



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

Office of Origin: Department of Hospital Epidemiology and Infection Control (HEIC)

**I. PURPOSE**

- A. To ensure appropriate strategies for surgical site infection (SSI) prevention are completed for patients undergoing surgical procedures at UCSF Medical Center and Benioff Children's Hospital
- B. To provide a single reference document reflecting best practices.

**II. REFERENCES**

1. Category 1A and 1B recommendations from Mangram AJ, Horan TC, Pearson ML, Silver LC, Jarvis WR, the Hospital Infection Control Practices Advisory Committee. Guideline for the prevention of surgical site infection, 1999. *Infect Control Hosp Epidemiol* 1999; 20:247-28
2. Centers for Medicare & Medicaid Services; Joint Commission. Specifications Manual for National Hospital Inpatient Quality Measures, version 3.2.
3. Yokoe, DS, LL Maragakis et al. Society for Hospital Epidemiologists of America (SHEA) Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals, 2014 Update.  
<http://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=262&print=0&entityTypeID=1>
4. Horan TC, Gaynes RP, Martone WJ, Jarvis WR, Emori TG. CDC definitions of nosocomial surgical site infections, 1992: a modification of CDC definitions of surgical wound infections. *Infect Control Hosp Epidemiol* 1992;13(10):606-8
5. American Institute of Architects *Guidelines for design and construction of hospital and health care facilities*. Washington (DC): American Institute of Architects Press; 1996. 300. Nichols RL. The operating room.

**III. POLICY**

- A. Patients undergoing surgical procedures at UCSF Medical Center and Benioff Children's Hospital will receive care compliant with recommended strategies<sup>1</sup> to prevent surgical site infection, under the professional medical judgment of the provider. Recommendations are in *italics*.
  1. Preoperative
    - a. *Provide patient education regarding prevention of surgical site infections and infection risks associated with devices (e.g., urinary catheters, central venous catheters, mechanical ventilation):*  
[http://patiented.ucsfmedicalcenter.org/Additional\\_Patient\\_Ed\\_Material.shtml](http://patiented.ucsfmedicalcenter.org/Additional_Patient_Ed_Material.shtml)
    - b. *Treat all infections remote to the site before elective operation*
    - c. *Do not remove hair at or around incision site unless it will interfere with the operation.*
    - d. *Remove hair only with electric clippers*
    - e. *Use an appropriate antiseptic agent for skin preparation; Remove gross contamination before performing antiseptic skin preparation.*
      - i. Patient skin prep:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/PrepsShaveSkin.pdf>



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

- 
- f. *Adequately control serum blood glucose levels in diabetic patients and avoid hyperglycemia perioperatively.*
  - g. *Encourage tobacco cessation 30 days before elective surgeries.*
  - h. *Do not withhold blood products as a means of preventing SSI.*
    - i. Blood administration:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/BloodAdministration.pdf>
    - ii. Blood loss estimation:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/BloodLossEstimation.pdf>
    - iii. Cell saver:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/CellSaver-AutologBloodTrnsfsn.pdf>
2. *Hand/forearm antiseptics for surgical team members*
- a. *Keep nails short and do not wear artificial nails.*
  - b. *Perform a preoperative surgical scrub for at least 2 to 5 minutes using an appropriate antiseptic (Table 6). Prepare the hands and forearms up to the elbows.*
  - c. *After performing the surgical scrub, keep hands up and away from the body (elbows in flexed position) so that water runs from the tips of the fingers toward the elbows. Dry hands with a sterile towel and don a sterile gown and gloves.*
    - i. The [UCSF Hand Hygiene Policy](#) provides step-by-step instructions for routine hand hygiene and surgical hand preparation
3. Antimicrobial prophylaxis
- a. *Surgical Antimicrobial Prophylaxis (SAP) is recommended for select surgical procedures. UCSF recommendations for SAP are based upon local epidemiology or evidence-based literature [http://clinicalpharmacy.ucsf.edu/idmp/guide\\_home.htm](http://clinicalpharmacy.ucsf.edu/idmp/guide_home.htm)*
  - b. *Administer a prophylactic antimicrobial agent only when indicated, and select it based on its efficacy against the most common pathogens causing SSI for a specific operation and published recommendations.*
  - c. *Administer the initial dose of prophylactic antimicrobial agent by the intravenous route, timed so the bactericidal concentration of the drug is established in serum and tissues when the incision is made. Maintain therapeutic levels of the agent in serum and tissues throughout the operation and until, at most, a few hours after the incision is closed in the operating room.*
  - d. *Discontinue prophylactic antibiotics within 24 hours after the incision is closed unless otherwise directed by the physician with rationale documented.*
  - e. *Before elective colorectal operations in addition to above, mechanically prepare the colon by use of enemas and cathartic agents. Administer nonabsorbable oral antimicrobial agents in divided doses on the day before the operation.*



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued: 1/11**  
**Last Approval: 01/2016**

- f. For cesarean section, at UCSF, administer the prophylactic antimicrobial agent immediately before the surgical incision, rather than after the umbilical cord is clamped. This policy is based upon local surgical site infection surveillance results.
- g. *Do not routinely use vancomycin for antimicrobial prophylaxis.* Analysis of surgical site infection surveillance from revision knee arthroplasty indicates vancomycin is indicated for that surgical procedure.

4. Intraoperative

- a. Cleaning and disinfection of environmental surfaces
  - 1. Perioperative cleaning:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/EnvironmentalCleaning.pdf>
  - 2. *When visible soiling or contamination with blood or other body fluids of surfaces or equipment occurs during an operation, use an EPA-approved hospital disinfectant to clean the affected areas before the next operation.*
  - 3. *Do not perform special cleaning or closing of operating rooms after contaminated or dirty operations.*
  - 4. *Do not use tacky mats at the entrance to the operating room suite or individual operating rooms for infection control.*
- b. Ventilation (Appendix V) (Please also refer to Facilities Management for monitoring and maintenance policies)
  - 1. *Maintain positive-pressure ventilation in the operating room with respect to the corridors and adjacent areas.*
  - 2. *Maintain a minimum of 15 air changes per hour, of which at least 3 should be fresh air.*
  - 3. *Filter all air, recirculated and fresh, through the appropriate filters per the American Institute of Architects' recommendations.*
  - 4. *Introduce all air at the ceiling, and exhaust near the floor.*
  - 5. *Keep operating room doors closed except as needed for passage of equipment, personnel, and the patient.*
- c. Microbiologic sampling
  - 1. *Environmental sampling of the operating room (e.g., microbiologic sampling of surfaces or air) is performed only as part of an epidemiologic investigation under the direction of the HEIC.*
- d. Sterilization of surgical instruments
  - 1. Care of instruments:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/InstrumntsCareHandling.pdf>
  - 2. *Sterilize all surgical instruments according to published guidelines.*
  - 3. *Perform immediate use steam sterilization (IUSS) only for patient care items that will be used immediately (e.g., to reprocess an inadvertently dropped instrument). Do not use IUSS for reasons of convenience, as an alternative to purchasing additional instrument sets, or to save time.*
- e. Surgical attire and drapes
  - 1. *Wear a surgical mask that fully covers the mouth and nose when entering the operating room if an operation is about to begin or already under way,*

- or if sterile instruments and/or supplies are exposed. Wear the mask throughout the operation.*
2. Attire in the OR:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/AttireOperatingRoom.pdf>
  3. Sales Representatives in the OR:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/SalesRepinOR.pdf>
  4. Visitors in the OR:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/VisitorsInOR.pdf>
  5. *Wear a cap or hood to fully cover hair on the head and face when entering the operating room.*
  6. *Do not wear shoe covers for the purpose of preventing SSI.*
  7. *Wear sterile gloves if a scrubbed surgical team member. Put on gloves after donning a sterile gown.*
  8. *Use surgical gowns and drapes that are effective barriers when wet (i.e., materials that resist liquid penetration).*
  9. Barrier Materials:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/BarrierMaterialsSelection.pdf>
  10. *Put on clean hospital-supplied surgical scrubs prior to entering the surgical departments. Change surgical scrubs that are visibly soiled, contaminated, and/or penetrated by blood or other potentially infectious materials.*
  11. Standard & Transmission Based Precautions in OR:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/StandardTransmissionBasedPrecautions.pdf>
- f. Assign appropriate wound classification (Appendix II) and ASA score (Appendix III)
1. Wound classification policy:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/SurgicalWoundClassn.pdf>
- g. Asepsis and surgical technique
1. *Adhere to principles of asepsis when placing intravascular devices (e.g., central venous catheters), spinal or epidural anesthesia catheters, or when dispensing and administering intravenous drugs.*
  2. Maintaining a Sterile Field policy:  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/AsepticTechnique.pdf>
  3. *Handle tissue gently, maintain effective hemostasis, minimize devitalized tissue and foreign bodies (i.e., sutures, charred tissues, necrotic debris), and eradicate dead space at the surgical site.*
  4. *Use delayed primary skin closure or leave an incision open to heal by second intention if the surgeon considers the surgical site to be heavily contaminated (e.g., Class III and Class IV).*
  5. *If drainage is necessary, use a closed suction drain. Place a drain through a separate incision distant from the operative incision. Remove the drain as soon as possible.*



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

- 
- h. There are no SCIP, ASA, cardiac, vascular, or general surgery guidelines for intraoperative glucose monitoring.
  - i. *Maintain normothermia*
    - 1. *Limit skin exposure.*
    - 2. *Initiate passive warming measures (i.e. cotton blankets, surgical drapes, plastic sheeting, and reflective composites).*
    - 3. *Maintain ambient room temperatures of 20-25 C (based on AORN Recommended Standards of Practice).*
    - 4. *Forced air warming and active warming measures (i.e. warmed IV fluids, circulating water garments, circulating water mattresses, radiant heat, gel pads such as the Arctic Sun, and resistive heating) should be considered for patients in surgeries planned for longer than 30 minutes, are hypothermic pre-operatively, are at risk for hypothermia, or at risk for increased complications related to hypothermia.*
    - 5. *Exceptions to this strategy for cardiac and other surgeries requiring intraoperative induction of hypothermia should be appropriately documented.*
5. Postoperative incision care and glucose monitoring
- a. *Protect with a sterile dressing for 24 to 48 hours postoperatively an incision that has been closed primarily.*
  - b. *Wash hands before and after dressing changes and any contact with the surgical site.*  
[UCSF Hand Hygiene Policy](#)
  - c. *Maintain postop cardiac surgery patients' blood glucose below 180 mg/dL for 18-24 hours after anesthesia end time(SCIP INF-4 measure).<sup>2</sup>*
6. Surveillance
- a. *Use CDC definitions of SSI (Appendix IV) without modification for identifying SSI among surgical inpatients and outpatients.*  
<http://infectioncontrol.ucsfmedicalcenter.org/ICMANUAL2007/Section8/Sec%208.5%20Surveillance.pdf>
  - b. The Annual Infection Control Risk Assessment and Plan identifies the targeted surgical procedures for which surveillance is planned each year.
  - c. *For inpatient case-finding (including readmissions), use direct prospective observation, indirect prospective detection, or a combination of both direct and indirect methods for the duration of the patient's hospitalization.*
  - d. *For post-discharge SSI case-finding, use a method that accommodates available resources and data needs.*
    - 1. For the American College of Surgeons' National Surgical Quality Improvement Program (NSQIP); a random sample of patients undergoing surgical procedures is reviewed for signs of SSI at 30 days post-op by medical record review and telephone or mailed questionnaire to the patient.
    - 2. For 1 year postop, medical records of patients undergoing surgical procedures are reviewed for signs of SSI when patients are re-admitted.
    - 3. Notification of patients admitted to other facilities with signs of SSI are received in HEIC.



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

- 4. Providers are encouraged to notify HEIC of patients with signs of SSI.
  - e. *For each patient undergoing an operation chosen for surveillance, record those variables shown to be associated with increased SSI risk (e.g., surgical wound class, ASA class, and duration of operation). Wound classification:*  
<http://manuals.ucsfmedicalcenter.org/NursingDept/PeriOp/PeriOpGeneralNursing/SurgicalWoundClassn.pdf>
  - f. *Periodically calculate operation-specific SSI rates stratified by variables shown to be associated with increased SSI risk (e.g., NHSN Standardized Infection Ratio). Quarterly SSI rates for targeted procedures are reported to the Infection Control Committee and the Quality Improvement Executive Committee.*
  - g. *Report appropriately stratified operation-specific SSI rates to surgical team members. The optimum frequency and format for such rate computations will be determined by stratified case-load sizes (denominators) and the objectives of local, continuous quality improvement initiatives.*
7. Management of infected personnel or colonized surgical personnel
- a. *Educate and encourage surgical personnel who have signs and symptoms of a transmissible infectious illness to report conditions promptly to their supervisory and occupational health service personnel.*
  - b. *Obtain appropriate cultures from, and exclude from duty, surgical personnel who have draining skin lesions until infection has been ruled out or personnel have received adequate therapy and infection has resolved.*
  - c. *Do not routinely exclude surgical personnel who are colonized with organisms such as S. aureus (nose, hands, or other body site) or group A Streptococcus, unless such personnel have been linked epidemiologically to dissemination of the organism in the healthcare setting.*
    - i. Healthcare Workers with Infections policy:  
<http://infectioncontrol.ucsfmedicalcenter.org/ICMANUAL2007/Section3/Sec%203.2%20Employees%20with%20Infections.pdf>
    - ii. Table of work restrictions for employees with infections:  
<http://infectioncontrol.ucsfmedicalcenter.org/ICMANUAL2007/Section3/Sec%203.2%20Attachment%20A%20Table%20of%20Illnesses%20Infections%20and%200Related%20Work%20Restrictions.pdf>

**IV. HISTORY OF POLICY**

- A. Date of issue: 1/11
- B. Approval by Infection Control Committee: 2/12
- C. Approval by OR Committee: 1/11 (to OR Committee after ICC approval)
- D. 2012 Review Team:

A. Nichols, C. Liu, P. Weintrub	Hospital Epidemiology and Infection Control (HEIC)
M. Doherty, K. Dunn, J. Mechanic	Nursing
J. Barba, B. Ide, D. Tumbarello	Patient Safety and QI
E. Lobo, J. Rickley	Periop



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

---

*This guideline is intended for use by UCSF Medical Center staff and personnel and no representations or warranties are made for outside use. Not for outside production or publication without permission. Direct inquiries to the Office of Origin or Medical Center Administration at (415) 353-2733.*



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

**Appendix I**

<b>MECHANISM AND SPECTRUM OF ACTIVITY OF ANTISEPTIC AGENTS COMMONLY USED FOR PREOPERATIVE SKIN PREPARATION AND SURGICAL SCRUBS</b>										
<b>Agent</b>	<b>Mechanism of Action</b>	<b>Gram + Bacteria</b>	<b>Gram – Bacteria</b>	<b>MTB</b>	<b>Fungi</b>	<b>Virus</b>	<b>Rapidity of Action</b>	<b>Residual Activity</b>	<b>Toxicity</b>	<b>Uses</b>
Alcohol	Denature proteins	E	E	G	G	G	Most rapid	None	Drying, volatile	SP, SS
Chlohexidine	Disrupt cell membrane	E	G	P	F	G	I	E	Ototoxicity keratitis	SP, SS
Iodine/ Iodophors	Oxidation/ substitution by free iodine	E	G	G	G	G	I	Min	Absorption from skin with possible toxicity, skin irritation	SP, SS
PCMX	Disrupt cell wall	G	F*	F	F	F	I	G	More data needed	SS
Triclosan	Disrupt cell wall	G	G	G	P	U	I	D	More data needed	SS

Abbreviations: E, excellent; F, fair; G, good; I, intermediate; Mtb, *Mycobacterium tuberculosis*; P, poor; PCMX, para-chloro-meta-xyleneol; SP, skin preparation; SS, surgical scrubs; U, unknown.  
Data from Larson E. Guideline for use of topical antimicrobial agents. *Am J Infect Control* 1988;16:53-66.  
\* Fair, except for *Pseudomonas* spp.; activity improved by addition of chelating agent such as EDTA.





HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued: 1/11**  
**Last Approval: 01/2016**

**Appendix II**

<b>SURGICAL WOUND CLASSIFICATION</b>
<i>Class I/Clean:</i> An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tract is not entered. In addition, clean wounds are primarily closed and, if necessary, drained with closed drainage. Operative incisional wounds that follow nonpenetrating (blunt) trauma should be included in this category if they meet the criteria.
<i>Class II/Clean-Contaminated:</i> An operative wound in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically, operations involving the biliary tract, appendix, vagina, and oropharynx are included in this category, provided no evidence of infection or major break in technique is encountered.
<i>Class III/Contaminated:</i> Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique (e.g., open cardiac massage) or gross spillage from the gastrointestinal tract, and incisions in which acute, nonpurulent inflammation is encountered are included in this category.
<i>Class IV/Dirty-Infected:</i> Old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the operative field before the operation.

1. Garner JS. CDC guideline for prevention of surgical wound infections, 1985. Supercedes guideline for prevention of surgical wound infections published in 1982. (Originally published in 1995). Revised. *Infect Control* 1986;7(3):193-200.
2. Simmons BP. Guideline for prevention of surgical wound infections. *Infect Control* 1982;3:185-196.



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued: 1/11**  
**Last Approval: 01/2016**

---

**Appendix III**

PHYSICAL STATUS CLASSIFICATION, AMERICAN SOCIETY OF ANESTHESIOLOGISTS\*

---

Code Patient's Preoperative Physical Status

- 1 Normally healthy patient
- 2 Patient with mild systemic disease
- 3 Patient with severe systemic disease that is not incapacitating
- 4 Patient with an incapacitating systemic disease that is a constant threat to life
- 5 Moribund patient who is not expected to survive for 24 hours with or without operation

---

\* Reference Anonymous. New classification of physical status. *Anesthesiology* 1963;24:-111.

Note: The above is the version of the ASA Physical Status Classification System that was current at the time of development of, and still is used in, the NNIS Risk Index. Meanwhile, the American Society of Anesthesiologists has revised their classification system; the most recent version is available at <http://www.asahq.org/profinfo/physicalstatus.html>.



---

**Appendix IV**

**CRITERIA FOR DEFINING A SURGICAL SITE INFECTION (SSI)**

**Superficial Incisional SSI**

1. Infection occurs within 30 days after the any NHSN operative procedure *and*
2. Infection involves only skin or subcutaneous tissue of the incision *and* at least *one* of the following:
  - a. Purulent drainage from the superficial incision.
  - b. Organisms isolated from an aseptically obtained culture from the superficial incision or subcutaneous tissue.
  - c. At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat *and* superficial incision is deliberately opened by surgeon, attending physician, or other designee and is culture-positive or not cultured..
  - d. Diagnosis of superficial incisional SSI by the surgeon, attending physician, or other designee.

Do *not* report the following conditions as SSI:

- a. Stitch abscess (minimal inflammation and discharge confined to the points of suture penetration).
- b. Infection of an episiotomy or newborn circumcision site.
- c. Infected burn wound.
- d. Incisional SSI that extends into the fascial and muscle layers (see deep incisional SSI).

*Note:* Specific criteria are used for identifying infected episiotomy and circumcision sites and burn wounds

**Deep Incisional SSI**

1. Infection occurs within 30 or 90 days after the surgery (with consideration to the type of surgery) and the infection appears to be related to the operation *and*
2. Infection involves deep soft tissues (e.g., fascial and muscle layers) of the incision *and* at least *one* of the following:
  - a. Purulent drainage from the deep incision but not from the organ/space component of the surgical site.
  - b. A deep incision spontaneously dehisces or is deliberately opened by a surgeon, attending physician, or other designee when the patient has at least one of the following signs or symptoms: fever (>38°C), localized pain or tenderness. A culture-negative finding does not meet this criterion.
  - c. An abscess or other evidence of infection involving the deep incision is found on gross anatomical or histopathologic exam, or imaging test.

*Notes:*

1. Report infection that involves both superficial and deep incision sites as deep incisional SSI.
2. Report an organ/space SSI that drains through the incision as a deep incisional SSI.

**Organ/Space SSI**

1. Infection occurs within 30 or 90 days after the surgery (with consideration to the type of surgery) and the infection appears to be related to the operation *and*
2. Infection involves any part of the anatomy (e.g., organs or spaces) deeper than the fascial/muscle layers which was opened or manipulated during an operation *and* at least *one* of the following:
  - a. Purulent drainage from a drain that is placed into the organ/space.



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

- 
- b. Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space.
  - c. An abscess or other evidence of infection involving the organ/space that is found on gross anatomical or histopathologic exam, or imaging test.



HOSPITAL EPIDEMIOLOGY AND  
INFECTION CONTROL  
**SURGICAL SITE INFECTION  
AND PREVENTION  
STRATEGIES**

**POLICY IC 4.9**  
**Issued:** 1/11  
**Last Approval:** 01/2016

---

**Appendix V**

**TABLE 8**  
PARAMETERS FOR OPERATING ROOM VENTILATION

---

Temperature	68-73°F, depending on normal ambient temperatures
Relative humidity	30%-60%
Air movement	From “clean to less clean” areas
Air changes	Minimum 15 total air changes per hour Minimum 3 air changes of outdoor air per hour

---

American Institute of Architects *Guidelines for design and construction of hospital and health care facilities*. Washington (DC): American Institute of Architects Press; 1996. 300. Nichols RL. The operating room. In: