



Forced-air warming from below.

In procedures involving general or regional anesthesia, maintaining body temperature is crucial. Any surgical patient can lose approximately 1.6°C during just the first hour of surgery alone.¹ Hypothermia can also increase the risk of infection,^{2,3} longer hospital stays² and death.⁴ For routine to complex surgeries, the 3M™ Bair Hugger™ Underbody Series Blankets offer warming solutions to meet your needs.

Who should be warmed? Everyone.

Patients under general or regional anesthesia cannot regulate their own temperature. Core body temperature declines by as much as 1.6°C within the first hour following the induction¹ of anesthesia, increasing the associated risks of unintended hypothermia such as higher mortality rates,⁴ longer hospital stays² and an increased rate of wound infection.^{2,3}

Forced-air warming is a simple, cost-effective method to help prevent unintended hypothermia and its complications.

Characteristic Patterns of General Anesthesia Induced Hypothermia

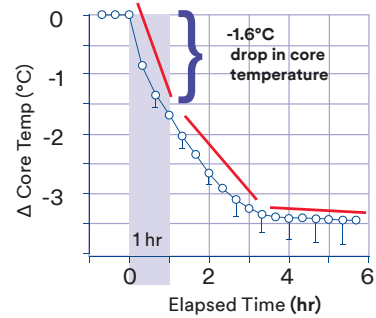
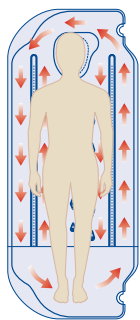


Chart adapted from: Sessler, D.I. Perioperative Heat Balance. *Anesthesiology*, Vol. 92, No. 2, Feb. 2000.

- Shivering and thermal discomfort^{1,2,7,8}
- Increased rate of wound infection^{2,3}
- Myocardial ischemia and cardiac disturbances^{9,10}
- Increased mortality rates⁴
- Prolonged and altered drug effect¹¹
- Coagulopathy⁴⁻⁶
- Delayed emergence from anaesthesia¹²

Simple, cost-effective protection against hypothermia.

Forced-Air Warming Using an Underbody Blanket*

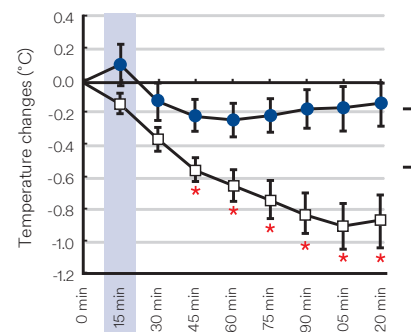


Outer channel surrounds the patient directing warmth to both the core and periphery

- Minimizes the initial temperature decrease caused by redistribution temperature drop¹³
- Effective in minimizing hypothermia during abdominal surgery¹³
- Recruits greater body surface area and is more effective in preventing hypothermia during abdominal surgery than an upper body blanket¹³
- More effective in preventing hypothermia than water mattress devices during abdominal surgery¹³

*As studied in upper abdominal surgery.

Changes in esophageal temperature⁴ (As studied in upper abdominal surgery)



- Bair Hugger™ full access underbody blanket group
- Control group [water mattress]
- * p<0.05 compared with 0 min

Underbody Series Blankets

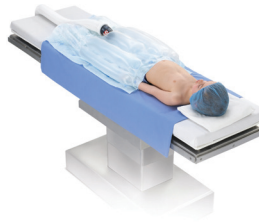
Adult Underbody Blanket 54500

Designed for the Cardiac Cath Lab and Interventional Radiology. This radiolucent blanket is positioned on the table as the room is turned over for the next patient so it's ready for immediate use.



Pediatric Underbody Blankets 55501/55000

Specifically for pediatric patients from neonate to young adults, eliminates the need to adapt products and equipment for pediatric use.



Spinal Underbody Blanket 57501

Designed for the challenging patient positioning created by the open frame of the spinal surgery table. This design does not interfere with the adjustment of support pads and allows full patient visualization.



Lithotomy Underbody Blanket 58501

Allows the clinical flexibility and full access needed for procedures involving the lower extremities and the abdominal, peritoneal and pelvic cavities.



Full Access Underbody Blankets 63500

Ideal for trauma, cardiac, complex or routine surgeries when the patient is in the supine, lateral or prone positions.



Full access from the start.

Underbody Series Blanket Benefits

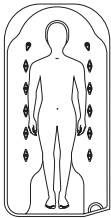
- 1 **Simplified OR prep** Placing the underbody series blankets on the table before the patient arrives in the OR allows immediate warming and more time for other pre-surgical tasks.
- 2 **Designed for flexibility** The unique design of the underbody series offers clinicians full, unrestricted access and flexible positioning for virtually any procedure.
- 3 **Innovation** Fluid outlets minimize the pooling of fluids while the patient's natural pressure points compress the blanket, preventing heat from reaching potentially ischemic tissue. Consistent, even perforations in the soft, radiolucent materials ensure uniform convective warming.
- 4 **From the leaders in forced-air warming** We created the category of forced-air warming in 1987 and today offer 16 blanket styles – the most complete portfolio in the industry.
- 5 **Proven performance** More than 300 million patients across the globe have experienced the benefits of Bair Hugger™ Blankets.



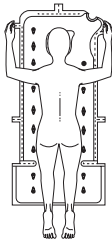
Bair Hugger™ Underbody Series Blankets

For routine to complex surgeries,
the benefits of maintaining normothermia are clear.

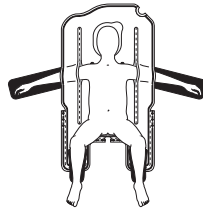
**Adult
Underbody**
Model 54500



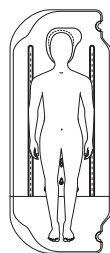
**Spinal
Underbody**
Model 57501



**Lithotomy
Underbody**
Model 58501



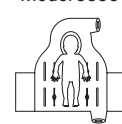
**Full Access
Underbody**
Model 63500



**Large Pediatric
Underbody**
Model 55000



**Pediatric
Underbody**
Model 55501



For additional information on 3M normothermia solutions, please contact your 3M representative,
call 1-800-364-3577 or visit bairhugger.com.

- ¹ Sessler, D.I. Current concepts: mild perioperative hypothermia. *New England Journal of Medicine*. 1997; 336: 1730-1737.
- ² Kurz, A.; Sessler, D.I.; et al. Perioperative Normothermia to Reduce the Incidence of Surgical-Wound Infection and Shorten Hospitalization. *New Engl. J. Med.* 1996; 334: 1209-1215.
- ³ Melling, A.C.; Ali, B.; Scott, E.M.; Leaper, D.J. Effects of preoperative warming on the incidence of wound infection after a clean surgery: a randomized controlled trial. *Lancet*. 2001; 358(9285): 876-880.
- ⁴ Bush, H. Jr.; Hydo, J.; Fischer, E.; et al. Hypothermia during elective abdominal aortic aneurysm repair: The high price of avoidable morbidity. *J. Vasc. Surg.* 1995; 21(3): 392-402.
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- ⁶ Rajagopalan, S.; et al. The Effects of Mild Perioperative Hypothermia on Blood Loss and Transfusion Requirement. *Anesth.* 2008; 108: 71-7.
- ⁷ Sessler, D.I. Perioperative Heat Balance. *Anesth.* 2000; 92: 578-596.
- ⁸ Fossum, S.; Hays, J.; Henson, M.M. A Comparison Study on the Effects of Prewarming Patients in the Outpatient Surgery Setting. *J. PeriAnesth Nurs.* 2001; 16(3): 187-194.
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- ¹⁰ Scott, A.V.; Stonemetz, J.L.; Wasey, J.O.; Johnson, D.J.; Rivers, R.J.; Koch, C.G.; et al. (2015) Compliance with Surgical Care Improvement Project for Body Temperature Management (SCIP Inf-10) is Associated with Improved Clinical Outcomes. *Anesthesiology* 123: 116-125.
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- ¹² Lenhardt, R.; Marker, E.; Goli, V.; et al. Mild intra-operative Hypothermia Prolongs Postanesthetic Recovery. *Anesth.* 1997; 87(6): 1318-1323.
- ¹³ Tominaga, A.; Koitabashi, T.; et al. Efficacy of an Underbody Forced-Air Warming Blanket for the Prevention of Intraoperative Hypothermia. *Anesthesiology*. 2007; 107: A91.



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