

**THE DISPENSE AND ADMINISTRATION OF AN ALTERNATE DRUG PRODUCT MUST BE DEEMED ACCEPTABLE BY THE PHARMACY & THERAPEUTICS COMMITTEE.**

- This document is used to support best practices for administration of surgical antibiotic prophylaxis.
- If history of severe or life-threatening allergic reaction to the preferred antibiotic, then give alternative antibiotic.
- Initial antibiotic dose for all drugs must be started within one hour prior to incision except Vancomycin AND Fluoroquinolones, which must be started within 2 hours prior to incision because of the prolonged infusion time required for these drugs (TCHHN policy 2.43.127)
- The National Surgical Infection Prevention (SIP) project mandates that prophylactic antibiotics not be extended beyond 24 hours of the end of the operation.
- CMS requirements are indicated with an asterisk (\*).
- Cefazolin dosing is 2g unless patient weight is  $\geq 120$  kg.
- Gentamicin dosing is based on ideal body weight unless the patient is 20% above their IBW; then, an adjusted dosing weight is used: Dosing weight (kg) = IBW + [0.4 x (ABW – IBW)].
- All antibiotics indicated are given intravenously, unless otherwise noted.
- Shaded procedures are screened for MRSA colonization. If positive, use Vancomycin 15 mg/kg dosing based on actual body weight; maximum dose of 2g.

Type of Procedure	Preferred First Line Use		Alternative if allergy to Preferred Antibiotic	
	Pre-Op	Interop Redosing	Pre-Op	Interop Redosing
<b>Neurosurgery:</b>				
<ul style="list-style-type: none"> <li>• Crani</li> <li>• CSF shunt procedures*</li> <li>• Pain pump implant *</li> <li>• Spinal cord stimulator*</li> <li>• Spine*</li> </ul>	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<b>Orthopedic:</b>				
<ul style="list-style-type: none"> <li>• Any procedure involving an implanted device</li> <li>• Arthrodesis*</li> <li>• Arthroplasty *</li> <li>• Long bone procedures*</li> <li>• ORIF*</li> <li>• Spine*</li> </ul>	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> <li>• Clean operations involving the hand, knee, or foot and not involving implantation of foreign materials</li> </ul>	No antibiotics recommended			

**References**

- Bratzler, DW, Dellinger, EP, Olsen, KM et. al. *Clinical practice guidelines for antimicrobial prophylaxis in surgery. Am J Health-Sys Pharm. 2013; 70:195-283.*
- Antibiotic prophylaxis for gynecologic procedures. ACOG Practice Bulletin No. 104. American College of Obstetricians and Gynecologists. Obstet Gynecol 2009; 113:1180-9.*
- Wolf Jr, JS, Bennett, CJ, Dmochowski, RR et.al. *Best Practice Policy Statement on Urologic Surgery Antimicrobial Prophylaxis 2008. (Revised 2011)*
- The Christ Hospital Health Network Policy 2.43.127 – Perioperative Antibiotic Dosing.*
- Piraino, Beth, Bernardini, Judith, Brown, Edwina, Figueiredo, Ana, Johnson, David W, Lye, Wai-Choong, Price, Valerie, Ramalakshmi, Szeto, Cheuk-Chu. *ISPD Position Statement on Reducing the Risks of Peritoneal Dialysis-Related Infections. Peritoneal Dialysis International, 31: 614-630.*