

Recommended prophylactic antimicrobial agents and administration guide

- Antibiotic should be administered between **10 to 60 minutes before knife to skin**
- Post-operative duration should NOT exceed **24 hours** (except cardiac or thoracic which should NOT exceed 48 hours)
- Continuing prophylaxis until drains or catheters are removed is **NOT** recommended

Surgical Procedure	Recommended Agent	Alternative if β-lactam allergic (anaphylaxis)	Acceptable Alternatives	Procedures where NO prophylaxis is needed
Cardiac or thoracic	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg or Vancomycin 15mg/kg (2g max), infuse 1g over an hour, to be completed before knife to skin		
Colorectal	Cefazolin IV 2g < 120kg 3g ≥ 120kg AND Metronidazole IV 500mg (or 1g rectally)	Gentamicin IV 5mg/kg ¹ (single dose) (400mg max) OR Clindamycin IV 600mg AND Metronidazole IV 500mg (or 1g rectally)	Cefoxitin IV 2g OR Cefuroxime IV 1.5g AND Metronidazole IV 500mg (or 1g rectally)	
Ear, nose and throat or maxillofacial Clean-contaminated	Cefazolin IV 2g < 120kg 3g ≥ 120kg with or without Metronidazole IV 500mg (or 1g rectally)	Clindamycin IV 600mg	Cefuroxime IV 1.5g AND Metronidazole IV 500mg (or 1g rectally) OR Amoxicillin-clavulanic acid IV 1.2-2.4g	Tonsillectomy Adenoidectomy Septoplasty Endoscopic sinus procedures
General surgery, clean	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg	Cefuroxime IV 1.5g OR Flucloxacillin IV 2g	Lymph node biopsy Excision of benign lump Diagnostic excisional biopsy Thyroidectomy and Parathyroidectomy
Gastroduodenal or oesophageal surgery (that does <i>not</i> enter GI tract) but patient has risk factors e.g. obesity	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg AND Gentamicin 5 mg/kg (weight based) single dose		Gastroduodenal or oesophageal surgery that does not enter GI tract lumen and no risk factors
Gastroduodenal or oesophageal surgery (that enters GI tract)	Same as above	Same as above		
Gynaecological	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Gentamicin IV 5mg/kg ¹ (single dose) (400mg max) OR Clindamycin IV 600mg AND Metronidazole IV 500mg (or 1g rectally)	Cefoxitin IV 2g OR Amoxicillin-clavulanic acid IV 1.2-2.4g	Hysteroscopy with no history of PID IUD insertion Endometrial biopsy D&C (non-pregnancy) cervical tissue biopsy Laparoscopy (except for hysterectomy)
Neurosurgery	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg or Vancomycin 15mg/kg (2g max), infuse 1g over an hour, to be completed before knife to skin	Cefuroxime IV 1.5g	
Orthopaedic Spinal procedures or those involving implants	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg or Vancomycin 15mg/kg (2g max), infuse 1g over an hour, to be completed before knife to skin	Cefuroxime IV 1.5g	
Plastic surgery Clean with risk factors or clean-contaminated	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg or Vancomycin 15mg/kg (2g max), infuse 1g over an hour, to be completed before knife to skin	Cefuroxime IV 1.5g OR Flucloxacillin IV 2g	
Urological Pre-op susceptibility results should guide choice of agent	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin IV 600mg or Gentamicin IV 5mg/kg ¹ (400mg max) single dose AND Metronidazole IV 500mg (or 1g rectally) if clean-contaminated procedure	Cefazolin IV 2g < 120kg 3g ≥ 120kg with or without Gentamicin IV 5mg/kg ¹ (400mg max) single dose	
	AND Metronidazole IV 500mg (or 1g rectally) if clean-contaminated procedure		OR Cefoxitin IV 1.2g for clean/contaminated procedure	
Vascular	Cefazolin IV 2g < 120kg 3g ≥ 120kg	Clindamycin 600mg IV or Vancomycin 15mg/kg (2g max), infuse 1g over an hour, to be completed before knife to skin.	Cefuroxime IV 1.5g or Flucloxacillin IV 2g	Varicose vein surgery Renal access fistula formation without prosthetic material

¹ Dose is based on actual body weight. If the patient's weight is >20% above ideal body weight (IBW) the dose weight (DW) can be determined by DW = IBW + 0.4(actual-IBW)

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Re-dosing

When	Agent	Frequency while in Surgery
Surgery longer than 4 hours	Cefazolin	Every 4 hours
	Cefuroxime	
or Extensive blood loss ≥15% blood volume		
	Clindamycin	Every 6 hours
	Metronidazole	Every 7 hours
	Vancomycin	Every 9 hours
	Gentamicin	Not required

Bilateral procedures

When	Agent
Bilateral Procedure	If second site commences one hour after the initial dose, second dose is required. Vancomycin – no second dose

MDRO

When	Agent	Notes
MRSA colonisation	Add vancomycin 15mg/kg actual body weight to regime (maximum dose of 2g)	1g infusion over a period of at least 60mins; 2g dose over 2 hours
ESBL	For contaminated/clean contaminated procedures, seek advice from microbiologist or infectious disease specialist.	N.B. Bowel colonisation with ESBL should not alter prophylaxis for clean surgical procedures