

Paediatric Antibiotic Surgical Prophylaxis & Perioperative Guideline

ANTIBIOTIC DOSING IN PAEDIATRICS (For use in children aged >3 months)

CNS:

ALL NEUROSURGERY:	Cefuroxime IV
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EYE:

ROUTINE EYE OPERATIONS:	Not Recommended
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ENT:

ROUTINE EAR, NOSE AND SINUS SURGERY:	Not Routinely Recommended
TONSILLECTOMY AND ADENOIDECTOMY:	Not Routinely Recommended
GROMMET INSERTION:	Ciprofloxacin Eye Drops topically as a ONCE off

Ortho:

OPEN FRACTURE:	Gentamicin IV + Flucloxacillin IV (+ Metronidazole IV if grossly contaminated wound) (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)
OPEN SURGERY FOR A CLOSED FRACTURE:	Gentamicin IV + Flucloxacillin IV (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)
ORTHOPAEDIC SURGERY WITH IMPLANT:	Gentamicin IV + Flucloxacillin IV (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)
ORTHOPAEDIC SURGERY (WITHOUT IMPLANT):	Not Recommended

Plastics

OMFS

Dental :

SOFT TISSUE INJURIES:	Not routinely recommended unless open digit fracture or contaminated wound.
BURNS:	Flucloxacillin IV (may need to be continued post op on individual basis) (<i>Penicillin Allergy</i> : Clindamycin IV)
DENTAL EXTRACTION:	Not routinely recommended

GI

APPENDICECTOMY:	Gentamicin IV + Metronidazole IV (may need to add Amoxicillin IV if perforated gangrenous appendix. May need to be continued post op on individual basis) (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)
COLORECTAL SURGERY:	Gentamicin IV + Metronidazole IV (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)
PEG TUBE INSERTION:	Co-amoxiclav IV (<i>Penicillin Allergy</i> : Co-trimoxazole IV)

GU

CIRCUMCISION:	Not routinely recommended
HYPOSPADIAS:	Not routinely recommended (post operatively oral Trimethoprim until catheter removed)
HYDROCELES / HERNIA REPAIR:	Not routinely recommended
CYSTOSCOPY +/- STENT REMOVAL:	Gentamicin IV
UROLOGICAL PROCEDURE INVOLVING BOWEL:	Gentamicin IV + Metronidazole IV (<i>Penicillin Allergy</i> : Clindamycin IV + Gentamicin IV)

STRUCTURAL CARDIAC DEFECTS: Routine prophylaxis no longer recommended for patients having surgery.

For advice regarding appropriate doses of antibiotics please check the current BNF for Children.

See Paediatric Gentamicin monograph for more information around dosing and monitoring

Standard prophylactic doses of the antibiotics recommended above are as follows: (NB: Doses given are per individual dose)

Amoxicillin	(20-30mg/kg, max 500mg)	Flucloxacillin	(25mg/kg max 1g)
Cefuroxime	(50mg/kg, max 1.5g)	Gentamicin	(4mg/kg,) see monograph
Clindamycin	(3.75-6.25mg/kg, max 1.2g)	Metronidazole	(30mg/kg max 500mg)
Co amoxiclav	(30mg/kg max 1.2g)	Co-trimoxazole	(18mg/kg max 1.44g)

References:

NHS GGC Surgical Prophylaxis guidelines 2021
SIGN 104. Antibiotic Prophylaxis in Surgery. April 2014

BNF for children Feb 2025
Tayside local guidance

ADVICE:

Microbiology: bleep 4039

Paediatric Pharmacist: bleep 4024

Antibiotic Pharmacist: bleep 4732