

VCUHS EMERGENCY DEPARTMENT ANTIBIOTIC SUSCEPTIBILITY TABLES
JANUARY – DECEMBER 2022
Department of Pathology - Microbiology/Immunology

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

Organism	Number Tested	Percentage (%) of Organisms Susceptible										
		Penicillin	Ampicillin	Oxacillin ^a	Ceftriaxone	Vancomycin	Tetracycline	Clindamycin	TMP/SMX	Ceftaroline ^c	Daptomycin ^{b,c}	Linezolid
<i>Staphylococcus aureus</i>	351			58		100	90	69	96	100	100	99
Coagulase negative <i>Staphylococcus</i> species	134			40		100			63		97	100
<i>Enterococcus faecalis</i>	234		98			97					94	100
<i>Enterococcus faecium</i>	41		4			34					97	100
<i>Streptococcus</i> species Viridans group	42	78			90			76				

^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	Pip/Tazo ^d	Cefazolin	Cefepime ^d	Ceftriaxone	Meropenem	Gentamicin	Ciprofloxacin	Levofloxacin	TMP/SMX	Nitrofurantoin
<i>Enterobacter cloacae</i> complex ^a	48	IR	95	IR	100	87	100	95	87	95	72	
<i>Escherichia coli</i>	1161		99	86	95	90	100	90	77	80	72	98
<i>Klebsiella oxytoca</i>	37	IR	94	72	97	89	100	97	91	100	94	
<i>Klebsiella pneumoniae</i>	337	IR	97	84	90	86	99	90	79	90	74	
<i>Proteus mirabilis</i> ^b	181	85	100	88	99	99	99	94	81	83	81	
<i>Pseudomonas aeruginosa</i>	151	IR	91		92	IR	93	88	82	75 ^c	IR	
<i>Serratia marcescens</i>	35	IR	97	IR	100	97	100	100	88	91	88	

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-ed32 and M60-ed2 Interpretation breakpoints were applied unless otherwise stated.**