**ORAL DRUG DOSING GUIDELINES FOR PEDIATRIC PATIENTS**

Antimicrobial doses listed in this chart represent usual initial doses for pediatric patients outside the neonate period with moderate to severe infections due to susceptible organisms. Please contact the pediatric infectious diseases PharmD (Jessica Gillon, pager 835-6961) for more dosing information.

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| Drug | Route | Restricted | Formulations Stocked | Usual dose and frequency (mg/kg/dose; max mg/dose) | Renal dose adjust | Monitor | Notes |
| **PENICILLINS** |
| Amoxicillin | PO | N | Susp: 400mg/5mL(flavor: cherry-raspberry)Cap: 250mgTab: 500mg, 875 mgChew tab: 250 mg | Resp/AOM: 45 q12h; max 2000Other: 15 q8h; max 500 mg | Y | Prolonged: SCr, BUN, LFTs, CBC/d | Step down for ampicillin |
| Amoxicillin/ clavulanate | PO | N | Susp: 600mg/5mL(flavor: strawberry cream)Tab: 500mg, 875mgChew Tab: 400mgXR Tab: 1000 mg | 600/5: 45 (amox) q12h500 mg q8h875 mg q12h2000 mg q12h | Y | Prolonged: SCr, BUN, LFTs, CBC/d | Step down for ampicillin/sulbactam or ceftriaxone |
| Penicillin VK | PO | N | Susp: 250mg/5mL(flavor: cherry)Tab: 250mg, 500mg | < 3y: 125 mg q6h ≥3y:250 mg q6h | N | Prolonged: SCr, BUN, CBC/d | Asplenia prophylaxis |
| **CEPHALOSPORINS** |
| Cephalexin | PO | N | Susp: 250mg/5mL(flavor: orange-banana)Tab: 250mg, 500mg | Osteo: 25 q6h or 40 q8h; max 1000Other: 25 q6-8h; max 500 | Y | Prolonged: SCr, BUN, LFTs, CBC/d |  |
| Cefuroxime | PO | N | Tab: 250mg | 15 q12h; max 500 | Y | Prolonged: SCr, BUN, LFTs, CBC/d | Suspension no longer available |
| Cefprozil | PO | N | Not currently stockedSusp: 250mg/5mL(flavor: bubble gum)Tab: 250 mg, 500 mg | 15 q12h; max 500 | Y | Prolonged: SCr, BUN, LFTs, CBC/d |  |
| Cefdinir | PO | N | Susp: 250 mg/5mL (flavor: strawberry cream)Cap: 300mg | 14 q24h; max 600 OR 7 q12h; max 300 | Y | Baseline and during: SCr, BUN, PT, CBC/d, LFTs | Does not adequately treat *Streptococcus pneumoniae* pneumonia |
| Cefixime | PO | N | Susp: 100mg/5mL(flavor: strawberry)Cap: 400 mg | 8 daily; max 400 | Y | Prolonged: SCr, BUN, LFTs | Used for irinotecan toxicity; Poor *S. aureus* coverage |
| **MACROLIDES** |
| Azithromycin | PO | N | Susp: 200mg/5mL(flavor: cherry)Tab: 250mg, 600 mg | 10 q24h x 1 then 5 q24h x 4; max 500 then 250 | N | LFTs, CBC/d | 1:1 IV to PO |
| Clarithromycin | PO | N | Susp: 250mg/5mL(flavor: fruit punch)Tab: 250mg, 500mg | 7.5 q12h; max 500 | Y | CBC/d, SCr, BUN, LFTs | Check hearing if on prolonged therapy |
| Erythromycin | PO | N | Susp: 200mg/5mL(flavor: fruit)Tab: 250mgEES Tab: 400mg | 12.5 q6h; max 500 | N | LFTs | Azithromycin preferred due to tolerability and fewer drug interactionsInfantile Hypertrophic pyloric stenosis |
| **FLUOROQUINOLONES** |
| Ciprofloxacin | PO | N | Susp: 500mg/5mL(flavor: strawberry)Tab: 100mg, 250mg, 500mg, 750mg | 15 q12; max 750 | Y | Prolonged: SCr, BUN, LFTs, CBC/d | 80% bioavailable Susp can’t be given in tubes –> crush tabSeparate from Ca, Mg |
| Levofloxacin | PO | N | Soln: 25mg/mL(flavor: grape-bubble gum)Tab: 250mg, 500mg, 750mg | <5y: 10 q12h≥5y: 10 q24; max 750 | Y | 100% bioavailableSeparate from Ca, Mg |
| **GRAM POSITIVE AGENTS** |
| Vancomycin | PO | Y | Soln: 50mg/mL (flavor: grape)Cap: 125mg, 250mg | 10 q6h | N |  | *Clostridium difficile* ONLYNot systemically absorbed |
| Clindamycin | PO | N | Soln: 75mg/5mL (flavor: cherry)Capsules: 75mg, 150mg | 13 q8h; max 600 | N | Prolonged: SCr, BUN, LFTs, CBC/d | 100% bioavailableCapsules can be opened and sprinkled; chocolate syrup masks flavor best (still awful) |
| TMP/SMX | PO | N | Susp: 40 mg (tmp)/5mL(flavor: grape)SS Tab: 80 mg (tmp)DS Tab: 160 mg (tmp) | MRSA: 6 q12hCF/PJP: 10 q12h | Y | SCr, BUN, LFTs, CBC/d, UA | 90 – 100 % bioavailableCI < 60 days oldDosed off trimethoprim |
| Linezolid | PO | Y | Oral Susp: 100mg/5mL(flavor: orange)Tab: 600mg | <12y: 10 q8h; max 600>12y: 10 q12h; max 600 | N | CBC (if > 2 weeks therapy) | Avoid with SSRI and ADHD medications100% bioavailableCheck visual fxn if on therapy > 3 mos |
| **MISCELLANEOUS ANTIBIOTICS** |
| Doxycycline | PO | N | Syrup: 50mg/5mL (flavor: raspberry-apple)Tab (mono): 50mgCap (hyclate): 100mg | 2.2 q12h; max 100 | N | Prolonged: SCr, BUN, LFTs, CBC/d | Take with food to decrease GI effectsTooth staining not noted in multiple series |
| Metronidazole | PO | N | Susp: 50mg/mL (compound)Tab: 250mg, 500mg | 10 q8h; max 500 | N | Baseline and Prolonged: CBC/d | 100% bioavailableTastes bad |
| **MISCELLANEOUS ANTIBIOTICS** |
| Nitrofurantoin | PO | N | Susp: 25mg/5mL ($$$$ and no longer formulary)Cap (Macrodantin): 25mg, 50mg, 100mgCap (Macrobid): 100 mg | Macrodantin 1.5 q6h; max 100MacroBID 100 mg BID | CI CrCL<60 | Periodic: SCr, BUN, LFTs, CBC/d, urine culture | Do not use if concerned for pyelonephritis |
| Rifampin | PO | N | Soln: 15mg/mL (compound)Cap: 150mg, 300 mg | 10 q12h; max 600 | N | Periodic: LFTs, Bili, CBC/d, PLTs | 100% bioavailableTurns all body fluids red |
| **ANTIVIRALS** |
| Acyclovir | PO | N | Susp: 200mg/5mL (flavor: banana)Cap: 200mgTab: 400mg, 800mg | Tx: 20 QID; max 800Neonatal suppressive therapy: 300/m2 q8h | Y | UA, SCr, BUN, urine output, LFTs, CBC/d | HSV, VZVHigh doses: monitor for neuro- and nephro- toxicity |
| Valacyclovir | PO | N | Soln: 50mg/mL (compound)Tab: 500mg | 20 q8h; max 1000 | Y | UA, BUN, SCr, LFTs, CBC/d | HSV, VZV |
| Valganciclovir | PO | N | Soln: 50mg/mL (compound)Tab: 450mg | 16 q12h; max 900 | Y | CBC/d, Plt, Scr | CMV |
| **ANTIFUNGALS** |
| Fluconazole | PO | N | Susp: 40mg/mL (flavor: orange)Tab: 50mg, 100mg, 150mg, 200mg | 12 q24h | Y | Periodic: LFTs, SCr, BUN, K, CBC/d | 100% bioavailable |
| Voriconazole | PO | N | Susp: 40mg/mL (flavor: orange)Tab: 50mg, 200mg | 9 q12h; max 600 | N | CMP, Bili, EKG, pancreatic function, troughs | Not 100% bioavailable in pediatrics**Send PREDICT testing**Check level after 5 daysGoal for tx: >1-2 |
| Itraconazole | PO | N | Soln: 10mg/mL(flavor: cherry-caramel)Cap: 100mg | 5 q8h x 3 days then 5 q12h; max 200 | N | LFTs, serum conc, SCr, BUN, K | DOC: Histoplasmosis!!Watch for drug interactions!!Solution: empty stomachCap: after meals Check level after 14 daysGoal for tx: itra + hydroxyl itra > 1 |
| Posaconazole | PO | Y | Susp: 40 mg/mL(flavor: cherry)Tab DR: 100 mg | < 20 kg: 100mg qd 21-35 kg: 200mg qd≥ 35 kg: 300mg qd | N | CMP, bili, EKG | Susp: absorption is poorTypically, only use tabs for treatmentCheck level after 7 daysGoal for tx: > 0.7 - 1 |