

VCUHS ANTIBIOTIC SUSCEPTIBILITY TABLES
JANUARY – DECEMBER 2023
Department of Pathology - Microbiology/Immunology

Table 1. Activity of selected antibiotics against gram-positive cocci

Organism	Number Tested	Percentage (%) of Organisms Susceptible													
		Penicillin (Nonmeningitis)	Penicillin (Meningitis)	Ampicillin	Oxacillin ^a	Ceftriaxone (Nonmeningitis)	Ceftriaxone (Meningitis)	Vancomycin	Tetracycline	Levofloxacin	Clindamycin	TMP/SMX	Ceftaroline ^c	Daptomycin ^{b,c}	Linezolid
<i>Staphylococcus aureus</i>	1475				68			100	88		69	98	99	99	100
<i>Staphylococcus lugdunensis</i>	56				91			100			80	100		100	100
Coagulase negative <i>Staphylococcus</i> species	318				44			100				60		99	100
<i>Enterococcus faecalis</i>	851			99				98						97	99
<i>Enterococcus faecium</i>	226			10				31						98	99
<i>Streptococcus pneumoniae</i>	88	94	60			89	80	100	79	95					
<i>Streptococcus</i> species Viridans group	142	83				99					83				

^a Staphylococci resistant to oxacillin (methicillin) are also resistant to penicillin, ampicillin, cefazolin, cefoxitin, ceftriaxone, meropenem and all other beta-lactam antibiotics. Staphylococci species breakpoints are in use.

^b Respiratory tract isolates included in Daptomycin results though excluded from reporting per CLSI M100 guidelines.

^c Ceftaroline and Daptomycin results include Susceptible Dose Dependent (SDD) isolates.

Table 2. Activity of selected antibiotics against gram-negative bacilli

Organism	Number Tested	Percentage (%) of Organisms Susceptible											
		Ampicillin	Amp/Sulb	Pip/Tazo ^d	Cefazolin	Cefepime ^d	Ceftriaxone	Meropenem	Gentamicin	Ciprofloxacin	Levofloxacin	TMP/SMX	Nitrofurantoin
<i>Acinetobacter</i> species	81	IR	88			79		83	86	76	77	79	
<i>Citrobacter koseri</i> (<i>diversus</i>)	97	IR	97	100	100	100	100	100	100	97	97	96	
<i>Citrobacter freundii</i> complex ^a	115	IR	IR	90	IR	100	80	100	95	93	96	87	
<i>Klebsiella</i> (<i>Enterobacter</i>) <i>aerogenes</i> ^a	172	IR	IR	76	IR	98	77	98	100	96	97	95	
<i>Enterobacter cloacae</i> complex ^a	288	IR	IR	80	IR	96	71	97	97	92	95	82	
<i>Escherichia coli</i>	3494		84	98	87	95	90	99	90	80	82	72	98
<i>Klebsiella oxytoca</i>	146	IR	81	92	65	99	91	100	96	89	97	91	
<i>Klebsiella pneumoniae</i>	1060	IR	79	94	85	93	88	98	92	84	90	80	
<i>Morganella morganii</i>	93	IR	26	94	IR	100	90	100	89	79	82	82	
<i>Proteus mirabilis</i> ^b	545	89	98	100	91	99	97	100	96	85	86	85	
<i>Pseudomonas aeruginosa</i>	785	IR	IR	91		92	IR	94		86	79 ^c	IR	
<i>Serratia marcescens</i>	173	IR	IR	97	IR	97	95	98	98	92	97	92	

IR = Intrinsic Resistance

^a Use of 3rd generation cephalosporins is not recommended for *Enterobacter cloacae* complex, *Citrobacter freundii* complex, and *Klebsiella aerogenes* infections because resistance develops rapidly. Cefepime, meropenem, a quinolone, or TMP/SMX are recommended.

^b *Proteus* species other than *Proteus mirabilis* are more resistant (similar to *Morganella* species).

^c Levofloxacin breakpoints for *Pseudomonas aeruginosa* are based on a dosage regimen of 750mg every 24 hours.

^d Piperacillin/tazobactam and Cefepime results include Susceptible Dose Dependent (SDD) isolates.

**Data collected by the Clinical Microbiology Laboratory, Department of Pathology
 CLSI M100-ed33 and M27M44-ed3 Interpretation breakpoints were applied unless otherwise stated.**