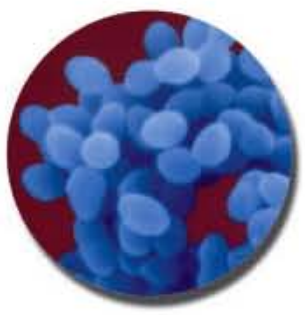
BioPatch® Protective Disk with CHG – the evidence-based choice.

The **ONLY** protective disk **PROVEN** to reduce the incidence of CRBSIs, local infections and skin colonization in patients with central venous and arterial catheters.[1]

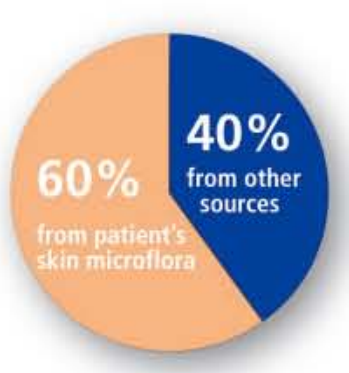


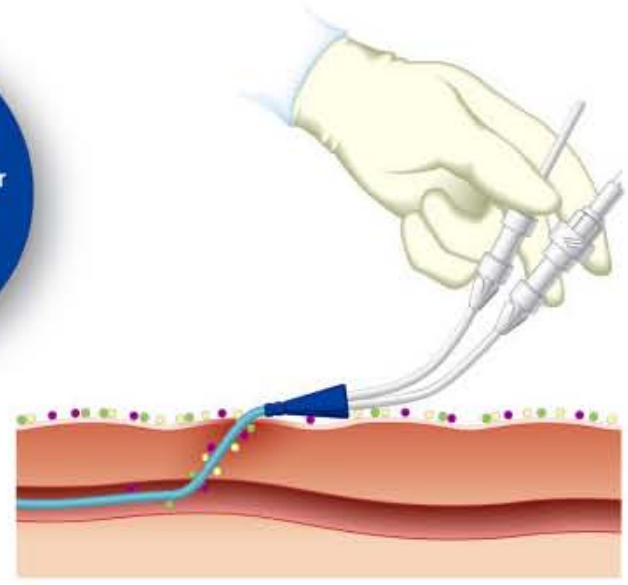
BioPatch®
Protective Disk with CHG

When

The Problem

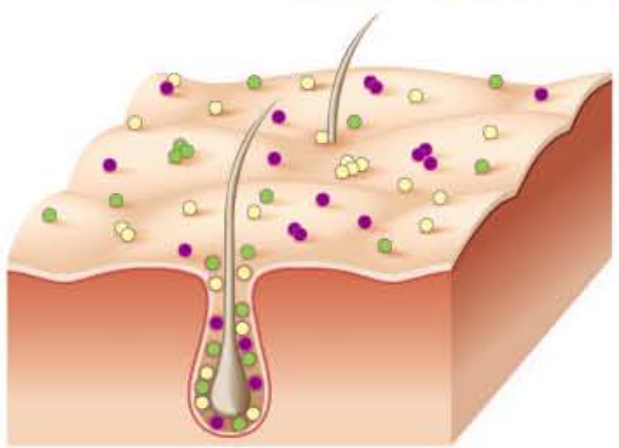
Prepping the skin is not enough[2] –
60% of CRBSI originate from the patient's own skin[3]



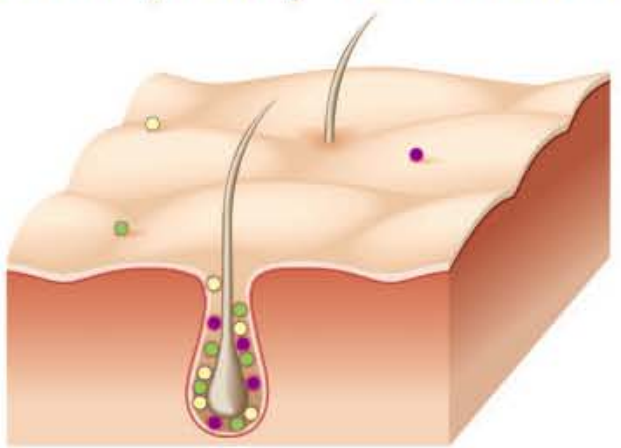


Without continual suppression, bacteria on the skin surface can REPOPULATE and migrate into the bloodstream, elevating the risk of CRBSI.

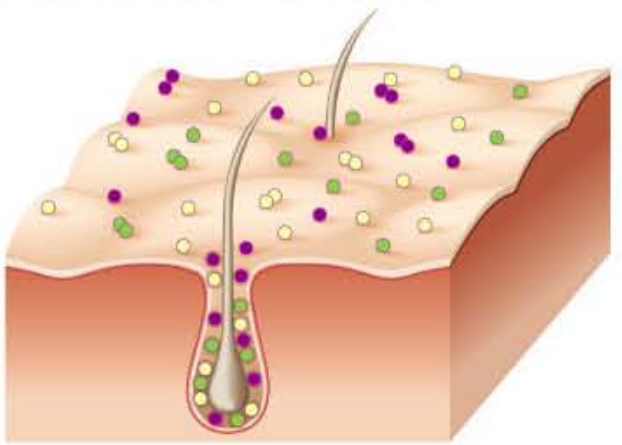
Within hours of thorough antiseptic application, resident bacteria quickly re-colonize the skin surface[2]



Pre-Prep
Bacteria colonies exist not only on the surface, but below the surface as well, particularly within the hair follicles and sebaceous glands.



Post-Prep (immediately following antiseptic application)
Prepping the skin reduces colony counts of bacteria from the surface only — it never completely disinfects the skin.



Post-Prep (within 1-2 days following antiseptic application)
Resident bacteria begin to re-colonize the skin surface.

Patients need to be protected from their own skin's microflora

Without BioPatch® Protective Disk with CHG, the skin surface quickly returns to the pre-prep environment[3]

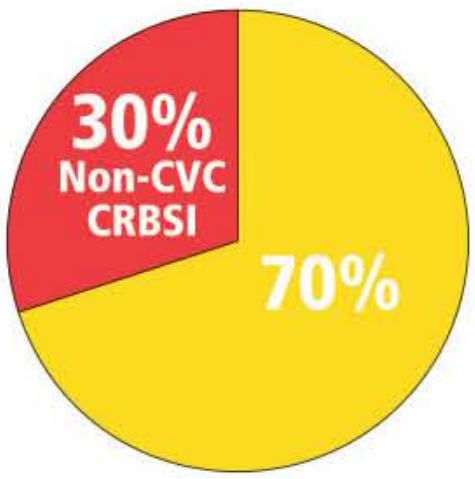
With BioPatch® Disk, post-prep environment extends for up to 7 days[4]

Patient Risk of Infection: Low Medium High

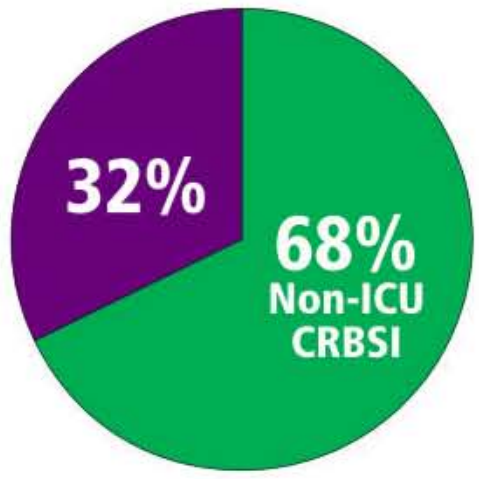
lives are on the line...

CRBSIs...The Scope

Recognize the problem –
catheter-related bloodstream infections (CRBSIs) are a hospital-wide challenge.



Annual Bloodstream Infections
(n = 357,000)[5]



Annual Central Venous CRBSIs
(n = 250,000)[5]

High Incidence

- Although CVCs are implicated in the majority of CRBSI, non-CVC devices account for 30% of total CRBSI
- Of the 250,000 CVC-related bloodstream infections reported annually, 68% occurred outside the ICU

CRBSI's impact on patient recovery and hospital costs

Patient Impact

- Increased morbidity and mortality - CRBSI-attributed mortality ranges from 12 to 25%[5]
- Increased hospital stays

Hospital Impact

- Incremental cost per CRBSI episode ranges from $25,000 to $56,000[5]
- Hospitals absorb majority of costs
- US hospitals incur as much as $2.3 billion per year as a result of CRBSIs[5]

The Need to Take Action - ZERO is the Goal

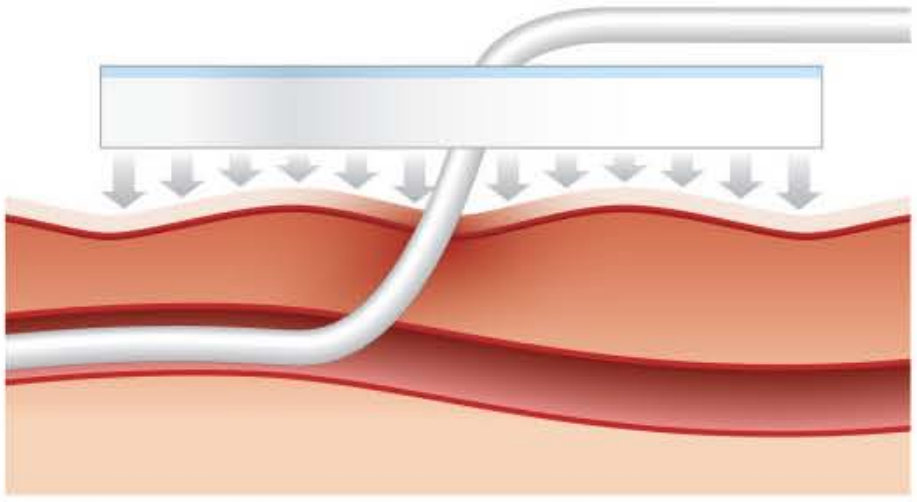
Organization	Statement
Joint Commission	Nation Patient Safety Goal #7.4.1 – Implement evidenced-based guidelines to prevent central line associated bloodstream infections by January 1, 2010.
CMS	As of October 1, 2008 CMS no longer reimburses hospitals for six preventable HAI including central line associated bloodstream infections. Many private payers follow suit.[6]
SHEA/IDSA	Five leading healthcare stakeholders (SHEA, IDSA, AHA, APIC, and Joint Commission) have worked together to develop strategies to prevent six of the most important healthcare associated infections (HAIs), including central line associated bloodstream infections.
APIC	"Targeting Zero" Initiative – "While not all infections are preventable, working toward zero should be the goal."[7]

lives are on the line, **trust the EV**

The Solution

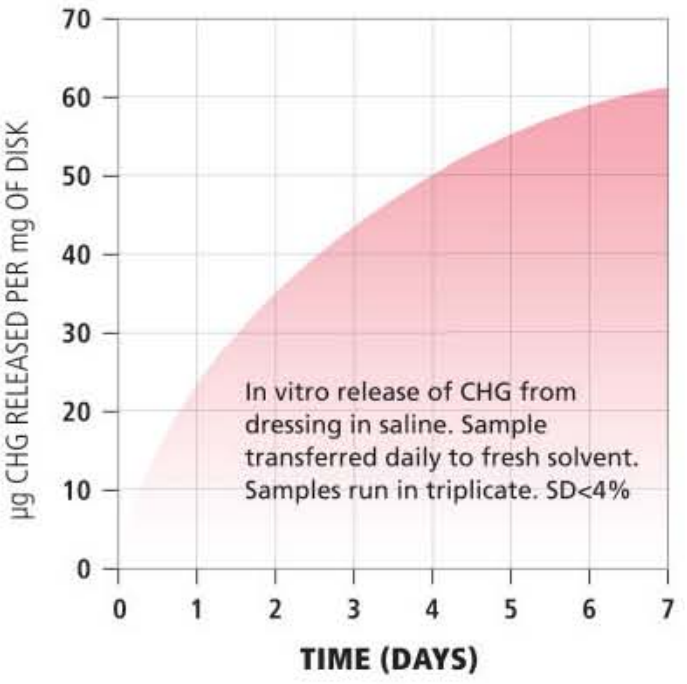
BioPatch® delivers the right dose of CHG

Through its proprietary delivery technology, BioPatch® provides proven sustained antimicrobial action over 7 days



Continuous release of CHG provides 360° protection for 7 days — for ongoing antisepsis between dressing changes

BioPatch® CHG release rate over 7 days



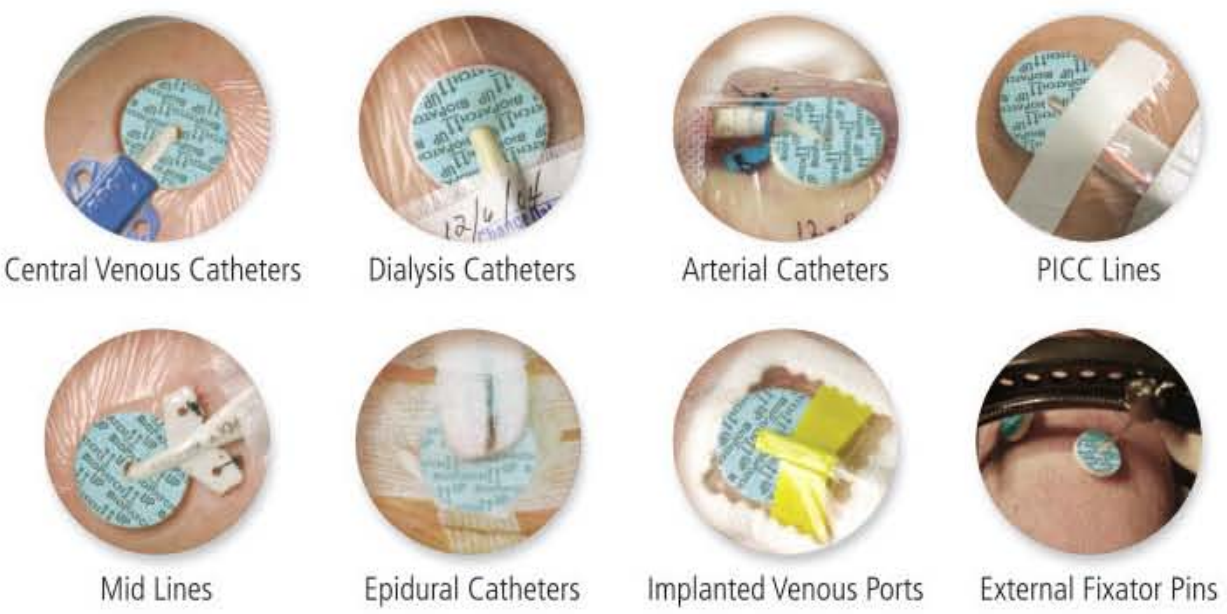
CHG Prep alone allows for a maximum of 48 hour protection. No studies are available that define the amount of CHG present at defined intervals during that 48 hour time period.

Extended release technology.

BioPatch® continuously delivers CHG over 7 days to maintain skin antisepsis[8]

- Specifically engineered urethane composite material is designed to continuously release CHG – not duplicated by other dressings
- The presence of moisture in the patient's skin initiates the quick release of CHG to maintain the post-prep environment and ongoing skin antisepsis
- Reduces bacteria levels on patients
- Absorbs 8 times its own weight in fluids[9]
- Eliminates frequent dressing changes reducing opportunity to spread bacteria by direct contact
- Ability to see site has been shown to be an unreliable predictor of CRBSIs[10]
- BioPatch® is the **ONLY** protective device **PROVEN** to reduce CRBSIs in patients with central venous and arterial catheters[1]

Use with both vascular and nonvascular percutaneous devices

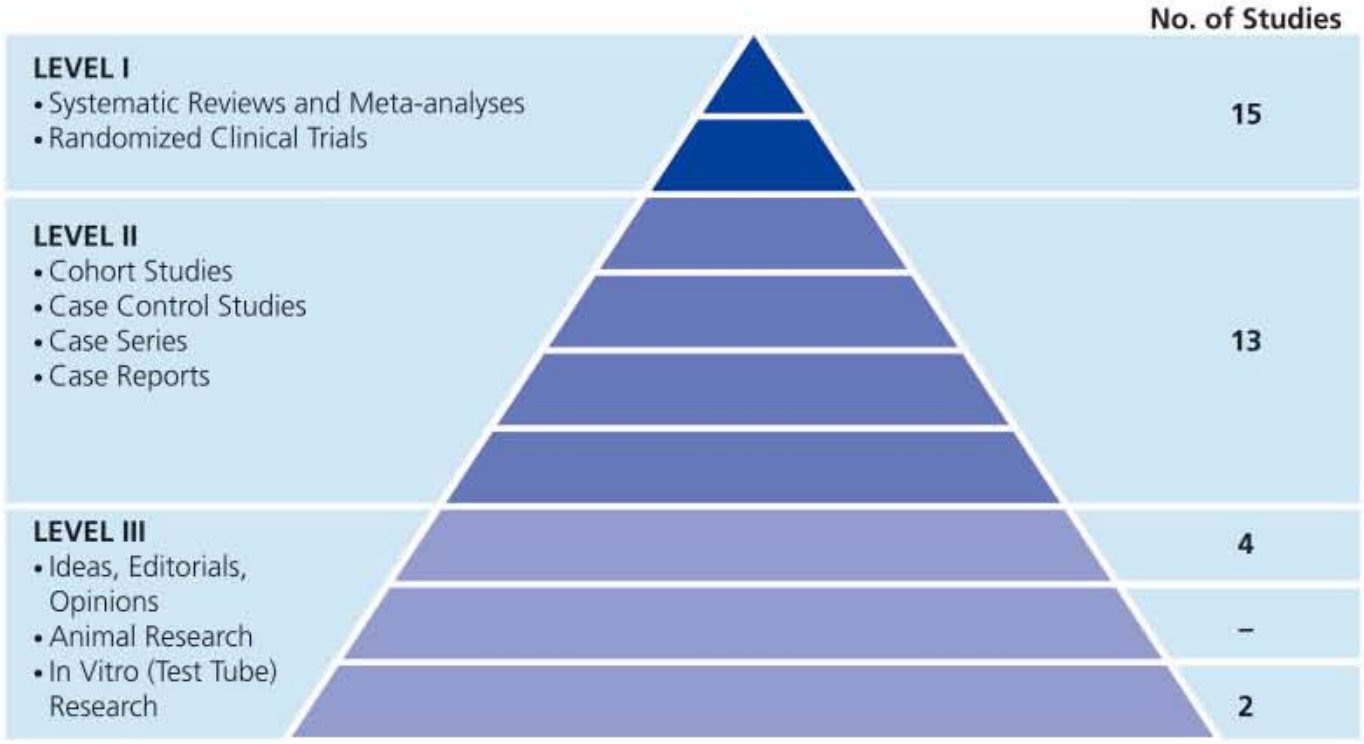


IDENCE

The Evidence

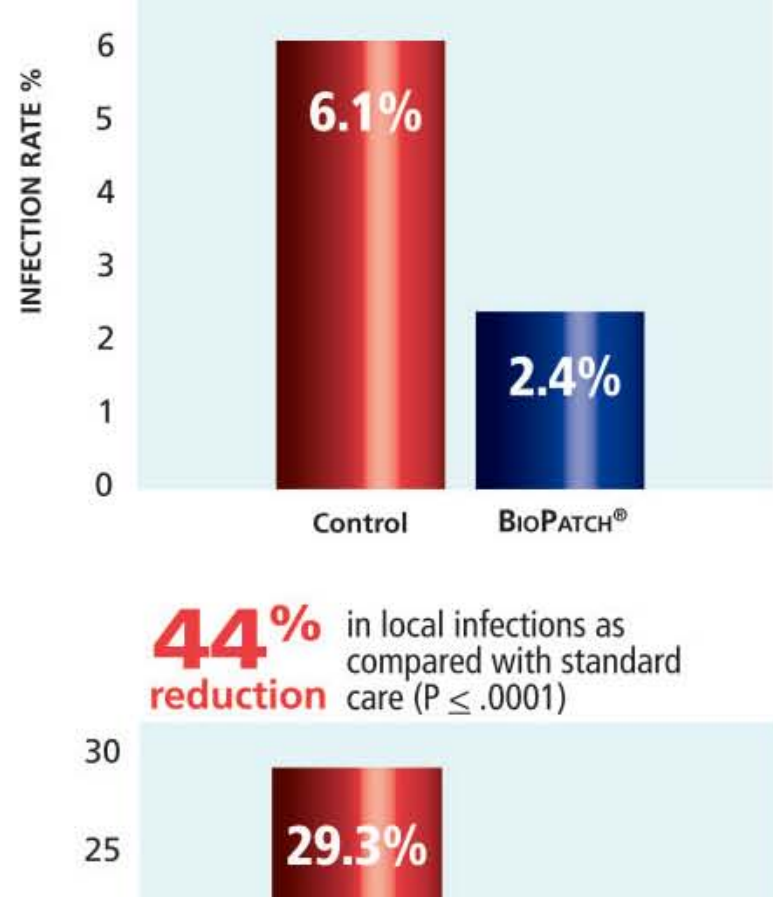
Trust the evidence

Hierarchy of BioPatch® Evidence

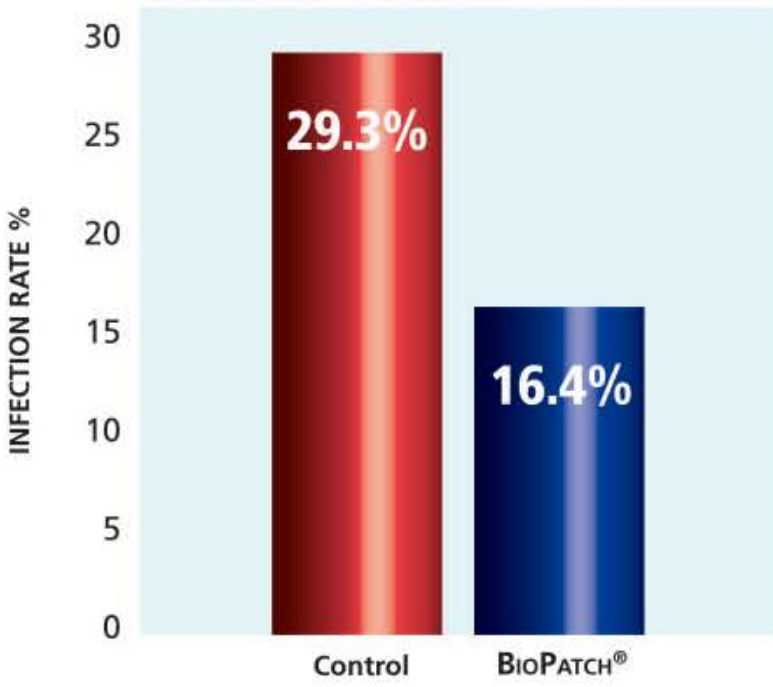


Results from randomized controlled trial[1]

60% reduction in catheter-related bloodstream infections as compared with standard care (P = .026)



44% reduction in local infections as compared with standard care (P ≤ .0001)



Only BioPatch® has extensive clinical experience – over 15 years

Author	Year	Meeting/Journal	No. of Patients
Timsit	2009	*Journal of the American Medical Association*	1,636
Garland	2001	*Pediatrics*	705
Ruschulte	2008	*Annals of Hemotology*	601
Maki	2000	Fortieth Interscience Conference of Antimicrobial Agents and Chemotherapy	589
Honeycutt	2007	APIC 34th Annual Education Conference & International Meeting	342
Levy	2005	*Pediatric Infectious Disease Journal*	145
Egol	2005	*Journal of Bone and Joint Surgery*	118
Chambers	2005	*Journal of Hospital Infection*	112
Shapiro	1990	*Anesthesiology*	57
Mann	2001	*Anaesthesia and Intensive Care*	55
Hanazaki	1999	*Journal of Hospital Infection*	50
Wu	2008	*International Wound Journal*	40
Karwowska	1995	*Pediatric Research*	35
Roberts	1998	*Australian Critical Care*	33

SHEA/IDSA Practice Recommended

In the SHEA/IDSA practice recommendations a "chlorhexidine-containing sponge dressing" has received a Category B recommendation and the highest possible rating for the Quality of Evidence (I). Over the past 15 years BioPatch® Protective Disk with CHG has been evaluated in multiple studies and controlled randomized trials. It is **the only** device of its kind with an FDA-cleared indication to reduce local infections, catheter-related bloodstream infections (CRBSIs), and skin colonization of microorganisms commonly related to CRBSI, in patients with central venous or arterials catheters.[1]

- The **ONLY** one of its kind **PROVEN** to reduce CRBSIs 60%[1]
- Engineered for continuous protection – up to 7 days
- Powerful protection that could reduce deaths attributable to CRBSIs
- Contains CHG – a potent antibacterial and antifungal agent recommended by the CDC for ongoing skin antisepsis[5]
- 15 years of clinical experience

ORDER CODE	4150	4151	4152
SIZE	1" disk (2.5 cm) w/4.0 mm center hole	3/4" disk (1.9 cm) w/1.5 mm center hole	1" disk (2.5 cm) w/7.0 mm center hole
FRENCH SIZE RANGE	6-12 Fr	<6 Fr	13-20 Fr
AVERAGE AMOUNT OF CHG PER DRESSING	92 mg	52.5 mg	86.8 mg
QUANTITY PER CASE	10/box 4 boxes/case; 40	10/box 4 boxes/case; 40	10/box 4 boxes/case; 40
HCPCS CODE[11,12]			
– for use with peg tubes	A6209	A6209	A6209
– for use with drug infusion catheter site	A4221	A4221	A4221

*WARNING: Not for use on premature infants or patients with known sensitivity to CHG. Safety and effectiveness in children under 16 years of age has not been established.

References

1. Maki DG, Mermel L, Genthner D, Hua S, Chiacchierini RP. An evaluation of BIOPATCH® Antimicrobial Dressing compared to routine standard of care in the prevention of catheter-related bloodstream infection. Johnson & Johnson Wound Management, a division of ETHICON, INC. 2000. Data on file. **2.** Hendley JO, Ashe KM. Effect of topical antimicrobial treatment on aerobic bacteria in the stratum corneum of human skin. *Antimicrobial Agents and Chemotherapy*. April 1991;35(4):627-631 **3.** Safdar N, Maki DG. The pathogenesis of catheter-related bloodstream infection with noncuffed short-term central venous catheters. *Intensive Care Med* 2004;30:62-67 **4.** Bhende MS, Rothenburger S. In vitro antimicrobial effectiveness of 5 catheter insertion-site dressings. *The Journal of the Association for Vascular Access*. 2007; 12(4):227-231 **5.** O'Grady NP, Alexander M, Dellinger EP, et al. Guidelines for the prevention of intravascular catheter-related infections. Centers for Disease Control and Prevention. *MMWR Recomm Rep*. 2002 Aug 9;51(RR-10):1-29. **6.** Centers for Medicare and Medicaid Services Web site. Hospital-Acquired Conditions. Available at http://www.cms.hhs.gov/HospitalAcqCond/. Accessed October 1, 2008. **7.** Association for Professionals in Infection Control and Epidemiology Web site. Available at http://www.apic.org/AM/Template.cfm?Section=Featured_News_and_Events&CONTENTID=12731&TEMPLATE=/CM/ContentDisplay.cfm. Accessed January 22, 2009. **8.** Shapiro JM, Bond EL, Garman JK. Use of a chlorhexidine dressing to reduce microbial colonization of epidural catheters. *Anesthesiology*. 1990 Oct;73(4):625-31. **9.** BIOPATCH® Protective Disk with CHG (Full Prescribing Information). Somerville, NJ. ETHICON, Inc. **10.** Safdar N, Maki DG. Inflammation at the insertion site is not predictive of catheter-related bloodstream infection with short-term noncuffed central venous catheters. *Crit Care Med*. 2002; 30:2632-2635 **11.** Healthcare Common Procedural Coding System for Med care Part B Reimbursement. **12.** The information contained in this document is provided for informational purposes only and represents no statement, promise, or guarantee by Johnson & Johnson Wound Management concerning levels of reimbursement, payment, or charge. Similarly, all CPT (copyright AMA) and HCPCS codes are supplied for informational purposes only and represent no statement, promise, or guarantee by Johnson & Johnson Wound Management that these codes will be appropriate or that reimbursement will be made. It is not intended to increase or maximize reimbursement by any payor. We strongly recommend that you consult your payor organization with regard to its reimbursement policies.

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