Warming patients who are undergoing complex surgical procedures should not be complicated. 3M™ Bair Hugger™ therapy offers a number of easy to use blanket designs to actively warm—and rewarm—your most challenging cases, from pediatric to geriatric, without compromising surgical access.
3M™ Bair Hugger™ Therapy

Access From the Start

3M™ Bair Hugger™ therapy offers multiple warming solutions for cardiothoracic and vascular surgeries in pediatric and adult patient populations.

Underbody series blankets are placed on the OR table prior to the patient’s arrival. This allows the care provider to focus on the patient and warm from the start of the procedure. As little as 15 minutes of forced-air warming prior to induction can add to the total heat content of the body helping to reduce the effects of redistribution temperature drop\(^1,2\) for procedures using a normothermic temperature management strategy.

The pediatric underbody blanket (model 555) and the large pediatric/small adult underbody blanket (model 550) offer excellent warming solutions for smaller patients. The full access underbody blanket (model 635) is ideally suited for the adult cardiothoracic or vascular surgery patient where unrestricted patient access is a requirement.

Temperature Management for Cardiothoracic and Vascular Surgery

Bair Hugger underbody series blankets will accommodate supine, lateral or prone positions and are suitable for use with either endovascular or open SVG harvesting techniques. Because the full access underbody blanket is in place under the surgical drapes, forced-air warming can be used to complement cardiopulmonary bypass rewarming strategies. The same blanket can be used to continue warming therapy after the patient has been weaned from bypass.

The full access underbody series blanket has been demonstrated to be more effective than a water mattress.\(^2,3\) Forced-air warming can also be used without the risk of thermal injury associated with conductive warming devices as a result of the combination of pressure, time and heat.\(^4\)

Unlike with water mattresses, the patient’s natural pressure points compress the forced-air underbody blanket preventing heat from reaching potentially ischemic tissue – areas that

Warm every patient
are at risk for pressure sore formation and thermal injury. All Bair Hugger underbody series blankets include unique drain holes that allow excess fluids to pass through the surface of the blanket to the linen below, reducing the potential for skin maceration or breakdown or inadvertent cooling of the surgical patient due to evaporative heat loss.

Bair Hugger temperature management units can be used to both actively warm or cool patients. In hypothermic bypass, the ambient setting may be used to complement CPB patient cooling while the medium and high settings can be used to complement CPB patient rewarming.

Maintaining normothermia with forced-air warming has been shown to reduce the rate of complications such as:

- Surgical site infection rates
- Post operative cardiac events
- ICU time
- Length of hospital stay
- Mortality rates
- Coagulopathy and transfusion of blood product
- Mechanical ventilation time

Cummberbund design allows for placement onto patient after surgical preparation.
On- and Off-Pump

Both on-pump and off-pump cardiothoracic and vascular procedures have demanding temperature management requirements.

Whether your surgical strategy involves near normothermic bypass or CPB-induced hypothermia where reducing the severity of post-bypass after drop is of concern, Bair Hugger therapy has demonstrated, flexible temperature management solutions designed to help you meet your patient temperature goals.

Bair Hugger underbody series blankets:

- Are significantly more effective at reducing unintended hypothermia following hypothermic CABG than resistive-electric type mattresses.¹

- Are effective at preventing hypothermia and the harmful effects of hypothermia in the early postoperative phase in patients undergoing near-normothermic CABG.⁸

- Have been adopted for use in fast-track cardiac surgery to ensure a core temperature of 36°C.¹⁰

Studies have demonstrated that convective Bair Hugger underbody forced-air warming blankets produce superior intraoperative warming results when compared to conductive under-the-patient water mattresses¹¹ or resistive-electric type heating mattress pads.⁸

References: