

PREVENTING SSI

FOLLOWING BEST PERIOPERATIVE PRACTICES FOR REDUCING SURGICAL SITE INFECTIONS

★ 2-5% ★

Of surgical patients develop a SSI each year

SSI accounts for 20% of all HAIs and is associated to a 2 to 11-fold increase in the risk of mortality. SSI is the most costly HAI type with an estimated annual cost of \$3.3 billion, and extends hospital length of stay by 9.7 days, with cost of hospitalization increased by more than \$20,000 per admission.

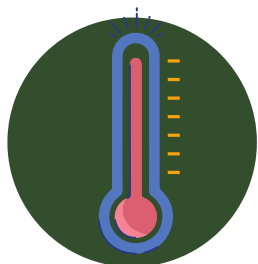
(www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf)

ALL PHASES OF CARE



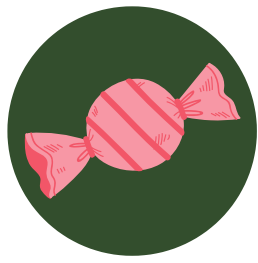
Preform Hand Hygiene

Hand hygiene is conducted to prevent the transmission of health-care-associated pathogens from one person to another.



Maintain Normothermia >35.9° C

Hypothermia may increase susceptibility to SSI by prompting subcutaneous vasoconstriction and consequent tissue hypoxia.



Glycemic Control <200 mg/dl

Hyperglycemia can adversely influence wound healing, immunity, and vascular function.



SSI Prevention Education

Provide education to caregivers and patients so all parties can participate in this patient safety measure.

DONNING AND DOFFING

PPE Protocol

Sequence for Putting on PPE

Gown

- Fully cover torso from neck to knees
- Fasten in back of neck and waist

Mask or Respirator

- Secure ties or elastic bands at middle of head and neck

Goggles or Face Shield

Gloves

- Extend to cover wrist of isolation gown

Sequence for Removing PPE

Gown and gloves

- Gown front, sleeves and outside of gloves are contaminated. Grasp gown in front and pull away from body, rolling into a bundle. Remove gloves at the same time.

Goggles or Face Shield

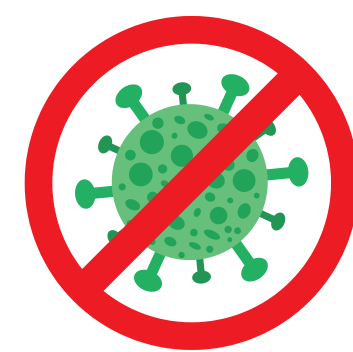
Mask or respirator

- Handle only by the strings. Front of mask is contaminated

Perform hand hygiene



PREOPERATIVE



Skin Preparation

Use of chlorhexidine gluconate (CHG) impregnated cloths may be used to reduce bacterial colonization on the skin.

Nose to Toes

Reduce the three main reservoirs of bacteria on the day of the procedure (nose, mouth, and skin) using CHG cloths, CHG oral rinse, and nasal antiseptic.

Antibiotics

Antimicrobial prophylaxis should be administered prior to surgical incision and dosed based on the patient's weight.

Hair Removal

If hair removal is necessary, hair should be clipped and not shaved outside of the OR.

Disinfection/Sterilization of Surgical Instruments and Implants

Critical items must be sterilized, semi-critical items must undergo high-level disinfection prior to use on a patient.

Re-Call Procedure of Sterilized Instruments

When a malfunction is identified on a sterilizer, the load must be quarantined, the sterilizer removed from service, and leadership and infection prevention notified.

INTRAOPERATIVE



Surgical Attire

Worn to provide a high level of cleanliness and hygiene within the perioperative environment.

Surgical Hand Scrub

Removes soil and transient microorganisms. Also suppresses growth of resident microorganisms.

Sterile Technique

Maintain sterility and prevent contamination of the sterile field and items.

Skin Antisepsis

Removes soil and transient microorganisms at the incision site.

Time Out

Conducts a final check so all team members are aware of all patient safety risks.



Wound Classification

Assess the degree of contamination of a surgical wound at the time of the procedure.

Environmental Cleaning

Cleaning and disinfecting the environment between patients and terminal cleaning completed at the end of each day to reduce pathogens in the surgical arena.

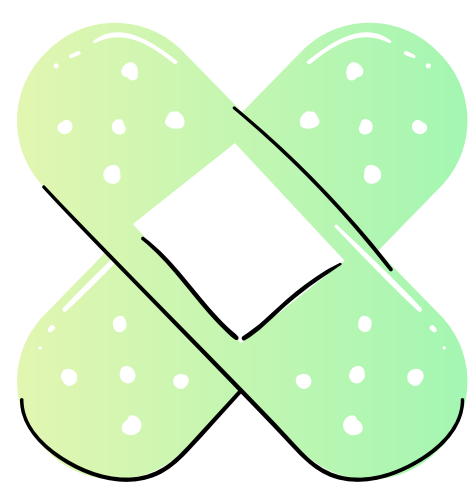
Immediate Use Steam Sterilization (IUSS)

Should be minimized and not used for procedures on patients with known or suspected prion disease or on implants.

Point of Use/ End of Case Instrument Care

Remove organic material and debris to prevent them from drying on instruments.

POSTOPERATIVE



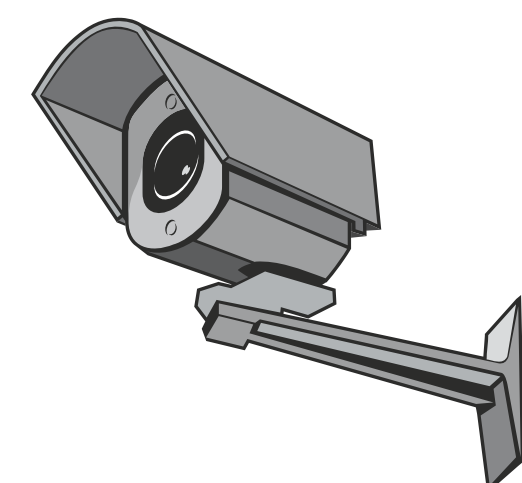
Dressings

Depending on the type of surgery, many different types of dressings may be used to prevent pathogens from entering the wound. Contact the provider if surgical dressings are compromised.



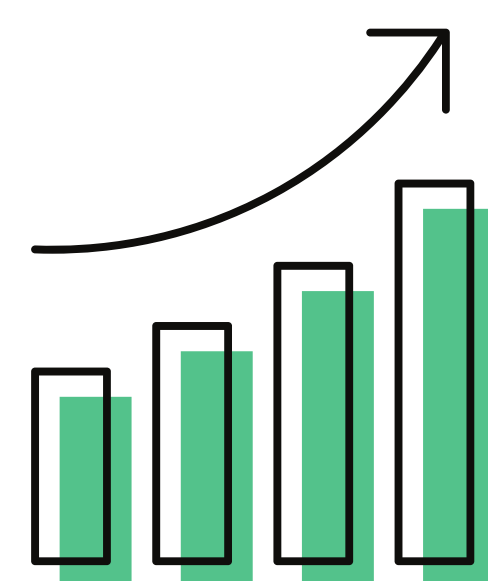
Post-op Patient Care Instructions

Provide patients with instructions regarding medications, wound care, signs/symptoms of infection, activity, bathing and who to contact if they have a concern with their wound healing



Surveillance for SSIs

Based on the CDC's National Healthcare Safety Network, high-risk operations will be targeted for SSI surveillance. This is based on a risk assessment from regulatory requirements.



SSI Data

SSI data will be shared with perioperative leadership to detect significant outbreaks, identify potential trends, and determine areas for improvement opportunities.