

- **Neonatal dosing applies to infants ≤ 44 weeks corrected gestational age**
- **Pediatric dosing applies to patients that are > 44 weeks corrected gestational age**
- Maximum doses apply to all patients of any age
- Antibiotic infusion should begin 10 – 60 minutes prior to cut time
- Vancomycin infusion can begin 20 – 120 minutes prior to cut time, infuse over 1 hour
- All doses below are for preoperative/ intraoperative prophylaxis in pediatric patients with normal renal function. These are not necessarily the same as treatment doses. Doses may require adjustment in patients with decreased renal function and premature infants and neonates. Consultation with a clinical pharmacist is indicated to verify dosing in these instances. *

Type of Surgery	Standard Prophylaxis	Penicillin Allergy/ MRSA
Cardiothoracic	≤ 44 weeks CGA : Cefazolin 25 mg/kg/dose IV > 44 weeks CGA : Cefazolin 30 mg/kg/dose IV MAX: 2 g (3 g if > 120 kg)	ALL : Vancomycin 15 mg/kg/dose IV MAX: 2 g
PDA ligation	≤ 44 weeks CGA : Cefazolin 25 mg/kg/dose IV > 44 weeks CGA : Cefazolin 30 mg/kg/dose IV MAX: 2 g (3 g if > 120 kg)	ALL : Vancomycin 15 mg/kg/dose IV MAX: 2 g
Gastrointestinal – Upper Tract including Nissen, Whipple, Biliary Tract (not laparoscopic), congenital diaphragmatic hernia	≤ 44 weeks CGA : Cefazolin 25 mg/kg/dose IV > 44 weeks CGA : Cefazolin 30 mg/kg/dose IV MAX: 2 g (3 g if > 120 kg)	≤ 44 weeks CGA : Gentamicin 2.5 mg/kg/dose AND Clindamycin 7.5 mg/kg/dose > 44 weeks CGA : Gentamicin 2.5 mg/kg/dose AND Clindamycin 10 mg/kg/dose MAX: 900 mg
Gastroschisis	≤ 44 weeks CGA : Cefazolin 25 mg/kg/dose IV	ALL : Vancomycin 15 mg/kg/dose IV
Appendectomy & Colorectal (including NEC, colostomy takedowns/ reanastomosis)	≤ 44 weeks CGA : Cefoxitin 30 mg/kg/dose IV > 44 weeks CGA : Cefoxitin 40 mg/kg/dose IV MAX: 2 g	ALL : Gentamicin 2.5 mg/kg/dose AND Metronidazole 15 mg/kg/dose IV (MAX: 500 mg)
VP Shunt	≤ 44 weeks CGA : Cefazolin 25 mg/kg/dose IV AND Gentamicin 4 mg, intrathecal > 44 weeks CGA : Cefazolin 30 mg/kg/dose IV AND Gentamicin 4 mg, intrathecal MAX: 2 g (3 g if > 120 kg)	ALL : Vancomycin 15 mg/kg/dose IV MAX: 2 g AND Gentamicin 4 mg, intrathecal

Type of Surgery	Standard Prophylaxis	Penicillin Allergy/ MRSA
Craniotomy & other clean neurosurgical procedures	≤ 44 weeks CGA: Cefazolin 25 mg/kg/dose IV > 44 weeks CGA: Cefazolin 30 mg/kg/dose IV MAX: 2 g (3 g if > 120 kg)	ALL: Vancomycin 15 mg/kg/dose IV MAX: 2 g
Head & Neck – Clean Contaminated (incision through skin or clean with prosthesis OR incision with skin and/or OP mucosa)	≤ 44 weeks CGA: Clindamycin 7.5 mg/kg/dose IV > 44 weeks CGA: Clindamycin 10 mg/kg/dose IV MAX: 900 mg	None
Oral & Maxillofacial/ Plastics through oral cavity	All ages: Unasyn 50 mg/kg/dose (based on Ampicillin component) MAX (Unasyn dose): 3 g	Clindamycin 10mg/kg/dose IV MAX: 900 mg
Orthopedic with insertion of hardware or prosthesis joint	≤ 44 weeks CGA: Cefazolin 25 mg/kg/dose IV > 44 weeks CGA: Cefazolin 30 mg/kg/dose IV MAX: 2 g (3 g if > 120 kg)	MRSA Colonized: ALL: Vancomycin 15 mg/kg/dose IV MAX: 2 g Penicillin allergic: ALL: Vancomycin 15 mg/kg/dose MAX 2 g OR Clindamycin 10mg/kg/dose IV MAX: 900 mg

Note: the redosing intervals below are for intraoperative use in patients with normal renal function and do not necessarily apply to post-operative or therapeutic treatment use.

Antibiotic	≤ 44 CGA	> 44 CGA PREOP Dosing	> 44 CGA INTRAOP Dosing	INTRAOP Redosing Interval (hours)
Cefazolin	NO REDOSING FOR ≤ 44 CGA	30 mg/kg/dose MAX: 2 gm 3 gm if > 120 kg	30 mg/kg/dose ** MAX: 1 gm	3
Cefoxitin		40 mg/kg/dose MAX: 2 gm	40 mg/kg/dose *** MAX: 1 gm	2
Clindamycin		10 mg/kg/dose MAX: 900 mg	10 mg/kg/dose MAX: 600 mg	6
Unasyn		50 mg/kg/dose MAX: 3 gm	50 mg/kg/dose MAX: 3 gm	2
Gentamicin *		2.5 mg/kg/dose	NO REDOSING	NO REDOSING
Metronidazole		15 mg/kg/dose MAX: 500 mg		
Vancomycin		15 mg/kg/dose MAX: 2 gm		

Clinical Notes

* Gentamicin for surgical antibiotic prophylaxis should be limited to a single dose given preoperatively. Dosing is based on the patient's actual body weight. If the patient's actual weight is more than 20% above ideal body weight (IBW), the dosing weight (DW) can be determined as follows: DW = IBW + 0.4(actual weight – IBW). Consultation with ID or a clinical pharmacist is advised.

** For weight-based dosing below max dose, do not exceed 150 mg/kg/day

*** For weight-based dosing below max dose, do not exceed 160 mg/kg/day