

Preventing Surgical Site Infection (SSI)

Plus Antibacterial Sutures are a cost-effective part of an SSI prevention bundle*

WHO RECOMMENDATION	RECOMMENDATION TYPE/ QUALITY OF EVIDENCE	RANGE OF ESTIMATED INCREMENTAL COSTS PER CASE		
		< \$5	\$5-\$20	> \$20
Antimicrobial Sutures Use antimicrobial sutures ¹	Conditional/Moderate ¹ 13 RCTs, 5347 patients ¹	●	Just 48¢ more on average per strand than traditional suture!²	
Maintaining Normothermia Use warming devices in the OR and during the surgical procedure ³	Conditional/Moderate ¹ 2 RCTs, 478 patients ¹		●	●
Pre-op Bathing Patients should bathe or shower prior to surgery with plain or antimicrobial soap	Conditional/Moderate ¹ 7 RCTs, 11327 patients ⁴	●		
Surgical Site Preparation Use alcohol-based antiseptic solutions based on chlorhexidine gluconate ⁶	Strong/Low-to-moderate ¹ 17 RCTs, 4899 patients ⁵	●		
Hair Removal Only if necessary and then with clipper	Strong/Moderate ¹ 15 RCTs or quasi-randomized trials, 4065 patients ⁷	●		
Optimal Timing for Pre-op Surgical Antibiotic Prophylaxis Administer prior to surgical incision when indicated ⁸	Strong/Low ¹ 113 Observational Studies, 53,975 patients ¹		●	●
Use of Protocols for Intensive Perioperative Blood Glucose Control Use for both diabetic and nondiabetic adult patients	Conditional/Low ¹ 15 RCTs, 2836 patients ¹	●		
Wound Protective Devices Consider the use of wound protector devices in clean-contaminated, contaminated, and dirty abdominal surgical procedures ⁹	Conditional/Very low (for abdominal surgery) ¹ 10 RCTs and 1 prospective controlled study, 2949 patients ¹		●	●
Post-op Advanced Dressings Do not use any type of advanced dressing over a standard dressing ¹⁰	Conditional/Low (do not use) ¹ 10 RCTs, 2628 patients ¹¹	●		

SSIs are potentially catastrophic for patients, costly for clinics and hospitals, and under increasing scrutiny by payers and policymakers. With the proven ability of triclosan-coated sutures to address a known risk factor for SSI, cost-effective Plus Sutures should be part of your infection prevention bundle.¹²⁻¹⁴

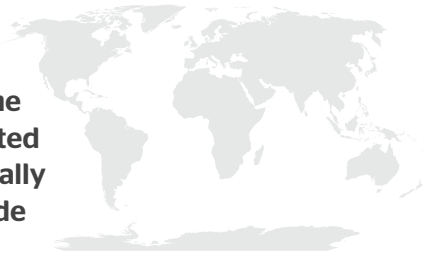
A single SSI can cost up to
\$39,000^{15†}



SSI-related treatment costs may no longer be reimbursed

Meta-analysis demonstrates
28% reduction
in SSI risk with the use of triclosan-coated sutures^{‡§}

Plus Sutures are the only triclosan-coated sutures commercially available worldwide



Plus Suture costs on average **48¢ more per strand** than traditional suture²

For complete indications, contraindications, warnings, precautions, and adverse reactions, please reference full package insert.

*Selected measures from WHO guidelines were chosen based on evidence-supported interventions recommended by Dr. Charles E. Edmiston, Jr. Please refer to the 2018 edition for the full list of 29 recommendations on 23 topics for SSI prevention.¹⁶

†As shown in a coronary artery bypass surgery.

‡Included 21 RCTs, 6462 patients, 95% CI: (14, 40%), $P < 0.001$.

§All triclosan-coated sutures in these RCTs were Ethicon Plus Antibacterial Sutures (MONOCRYL® Plus Antibacterial (poliglecaprone 25) Suture, Coated VICRYL® Plus Antibacterial (polyglactin 910) Suture, and PDS® Plus Antibacterial (polydioxanone) Suture).

References: 1. WHO Global Guidelines for the Prevention of Surgical Site Infection. 2018. <https://apps.who.int/iris/bitstream/handle/10665/277399/9789241550475-eng.pdf>. Accessed May 9, 2020. 2. Plus Suture Cost Analysis. 2019. Ethicon, Inc. 3. Welch T. A common sense approach to hypothermia. *AANA Journal*. 2002;70(3):227-231. 4. WHO Global Guidelines for the Prevention of Surgical Site Infection, Appendix 2. 2018. <https://www.ncbi.nlm.nih.gov/books/NBK536394/#webapp2.app4>. Accessed May 9, 2020. 5. WHO Global Guidelines for the Prevention of Surgical Site Infection, Appendix 8. 2018. <https://www.ncbi.nlm.nih.gov/books/NBK536434/#webapp8.app4>. Accessed May 9, 2020. 6. Lee I, Agarwal R, Lee B, et al. Systematic Review and Cost Analysis Comparing Use of Chlorhexidine with Use of Iodine for Preoperative Skin Antisepsis to Prevent Surgical Site Infection. *Infect Control Hosp Epidemiol*. 2010;31(12):1219-1229. 7. WHO Global Guidelines for the Prevention of Surgical Site Infection, Appendix 7. 2018. <https://www.ncbi.nlm.nih.gov/books/NBK536407/#webapp7.app4>. Accessed May 9, 2020. 8. Wilson SE, Turpin RS, Kumar RN, et al. Comparative costs of ertapenem and cefotetan as prophylaxis for elective colorectal surgery. *Surg Infect*. 2008;9(3):349-356. 9. Lee P, Waxman K, Taylor B, et al. Use of wound-protection system and postoperative wound-infection rates in open appendectomy: A randomized prospective trial. *Archives of Surgery*. 2009;144(9):872-875. 10. Sadik K, Fiener J, Gargiulo J, et al. A US hospital budget impact analysis of a skin closure system compared with standard of care in hip and knee arthroplasty. *ClinicoEcon Outcomes Res*. 2018;11:11. 11. WHO Global Guidelines for the Prevention of Surgical Site Infection, Appendix 26. 2018. <https://www.ncbi.nlm.nih.gov/books/NBK536417/#webapp26.app4>. Accessed May 9, 2020. January 23, 2020. 12. Zimlichman E, Henderson D, Tamir O, et al. Health Care-Associated Infections; A Meta-analysis of Costs and Financial Impact on the US Health Care System. *JAMA Internal Medicine*. 2013;173(22):2039-46. 13. Saleh A, Faour M, Sultan A, et al. Emergency Department Visits Within Thirty Days of Discharge After Primary Total Hip Arthroplasty: A Hidden Quality Measure. *J Arthroplasty*. 2019;34:20-26. 14. de Jonge SW, Atema JJ, Solomkin JS, Boormeester MA. Meta-analysis and trial sequential analysis of triclosan-coated sutures for the prevention of surgical site infection. *Brit J Surg*. 2017;ePub-DOI: 10.1002/bjs.10445. 15. de Lissovoy G, Pan F, Patkar A, et al. Surgical Site Infection Incidence and Burden Assessment Using Multi-institutional Real-world Data. Presented at EU ISPOR, 2011, Madrid, Spain. 16. Edmiston CE. Demystifying the Surgical Care Bundle in the Prevention of Surgical Site Infections. Presented at Association for Professionals in Infection Control and Epidemiology (APIC) symposium. 2019. Ethicon, Inc.