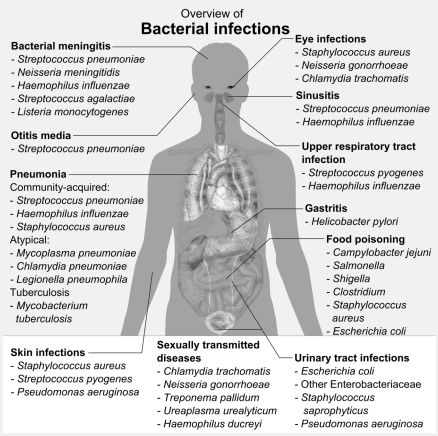
Bacterial Infections Based on Bugs



When Prophylaxis is Appropriate

- Prosthetic heart valve/valvular disease + dental/oral procedures
- - infective endocarditis
- - GU/GI procedures
- Rheumatic fever (recurrence)
- People in contact with meningococcal disease
- Surgical
- People at high risk/in contact with TB
- People at high risk/in contact with HIV

Medically Important Microorganisms

- G+/G- cocci
- G+/G- bacilli
- Anaerobes
- Spirochetes
- Mycoplasma
- Chlamydia

General AE of ABX

- Vomiting
- Severe watery diarrhea
- Abdominal cramps
- Allergic rxn

Antibiotic Spectra

Narrow Spectrum	Active against single or limited group of microorganisms
Extended Spectrum	Effective against G+ and some G-
Broad Spectrum	Effective against both G+ and G-

Static Vs. Cidal

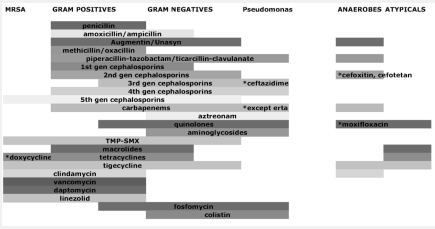
Bacteriostatics	**Bactericidal**
inhibit growth without causing death	*Kill* bacteria
Sulfonamides *(DNA synthesis)*, Chloramphenicol *(transcription and translation)*	PCN (cell wall inhibitor)
Relies on INTACT immune system to clear nongrowing/viable bacteria	Can be given to patients with COMPROMISED immunity

Empiric Treatment - Match the Bug to Location

G+ cocci	Skin
G- bacilli	Urethras
G+, G-, anaerobes	Large Intestine

Drug Distribution

Antibiotic Activity



Site of Action of ABX

Cell Wall Inhibitors	Fosfomycin Cycloserine Vanco PCN CPN Monobactams Carbapenems Ethambutol Pyrrazinamide Isoniazid
DNA Synthesis & Integrity Inhibitors	Sulfonamides Trimethoprim Quinolones
Transcription & Translation Inhibitors	Rifampin AGs Spectinomycin Tetracyclines Macrolides Chloramphenicol Streptogramins Oxazolidinones

Sponsored by **ApolloPad.com**
Everyone has a novel in them. Finish Yours!
https://apollopad.com