

Surgical antimicrobial prophylaxis

All IV single doses unless stated

STARSHIP OR

CONSIDERATIONS

When to give
0-60 mins before knife to skin for all antibiotics except vancomycin which should be completed within 30 minutes of incision

Obesity ($\geq 120\text{kg}$ or $\text{BMI} \geq 35\text{kg/m}^2$)
Increase cefazolin max dose to 3g

MRSA colonised/infected
Add vancomycin 15mg/kg (ABW) (Max 2g)

ESBL colonised/infected
Seek advice from Paediatric Infectious Diseases

Antibiotic Allergy
Immediate hypersensitivity to penicillin or another cephalosporin
Use cefazolin 30mg/kg (max 2g)

Immediate hypersensitivity to cefazolin
Use cefuroxime 50mg/kg (max 1.5g)

Delayed hypersensitivity to penicillin or cephalosporin
Intra-abdominal **replace** cefazolin with gentamicin 5mg/kg (LBW) (Max 360mg)

All others **replace** cefazolin with vancomycin 15mg/kg (ABW) (Max 2g) or clindamycin 10mg/kg (max 600mg)

When to redose (the same dose) with extensive blood loss or surgery >4 hours:

Cefazolin	every 4 hours
Cefuroxime	every 4 hours
Clindamycin	every 6 hours
Metronidazole	every 7 hours
Vancomycin	every 8 hours
Gentamicin	not required

Continue current antimicrobial treatment regimens as scheduled peri-operatively
Standard surgical prophylaxis should be administered in addition to current therapy

CLEAN SURGERY

Antibiotic and dose

Neurosurgery
Craniotomy and CSF shunt insertion
Myelomeningocele

cefazolin 30mg/kg (2g max)

Head and neck surgery
Thyroglossal cysts
Branchial cysts
Neck lumps
Hearing Implants

cefazolin 30mg/kg (2g max)

Cardiac surgery
1. Congenital repair
2. Valve replacement

Unit specific guideline

3. Thoracotomy
4. Implantable cardiac device

cefazolin 30mg/kg (2g max)

Orthopaedics
1. Osteotomy/Dysplasia/lengthening
2. Spinal surgery – congenital/idiopathic
3. Open reduction int fixation
5. Revision surgery

cefazolin 30mg/kg (2g max) then 15mg/kg q8h for up to 3 doses

6. Biopsy

None required

7. Spinal surgery - complex

cefazolin 30mg/kg (2g max) and gentamicin 5mg/kg (360mg max)

General surgery
1. High risk abdominal laparoscopic surgery
2. High risk central lines
3. Thoracoscopy

cefazolin 30mg/kg (2g max)

General surgery
1. Herniotomy
2. Orchidopexy/hydroceles
3. Elective skin procedures

None required

Solid organ transplantation

Unit -specific guidelines

CLEAN-CONTAMINATED SURGERY

Antibiotic and dose

ORL:
1. Adenoidectomy
2. Tonsillectomy
3. Tympanostomy
4. L & Bs
5. Septo/myringoplasty

None required

6. FESS/cleft palate
7. Repair CSF leaks
8. Mastoidectomy
9. Preauricular cyst

cefazolin 30mg/kg (2g max)

Dental Surgery

None required

Trauma:
Compound fractures grade 1 - 2

cefazolin 30mg/kg (2g max)

Neonatal GI Surgery

cefazolin 30mg/kg (2g max)

Upper GI
1. Congenital surgery
2. Jejunostomy tube Placement

cefazolin 30mg/kg (2g max)

3. Small bowel surgery
4. Biliary surgery

cefazolin 30mg/kg (2g max) and metronidazole 7.5mg/kg (500mg max)

Colorectal
1. Appendicectomy
2. Colectomy
3. Trauma

cefazolin 30mg/kg (2g max) \pm metronidazole 7.5mg/kg (500mg max)

Urology
1. Nephrectomy
2. Cystoscopy
3. Renal stent placement
4. Any procedure that results in entry into the urinary tract (e.g. hypospadias)

cefazolin 30mg/kg (2g max)

CONTAMINATED/DIRTY/COMPLEX SURGERY

Antibiotic and dose

Other complex procedures above the diaphragm

cefazolin 30mg/kg (2g max) and metronidazole 7.5mg/kg (500mg max)

Trauma:
Compound fractures grade 3

cefazolin 30mg/kg (2g max) and gentamicin 5mg/kg (360mg max)

Peritonitis
Abscess drainage
Bowel anastomotic repair
Fistula repair
Reversal of stoma
Urinary procedure that results in entry into the bowel

cefuroxime 50mg/kg (1.5g max) and metronidazole 7.5mg/kg (500mg max)

