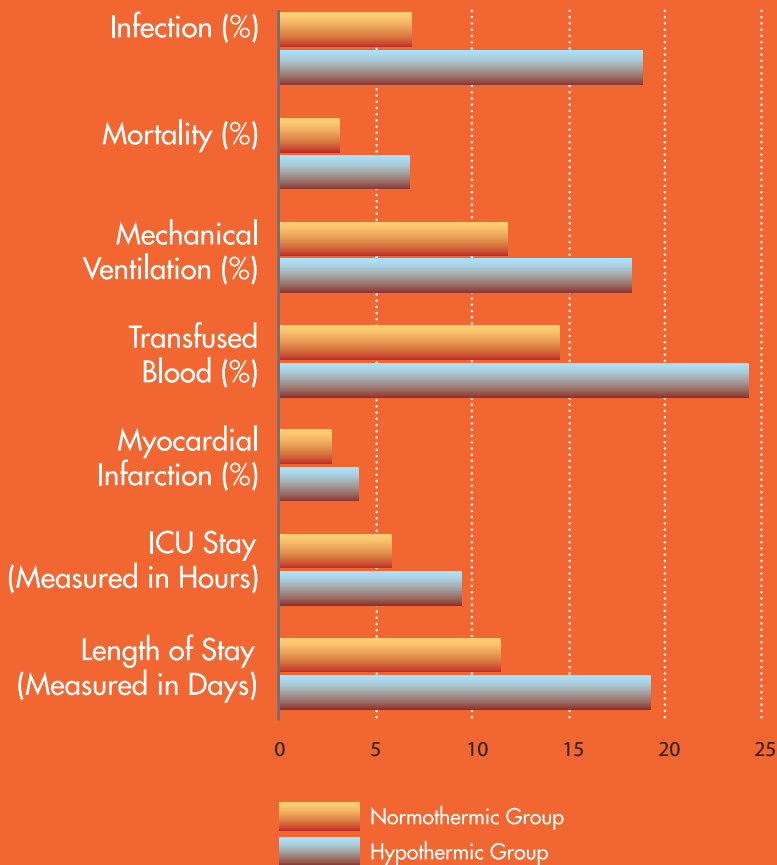
 **thermoflect**[®]
Heat Reflective Technology

“The best way to treat hypothermia is to prevent it in the first place.”

Outpatient Surgery Magazine
January 2007

ADVERSE PATIENT OUTCOMES RELATED TO HYPOTHERMIA⁴

This graph displays the significant difference between hypothermic and normothermic groups in relation to: infection, myocardial infarction, the probability of receiving transfusions, mechanical ventilation, mortality, duration of ICU stay, and length of hospital stay.





THE PROBLEM: HYPOTHERMIA

Under normal circumstances, the human body maintains a steady internal (core) temperature ranging from 36.6°C to 37.5°C (97.9°F-99.5°F).

Hypothermia is a core body temperature of less than 36°C (96.8°F). Medical facilities and Emergency Medical Services are constantly battling the clinical implications of hypothermia and its adverse affects on patient recovery, outcomes, and the cost of treatment.

HYPOTHERMIA AND SURGICAL SITE INFECTIONS (SSIs)

In the study "Perioperative Normothermia to Reduce the Incidence of Surgical Wound Infection and Shorten Hospitalization" NEJM (Kurz et al),

- 18 out of 96 hypothermic patients (19%) had Surgical Site Infections
- 6 out of 104 normothermic patients (6%) had Surgical Site Infections

SSIs account for approximately 40% of Hospital Acquired Infections among Surgical Patients.²

SSIs account for as much as 16% of all Hospital Acquired Infections.²

SSIs remain one of the most common and serious complications of surgery.¹

Hospitals participating in the **Surgical Care Improvement Project (SCIP)** are currently evaluating the benefits of Thermoflect in reducing the negative consequences of hypothermia in surgical patients.



THE SOLUTION: THERMOFLECT

Thermoflect prevents hypothermia by preserving—or banking—a patient’s core body temperature.

Maintaining normothermia delivers significant advantages:

- Improved patient outcomes
- Reduced surgical site infections (SSIs)
- Shorter hospital stays
- Reduced healthcare costs
- More patient comfort.

PROVEN, DURABLE, COST-EFFECTIVE

Thermoflect Simply Works.

Thermoflect is a simple solution to hypothermia that utilizes NASA pioneered science instead of electricity. The innovative Thermoflect material reflects a patient’s endogenous radiant heat, banking it in the body’s core, while preventing convective heat loss (wind chill). The material is lined with a soft, patient-friendly inner surface.

- Thermoflect products are cost-effective, ultra-lightweight yet durable, and move easily with the patient throughout the perioperative journey.
- Thermoflect is so trusted, it has become a part of the US Military’s Hypothermia Prevention Protocol.
- Thermoflect has proven effective in a variety of applications, including healthcare, EMS and survival gear.

USING THERMOFLECT IS AS EASY AS 1,2,3

Optimum hypothermia prevention must begin while the patient is warm before entry into the OR Suite (Bank the Heat to Beat the Chill).

1. Cover the patient as early as possible.
2. Cover the patient's maximum body surface area—tucking the material around the patient to help seal in the heat.
3. Maintain maximum coverage throughout all perioperative phases—PREOP, INTRAOP and PACU.

“Although OR staff hoped using Thermoflect would improve patient comfort levels, results from additional benefits were more dramatic...P.A.C.U. staff has documented an 87.5% reduction in patients arriving with temperatures below 36 degrees.”

D.J.B., RN, MSN, CNOR

Surgical Services Director at a major medical center

“We will be carrying your [Thermoflect transport] cocoons on each of our aircraft in the future. Thank you very much for such a helpful and useful product.”

K. T., LP

Critical Care Manager for a major medical air transport service

“For trauma patients, or for any patient that has, or may have, the potential for a decrease in core temperature, it is a must. We use it for trauma, long outside exposure, blood loss... We have had excellent results... We would recommend it very highly for anyone.”

B. M., Flight Medic

For a major medical air transport service

Thermoflect is available in a wide range of products—blankets, caps, patient gowns, and more. For a product list, visit www.thermoflect.com.

PUT THERMOFLECT TO WORK FOR YOUR PATIENTS.

Call 800.826.4490 or visit www.thermoflect.com

THERMOFLECT ADDRESSES THE PRIMARY MECHANISMS OF HEAT LOSS BY

- Reflecting the body's radiant heat
- Preventing convective heat loss

Convection and Radiation account for 90% of all patient heat loss in the operating room.³

Radiation is direct loss of heat energy via the invisible infrared wavelength range. In the human body, it is the largest source of heat loss, accounting for about 65% of the total loss.

Convection is heat loss due to circulation of the surrounding air currents and explains the so-called "wind-chill factor." Convection accounts for 25% of body heat loss. The high air exchange rate in most operating rooms increases the loss of heat through convection.

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1. Infection Control Today, October 2003, Temperature Management in the Intraoperative Setting, by Tina Brooks
2. Infection Control Today, March 2003. HAIs and SSIs: National Initiatives Aim to Control These Killers, by Kelly M. Pyrek
3. Gyn Physiology, Leigh Simpson, MD. University of Tennessee, Resident Didactic Series. November 11, 2004, www.utmem.edu/bgyn/res_pres/Gyn%20Physiology.ppt
4. Maintaining Intraoperative Normothermia: A Meta Analysis of Outcomes With Costs. C.B.Mahoney, J. Odum (AANA Journal 67 (April 1999) 155-163

Thermoflect is a trademark of Encompass Group LLC

Learn more at:
800.826.4490
or
www.thermoflect.com



Thermoflect is:

- Latex-free
- Nonconductive
- Radio-translucent (does not obstruct X-rays)
- Meets "CFR Part 1610, Standard for Flammability of Clothing Textiles"
- Meets "CFR Part 1615, Standard for Flammability of Children's Sleepwear Sizes 0-6X"
- Meets "CFR Part 1616, Standard for Flammability of Children's Sleepwear Sizes 7-14"



**NOT FOR
USE IN MRI**