

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 ≥ 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
Cardiac/Thoracic:				
<ul style="list-style-type: none"> • Any open-heart surgery including mediastinal re-exploration* 	Cefuroxime 1.5 g	Cefuroxime 1.5 g every 4 hrs	Vancomycin 15mg/kg	Not Recommended
<ul style="list-style-type: none"> • Esophagectomy • Non Cardiac Thoracotomy Procedures (Lobectomy /biopsy) • TAVR or TAVI 	Cefazolin 2 g	Cefazolin 2g every 4 hrs	Vancomycin 15mg/kg	Not Recommended
<ul style="list-style-type: none"> • ASD closures • Pacemaker or defibrillator Implant* 	Cefazolin 2 g	Cefazolin 2g every 4 hrs	Vancomycin 15mg/kg	Not Recommended
<ul style="list-style-type: none"> • Cardiac Cath • EP studies (afib ablation, perivalvular leak closures) • TEE 	No antibiotics recommended			
Vascular:				
<ul style="list-style-type: none"> • Any AAA procedure* • Any LE Bypass procedure or amputation* • Any procedure with a groin incision* • Arterial surgery involving a prosthesis* • AV fistula – any surgical or radiologic manipulation* • Carotid endarterectomy* • Dialysis Cath removal * 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> • Any Angiography procedure including stenting 	No antibiotics recommended			

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Gastrointestinal/Intra-Abdominal/General Surgery:				
<ul style="list-style-type: none"> • Colorectal procedures* • Appendectomy (non-perforated) • For major intra-abdominal surgery not listed below 	Cefazolin 2 g PLUS Metronidazole 500 mg	Cefazolin 2 g every 4 hrs	Metronidazole 500 mg PLUS Levofloxacin 750 mg	Not Recommended
<ul style="list-style-type: none"> • Bariatric procedures • Enterolysis • Esophageal procedure • Gastroduodenal procedures • Laparotomy • Lysis of Adhesions • Mastectomy • Nissan Fundoplication • Open Cholecystectomy • Percutaneous G-tube* • Sentinel Node Biopsy 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg PLUS Levofloxacin 750 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> • Hernia 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> • Adrenalectomy • Laparoscopic Cholecystectomy • Laparoscopic Splenectomy • Laparoscopy (diagnostic, operative) • Lumpectomy • Parathyroidectomy • Partial Mastectomy • Thyroidectomy • Wire Loc Breast Biopsy 	No antibiotics recommended			
<ul style="list-style-type: none"> • Kidney Transplant 	Cefazolin 2 g	Request no interop dose per transplant physicians	Clindamycin 900 mg PLUS Levofloxacin 750 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> • Peritoneal Dialysis Catheter placement 	Vancomycin 15mg/kg	Not Recommended	Cefazolin 2 g	Cefazolin 2 g every 4 hrs

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Genitourinary:				
<ul style="list-style-type: none"> Bladder sling* Brachytherapy Laparoscopic Procedures <ul style="list-style-type: none"> Nephroureterectomy Robotic Prostatectomy Nephrectomy (open) Penile procedures Scrotal procedures <ul style="list-style-type: none"> Hydrocele Epididymal cystectomy Spermatocele Variocele 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Levofloxacin 750 mg	Not Recommended
<ul style="list-style-type: none"> Cystectomy Perineal Prostatectomy Procedures involving bowel 	Cefuroxime 1.5 g	Cefuroxime 1.5 g	Metronidazole 500 mg PLUS Levofloxacin 750 mg	Not Recommended
<ul style="list-style-type: none"> Penile Prosthesis * Interstim 	Gentamicin 5 mg/kg PLUS Cefazolin 2g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg PLUS Gentamicin 5 mg/kg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> Percutaneous Renal Surgery 	Cefazolin 2 g	Cefazolin 2 g every 4 hours	Clindamycin 900 mg PLUS Gentamicin 5 mg/kg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> Bladder Biopsy Cystoscopy with manipulation Hydrodistension Lithotripsy Prostate Vaporization Retrograde pyelogram Transrectal Prostate Biopsy* TURP, TURBT Ureteroscopy 	Levofloxacin 750 mg (IV or po)	Not Recommended	Cefuroxime 1.5 g	Cefuroxime 1.5 g
<ul style="list-style-type: none"> Cystoscopy Vasectomy 	No antibiotics recommended			
Gynecologic/Obstetric:				
<ul style="list-style-type: none"> Hysterectomy* - any approach C-Section Urogyn procedures <ul style="list-style-type: none"> Bladder sling* Paravaginal defect repair* 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg PLUS Gentamicin 5 mg/kg	Not Recommended
<ul style="list-style-type: none"> D & E Induced abortion Spontaneous abortion 	Doxycycline 100 mg po 1 hr prior to procedure And 200 mg po POST OP		POST OP ONLY Metronidazole 500 mg po bid X 5 days	
<ul style="list-style-type: none"> Cervical Cone Procedures Chromotubation Hysterosalpingogram Laparoscopy (diagnostic, operative, tubal sterilization) Laparotomy (unless vagina or GI tract is entered) Tubal ligation (any) 	<p>No antibiotics recommended pre-op</p> <p>For Chromotubation or Hysterosalpingogram with a history of PID or dilated tubes patient should receive POST OP Doxycycline 100 mg po twice daily for 5 days post procedure – per ACOG guidelines.</p>			

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Head & Neck Surgery:				
<ul style="list-style-type: none"> Cancer surgery Clean-contaminated procedures 	Cefazolin 2 g PLUS Metronidazole 500 mg	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> Adenoidectomy Blepharoplasties Diverticulectomy of hypopharynx or esophagus (cervical approach)* Incision through oral or pharyngeal mucosa Interdental Fixation* Lymph node biopsies Mohs flap reconstruction Open Mandibular Fracture* Placement of prosthetic material (clean) Rhinoplasties Tonsillectomy Tympanoplasties 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> Parathyroidectomy Thyroidectomy 	No antibiotics recommended			
Neurosurgery:				
<ul style="list-style-type: none"> Crani CSF shunt procedures* Pain pump implant * Spinal cord stimulator* Spine* 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
Orthopedic:				
<ul style="list-style-type: none"> Any procedure involving an implanted device Arthrodesis* Arthroplasty * Long bone procedures* ORIF* Spine* 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs
<ul style="list-style-type: none"> Clean operations involving the hand, knee, or foot and not involving implantation of foreign materials 	No antibiotics recommended			
Plastic Surgery:				
<ul style="list-style-type: none"> All plastic surgery procedures 	Cefazolin 2 g	Cefazolin 2 g every 4 hrs	Clindamycin 900 mg	Clindamycin 900 mg every 6 hrs

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.*
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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.*