

**Key Words and Phrases for Concept Map on
How Antibiotics Affect Bacterial Structures and Functions:
Agents that Alter Prokaryotic Ribosomal Subunits,
Inhibit RNA Polymerase, and Denature Enzymes**

Antibiotic/chemical agent binds to prokaryotic ribosomal subunits.

Anticodons of charged tRNAs cannot align with the codons of the mRNA

Binds to 30S ribosomal subunit

Binds to 50S ribosomal subunit

Blocks translation of mRNA into protein

Inhibits bacterial RNA polymerase

Interferes with the binding of the 50S subunit to the initiation complex

Interferes with the proofreading process that helps assure the accuracy of translation

Prevents peptidyltransferase from forming peptide bonds

Prevents the transfer of the peptidyl tRNA from the A-site to the P-site