

# Pathogens and Abx

<u>Bone</u>	Osteomyelitis/septic arthritis	Staph a [ <b>fluclo</b> x + <b>rifamp/fusidic acid or gent</b> ]/MRSA [ <b>vanc + rifamp</b> ] Strep [ <b>benzyl pen or cefuroxime</b> ] (inc pyogenes 1-16y) H influenzae (< 3y) N Gonorrhoea (young adults) Pseudomonas a (IVDU) [ <b>ciprofloxacin/ceftazidine + gent</b> ]
	Reactive arthritis (NB: an inflammatory not a infective disease)	Salmonells, Campylobacter, Yersinia, Shigella [ <b>g-ve: ciprofloxacin</b> ] Chlamydia/Gonorrhoea (Reiters) Hep B
	Septic arthritis in prosthesis	Staph epidermis (coag -ve staph) Enterococci, diptheroids Staph aureus, strep, coliforms
<u>Enteric</u>	Gastroenteritis	E Coli (hamburgers, milk) ETEC/VTEC [ <b>ciprofloxacin except HUS</b> ] Salmonella (food poisoning/typhoid/paratyphoid) enteritidis, typhimurium, virchow [ <b>ciprofloxacin 3-4d</b> ] Shigellosis [ <b>ciprofloxacin</b> ] Campylobacter (poultry) [ <b>erythromycin</b> ] Viral – Noro, sapo, rota, adeno [ <b>no antivirals</b> ]
<u>LRTI</u>	COPD	Haemophilus i [ <b>HiB</b> ], M Cattarrhalis [ <b>amox or tetraC</b> ]
	Pneumonia	CAP: Strep p [ <b>pen, cephalosporin/erythromycin</b> ], Haemophilus i [ <b>pen +- B lactamase I</b> ], G- enteric [ <b>cephalosporin</b> ]. Atyp: Mycoplasma p [ <b>tetraC/fluoroQ</b> ], Staph a [ <b>fluclo/vanc</b> ], Chlamydia psitt/pneum, Legionella p [ <b>macrolide/quinolone + rifampicin</b> ], Coxiella b [ <b>tetraC</b> ], Legionella p [ <b>macrolide</b> ] [ <b>empirical for CAP = @ home: amoxicillin (or macrolide). hospital severe: co-amoxiclav (amox + clav acid)/ cefuroxime/ cefotaxime/ ceftriaxome + macrolide</b> ] Nosocomial: Coliforms, Staph a, Strep p, Pseudomonas, H influenzae Aspiration: URT flora ImmunoC: (i) Neutropenia: g-ve{coliforms, pseudomonas} +ve {Staph a, Viridans s} (ii) ↓ T cells: intracellular paths {mycobacterium}, fungi {Cryptococcus, Aspergillus}
	Bronchiectasis/C	Staph a [ <b>fluclo</b> x], Haemophilus i [ <b>pen + beta lactamase</b> ], Moraxella c, Pseudomonas a [ <b>ceftaz + gent</b> ]
	Pharyngitis	Strep pyogenes [ <b>pen</b> ], Rhinovirus, EBV, CMV
	Common cold	Rhioviruses, Coronaviruses, Strep pyogenes [ <b>symptomatic</b> ]
	Influenza	Inf A + B viruses [ <b>immunisation: amantadine, rimantidine, zanamivir</b> ]
	TB	Mycobacterium TB [ <b>1<sup>st</sup>: isoniazid, rifampicin, pyrazinamide, ethambutol, streptomycin. amikacin, kanamycin, capreomycin</b> ]
<u>UTI</u>		Proteus, Pseudomonas, Ecoli, Enterobacter, Enterococcus faecalis, Staph, Klebsiella [ <b>cystitis: trimethprim. pyelonephritis: cefuroxime, prostatitis: ciprofloxacin</b> ]
<u>ImmunoC</u>	Granulocytopenia → fever	G+: Staph a, coag -ve staph, Corynebacterium, Strep v, Enterococci G-: E coli, Klebsiella, Enterobacter, Pseudomonas Fungi: Candida, Aspergillus, Mucor spp [ <b>combo: (a) B lactam + aminoglycoside</b> <b>(b) double B lactam (pen + cephalosporin) eg piperacillin + ceftazidine</b>  <b>mono: ceftazidine (or B lactam + aminoglycoside), atreonom (+ vanc), ciprofloxacin (+ pen), imipenem/meropenem</b> ]
	Cellular immune dysfunction (↓ T cells)	Mycobacterium, Listeria, Typhoid/Salmonella, Legionella, Nocardia, Haemophilus i, Pneumococcus Fungi: Candida, aspergillus, cryptococcus Protozoa: Cryptosporidium, Toxoplasma pneumocystis Viruses: HSV, VZV, CMV, EBV [ <b>approp to pathogen – empirical impossible cos too many pathogens</b> ]
	Defective humoral immunity	Pneumococcus, Haemophilus i, Meningococcus, Malaria, Babesia, Capnocytophaga c [ <b>approp to pathogen</b> ]
	Post BMTx	CMV, PCP, Mycobacteria TB, Aspergillus, CAP
	HIV	Predispose to all of above MAI: Mycobacterium avium intracellular