

**Key Words and Phrases for Concept Map on
How Antibiotics Affect Bacterial Structures and Functions:
Agents that Inhibit Cell Wall Synthesis, Alter the Cytoplasmic Membrane,
or Inhibit DNA Synthesis**

Antibiotic/chemical agent inhibits normal nucleic acid replication.

Antibiotic inhibits peptidoglycan synthesis

Antibiotic or disinfectant alters cytoplasmic membrane.

Binds to bactoprenol

Binds to peptides of peptidoglycan monomers

Binds to transpeptidases

Blocks incorporation of arabinogalactan into cell wall

Blocks incorporation of mycolic acid into cell wall

Causes leakage of cellular needs

Drug inhibits synthesis of acid-fast cell walls

Inhibits bacterial topoisomerase enzymes

Osmotic lysis

Prevents synthesis of tetrahydrofolic acid

Puts nicks in the DNA strands of certain bacteria