



**Note:** For appropriate antimicrobial selection, see the [Preoperative Antibiotic Order Grid Search Form](#) on the ASP website.

### Educate Patients Preoperatively

- Discontinue all forms of tobacco at least 30 days prior to surgery.
- Bathe with 4% chlorhexidine gluconate (CHG) soap the day before and day of surgery (i.e., at least twice).
  - Document CHG bathing in IHIS
- After showering with 4% CHG soap, do not use:
  - Lotions
  - Moisturizer
  - Make-up
  - Deodorant, or
  - Any other products on the skin near the part of the body that will be cut for surgery
- For at least 48 hours before surgery, do not shave near the part of the body that will be cut for surgery.
- Notify the surgeon (or his designee) if any illness or infection develops **before the day of surgery**.
- Health Care Workers (HCW) must document education provided in IHIS.

### Preoperative Clinical Processes

- Identify and treat all nonsurgical site infections prior to surgery.
- Postpone *elective* operations until infection is resolved.
- Assess nutritional status of patient and address before surgery, as feasible.
- Check HbA1c in the preoperative setting; address abnormal levels **before surgery**, as feasible.
- Document an assessment of **allergy and the associated reactions** to antimicrobials.
- Activate preoperative order sets.
- Collect nasal screens as indicated for high-risk surgical procedures; monitor results.
  - Administer mupirocin nasal ointment twice a day for 5 days if MSSA or MRSA is positive.
  - Perform CHG bathing daily for 5 days prior to surgery, if MSSA or MRSA is positive.
  - **If results are pending, administer mupirocin and perform CHG bathing until results are finalized; discontinue if negative.**
- Refer to the [OSUWMC Preoperative Antibiotic Order Grid](#) for antimicrobial selection, dosing, re-dosing, and discontinuation.
  - Adjust dosage for obesity.
- The optimal time to start all antibiotics is 15-60 minutes prior to incision; administration should be completed prior to incision, unless listed below:
  - Vancomycin at 2 hours
  - Ciprofloxacin at 1 hour
  - Fluconazole at 1 hour
  - Gentamicin at 1 hour

- For all surgeries perform gross removal of debris from the surgical site(s), provide targeted bathing of the surgical site and surrounding skin folds using disposable SAGE cloth(s).
- For patients undergoing elective colorectal surgery, a standardized bowel prep kit is supplied at the pre-op clinic visit and includes:
  - CHG Foam for bathing
  - Polyethylene glycol 3350 (Miralax<sup>®</sup>) and bisacodyl (Dulcolax<sup>®</sup>) for a mechanical prep
  - Neomycin/ Metronidazole (Flagyl<sup>®</sup>) tablets for GI tract decontamination
  - All components are recommended
- Remove hair only if it interferes with the operative site using clippers or depilatory, no razors.
  - If necessary, hair should be removed immediately prior to the procedure. Hair removal should not occur in the OR.
- HCWs must keep nails short.
  - Artificial nails are not permitted.
  - No nail polish is permitted in perioperative area.
  - Clean underneath fingernails prior to first surgical scrub.
- Complete a 3-minute preoperative scrub using antiseptic soap, or use an alcohol-based surgical antiseptic (e.g., Avagard<sup>®</sup>) according to manufacturer's directions.
  - See [Aseptic Technique Policy](#)
- Keep patients warm in the immediate preoperative period.

### Intraoperative Clinical Processes

- Comply with Association of perioperative Registered Nurses (AORN) standards for OR asepsis.
- Avoid immediate-use steam sterilization (IUSS) (i.e. flashing) of instruments and implants.
  - Check sterility of instruments during setup/before use.
- Avoid traffic in and out of the OR to ensure positive air pressure is maintained **throughout the case**.
- Comply with the [Perioperative Attire Policy](#)
  - Wear a cap / hood to fully cover hair / beard and secure a surgical mask to completely cover the nose/mouth when entering the suite. This must be done **from the time sterile supplies are opened until a sterile dressing is applied to incision**.
  - Wear sterile gloves if working as a scrubbed surgical team member.
  - Do not bring personal belongings into the OR suite, unless relevant and/or necessary for the care of the patient and/or research. Belongings should not be contained in items that are constructed of porous material.

- Use sterile technique when placing central intra-vascular devices, (i.e., large sterile drape, cap, mask with face shield, sterile gown, sterile gloves).
- Follow [Blood and Body Fluid Exposure Protocol](#)
- Refer to [Safe Sharp Handling at the Operative Field Policy](#) for appropriate tool handling
- Sterile gloves should be changed:
  - when a visible defect is noted
  - when suspected or actual contamination or perforation occurs;
  - for procedures involving cutting of bone; this may be hourly or more
  - whenever gloves begin to swell, expand, or become loose on the wearer's hands
  - immediately following the procedure
- **ChloroPrep® is the preferred skin prep.** Prepare initial and anticipated surgical fields with ChloroPrep®. **Exceptions:**
  - **DO NOT** use ChloroPrep® internally; on open wounds; in contact with meninges; in or around ears, eyes, nose, or mouth
  - DuraPrep™ may be used as a secondary option for patients with medical contraindications to ChloroPrep®.
  - **DO NOT** use DuraPrep™ on patients with a known allergy to iodine or isopropyl alcohol, or on open wounds, or mucous membranes.
  - Chlorhexidine gluconate soap 4% is acceptable for prepping external genitalia.
  - Povidone-iodine is acceptable for the face, mucous membranes, or perineal areas.
  - Sterile saline is to be used as skin prep for open wounds.
- Actively warm patients intraoperatively for all major surgeries (temperature > 36°C or 96.8°F).
- Control serum blood glucose to 140-180 mg/dL in all hospitalized patients
- Re-dose prophylactic antibiotics, if indicated, to maintain adequate concentrations during the case.
- Handle tissue gently to minimize tissue damage, maintain effective hemostasis, minimize devitalized tissue, and eradicate dead space.
- If infection is suspected, obtain aerobic, anaerobic, acid fast and fungal cultures intraoperatively; place specimens, tissue, and foreign material in appropriate containers, avoid formalin for culture.
- If drainage is indicated, use a closed-suction drain placed at a separate incision. Sending specimens at the time of insertion is fine, but should not be obtained after the patient has left the OR; i.e. as the drain is colonized thereafter.
- Apply a sterile dressing to cover the incision.
- If the surgical site is heavily contaminated; perform delayed primary skin closure **or** allow incision to heal by secondary intention; **or** consider application of vacuum-assisted closure for wound management.

## Educate Patients Post-operatively

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- Clean your hands frequently.
- Read/follow instructions for post-op incision care.
- Notify health care providers as soon as signs or symptoms of an SSI develop.
- HCW must document education provided in IHIS.

## Postoperative Clinical Processes

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- Remove and discard all PPE and perform hand hygiene
- Change soiled surgical scrubs immediately
- Perform hand hygiene before **and** after any contact with the surgical site and before donning PPE.
- Clean and disinfect visibly soiled environmental surfaces with a hospital approved disinfectant before the next operation.
- Control serum glucose in diabetics and non-diabetics.
- Consider use of supplemental oxygen in the immediate post-op period to optimize tissue oxygenation
- Remove surgical drains as soon as possible following the procedure.
- Remove urinary catheter as soon as possible.
- Keep primarily closed incisions covered with a sterile dressing until POD 2.
- The primary service usually removes the intraoperative dressing and **MUST** provide guidance for the patient as to showering etc.
- Access Mosby's on Onesource for procedures that address post-operative wound care and dressing changes. Consider referencing the following titles:
  - [Dry and Moist-to-Dry Dressing](#)
  - [Sterile Dressing Change with Packing Procedure](#)
  - [Postoperative Care: Immediate Recovery Period](#)
  - [Postoperative Care: Convalescent Period](#)

## Orderset

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- [Preoperative Antibiotic Order Grid Search Form](#)
- Preoperative antibiotic orders for specific surgeries are in individual surgical order sets.

## Quality Measures

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- NHSN - SSI Infection Rates
- Administration of appropriate pre-op antibiotics within 1 hour prior to incision

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## Guideline Approved

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## Polices/ Guidelines

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- [Perioperative/ Periprocedure Glucose Management Guideline](#)
- [Aseptic Technique Policy](#)
- [Blood and Body Fluid Exposure Policy](#)
- [Safe Sharp Handling at the Operative Field Policy](#)
- [Perioperative Attire Policy](#)