
**Antibiotic Prophylaxis:**

1. **Clean** (without infection)
2. **Clean-contaminated** (prior cultures positive)
3. **Contaminated** (open wound, infection)
4. **Dirty**

**Antibiotic Dosing:**

- **Adult:** 18-80 kg
- **Pediatric:** ≤ 18 kg
- **Infant:** 1-10 kg
- **Newborn:** ≤ 1 kg

**Hygiene:**

- **Hand hygiene:** before and after surgical procedures.

**Legislation:**

- **JC/CMS measures require that documentation must reflect the prophylaxis choice (whether to give, what is given and the length of prophylaxis) and the reason.**

**Notes:**

1. The Joint Commission and other regulatory agencies state that medication compounding must be performed by pharmacists, not in the OR.
2. Because vancomycin, quinolones and aminoglycosides have long half-lives, no re-dosing is needed.
3. If infection (or asymptomatic bacteriuria for urological procedure) use culture/susceptibility for antibiotic selection.
4. Gentamicin vials come in 80 mg; max dose 240 mg.

**Antibiotic Wash**

- Because of increased bacterial resistance, Montefiore does not endorse washes, irrigations and soaks in the OR and procedure suites since there are no efficacy data to support their use. (CDC SSIs guidelines, ANAB 2017)

**Antibiotic re-dosing for non-clean procedures (esp. contaminated or dirty):**

- Subsequent prophylactic doses of cefazolin or cefoxitin should be the same as initial dose; frequency determined by patient age, renal function, EBL or OR (see below).
- Per 2017 CDC SSIs guidelines, subsequent antibiotics may not be re-administered after OR wound closure for clean and clean-contaminated procedures.

*Please note: this does not apply to cefazolin impregnated with antibiotic for infected joints, ophthalmology procedures, or impregnation decontamination for CT surgery when data exists.

**References available upon request from: Stewarding**

### Type of Surgery

<table>
<thead>
<tr>
<th>Type of Surgery</th>
<th>Antibiotic and Dose</th>
<th>Severe Penicillin Allergy</th>
<th>Re-Dosing Schedule (based on normal renal function): Same as initial dose; Re-dose for any case with EBL &gt;1.5L</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cardiac/Non-cardiac thoracic</strong></td>
<td><strong>Prosthetic valve insertion, CABG, other open heart surgery, or pacemaker insertion</strong></td>
<td><strong>Cefazolin 2 g IV</strong></td>
<td><strong>Vancomycin 1 g IV</strong></td>
</tr>
<tr>
<td><strong>Vascular</strong></td>
<td>Arterial surgery involving the abdominal aorta, a prosthesis, or a groin incision; leg amputation for ischemia</td>
<td>Gentamicin 5mg/kg IV</td>
<td>Vancomycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Orthopedic</strong></td>
<td>Hip and knee surgery (i.e. fracture repair), total joint replacement, implantation of internal fixation devices (i.e. nails, screws, plates, wires) and tendon/bone</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Vancomycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Neurologic</strong></td>
<td>Craniootomy, spinal surgery, or others (i.e., VP shunt)</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Vancomycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Urologic</strong></td>
<td>Transcutaneous surgery (i.e., TURP), transrectal biopsy (&lt;1hr before), urologic procedure with history prosthetic joint</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Oxacillin 50 mg/kg IV</td>
</tr>
<tr>
<td><strong>Penile Implant</strong></td>
<td></td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Vancomycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Plastic</strong></td>
<td>Implementation of permanent prosthetic material, or entering the oral cavity of pharynx</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Clindamycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Head and Neck or ENT</strong></td>
<td>Involving oral cavity or pharynx</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Clindamycin: only 1 peri-operative dose (long half-life)</td>
</tr>
<tr>
<td><strong>Abdominal and Gynecologic (see GYN specific guidelines):</strong></td>
<td>High-risk gynecotestinal, high-risk biliary tract, colorectal, appendectomy, hysterectomy, biliary surgery, etc.</td>
<td>Cefazolin OR Cefoxitin 2 g IV</td>
<td>Clindamycin: only 1 peri-operative dose (long half-life)</td>
</tr>
</tbody>
</table>

*For UAB, Liver, lung, kidney, lung and heart transplant, please see service specific protocols on intranet.

**Dose gentamicin by IWB (use ADJUSTED BODY WEIGHT if actual body weight is 120% of IWB, use ACTUAL BODY WEIGHT if actual body weight less than IWB). Epic calculates IWB and ADJUSTED BODY WEIGHT automatically, please see Epic patient profile screen for the appropriate weight.