

Comparing Surgical Site Infection (SSI) Prevention Guidelines: WHO, CDC, ACS/SIS, and Wisconsin DPH

Intervention	2016 WHO Guidelines ¹	2017 CDC Guidelines ²	2016 ACS/SIS Guidelines ³	2017 WI DPH Guidance ⁴
Antimicrobial Sutures	"The panel suggests the use of triclosan-coated sutures for the purpose of reducing the risk of SSI, independent of the type of surgery." [*]	"Consider the use of triclosan-coated sutures for the prevention of SSI." [*]	"Triclosan antibacterial suture use is recommended for wound closure in clean and clean-contaminated abdominal cases when available." [*]	"Use triclosan-coated antimicrobial sutures to close surgical wounds."
Normothermia	Maintain normothermia	Maintain normothermia	Maintain normothermia	Maintain normothermia – FAW [†] may reduce incidence of SSI
Wound Irrigation	Recommended	Intraoperative irrigation recommended – povidone iodine	No recommendation	Intraoperative irrigation with aqueous 0.05% CHG [‡] recommended
Antimicrobial Prophylaxis	Short durational	Short durational	Short durational	Short durational – follow ASHP [§] weight-based dosing
Glycemic Control	Recommended	Recommended	Highly beneficial	Highly beneficial; Ha1c ≤ 6.7
Perioperative Oxygenation	Recommended	Administer increased FIO ₂ during surgery after extubation, immediate postop period	Recommended	Recommended – strongest evidence in colorectal surgery
Pre-admission Showers	Advise patients to bathe or shower with soap	Advise patients to bathe or shower with soap or antiseptic agent at least the night before surgery	Advise patients to bathe/shower with CHG [‡]	Advise patients to take standardized showers/cleansings with CHG [‡] night before/morning of surgery

^{*}CDC, WHO, and ACS/SIS guidelines on reducing the risk of surgical site infections are general to triclosan-coated sutures and are not specific to any one brand. [†]FAW=Forced-air warming. [‡]CHG=Chlorhexidine gluconate. [§]ASHP= American Society of Health-System Pharmacists

References: 1. WHO Global Guidelines for the Prevention of Surgical Site Infection, 2016. 2. Berríos-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. *JAMA Surg.* doi:10.1001/jamasurg.2017.0904. 3. Ban KA, Minei JP, Laronga C, et al. American College of Surgeons and Surgical Infection Society: Surgical Site Infection Guidelines, 2016 Update. *J Am Coll Surg.* 2016;224:59-74. 4. Wisconsin Division of Public Health Supplemental Guidance for the Prevention of Surgical Site Infections: An Evidence-Based Perspective, 2017. Wisconsin Department of Health Services website. <https://www.dhs.wisconsin.gov/publications/p01715.pdf>. Accessed October 4, 2017.