

# **Antimicrobial Treatment**

Chapter 10

## I. Vocabulary

- A. Prophylaxis
- B. Antimicrobial Chemotherapy
- C. Antimicrobials
- D. Antibiotics
- E. Semisynthetic
- F. Synthetic
- G. Narrow-Spectrum
- H. Broad-Spectrum

## II. Antimicrobial Considerations

### III. History

- A. Salvarsan
- B. Sulfonamides
- C. Penicillin
- D. Now others

## IV. Diagnosis

### V. Discovery & Susceptibility

- A. Evaluation
- B. Use-dilution test
- C. Tube-dilution test
- D. Kirby-Bauer
  - a. zone of inhibition

## VI. Antimicrobial classes

- A. Target = Cell wall
  - 1. Penicillins
  - 2. Cephalosporins
  - 3. Vancomycin
- B. Target - Protein synthesis
  - 1. Aminoglycosides
  - 2. Tetracycline
  - 3. Macrolides
- C. Target - folic acid synthesis
  - 1. Sulfonamides
- D. Target - DNA
  - 1. Fluoroquinolones

## VII. Anti-fungals

## VIII. Anti-protozoals

- A. Metronidazole

## IX. Anti-virals

- A. Strategies

## X. Antimicrobial Resistance

- A. Intrinsic
- B. Acquisition
- C. Mechanisms