**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.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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: 250mg  Tab: 500mg, 875 mg  Chew tab: 250 mg | Resp/AOM: 45 q12h; max 2000  Other: 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, 875mg  Chew Tab: 400mg  XR Tab: 1000 mg | 600/5: 45 (amox) q12h  500 mg q8h  875 mg q12h  2000 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 1000  Other: 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 stocked  Susp: 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: 250mg  EES Tab: 400mg | 12.5 q6h; max 500 | N | LFTs | Azithromycin preferred due to tolerability and fewer drug interactions  Infantile 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 tab  Separate 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% bioavailable  Separate from Ca, Mg |
| **GRAM POSITIVE AGENTS** | | | | | | | | |
| Vancomycin | PO | | Y | Soln: 50mg/mL  (flavor: grape)  Cap: 125mg, 250mg | 10 q6h | N |  | *Clostridium difficile* ONLY  Not 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% bioavailable  Capsules 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 q12h  CF/PJP: 10 q12h | Y | SCr, BUN, LFTs, CBC/d, UA | 90 – 100 % bioavailable  CI < 60 days old  Dosed 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 medications  100% bioavailable  Check visual fxn if on therapy > 3 mos |
| **MISCELLANEOUS ANTIBIOTICS** | | | | | | | | |
| Doxycycline | | PO | N | Syrup: 50mg/5mL  (flavor: raspberry-apple)  Tab (mono): 50mg  Cap (hyclate): 100mg | 2.2 q12h; max 100 | N | Prolonged: SCr, BUN, LFTs, CBC/d | Take with food to decrease GI effects  Tooth 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% bioavailable  Tastes bad |
| **MISCELLANEOUS ANTIBIOTICS** | | | | | | | | |
| Nitrofurantoin | | PO | N | Susp: 25mg/5mL ($$$$ and no longer formulary)  Cap (Macrodantin): 25mg, 50mg, 100mg  Cap (Macrobid): 100 mg | Macrodantin 1.5 q6h; max 100  MacroBID 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% bioavailable  Turns all body fluids red |
| **ANTIVIRALS** | | | | | | | | |
| Acyclovir | PO | | N | Susp: 200mg/5mL  (flavor: banana)  Cap: 200mg  Tab: 400mg, 800mg | Tx: 20 QID; max 800  Neonatal suppressive therapy: 300/m2 q8h | Y | UA, SCr, BUN, urine output, LFTs, CBC/d | HSV, VZV  High 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 days  Goal 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 stomach  Cap: after meals  Check level after 14 days  Goal 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 poor  Typically, only use tabs for treatment  Check level after 7 days  Goal for tx: > 0.7 - 1 |