

# **Antibiotics for Surgical Prophylaxis in Paediatrics**

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## GASTROINTESTINAL SURGERY

PROCEDURE	1 <sup>ST</sup> LINE ANTIBIOTIC	PENICILLIN ALLERGY	COMMENTS/DOSING
GI/GU surgery	<b>Gentamicin</b> IV 2.5mg/kg PLUS <b>metronidazole</b> IV 30mg/kg (max dose 500mg)	No Change	<i>Single dose</i>  <i>If infection/peritonitis found at surgery then a prolonged course of antibiotics should be given</i>  <i>Metronidazole may be given by suppository but should be given 2 hours before procedure to allow for absorption</i>
Appendicectomy	<b>Gentamicin</b> IV 2.5mg/kg PLUS <b>metronidazole</b> IV 30mg/kg (max dose 500mg)	No Change	<b>Normal or inflamed non-perforated appendix:</b> <i>No further doses unless specified by surgeon</i>  <b>Perforation:</b> <i>a prolonged course of antibiotics should be given(min 5 days)</i>
PEG insertion	<b>Co-amoxiclav</b> IV 30mg/kg (Max 1.2g)	If penicillin allergy (rash): <b>cefuroxime</b> IV 50mg/kg (max dose 1.5g)  If penicillin anaphylaxis: <b>teicoplanin</b> IV 10 mg/kg	<i>Single dose</i>

## ORTHOPAEDIC SURGERY

PROCEDURE	1 <sup>ST</sup> LINE ANTIBIOTIC	PENICILLIN-ALLERGY	COMMENTS/DOSING
Open Fractures	<b>Co-amoxiclav</b> IV 30mg/kg (max 1.2g) tds	Skin reaction only: <b>cefuroxime</b> IV 50mg/kg (max 1.5g) <b>PLUS metronidazole</b> IV 30mg/kg (max 500mg)  Penicillin anaphylaxis: <b>clindamycin</b> IV 6mg/kg (max 1.2g)	<i>Continue for 72 hrs max or until soft tissue closure</i>
Open surgery for closed fracture	<b>Flucloxacillin</b> IV 50mg/kg (max 2g)	Skin reaction only: <b>cefuroxime</b> IV 50mg/kg (max 1.5g)  Penicillin anaphylaxis: <b>teicoplanin</b> IV 10mg/kg	<i>Single dose</i>  <i>(Additional doses may be required if prolonged surgery or major blood loss)</i>
Spinal roads, SUFE, ORIF, Hip reconstruction or other complex procedures	<b>Flucloxacillin</b> IV 50mg/kg (max 2g) + <b>gentamicin</b> IV 2.5 mg/kg	<b>Teicoplanin</b> IV 10mg/kg + <b>gentamicin</b> IV 2.5mg/kg	<i>Single dose</i>

## UROLOGY SURGERY

PROCEDURE	1 <sup>ST</sup> LINE ANTIBIOTIC	PENICILLIN-ALLERGY	COMMENTS/DOSING
<i>Circumcision</i>	Not routinely recommended	---	---
Urological procedures (including cystoscopy and stent insertion/removal)	<b>Gentamicin</b> IV 2.5 mg/kg	No change	<i>Single dose</i>

## ENT SURGERY

PROCEDURE	1 <sup>ST</sup> LINE ANTIBIOTIC	PENICILLIN ALLERGY	COMMENTS/DOSING
Tonsillectomy, adenoid removal, sinus surgery	Not routinely recommended	---	---
Supraglottoplasty	<b>Co-amoxiclav</b> IV 30mg/kg	Skin reaction only: Cefuroxime 50mg/kg (max 1.5g) Penicillin anaphylaxis: contact Microbiologist	<i>Single dose</i>
Mastoiditis surgery	<b>Piperacillin-tazobactam (Tazocin)</b> IV 90mg/kg (max 4.5g)	Skin reaction only: <b>ceftazidime</b> IV (max 2g) <b>PLUS metronidazole</b> IV 30mg/kg (max 500mg) Penicillin anaphylaxis: contact Microbiologist	<i>Single dose</i>

## OTHER

PROCEDURE	1 <sup>ST</sup> LINE ANTIBIOTIC	ALTERNATIVE	COMMENTS/ DOSING
Eye surgery	Not routinely recommended		
Dental extractions	Not routinely recommended		
Structural cardiac defects	Not routinely recommended		<i>Antibacterial prophylaxis is <b>not</b> routinely recommended for the prevention of infective endocarditis in children at risk undergoing <b>dental, respiratory (including ENT and bronchoscopy), genitourinary or gastrointestinal procedures</b></i>

## NOTES

- Prophylaxis is usually single dose (see table for exceptions) which should be given up to 30 minutes BEFORE the procedure
- Doses given are for children – for neonates please refer to “BNF for Children” or contact Pharmacy
- Patients with suspected or confirmed MRSA infection will require **teicoplanin** in addition to/instead of the above – contact Microbiology if advice required