# ANTIBACTERIAL AGENT SUSCEPTIBLITY AND RESISTANCE & BACTERIAL ANATOMICAL SITE ANALYSIS

## LOUISIANA VETERINARY MEDICAL DIAGNOSTIC LABORATORY 2004

## PRELIMINARY REPORT
## Section III
**(April 3, 2006)**

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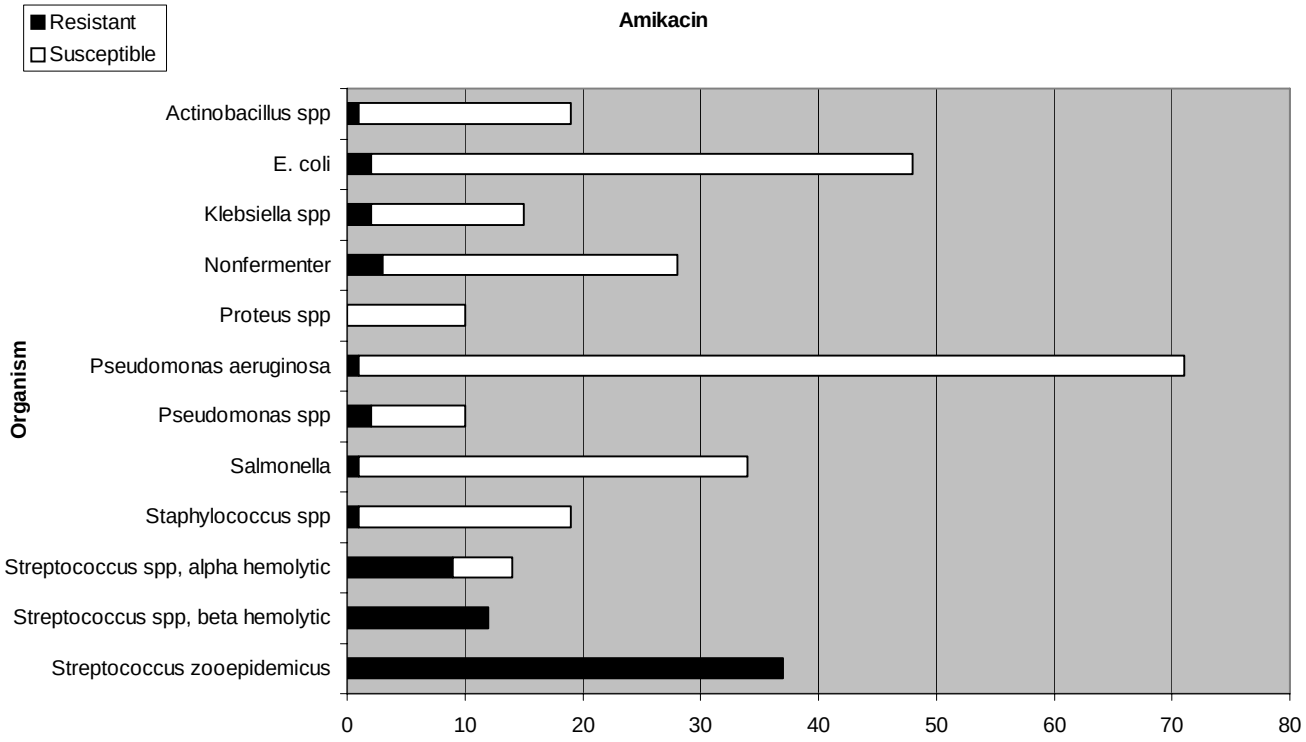
## III. Susceptibility profiles for specific antibacterial agents

This section features susceptibility/resistance information for specific antibacterial agents. The effectiveness was measured in vitro against specific bacterial isolates from various anatomical sites and animal species. The information is only provided for those bacteria in which at least 10 samples were tested for each antimicrobial agent.

A bar chart is displayed for quick visualization of proportional susceptibility/resistance. A table with sample numbers and percentages is displayed after each bar chart.

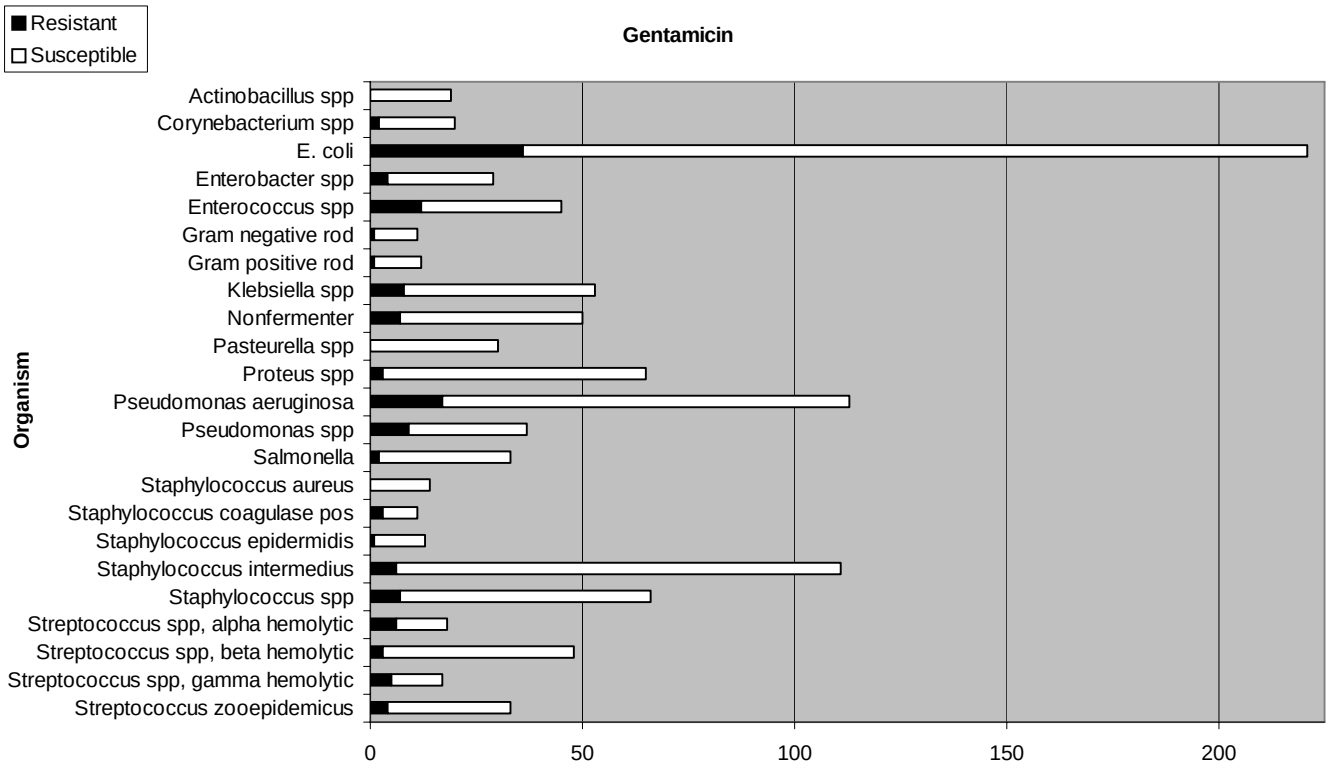
A. Aminoglycosides

1. Amikacin



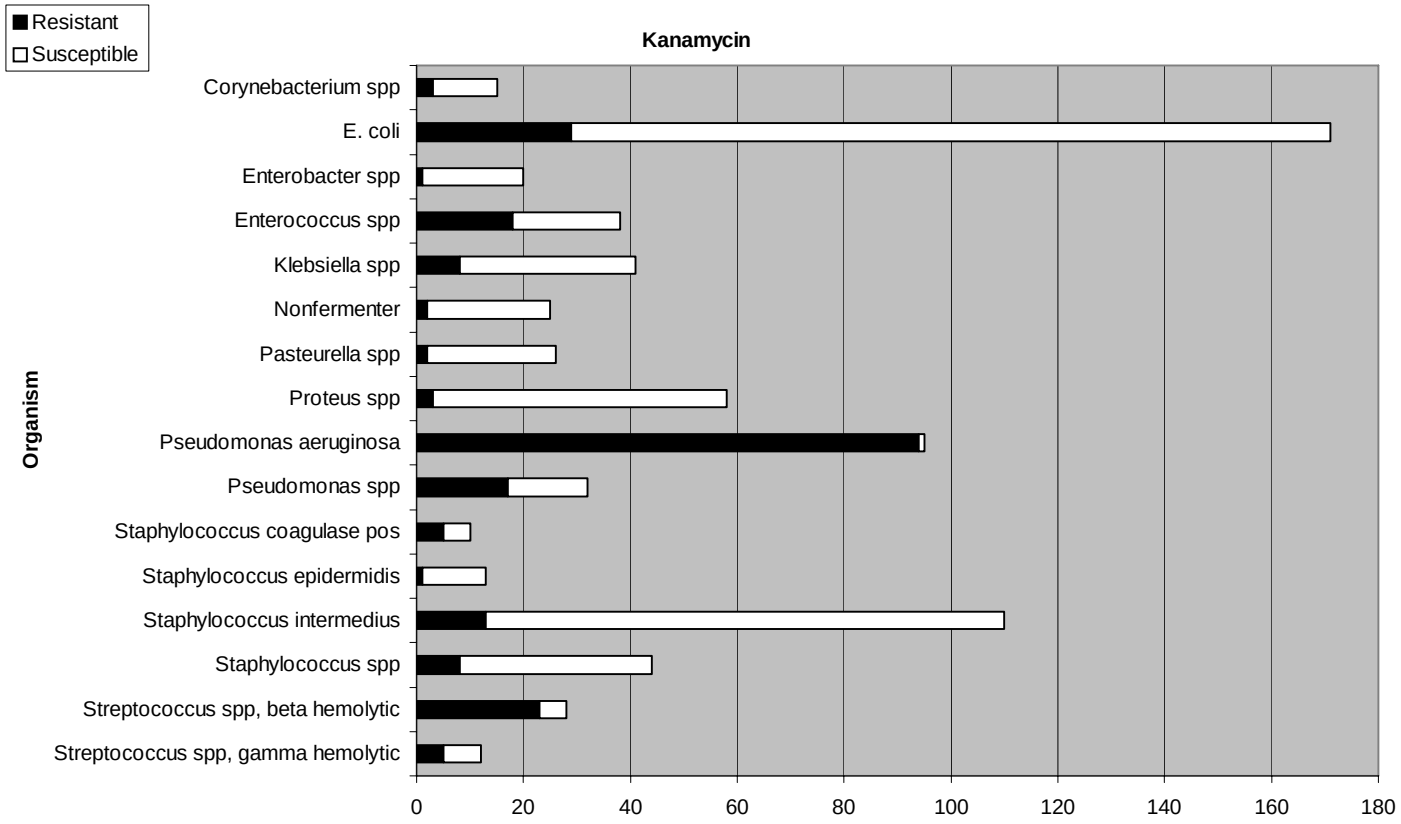

| AMIKACIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **18** | **19** | **94.7** |
| **E. coli** | **2** | **46** | **48** | **95.8** |
| **Klebsiella spp** | **2** | **13** | **15** | **86.7** |
| **Nonfermenter** | **3** | **25** | **28** | **89.3** |
| **Proteus spp** | **0** | **10** | **10** | **100.0** |
| **Pseudomonas aeruginosa** | **1** | **70** | **71** | **98.6** |
| **Pseudomonas spp** | **2** | **8** | **10** | **80.0** |
| **Salmonella** | **1** | **33** | **34** | **97.1** |
| **Staphylococcus spp** | **1** | **18** | **19** | **94.7** |
| **Streptococcus spp, alpha hemolytic** | **9** | **5** | **14** | **35.7** |
| **Streptococcus spp, beta hemolytic** | **12** | **0** | **12** | **0.0** |
| **Streptococcus zooepidemicus** | **37** | **0** | **37** | **0.0** |

2. Gentamicin



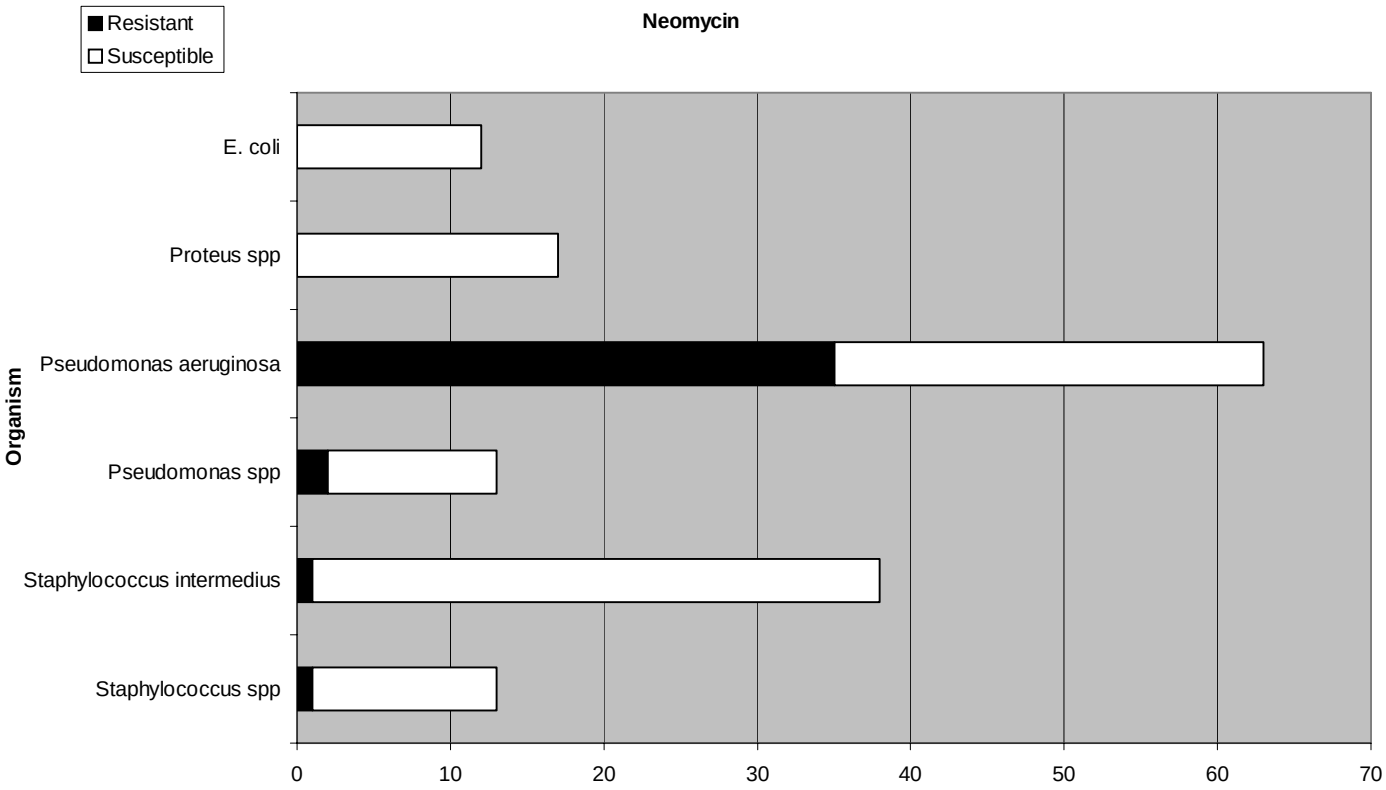

| GENTAMICIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **0** | **19** | **19** | **100.0** |
| **Corynebacterium spp** | **2** | **18** | **20** | **90.0** |
| **E. coli** | **36** | **185** | **221** | **83.7** |
| **Enterobacter spp** | **4** | **25** | **29** | **86.2** |
| **Enterococcus spp** | **12** | **33** | **45** | **73.3** |
| **Gram negative rod** | **1** | **10** | **11** | **90.9** |
| **Gram positive rod** | **1** | **11** | **12** | **91.7** |
| **Klebsiella spp** | **8** | **45** | **53** | **84.9** |
| **Nonfermenter** | **7** | **43** | **50** | **86.0** |
| **Pasteurella spp** | | **30** | **30** | **100.0** |
| **Proteus spp** | **3** | **62** | **65** | **95.4** |
| **Pseudomonas aeruginosa** | **17** | **96** | **113** | **85.0** |
| **Pseudomonas spp** | **9** | **28** | **37** | **75.7** |
| **Salmonella** | **2** | **31** | **33** | **93.9** |
| **Staphylococcus aureus** | | **14** | **14** | **100.0** |
| **Staphylococcus coagulase pos** | **3** | **8** | **11** | **72.7** |
| **Staphylococcus epidermidis** | **1** | **12** | **13** | **92.3** |
| **Staphylococcus intermedius** | **6** | **105** | **111** | **94.6** |
| **Staphylococcus spp** | **7** | **59** | **66** | **89.4** |
| **Streptococcus spp, alpha hemolytic** | **6** | **12** | **18** | **66.7** |
| **Streptococcus spp, beta hemolytic** | **3** | **45** | **48** | **93.8** |
| **Streptococcus spp, gamma hemolytic** | **5** | **12** | **17** | **70.6** |
| **Streptococcus zooepidemicus** | **4** | **29** | **33** | **87.9** |

3. Kanamycin



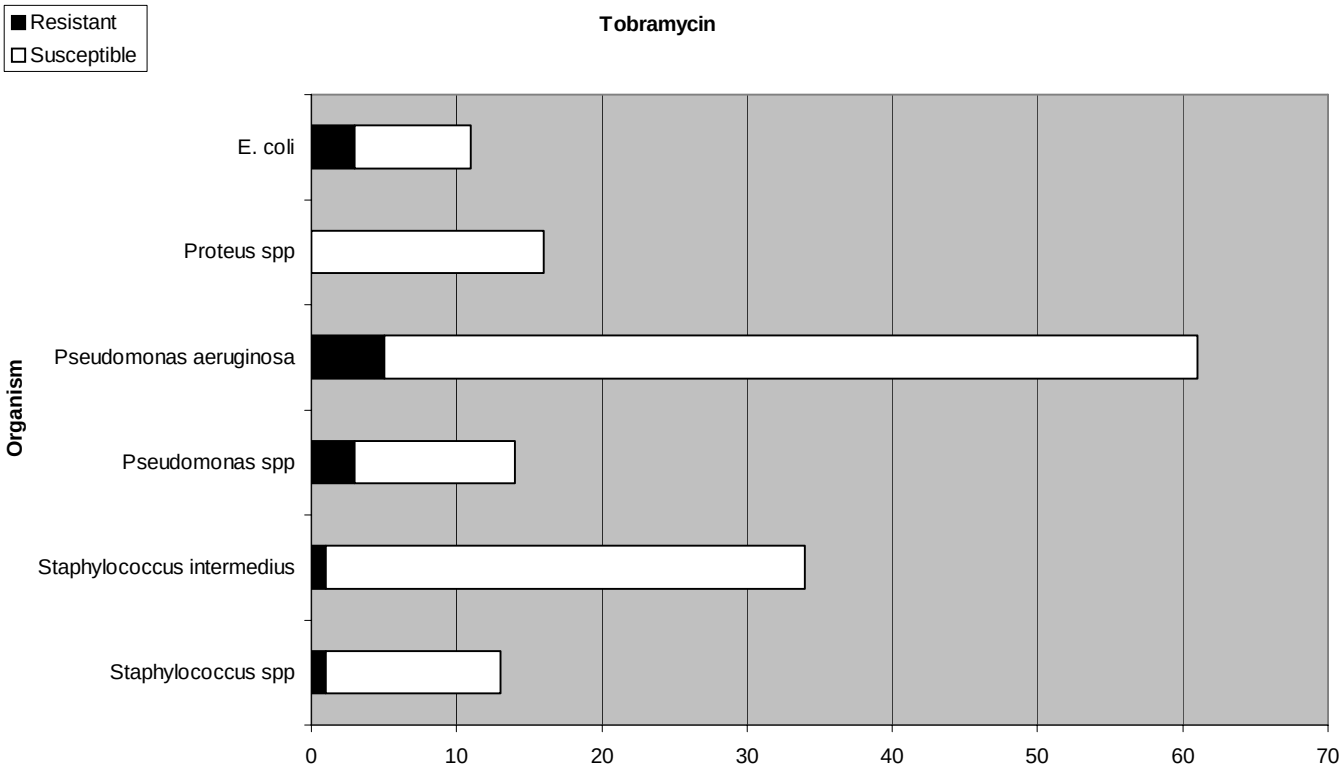

| KANAMYCIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Corynebacterium spp** | **3** | **12** | **15** | **80.0** |
| **E. coli** | **29** | **142** | **171** | **83.0** |
| **Enterobacter spp** | **1** | **19** | **20** | **95.0** |
| **Enterococcus spp** | **18** | **20** | **38** | **52.6** |
| **Klebsiella spp** | **8** | **33** | **41** | **80.5** |
| **Nonfermenter** | **2** | **23** | **25** | **92.0** |
| **Pasteurella spp** | **2** | **24** | **26** | **92.3** |
| **Proteus spp** | **3** | **55** | **58** | **94.8** |
| **Pseudomonas aeruginosa** | **94** | **1** | **95** | **1.1** |
| **Pseudomonas spp** | **17** | **15** | **32** | **46.9** |
| **Staphylococcus coagulase pos** | **5** | **5** | **10** | **50.0** |
| **Staphylococcus epidermidis** | **1** | **12** | **13** | **92.3** |
| **Staphylococcus intermedius** | **13** | **97** | **110** | **88.2** |
| **Staphylococcus spp** | **8** | **36** | **44** | **81.8** |
| **Streptococcus spp, beta hemolytic** | **23** | **5** | **28** | **17.9** |
| **Streptococcus spp, gamma hemolytic** | **5** | **7** | **12** | **58.3** |

4. Neomycin




| NEOMYCIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **E. coli** | | **12** | **12** | **100.0** |
| **Proteus spp** | | **17** | **17** | **100.0** |
| **Pseudomonas aeruginosa** | **35** | **28** | **63** | **44.4** |
| **Pseudomonas spp** | **2** | **11** | **13** | **84.6** |
| **Staphylococcus intermedius** | **1** | **37** | **38** | **97.4** |
| **Staphylococcus spp** | **1** | **12** | **13** | **92.3** |

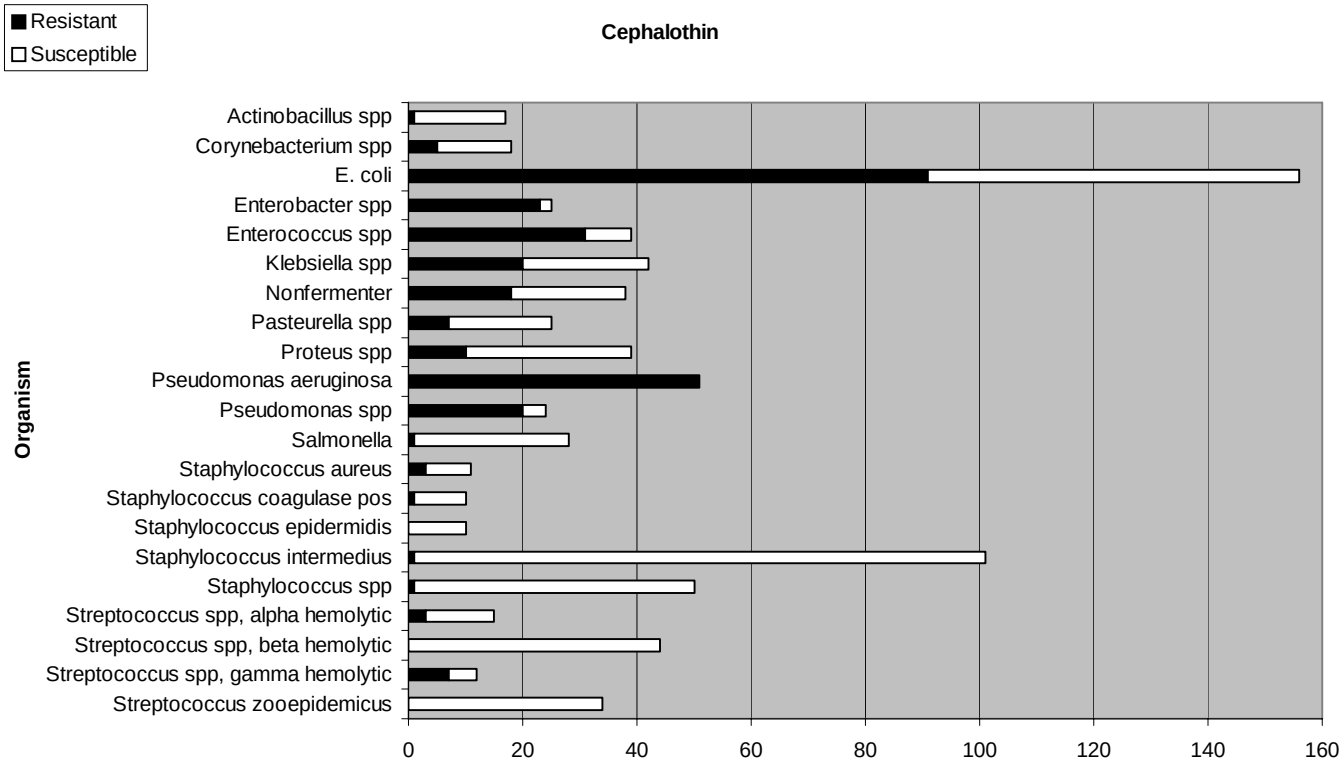
5. Tobramycin




| TOBRAMYCIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **E. coli** | **3** | **8** | **11** | **72.7** |
| **Proteus spp** | | **16** | **16** | **100.0** |
| **Pseudomonas aeruginosa** | **5** | **56** | **61** | **91.8** |
| **Pseudomonas spp** | **3** | **11** | **14** | **78.6** |
| **Staphylococcus intermedius** | **1** | **33** | **34** | **97.1** |
| **Staphylococcus spp** | **1** | **12** | **13** | **92.3** |

B. First generation Cephalosporin

1. Cepahlothin



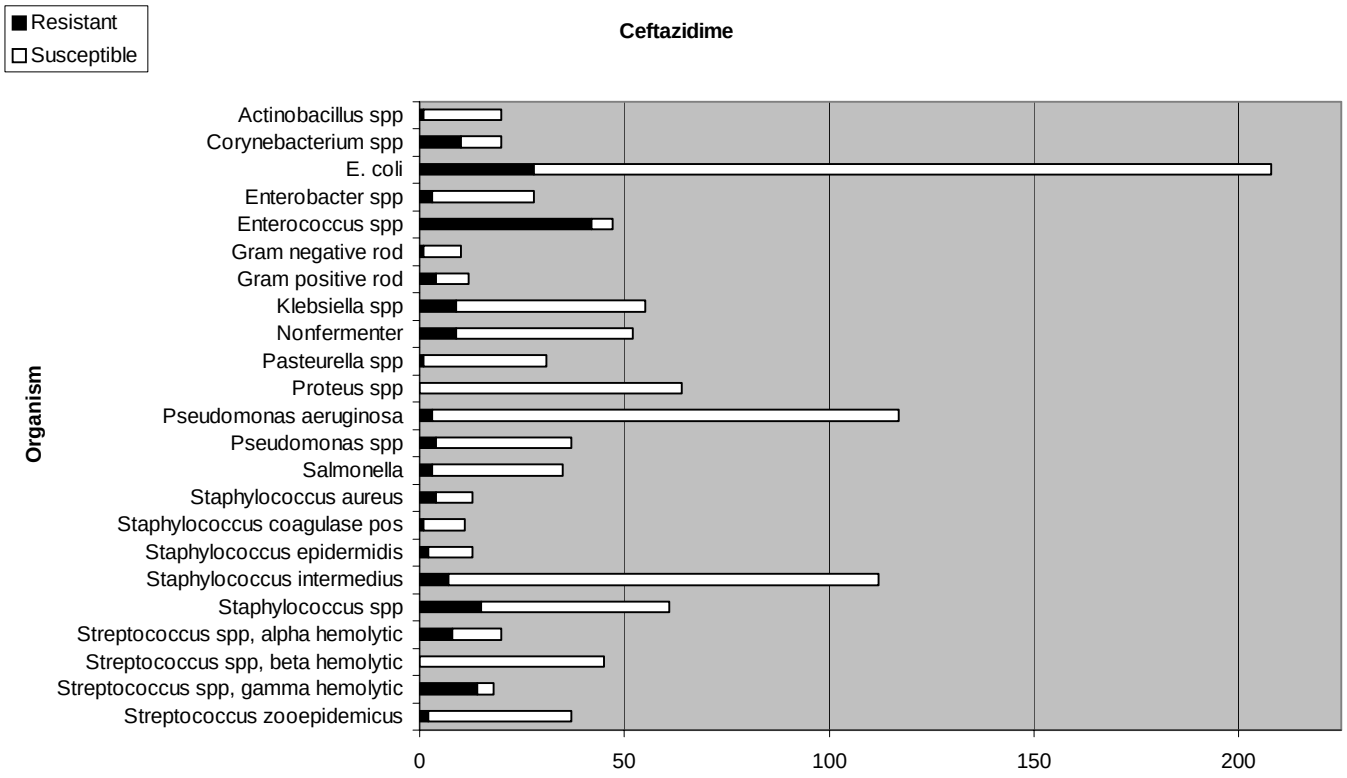

| CEPHALOTHIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **16** | **17** | **94.1** |
| **Corynebacterium spp** | **5** | **13** | **18** | **72.2** |
| **E. coli** | **91** | **65** | **156** | **41.7** |
| **Enterobacter spp** | **23** | **2** | **25** | **8.0** |
| **Enterococcus spp** | **31** | **8** | **40** | **20.0** |
| **Klebsiella spp** | **20** | **22** | **42** | **52.4** |
| **Nonfermenter** | **18** | **20** | **38** | **52.6** |
| **Pasteurella spp** | **7** | **18** | **25** | **72.0** |
| **Proteus spp** | **10** | **29** | **39** | **74.4** |
| **Pseudomonas aeruginosa** | **51** | | **51** | **0.0** |
| **Pseudomonas spp** | **20** | **4** | **24** | **16.7** |
| **Salmonella** | **1** | **27** | **28** | **96.4** |
| **Staphylococcus aureus** | **3** | **8** | **11** | **72.7** |
| **Staphylococcus coagulase pos** | **1** | **9** | **10** | **90.0** |
| **Staphylococcus epidermidis** | | **10** | **10** | **100.0** |
| **Staphylococcus intermedius** | **1** | **100** | **101** | **99.0** |
| **Staphylococcus spp** | **1** | **49** | **51** | **96.1** |
| **Streptococcus spp, alpha hemolytic** | **3** | **12** | **15** | **80.0** |
| **Streptococcus spp, beta hemolytic** | | **44** | **44** | **100.0** |
| **Streptococcus spp, gamma hemolytic** | **7** | **5** | **12** | **41.7** |
| **Streptococcus zooepidemicus** | | **34** | **34** | **100.0** |

C. Third generation Cephalosporin:

1. Cefotaxime

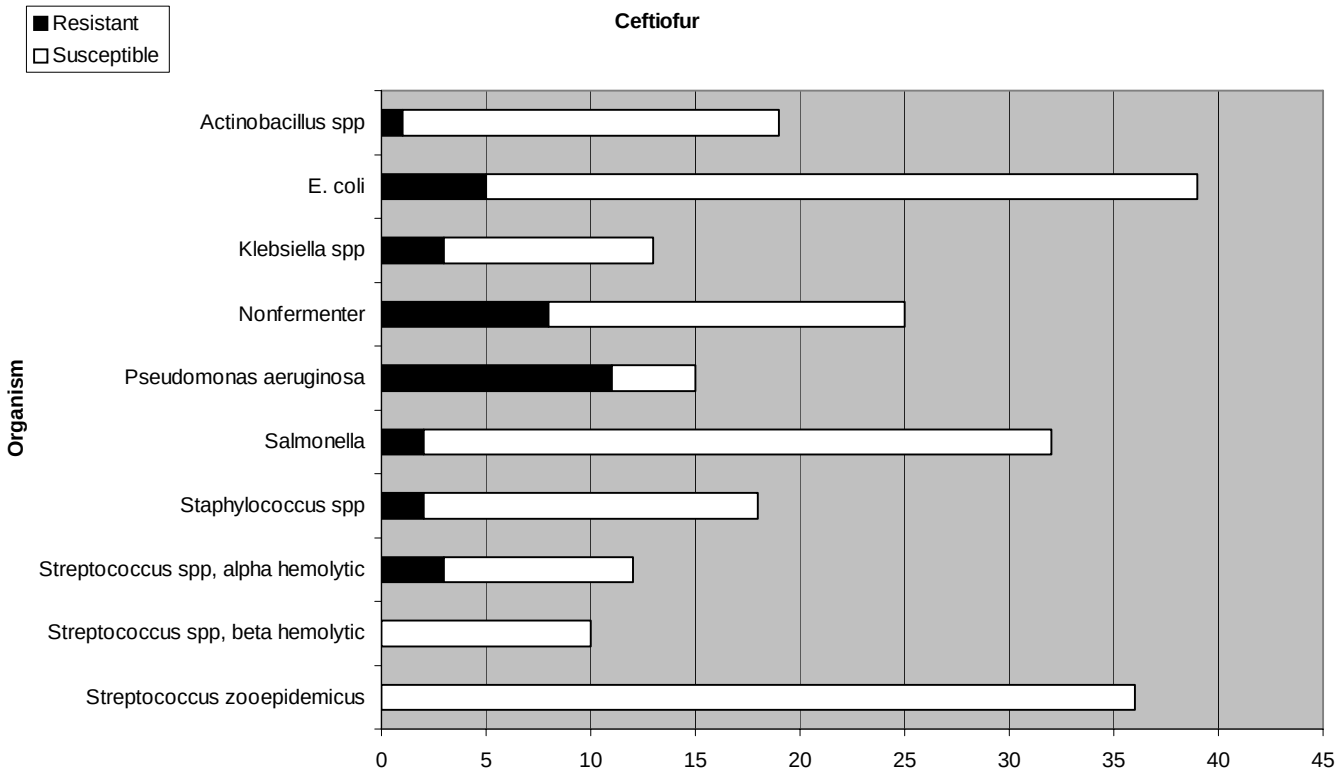
| CEFOTAXIME | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **E. coli** | | **21** | **21** | **100.0** |

2. Ceftazidime



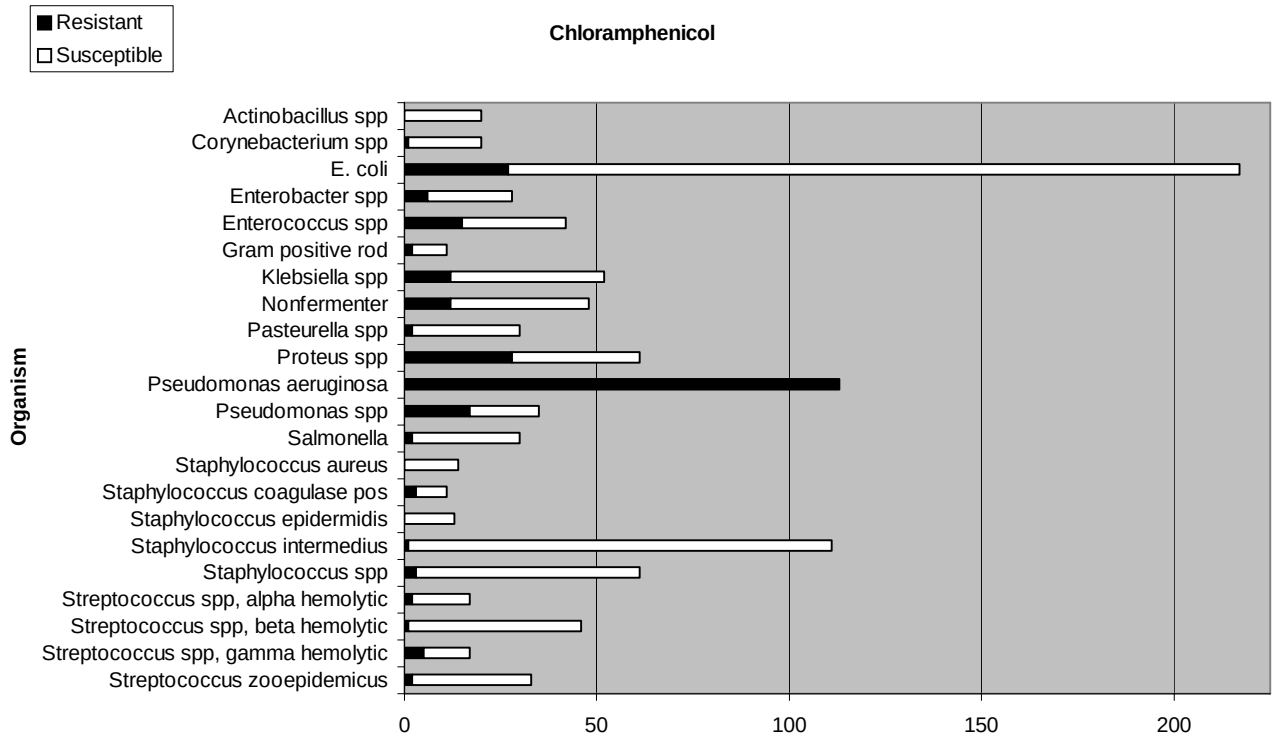

| CEFTAZIDIME | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **19** | **20** | **95.0** |
| **Corynebacterium spp** | **10** | **10** | **20** | **50.0** |
| **E. coli** | **28** | **180** | **208** | **86.5** |
| **Enterobacter spp** | **3** | **25** | **28** | **89.3** |
| **Enterococcus spp** | **42** | **5** | **47** | **10.6** |
| **Gram negative rod** | **1** | **9** | **10** | **90.0** |
| **Gram positive rod** | **4** | **8** | **12** | **66.7** |
| **Klebsiella spp** | **9** | **46** | **55** | **83.6** |
| **Nonfermenter** | **9** | **43** | **52** | **82.7** |
| **Pasteurella spp** | **1** | **30** | **31** | **96.8** |
| **Proteus spp** | | **64** | **64** | **100.0** |
| **Pseudomonas aeruginosa** | **3** | **114** | **117** | **97.4** |
| **Pseudomonas spp** | **4** | **33** | **37** | **89.2** |
| **Salmonella** | **3** | **32** | **35** | **91.4** |
| **Staphylococcus aureus** | **4** | **9** | **13** | **69.2** |
| **Staphylococcus coagulase pos** | **1** | **10** | **11** | **90.9** |
| **Staphylococcus epidermidis** | **2** | **11** | **13** | **84.6** |
| **Staphylococcus intermedius** | **7** | **105** | **112** | **93.8** |
| **Staphylococcus spp** | **15** | **46** | **61** | **75.4** |
| **Streptococcus spp, alpha hemolytic** | **8** | **12** | **20** | **60.0** |
| **Streptococcus spp, beta hemolytic** | | **45** | **46** | **97.8** |
| **Streptococcus spp, gamma hemolytic** | **14** | **4** | **18** | **22.2** |
| **Streptococcus zooepidemicus** | **2** | **35** | **37** | **94.6** |

3. Ceftiofur




| CEFTIOFUR | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **18** | **19** | **94.7** |
| **E. coli** | **5** | **34** | **39** | **87.2** |
| **Klebsiella spp** | **3** | **10** | **13** | **76.9** |
| **Nonfermenter** | **8** | **17** | **25** | **68.0** |
| **Pseudomonas aeruginosa** | **11** | **4** | **15** | **26.7** |
| **Salmonella** | **2** | **30** | **32** | **93.8** |
| **Staphylococcus spp** | **2** | **16** | **18** | **88.9** |
| **Streptococcus spp, alpha hemolytic** | **3** | **9** | **12** | **75.0** |
| **Streptococcus spp, beta hemolytic** | | **10** | **10** | **100.0** |
| **Streptococcus zooepidemicus** | | **36** | **36** | **100.0** |

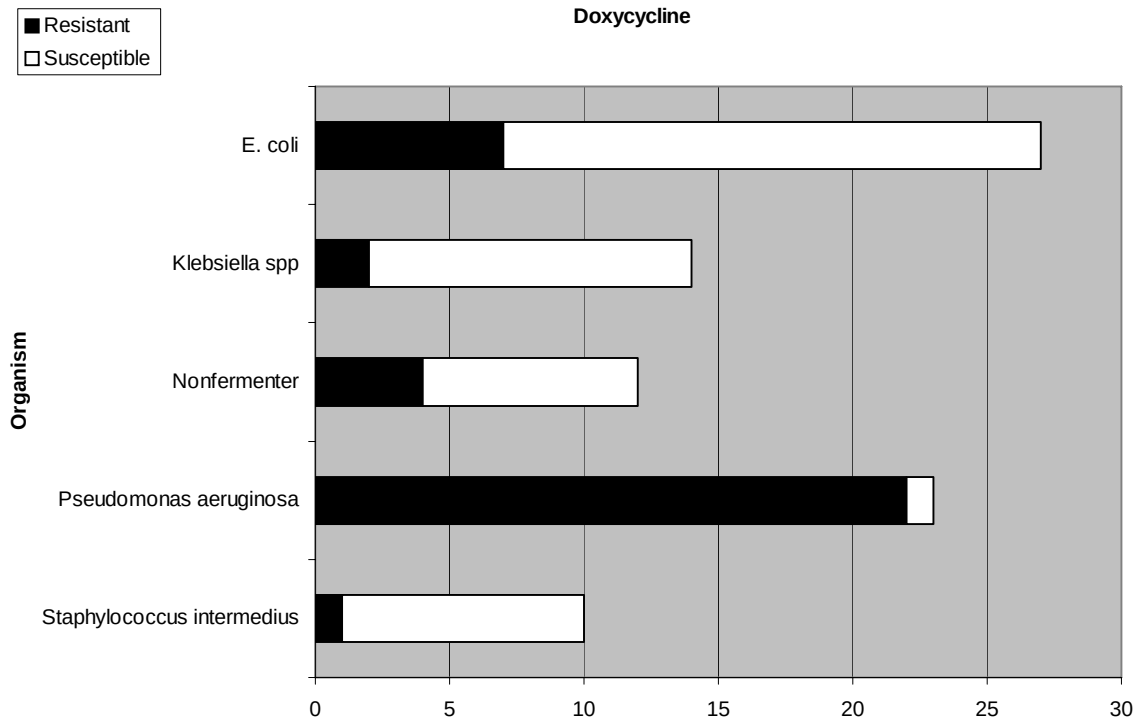
D. Chloramphenicol




| CHLORAMPHENICOL | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | | **20** | **20** | **100.0** |
| **Corynebacterium spp** | **1** | **19** | **20** | **95.0** |
| **E. coli** | **27** | **190** | **217** | **87.6** |
| **Enterobacter spp** | **6** | **22** | **28** | **78.6** |
| **Enterococcus spp** | **15** | **27** | **42** | **64.3** |
| **Gram positive rod** | **2** | **9** | **11** | **81.8** |
| **Klebsiella spp** | **12** | **40** | **52** | **76.9** |
| **Nonfermenter** | **12** | **36** | **48** | **75.0** |
| **Pasteurella spp** | **2** | **28** | **30** | **93.3** |
| **Proteus spp** | **28** | **33** | **61** | **54.1** |
| **Pseudomonas aeruginosa** | **113** | | **113** | **0.0** |
| **Pseudomonas spp** | **17** | **18** | **35** | **51.4** |
| **Salmonella** | **2** | **28** | **30** | **93.3** |
| **Staphylococcus aureus** | | **14** | **14** | **100.0** |
| **Staphylococcus coagulase pos** | **3** | **8** | **11** | **72.7** |
| **Staphylococcus epidermidis** | | **13** | **13** | **100.0** |
| **Staphylococcus intermedius** | **1** | **110** | **111** | **99.1** |
| **Staphylococcus spp** | **3** | **58** | **61** | **95.1** |
| **Streptococcus spp, alpha hemolytic** | **2** | **15** | **17** | **88.2** |
| **Streptococcus spp, beta hemolytic** | **1** | **45** | **46** | **97.8** |
| **Streptococcus spp, gamma hemolytic** | **5** | **12** | **17** | **70.6** |
| **Streptococcus zooepidemicus** | **2** | **31** | **33** | **93.9** |

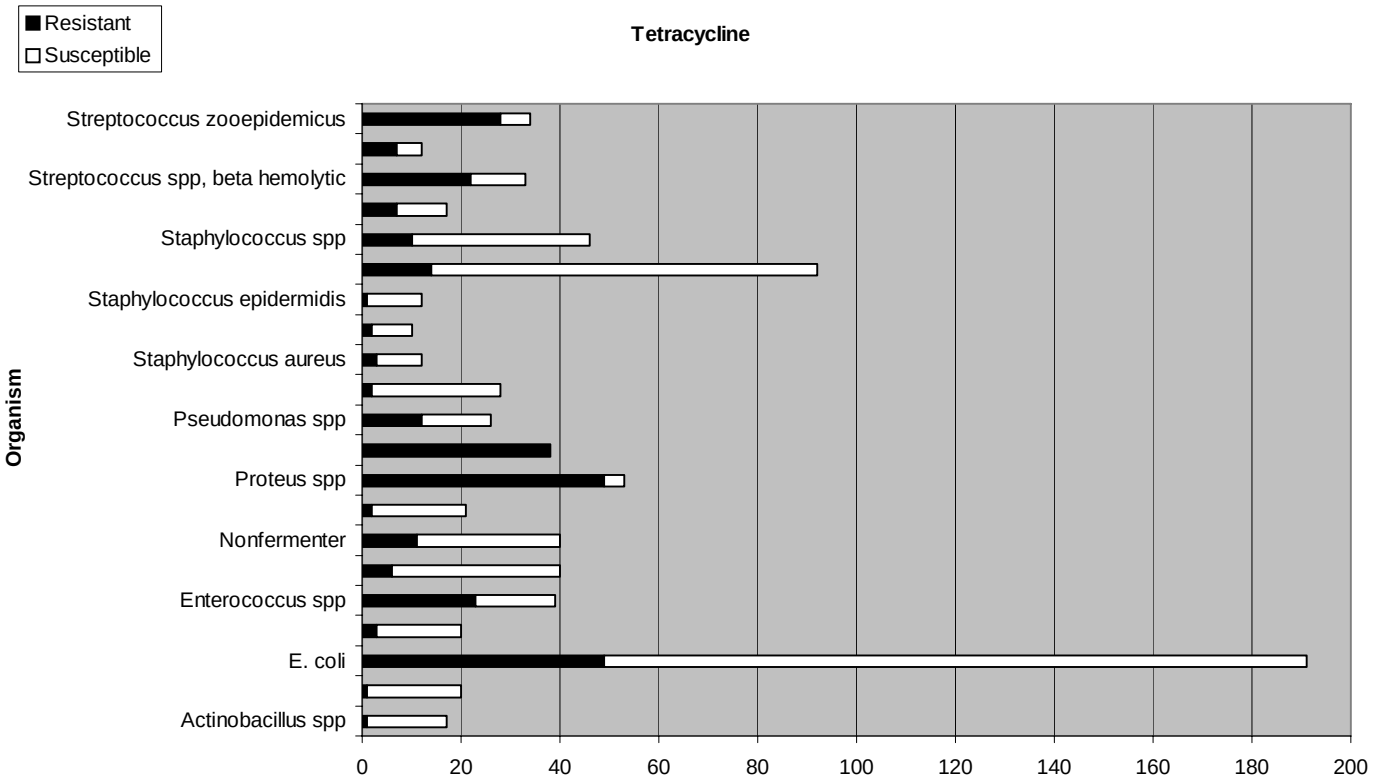
E. Cyclines

1. Doxycycline




| DOXYCYCLINE | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **E. coli** | **7** | **20** | **27** | **74.1** |
| **Klebsiella spp** | **2** | **12** | **14** | **85.7** |
| **Nonfermenter** | **4** | **8** | **12** | **66.7** |
| **Pseudomonas aeruginosa** | **22** | **1** | **23** | **4.3** |
| **Staphylococcus intermedius** | **1** | **9** | **10** | **90.0** |

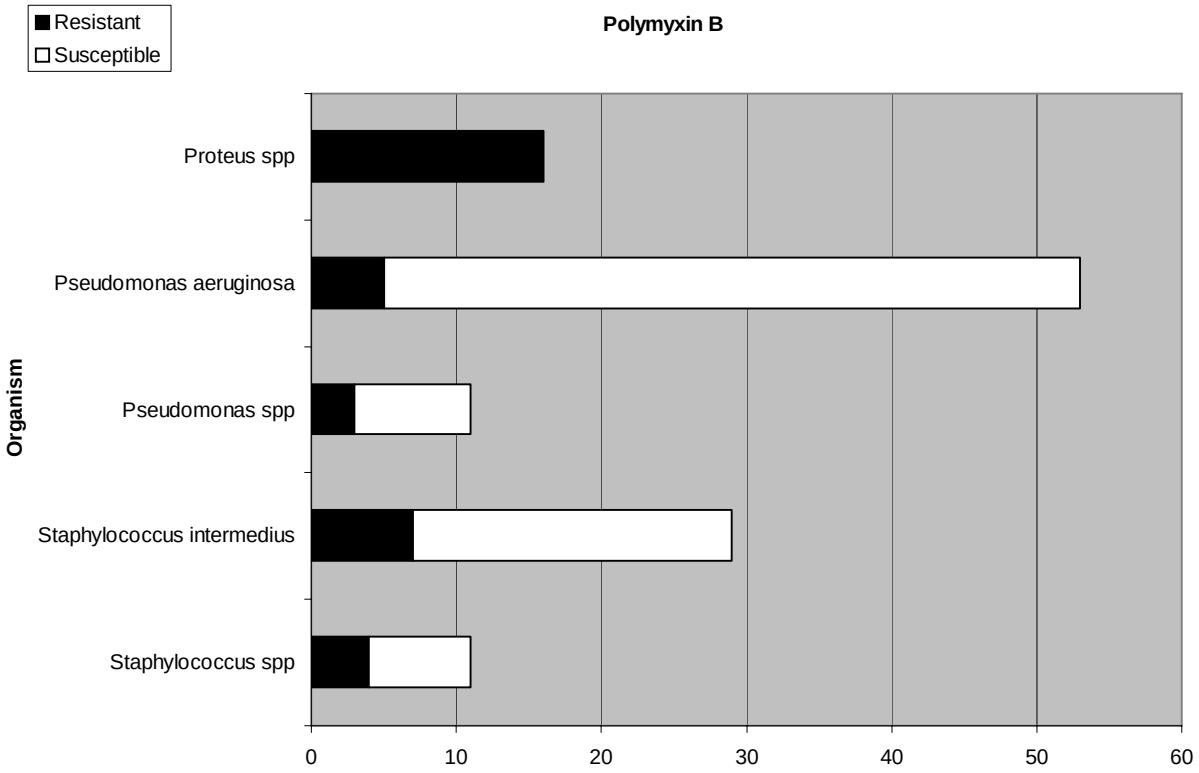
2. Tetracycline




| TETRACYCLINE | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **16** | **17** | **94.1** |
| **Corynebacterium spp** | **1** | **19** | **20** | **95.0** |
| **E. coli** | **49** | **142** | **191** | **74.3** |
| **Enterobacter spp** | **3** | **17** | **20** | **85.0** |
| **Enterococcus spp** | **23** | **16** | **39** | **41.0** |
| **Klebsiella spp** | **6** | **34** | **40** | **85.0** |
| **Nonfermenter** | **11** | **29** | **40** | **72.5** |
| **Pasteurella spp** | **2** | **19** | **21** | **90.5** |
| **Proteus spp** | **49** | **4** | **53** | **7.5** |
| **Pseudomonas aeruginosa** | **38** | | **38** | **0.0** |
| **Pseudomonas spp** | **12** | **14** | **26** | **53.8** |
| **Salmonella** | **2** | **26** | **28** | **92.9** |
| **Staphylococcus aureus** | **3** | **9** | **12** | **75.0** |
| **Staphylococcus coagulase pos** | **2** | **8** | **10** | **80.0** |
| **Staphylococcus epidermidis** | **1** | **11** | **12** | **91.7** |
| **Staphylococcus intermedius** | **14** | **78** | **92** | **84.8** |
| **Staphylococcus spp** | **10** | **36** | **46** | **78.3** |
| **Streptococcus spp, alpha hemolytic** | **7** | **10** | **17** | **58.8** |
| **Streptococcus spp, beta hemolytic** | **22** | **11** | **33** | **33.3** |
| **Streptococcus spp, gamma hemolytic** | **7** | **5** | **12** | **41.7** |
| **Streptococcus zooepidemicus** | **28** | **6** | **34** | **17.6** |

F. Glycopolypeptide

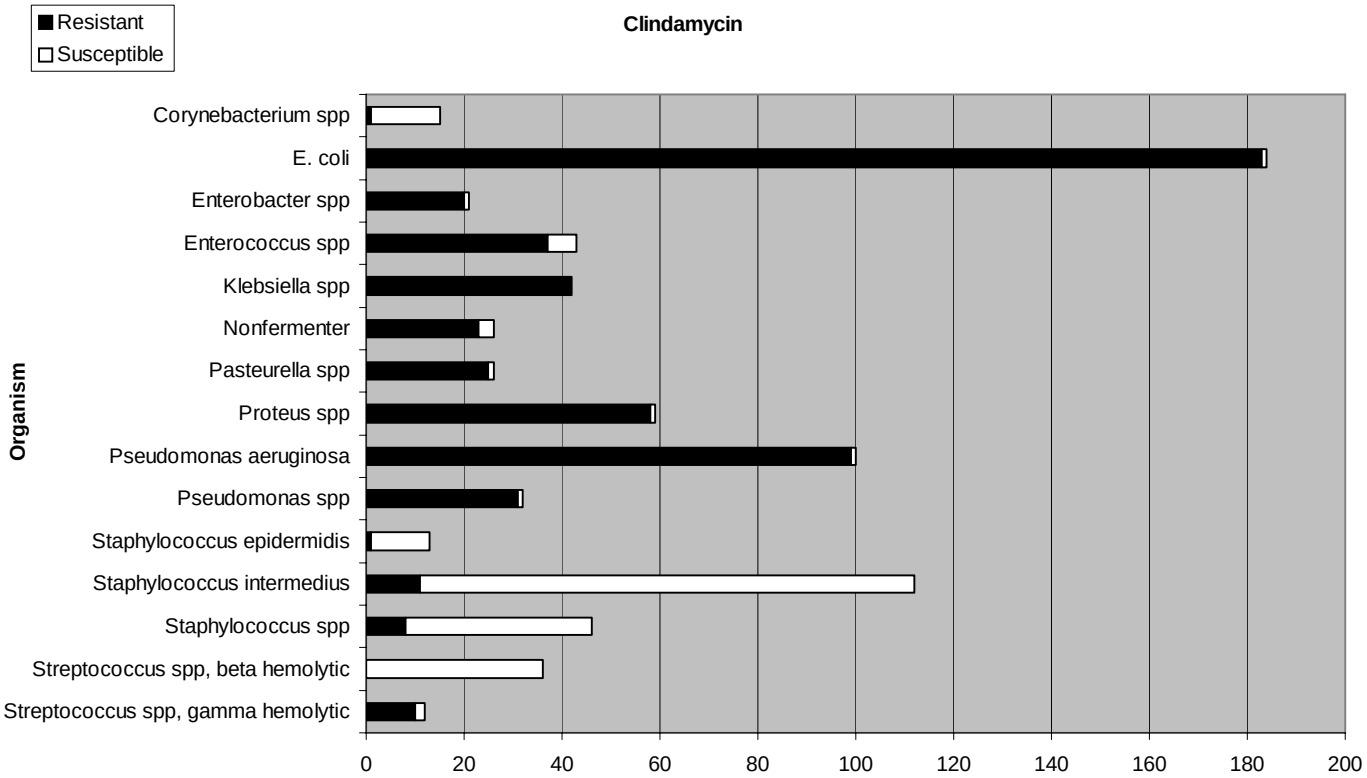
1. Polymyxin B




| POLYMYXIN B | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Proteus spp** | **16** | | **16** | **0.0** |
| **Pseudomonas aeruginosa** | **5** | **48** | **53** | **90.6** |
| **Pseudomonas spp** | **3** | **8** | **11** | **72.7** |
| **Staphylococcus intermedius** | **7** | **22** | **29** | **75.9** |
| **Staphylococcus spp** | **4** | **7** | **11** | **63.6** |

G. Lincosamides

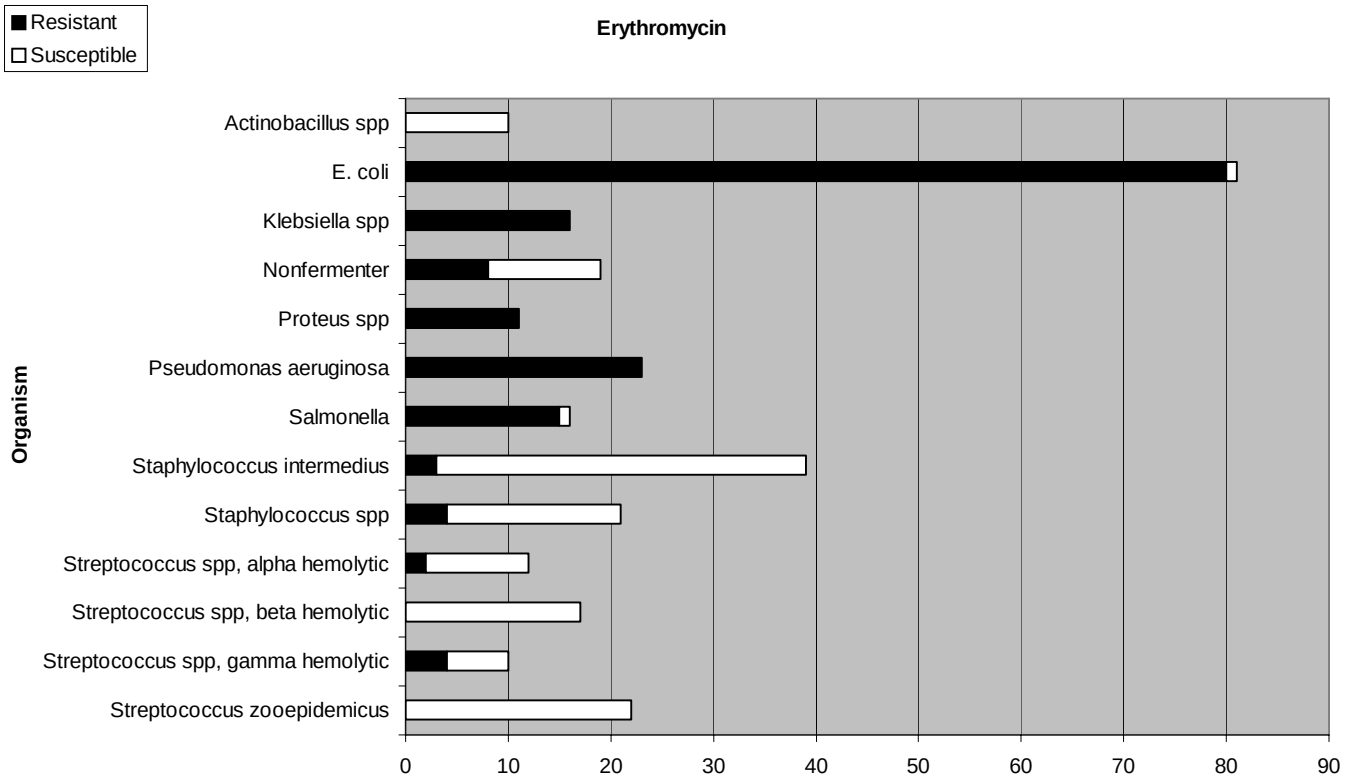
1. Clindamycin




| CLINDAMYCIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Corynebacterium spp** | **1** | **14** | **15** | **93.3** |
| **E. coli** | **183** | **1** | **184** | **0.5** |
| **Enterobacter spp** | **20** | **1** | **21** | **4.8** |
| **Enterococcus spp** | **37** | **6** | **43** | **14.0** |
| **Klebsiella spp** | **42** | | **42** | **0.0** |
| **Nonfermenter** | **23** | **3** | **26** | **11.5** |
| **Pasteurella spp** | **25** | **1** | **26** | **3.8** |
| **Proteus spp** | **58** | **1** | **59** | **1.7** |
| **Pseudomonas aeruginosa** | **99** | **1** | **100** | **1.0** |
| **Pseudomonas spp** | **31** | **1** | **32** | **3.1** |
| **Staphylococcus epidermidis** | **1** | **12** | **13** | **92.3** |
| **Staphylococcus intermedius** | **11** | **101** | **112** | **90.2** |
| **Staphylococcus spp** | **8** | **38** | **46** | **82.6** |
| **Streptococcus spp, beta hemolytic** | | **36** | **36** | **100.0** |
| **Streptococcus spp, gamma hemolytic** | **10** | **2** | **12** | **16.7** |

H. Macrolides

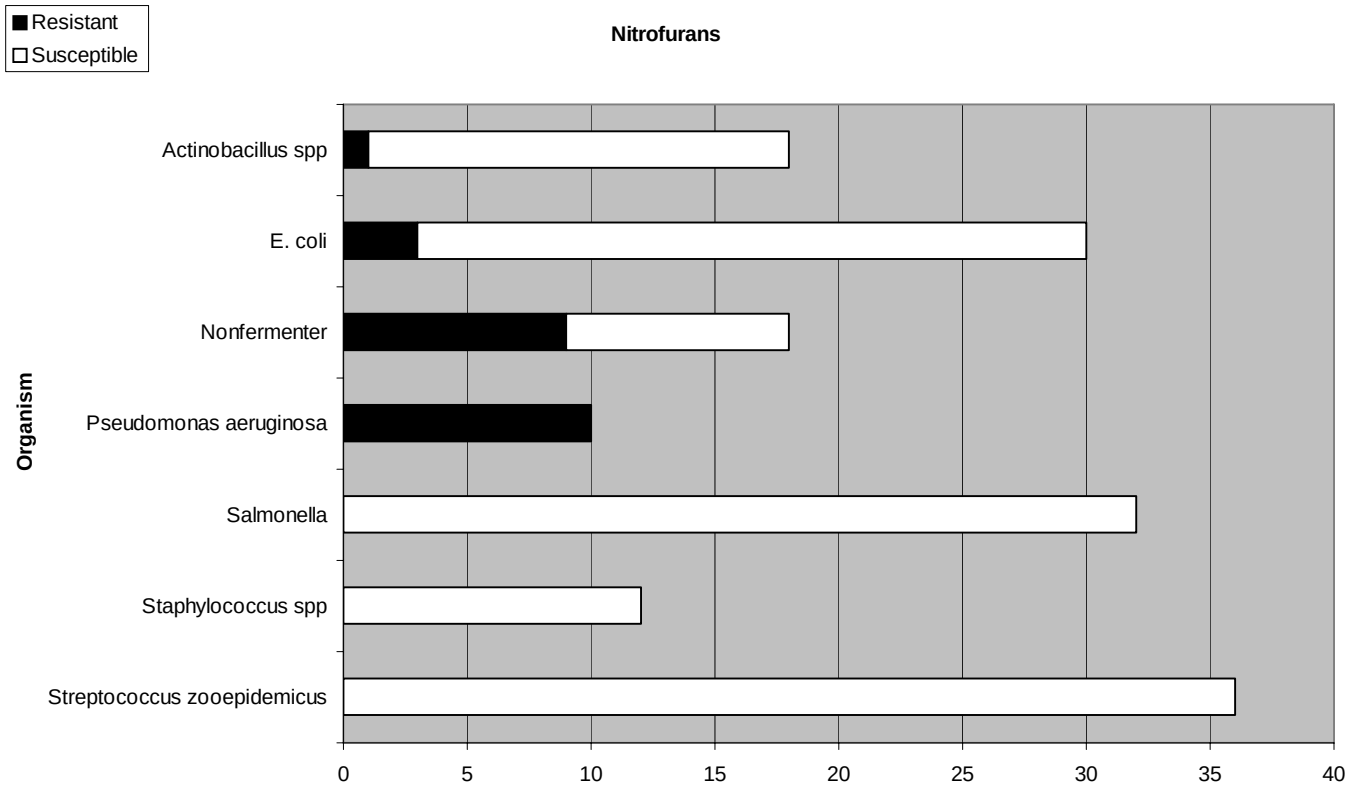
1. Erythromycin




| ERYTHROMYCIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | | **10** | **10** | **100.0** |
| **E. coli** | **80** | **1** | **81** | **1.2** |
| **Klebsiella spp** | **16** | | **16** | **0.0** |
| **Nonfermenter** | **8** | **11** | **19** | **57.9** |
| **Proteus spp** | **11** | | **11** | **0.0** |
| **Pseudomonas aeruginosa** | **23** | | **23** | **0.0** |
| **Salmonella** | **15** | **1** | **16** | **6.3** |
| **Staphylococcus intermedius** | **3** | **36** | **39** | **92.3** |
| **Staphylococcus spp** | **4** | **17** | **21** | **81.0** |
| **Streptococcus spp, alpha hemolytic** | **2** | **10** | **12** | **83.3** |
| **Streptococcus spp, beta hemolytic** | | **17** | **17** | **100.0** |
| **Streptococcus spp, gamma hemolytic** | **4** | **6** | **10** | **60.0** |
| **Streptococcus zooepidemicus** | | **22** | **22** | **100.0** |

I. Nitrofurans

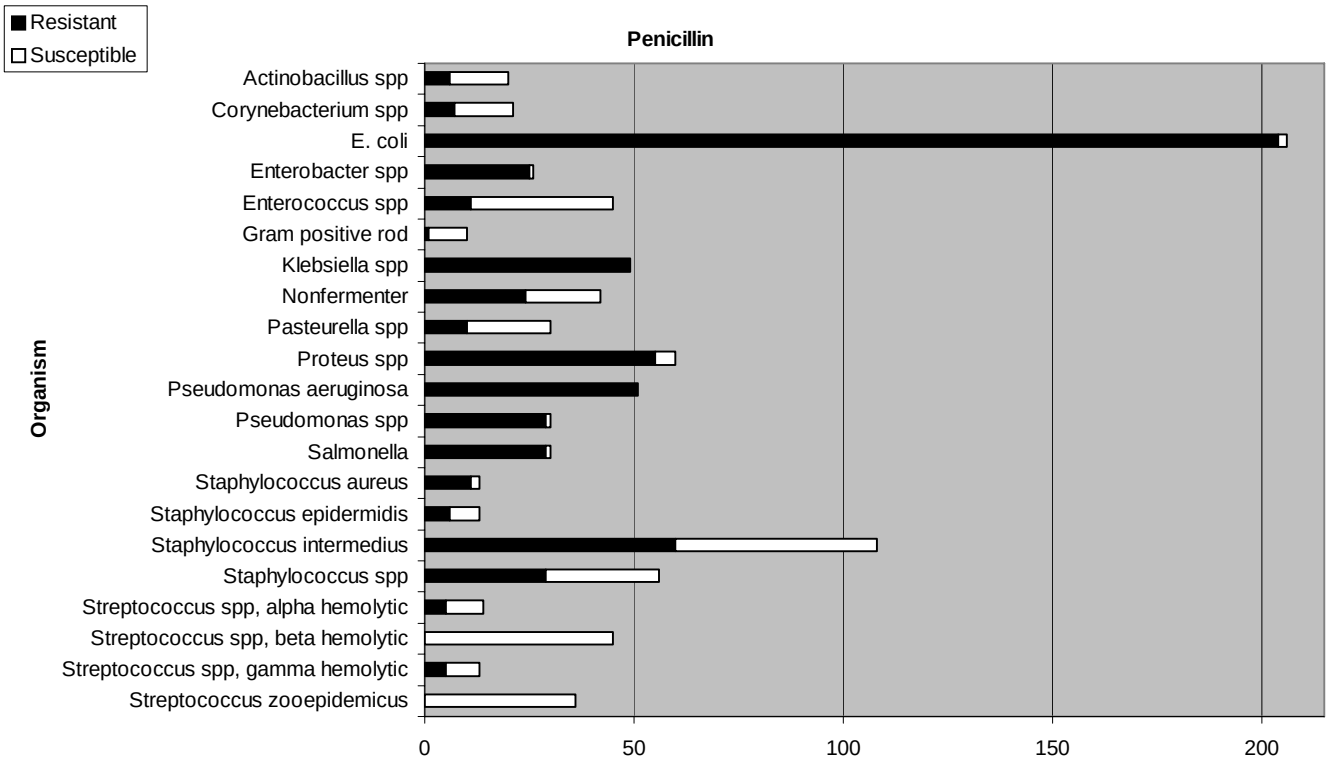
1. Nitrofurans




| NITROFURANS | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **1** | **17** | **18** | **94.4** |
| **E. coli** | **3** | **27** | **30** | **90.0** |
| **Nonfermenter** | **9** | **9** | **18** | **50.0** |
| **Pseudomonas aeruginosa** | **10** | | **10** | **0.0** |
| **Salmonella** | | **32** | **32** | **100.0** |
| **Staphylococcus spp** | | **12** | **12** | **100.0** |
| **Streptococcus zooepidemicus** | | **36** | **36** | **100.0** |

J. Penicillin

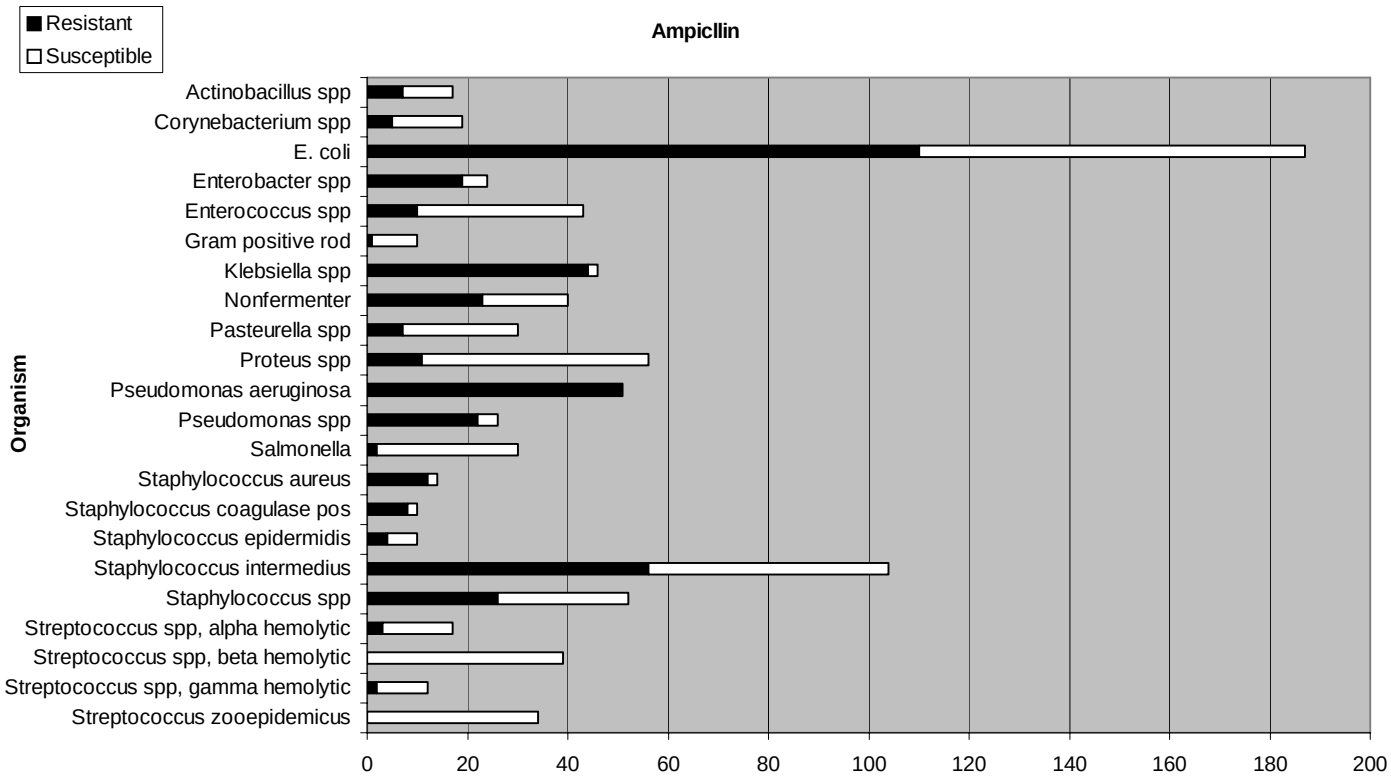
1. Penicillin




| PENICILLIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **6** | **14** | **20** | **70.0** |
| **Corynebacterium spp** | **7** | **14** | **21** | **66.7** |
| **E. coli** | **204** | **2** | **206** | **1.0** |
| **Enterobacter spp** | **25** | **1** | **26** | **3.8** |
| **Enterococcus spp** | **11** | **34** | **45** | **75.6** |
| **Gram positive rod** | **1** | **9** | **10** | **90.0** |
| **Klebsiella spp** | **49** | | **49** | **0.0** |
| **Nonfermenter** | **24** | **18** | **42** | **42.9** |
| **Pasteurella spp** | **10** | **20** | **30** | **66.7** |
| **Proteus spp** | **55** | **5** | **60** | **8.3** |
| **Pseudomonas aeruginosa** | **51** | | **51** | **0.0** |
| **Pseudomonas spp** | **29** | **1** | **30** | **3.3** |
| **Salmonella** | **29** | **1** | **30** | **3.3** |
| **Staphylococcus aureus** | **11** | **2** | **13** | **15.4** |
| **Staphylococcus epidermidis** | **6** | **7** | **13** | **53.8** |
| **Staphylococcus intermedius** | **60** | **48** | **108** | **44.4** |
| **Staphylococcus spp** | **29** | **27** | **56** | **48.2** |
| **Streptococcus spp, alpha hemolytic** | **5** | **9** | **15** | **60.0** |
| **Streptococcus spp, beta hemolytic** | | **45** | **46** | **97.8** |
| **Streptococcus spp, gamma hemolytic** | **5** | **8** | **13** | **61.5** |
| **Streptococcus zooepidemicus** | | **36** | **36** | **100.0** |

K. Penicillin Amino

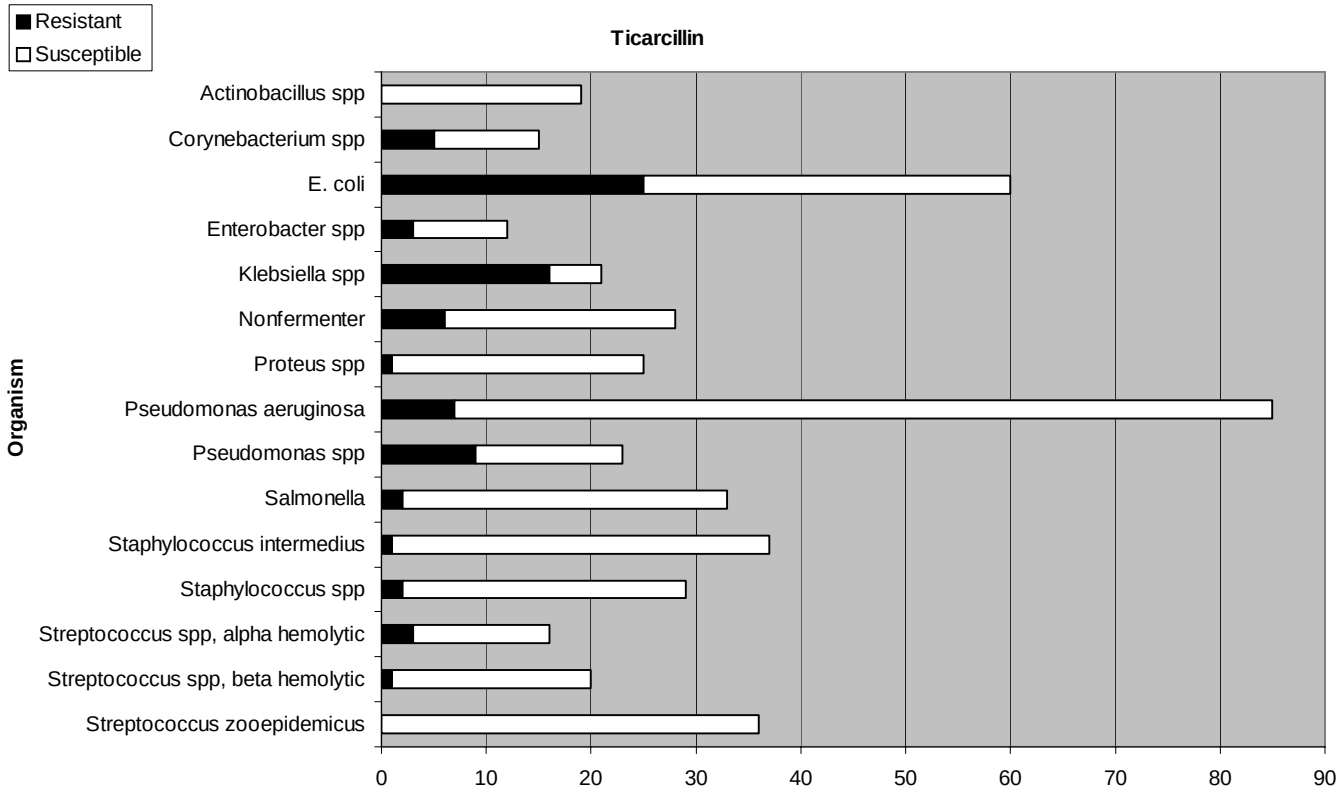
1. Ampicillin




| AMPICILLIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **7** | **10** | **17** | **58.8** |
| **Corynebacterium spp** | **5** | **14** | **19** | **73.7** |
| **E. coli** | **110** | **77** | **187** | **41.2** |
| **Enterobacter spp** | **19** | **5** | **24** | **20.8** |
| **Enterococcus spp** | **10** | **33** | **43** | **76.7** |
| **Gram positive rod** | **1** | **9** | **10** | **90.0** |
| **Klebsiella spp** | **44** | **2** | **46** | **4.3** |
| **Nonfermenter** | **23** | **17** | **40** | **42.5** |
| **Pasteurella spp** | **7** | **23** | **30** | **76.7** |
| **Proteus spp** | **11** | **45** | **56** | **80.4** |
| **Pseudomonas aeruginosa** | **51** | | **51** | **0.0** |
| **Pseudomonas spp** | **22** | **4** | **26** | **15.4** |
| **Salmonella** | **2** | **28** | **30** | **93.3** |
| **Staphylococcus aureus** | **12** | **2** | **14** | **14.3** |
| **Staphylococcus coagulase pos** | **8** | **2** | **10** | **20.0** |
| **Staphylococcus epidermidis** | **4** | **6** | **10** | **60.0** |
| **Staphylococcus intermedius** | **56** | **48** | **104** | **46.2** |
| **Staphylococcus spp** | **26** | **26** | **52** | **50.0** |
| **Streptococcus spp, alpha hemolytic** | **3** | **14** | **18** | **77.8** |
| **Streptococcus spp, beta hemolytic** | | **39** | **40** | **97.5** |
| **Streptococcus spp, gamma hemolytic** | **2** | **10** | **12** | **83.3** |
| **Streptococcus zooepidemicus** | | **34** | **34** | **100.0** |

L. Penicillin Carboxy

1. Ticarcillin




| TICARCILLIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | | **19** | **19** | **100.0** |
| **Corynebacterium spp** | **5** | **10** | **15** | **66.7** |
| **E. coli** | **25** | **35** | **60** | **58.3** |
| **Enterobacter spp** | **3** | **9** | **12** | **75.0** |
| **Klebsiella spp** | **16** | **5** | **21** | **23.8** |
| **Nonfermenter** | **6** | **22** | **28** | **78.6** |
| **Proteus spp** | **1** | **24** | **25** | **96.0** |
| **Pseudomonas aeruginosa** | **7** | **78** | **85** | **91.8** |
| **Pseudomonas spp** | **9** | **14** | **23** | **60.9** |
| **Salmonella** | **2** | **31** | **33** | **93.9** |
| **Staphylococcus intermedius** | **1** | **36** | **37** | **97.3** |
| **Staphylococcus spp** | **2** | **27** | **29** | **93.1** |
| **Streptococcus spp, alpha hemolytic** | **3** | **13** | **16** | **81.3** |
| **Streptococcus spp, beta hemolytic** | **1** | **19** | **20** | **95.0** |
| **Streptococcus zooepidemicus** | | **36** | **37** | **97.3** |

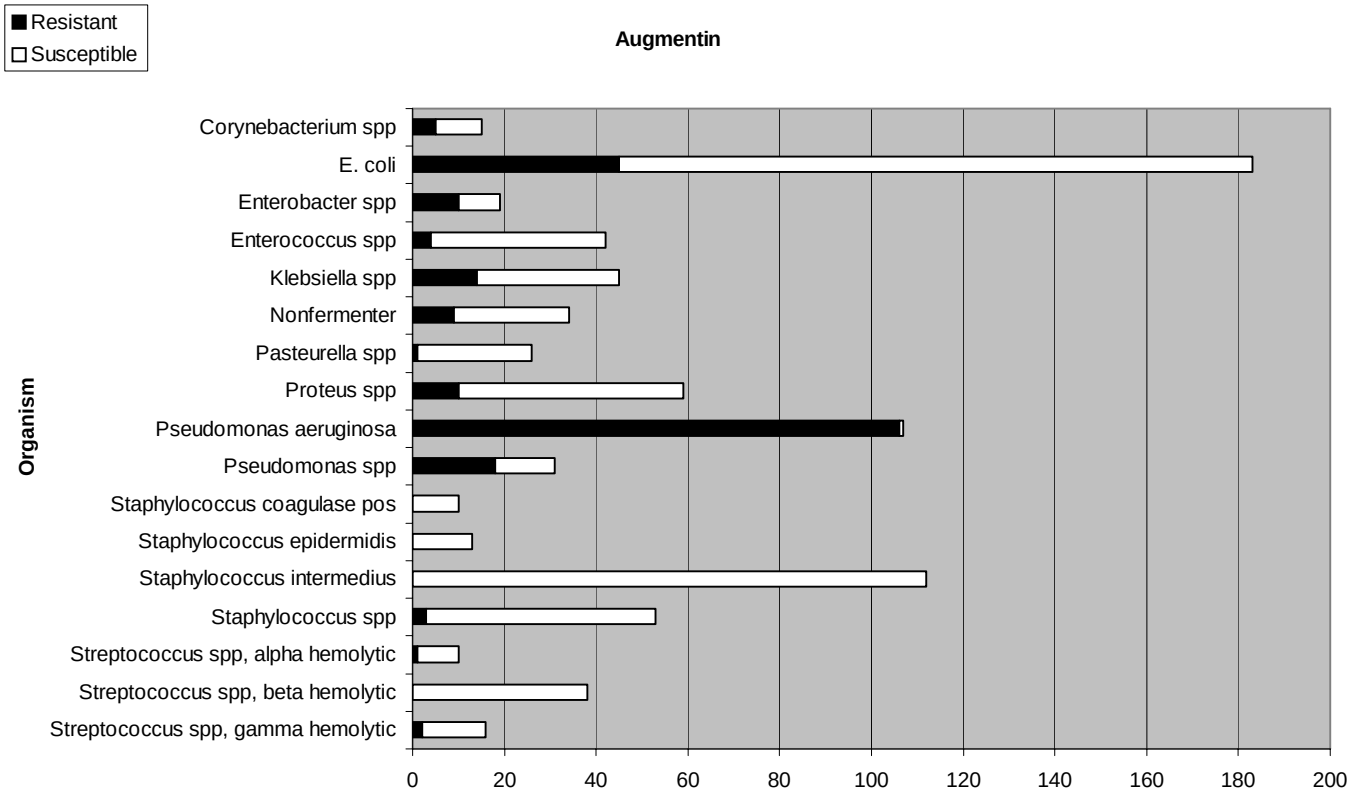
M. Penicillin Ureido

1. Piperacillin

| PIPERACILLIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Pseudomonas aeruginosa** | **1** | **39** | **40** | **97.5** |

N. Penicillin and beta lactam inhibitor

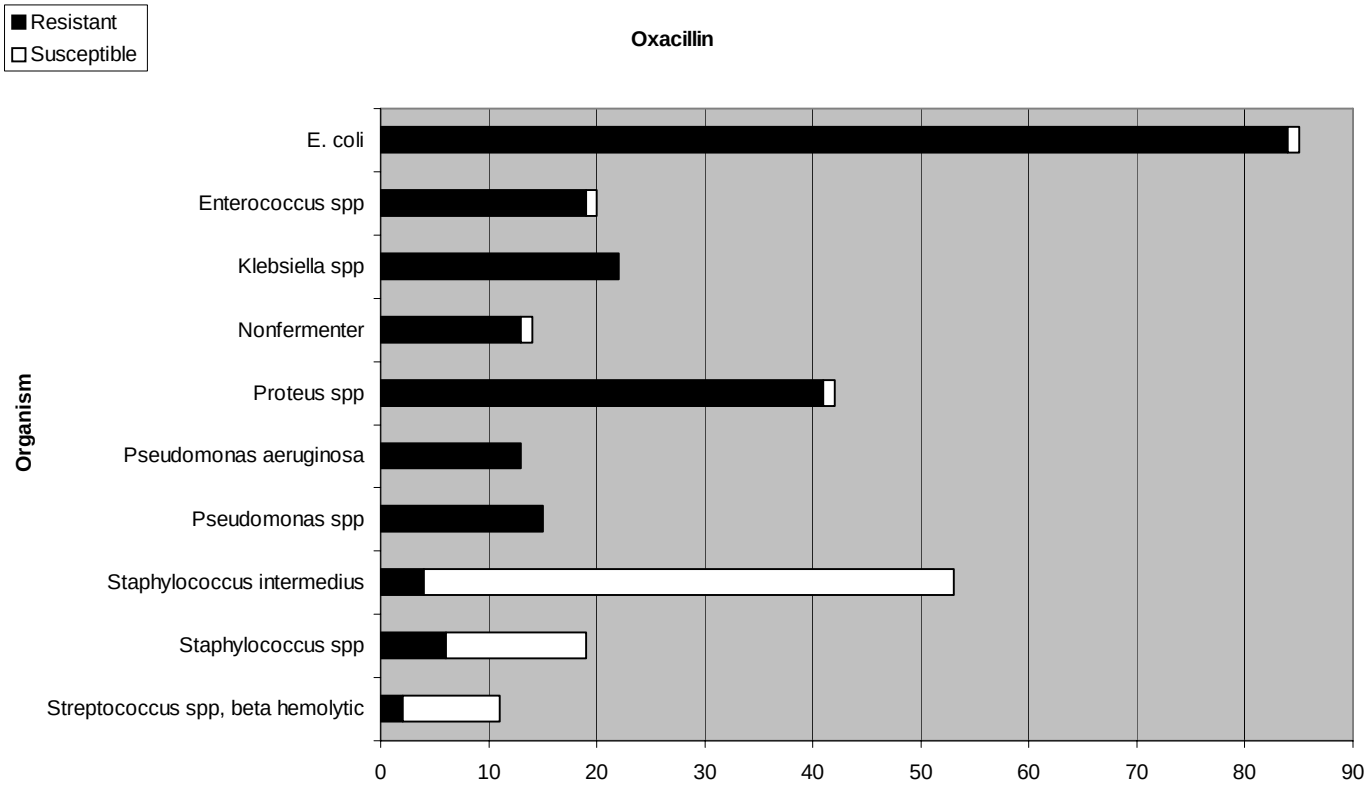
1. Augnmentin/Clavamox




| AUGMENTIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Corynebacterium spp** | **5** | **10** | **15** | **66.7** |
| **E. coli** | **45** | **138** | **184** | **75.0** |
| **Enterobacter spp** | **10** | **9** | **19** | **47.4** |
| **Enterococcus spp** | **4** | **38** | **42** | **90.5** |
| **Klebsiella spp** | **14** | **31** | **45** | **68.9** |
| **Nonfermenter** | **9** | **25** | **34** | **73.5** |
| **Pasteurella spp** | **1** | **25** | **26** | **96.2** |
| **Proteus spp** | **10** | **49** | **59** | **83.1** |
| **Pseudomonas aeruginosa** | **106** | **1** | **107** | **0.9** |
| **Pseudomonas spp** | **18** | **13** | **31** | **41.9** |
| **Staphylococcus coagulase pos** | | **10** | **10** | **100.0** |
| **Staphylococcus epidermidis** | | **13** | **13** | **100.0** |
| **Staphylococcus intermedius** | | **112** | **112** | **100.0** |
| **Staphylococcus spp** | **3** | **50** | **53** | **94.3** |
| **Streptococcus spp, alpha hemolytic** | **1** | **9** | **10** | **90.0** |
| **Streptococcus spp, beta hemolytic** | | **38** | **38** | **100.0** |
| **Streptococcus spp, gamma hemolytic** | **2** | **14** | **16** | **87.5** |

O. PenicillinRb-Lactamase

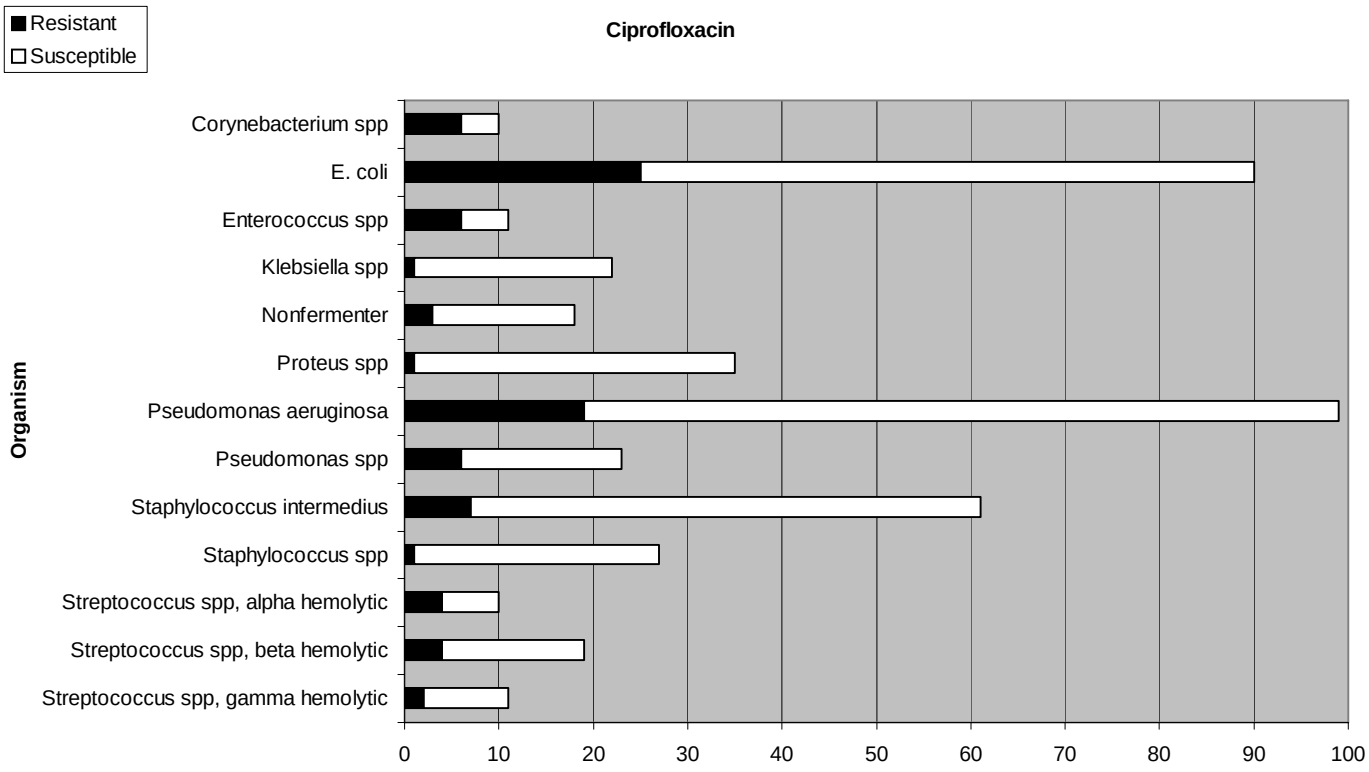
1. Oxacillin




| OXACILLIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **E. coli** | **84** | **1** | **85** | **1.2** |
| **Enterococcus spp** | **19** | **1** | **20** | **5.0** |
| **Klebsiella spp** | **22** | | **22** | **0.0** |
| **Nonfermenter** | **13** | **1** | **14** | **7.1** |
| **Proteus spp** | **41** | **1** | **42** | **2.4** |
| **Pseudomonas aeruginosa** | **13** | | **13** | **0.0** |
| **Pseudomonas spp** | **15** | | **15** | **0.0** |
| **Staphylococcus intermedius** | **4** | **49** | **53** | **92.5** |
| **Staphylococcus spp** | **6** | **13** | **19** | **68.4** |
| **Streptococcus spp, beta hemolytic** | **2** | **9** | **11** | **81.8** |

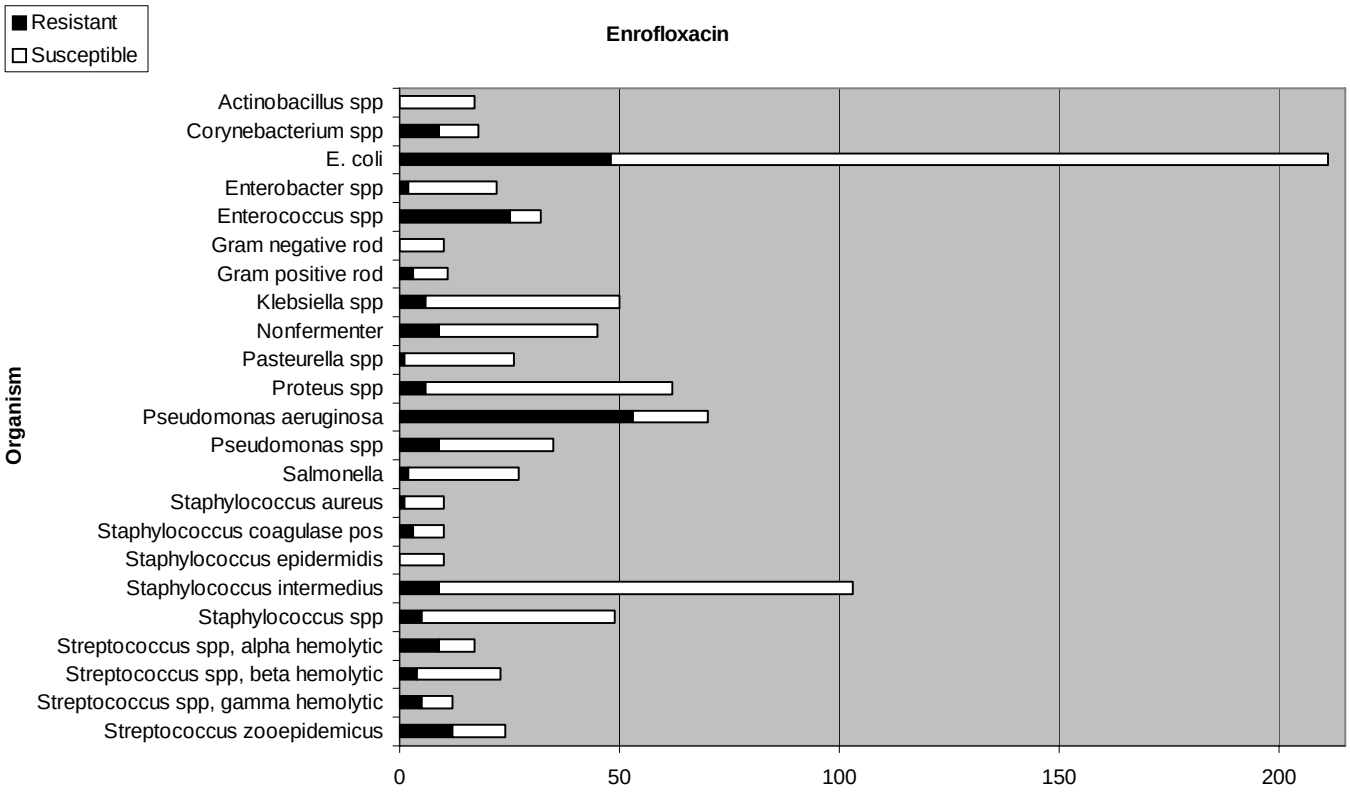
P. Quinilones

1. Ciprofloxacin



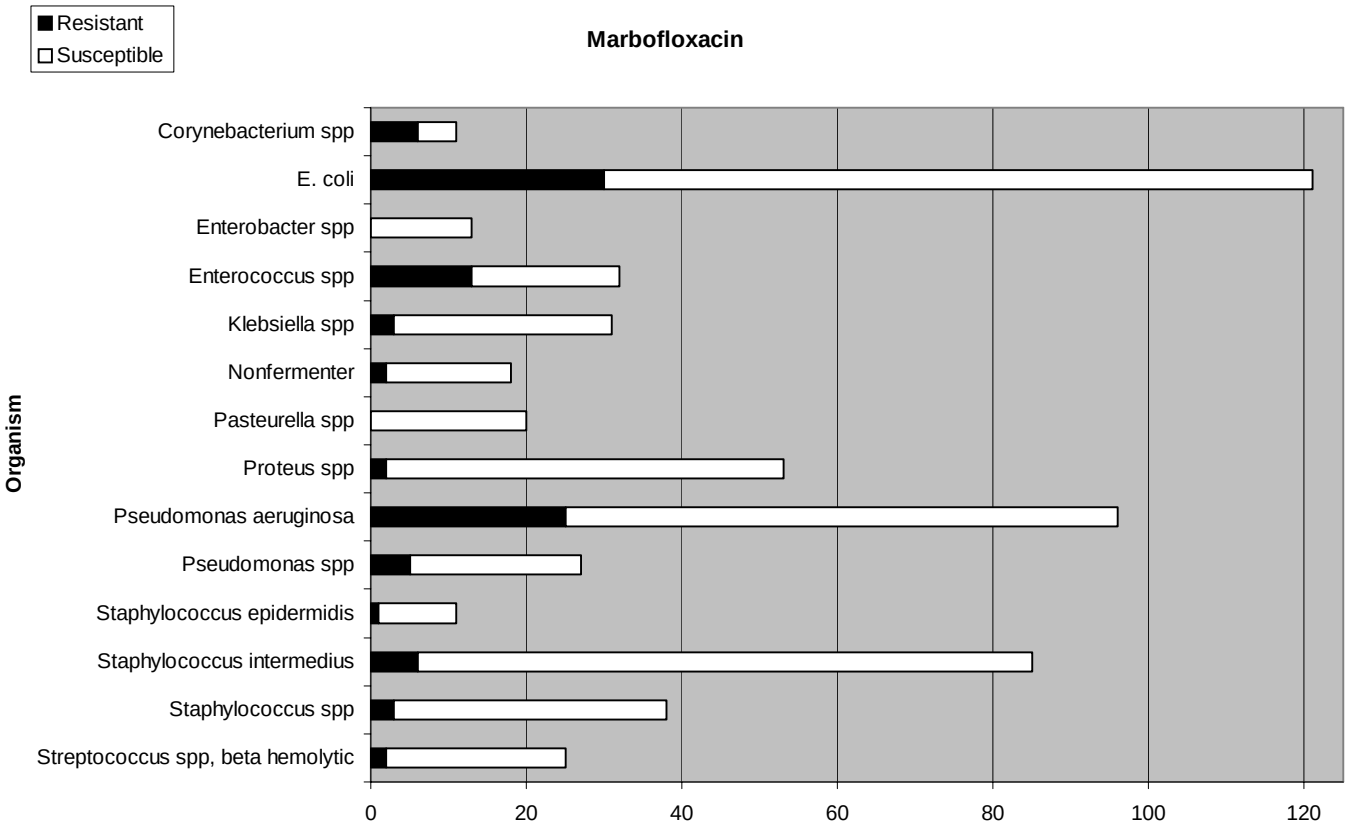

| CIPROFLOXACIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Corynebacterium spp** | **6** | **4** | **10** | **40.0** |
| **E. coli** | **25** | **65** | **90** | **72.2** |
| **Enterococcus spp** | **6** | **5** | **11** | **45.5** |
| **Klebsiella spp** | **1** | **21** | **22** | **95.5** |
| **Nonfermenter** | **3** | **15** | **18** | **83.3** |
| **Proteus spp** | **1** | **34** | **35** | **97.1** |
| **Pseudomonas aeruginosa** | **19** | **80** | **99** | **80.8** |
| **Pseudomonas spp** | **6** | **17** | **24** | **70.8** |
| **Staphylococcus intermedius** | **7** | **54** | **61** | **88.5** |
| **Staphylococcus spp** | **1** | **26** | **27** | **96.3** |
| **Streptococcus spp, alpha hemolytic** | **4** | **6** | **10** | **60.0** |
| **Streptococcus spp, beta hemolytic** | **4** | **15** | **19** | **78.9** |
| **Streptococcus spp, gamma hemolytic** | **2** | **9** | **11** | **81.8** |

2. Enrofloxacin




| ENROFLOXACIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | | **17** | **17** | **100.0** |
| **Corynebacterium spp** | **9** | **9** | **18** | **50.0** |
| **E. coli** | **48** | **163** | **211** | **77.3** |
| **Enterobacter spp** | **2** | **20** | **22** | **90.9** |
| **Enterococcus spp** | **25** | **7** | **32** | **21.9** |
| **Gram negative rod** | | **10** | **10** | **100.0** |
| **Gram positive rod** | **3** | **8** | **11** | **72.7** |
| **Klebsiella spp** | **6** | **44** | **50** | **88.0** |
| **Nonfermenter** | **9** | **36** | **45** | **80.0** |
| **Pasteurella spp** | **1** | **25** | **26** | **96.2** |
| **Proteus spp** | **6** | **56** | **62** | **90.3** |
| **Pseudomonas aeruginosa** | **53** | **17** | **70** | **24.3** |
| **Pseudomonas spp** | **9** | **26** | **35** | **74.3** |
| **Salmonella** | **2** | **25** | **27** | **92.6** |
| **Staphylococcus aureus** | **1** | **9** | **10** | **90.0** |
| **Staphylococcus coagulase pos** | **3** | **7** | **10** | **70.0** |
| **Staphylococcus epidermidis** | | **10** | **10** | **100.0** |
| **Staphylococcus intermedius** | **9** | **94** | **103** | **91.3** |
| **Staphylococcus spp** | **5** | **44** | **49** | **89.8** |
| **Streptococcus spp, alpha hemolytic** | **9** | **8** | **17** | **47.1** |
| **Streptococcus spp, beta hemolytic** | **4** | **19** | **23** | **82.6** |
| **Streptococcus spp, gamma hemolytic** | **5** | **7** | **12** | **58.3** |
| **Streptococcus zooepidemicus** | **12** | **12** | **24** | **50.0** |

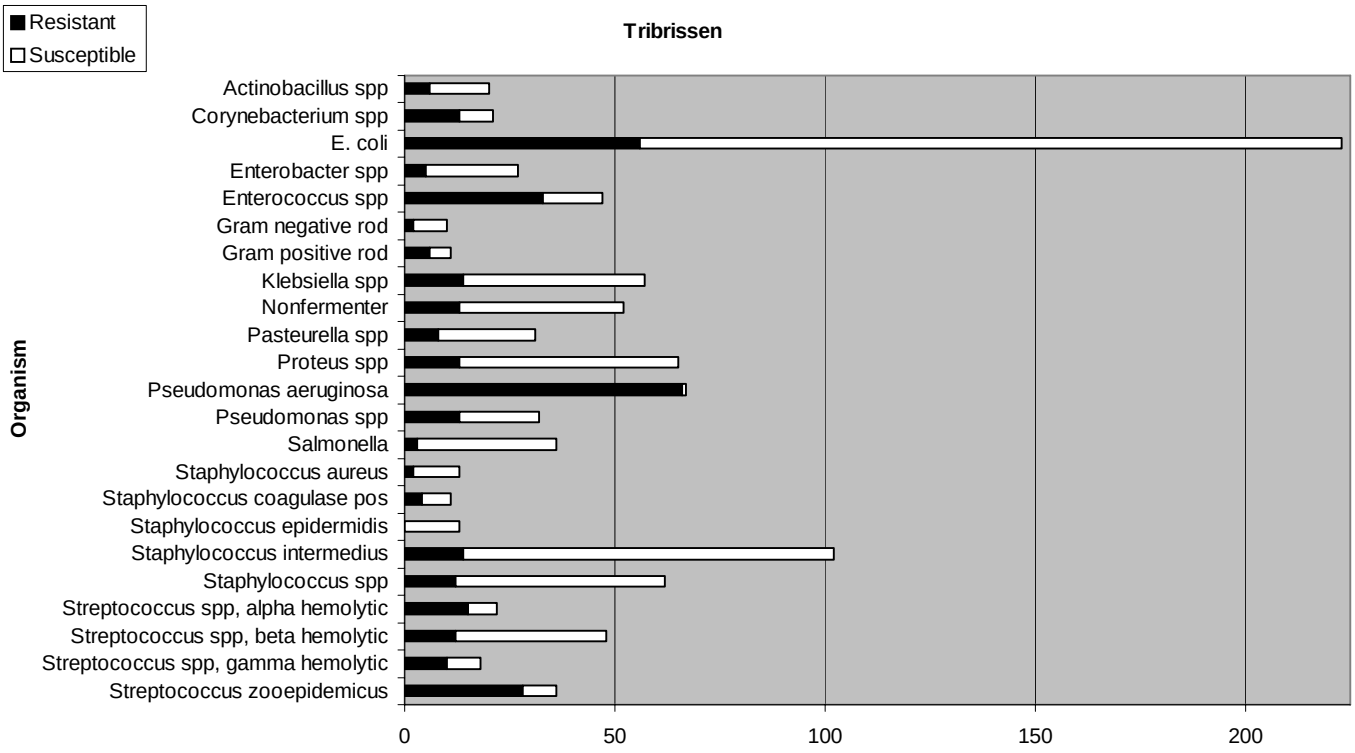
3. Marbofloxacin




| MARBOFLOXACIN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Corynebacterium spp** | **6** | **5** | **11** | **45.5** |
| **E. coli** | **30** | **91** | **121** | **75.2** |
| **Enterobacter spp** | | **13** | **13** | **100.0** |
| **Enterococcus spp** | **13** | **19** | **32** | **59.4** |
| **Klebsiella spp** | **3** | **28** | **31** | **90.3** |
| **Nonfermenter** | **2** | **16** | **18** | **88.9** |
| **Pasteurella spp** | | **20** | **20** | **100.0** |
| **Proteus spp** | **2** | **51** | **53** | **96.2** |
| **Pseudomonas aeruginosa** | **25** | **71** | **96** | **74.0** |
| **Pseudomonas spp** | **5** | **22** | **27** | **81.5** |
| **Staphylococcus epidermidis** | **1** | **10** | **11** | **90.9** |
| **Staphylococcus intermedius** | **6** | **79** | **85** | **92.9** |
| **Staphylococcus spp** | **3** | **35** | **38** | **92.1** |
| **Streptococcus spp, beta hemolytic** | **2** | **23** | **25** | **92.0** |

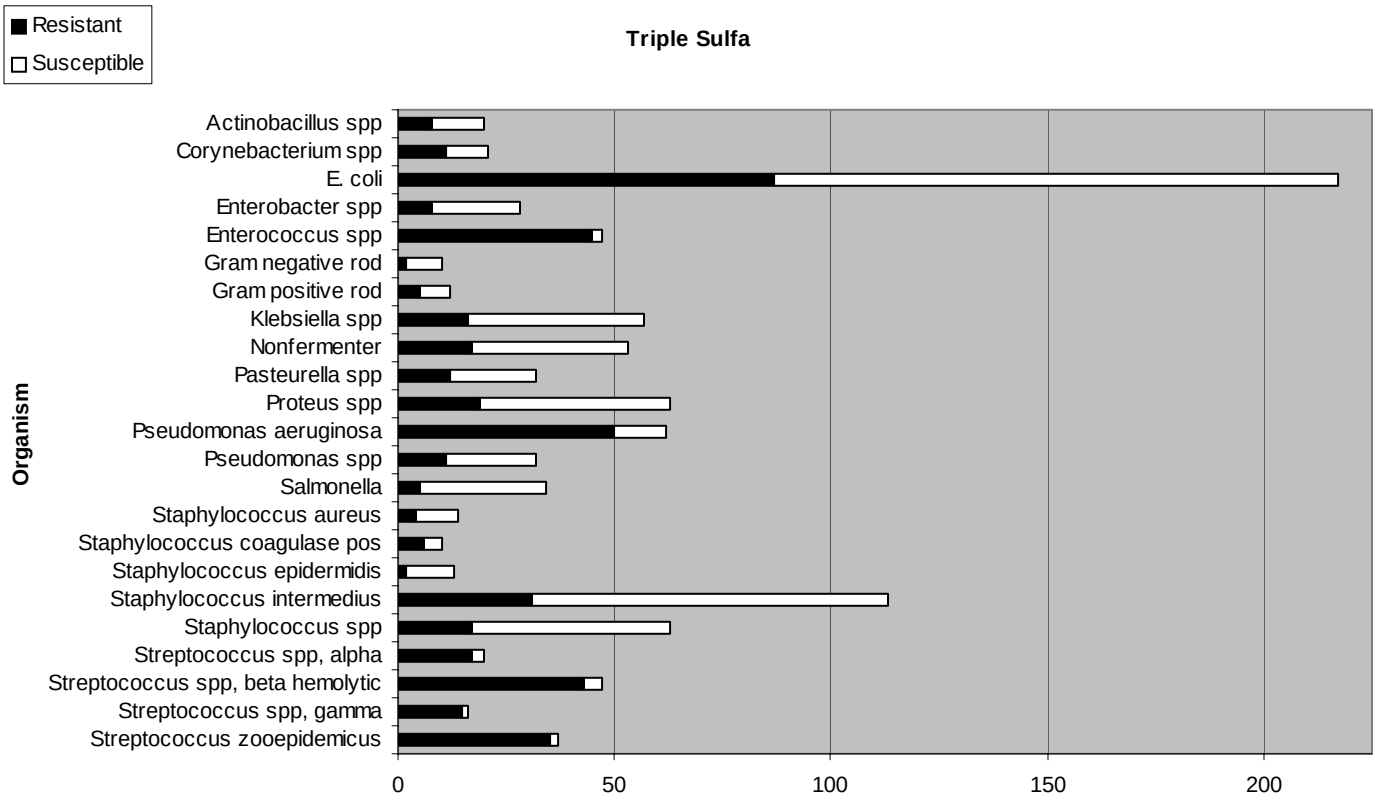
Q. Sulfonamides

1. Tribrissen




| TRIBRISSEN | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **6** | **14** | **20** | **70.0** |
| **Corynebacterium spp** | **13** | **8** | **21** | **38.1** |
| **E. coli** | **56** | **167** | **223** | **74.9** |
| **Enterobacter spp** | **5** | **22** | **27** | **81.5** |
| **Enterococcus spp** | **33** | **14** | **47** | **29.8** |
| **Gram negative rod** | **2** | **8** | **10** | **80.0** |
| **Gram positive rod** | **6** | **5** | **11** | **45.5** |
| **Klebsiella spp** | **14** | **43** | **57** | **75.4** |
| **Nonfermenter** | **13** | **39** | **52** | **75.0** |
| **Pasteurella spp** | **8** | **23** | **31** | **74.2** |
| **Proteus spp** | **13** | **52** | **65** | **80.0** |
| **Pseudomonas aeruginosa** | **66** | **1** | **67** | **1.5** |
| **Pseudomonas spp** | **13** | **19** | **32** | **59.4** |
| **Salmonella** | **3** | **33** | **36** | **91.7** |
| **Staphylococcus aureus** | **2** | **11** | **13** | **84.6** |
| **Staphylococcus coagulase pos** | **4** | **7** | **11** | **63.6** |
| **Staphylococcus epidermidis** | | **13** | **13** | **100.0** |
| **Staphylococcus intermedius** | **14** | **88** | **102** | **86.3** |
| **Staphylococcus spp** | **12** | **50** | **62** | **80.6** |
| **Streptococcus spp, alpha hemolytic** | **15** | **7** | **22** | **31.8** |
| **Streptococcus spp, beta hemolytic** | **12** | **36** | **48** | **75.0** |
| **Streptococcus spp, gamma hemolytic** | **10** | **8** | **18** | **44.4** |
| **Streptococcus zooepidemicus** | **28** | **8** | **36** | **22.2** |

2. Triple Sulfa




| TRIPLE SULFA | | | | |
|---|---|---|---|---|
| **Organism** | **Resistant** | **Susceptible** | **Total** | **Percent Susceptible** |
| **Actinobacillus spp** | **8** | **12** | **20** | **60.0** |
| **Corynebacterium spp** | **11** | **10** | **21** | **47.6** |
| **E. coli** | **87** | **130** | **218** | **59.6** |
| **Enterobacter spp** | **8** | **20** | **28** | **71.4** |
| **Enterococcus spp** | **45** | **2** | **47** | **4.3** |
| **Gram negative rod** | **2** | **8** | **10** | **80.0** |
| **Gram positive rod** | **5** | **7** | **12** | **58.3** |
| **Klebsiella spp** | **16** | **41** | **57** | **71.9** |
| **Nonfermenter** | **17** | **36** | **53** | **67.9** |
| **Pasteurella spp** | **12** | **20** | **32** | **62.5** |
| **Proteus spp** | **19** | **44** | **63** | **69.8** |
| **Pseudomonas aeruginosa** | **50** | **12** | **62** | **19.4** |
| **Pseudomonas spp** | **11** | **21** | **32** | **65.6** |
| **Salmonella** | **5** | **29** | **34** | **85.3** |
| **Staphylococcus aureus** | **4** | **10** | **14** | **71.4** |
| **Staphylococcus coagulase pos** | **6** | **4** | **10** | **40.0** |
| **Staphylococcus epidermidis** | **2** | **11** | **13** | **84.6** |
| **Staphylococcus intermedius** | **31** | **82** | **113** | **72.6** |
| **Staphylococcus spp** | **17** | **46** | **64** | **71.9** |
| **Streptococcus spp, alpha hemolytic** | **17** | **3** | **20** | **15.0** |
| **Streptococcus spp, beta hemolytic** | **43** | **4** | **47** | **8.5** |
| **Streptococcus spp, gamma hemolytic** | **15** | **1** | **16** | **6.3** |
| **Streptococcus zooepidemicus** | **35** | **2** | **37** | **5.4** |