

Antibiotics Quick Guide — One-Page Cheat Sheet

Classes, examples, mechanisms, key ADRs & notes — for quick revision

Class	Examples	Mechanism	Key ADRs / Notes
β-lactams (Penicillins)	Amoxicillin, Ampicillin, Benzylpenicillin	Inhibit cell wall synthesis (PBPs)	Allergy; avoid if anaphylaxis; GI upset
β-lactamase-resistant Penicillins	Flucloxacillin, Oxacillin	Resistant to staphylococcal β-lactamases	Hepatotoxicity (rare)
Cephalosporins	Cefalexin, Cefuroxime, Ceftriaxone	Inhibit cell wall synthesis	Cross-reactivity small with penicillin; biliary sludging (ceftriaxone)
Carbapenems	Imipenem, Meropenem	Broad-spectrum β-lactams; inhibit cell wall	Seizure risk (imipenem); reserved for severe infections
Glycopeptides	Vancomycin	Inhibit peptidoglycan synthesis	Nephrotoxicity, Red-man syndrome; monitor levels
Aminoglycosides	Gentamicin, Amikacin	Inhibit 30S ribosomal subunit	Nephrotoxicity, Ototoxicity; monitor levels
Macrolides	Azithromycin, Clarithromycin	Inhibit 50S ribosomal subunit	GI upset; QT prolongation; CYP interactions
Fluoroquinolones	Ciprofloxacin, Levofloxacin	Inhibit DNA gyrase/topoisomerase IV	Tendonitis/tendon rupture; QT prolongation
Tetracyclines	Doxycycline	Inhibit 30S; bacteriostatic	Photosensitivity; avoid in pregnancy/children
Sulfonamides & Trimethoprim	Co-trimoxazole (TMP-SMX)	Folate synthesis inhibitors	SJS risk; hyperkalaemia with TMP; avoid late pregnancy
Nitroimidazoles	Metronidazole	Forms toxic radicals in anaerobes	Disulfiram-like reaction with alcohol; metallic taste
Polymyxins	Colistin	Disrupts cell membranes (gram-negative)	Nephrotoxicity, neurotoxicity; last-resort
Oxazolidinones	Linezolid	Inhibits 50S (blocks initiation)	Thrombocytopenia; MAOI interactions