

Surgical Antimicrobial Prophylaxis Guidelines

1. Antibiotics should be administered less than 60 minutes prior to incision
2. Per CDC recommendations for the prevention of surgical site infections, additional prophylactic antibiotics are not recommended after surgical incision is closed in clean and clean-contaminated procedures
 - This includes procedures with the presence of a drain
3. In the absence of type 1 hypersensitivity reaction to penicillin, a beta-lactam antibiotic should be used for surgical prophylaxis

Antibiotic	ADULT Prophylaxis Dose	PEDIATRIC Prophylaxis Dose ***	Intra-Op Redosing Interval (HR) CrCl > 30ml/min	Intra-Op Redosing Renal Failure (hr) CrCl < 30 ml/min
Cefazolin	<120kg : 2g >120kg : 3g	30 mg/kg	4 ##	8 CrCl < 10 – no redoes
Cefoxitin	2 g	40 mg/kg	2	8
Cefuroxime	1.5 g	50 mg/kg	4	8
Clindamycin	900 mg	10 mg/kg	6	6
Gentamicin	5 mg/kg *	2.5 mg/kg	n/a	n/a
Levofloxacin #	500 mg	10 mg/kg	n/a	n/a
Metronidazole	500 mg	15 mg/kg	n/a	n/a
Vancomycin #	15 mg/kg **	15 mg/kg **	n/a	n/a

* Dose based on actual body weight unless > 120% ideal body weight (IBW). If body weight > 120% IBW, adjusted body weight should be used.

** Actual body weight

*** Pediatric doses should never exceed adult dosing.

Requires prolonged infusion time. Should be given 60-120- minutes prior to incision.

After initial dose, all subsequent doses of cefazolin should be 2mg. There is no data to support the use of 3gm cefazolin for redosing.

Procedure	1 st Line Prophylaxis	Type 1 Hypersensitivity to PCN – Alternative Antibiotic	Unknown Screen or Positive for MRSA
Cardiac (CABG, Cardiac device insertion, VAD)	Cefazolin, cefuroxime	Vancomycin	ADD Vancomycin
Thoracic (lobectomy, thoracotomy, lung resection, etc.)	Cefazolin	Vancomycin	
Gastrointestinal	Cefazolin	Clindamycin	
Open biliary procedures	Cefazolin	Clindamycin	
Appendectomy	Cefazolin + metronidazole	Clindamycin + Gentamicin	
Colorectal	Cefazolin + metronidazole	Clindamycin + Gentamicin	
Head & Neck			
• Clean	None	None	
• Clean – with placement of prosthesis	Cefazolin	Clindamycin	
• Clean – contaminated	Cefazolin + metronidazole	Clindamycin	
Neurosurgery	Cefazolin	Vancomycin	
Cesarean	Cefazolin	Clindamycin + Gentamicin	
Hysterectomy – Vaginal & Abdominal	Cefoxitin	Clindamycin + Gentamicin	
Orthopedic			
• Clean (hand, knee, foot, without implantation)	None	None	
• Spinal Procedures	Cefazolin	Clindamycin	ADD Vancomycin
• Implantation, total joint, hip fracture repair	Cefazolin	Clindamycin	ADD Vancomycin
Urologic			
• Clean – without entry into urinary tract	Cefazolin	Clindamycin	
• Clean – with entry into urinary tract	Cefazolin	Levofloxacin	
• Lower tract instrumentation, transrectal prostate biopsy	Levofloxacin	Gentamicin	
• Clean – contaminated	Cefazolin + metronidazole	Levofloxacin	
Vascular	Cefazolin	Vancomycin / Clindamycin	
Plastic Surgery	Cefazolin	Clindamycin	