

PRE-OP ANTIBIOTIC SURGICAL PROPHYLAXIS – ADULTS (last updated 2/4/11) - COLUMBIA

Optimal administration within 15-60 minutes prior to incision. Vancomycin administration may begin within 2 hours prior to incision.

NATURE OF OPERATION	PRIMARY ANTIBIOTIC PROPHYLAXIS RECOMMENDED	ALTERNATIVE (e.g. Penicillin/Sulfa Allergy)
CARDIAC: CABG, other open-heart	cefazolin 1 g OR 2 g IV X 1	vancomycin 1 g IV X 1
Prosthetic valve	cefazolin 1 g OR 2 g IV X 1 ± gentamicin 1.5 mg/kg* (LBW ¹) IV X 1	vancomycin 1 g IV X 1 ± gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
Pacemaker, defibrillator placement	cefazolin 1 g OR 2 g IV X 1	clindamycin 600 mg IV X 1 OR vancomycin 1 g IV X 1
GASTRO-INTESTINAL, GYNECOLOGIC AND OBSTETRIC:	cefazolin 1 g OR 2 g IV X 1 OR cefoxitin 2 g IV X 1 <i>(for cesarean delivery, may be administered prior to incision or after cord clamping)</i>	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1 <i>(for cesarean delivery, may be administered prior to incision or after cord clamping)</i>
Bariatric surgery	cefazolin 2 g OR 3 g IV X 1 ± metronidazole 500 mg IV x 1	clindamycin 900 mg IV X 1
Colorectal, appendectomy (non-perforated)	cefazolin 1-2 g IV + metronidazole 500 mg IV x 1 OR cefoxitin 2 g IV X 1	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
GENITOURINARY:	cefazolin 1 g OR 2 g IV X 1 OR ampicillin 2 g IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1 (except open or laparoscopic surgery)	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
Transrectal prostate biopsy	cefoxitin 2 g IV X 1	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
Penile prosthesis insertion, removal, revision	vancomycin 1 g IV X 1 + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
HEAD AND NECK:	cefazolin 1 g OR 2 g IV X 1	clindamycin 600 mg IV + gentamicin 1.5 mg/kg* (LBW ¹) IV X 1
NEUROSURGERY, THORACIC, VASCULAR:	cefazolin 1 g OR 2 g IV X 1	vancomycin 1 g IV X 1
ORTHOPEDIC	cefazolin 1 g OR 2 g IV X 1	vancomycin 1 g IV X 1 OR clindamycin 600 mg IV X 1
TRANSPLANTS:	cefazolin 1 g OR 2 g IV X 1	vancomycin 1 g IV X 1
Heart, kidney	cefazolin 1 g OR 2 g IV X 1	vancomycin 1 g IV X 1
Lung	ampicillin/sulbactam 3 g IV X 1	vancomycin 1 g IV + aztreonam 1 g IV X 1
Liver	ampicillin/sulbactam 3 g IV X 1	vancomycin 1 g IV + aztreonam 1 g IV + metronidazole 500 mg IV X 1
LVAD	rifampin 600 mg IV + fluconazole 400 mg IV + TMP/SMX 160 mg (TMP) IV X 1	rifampin 600 mg IV + fluconazole 400 mg IV + vancomycin 1 g IV X 1
Pancreas or kidney/pancreas	ampicillin/sulbactam 3 g IV + fluconazole 400 mg IV X 1	clindamycin 600 mg IV + aztreonam 1 g IV + fluconazole 400 mg IV X 1

1 LBW: lean body weight

**USE MAXIMAL DOSES (e.g., cefazolin 2 g)
FOR PATIENTS WEIGHING >80 kg.**

INTRA-OP ANTIBIOTICS:

If surgery is longer than interval listed below for chosen pre-op antibiotic, you must redose antibiotic at the indicated frequency to optimize antibiotic tissue levels at time of closure.

Choices for pre-op and intra-op antibiotics **MUST** match, but only those listed below require redosing. The need to redose vancomycin and trimethoprim/sulfa are highly dependent on renal function and may not require redosing in patients with elevated SCr (i.e. renal dysfunction).

Drug	Cefazolin	Cefoxitin	Ampicillin / sulbactam	Clindamycin	Vancomycin	Metronidazole	Aztreonam	Trimethoprim / sulfa
Redosing frequency intra-operatively	q4 hours	q3 hours	q3 hours	q8 hours	q8 hours	q8 hours	q6 hours	q8 hours

*Adult Gentamicin Dosing for Surgical Prophylaxis Based on Weight

Weight (kg)	Gentamicin Dose to Administer (1.5 mg/kg/dose)
30-40	60 mg
41-50	70 mg
51-60	90 mg
61-70	100 mg
71-100	120 mg
> 100 kg	Use alternative if appropriate: aztreonam 2 g