

VCUHS PEDIATRIC ANTIBIOTIC SUSCEPTIBILITY TABLES
JANUARY – DECEMBER 2024
Department of Pathology - Microbiology/Immunology

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

Organism	Percentage (%) of Organisms Susceptible													
	Number Tested	Penicillin (Nonmeningitis)	Penicillin (Meningitis)	Ampicillin	Oxacillin ^a	Ceftriaxone (Nonmeningitis)	Ceftriaxone (Meningitis)	Vancomycin	Tetracycline	Clindamycin	TMP/SMX	Ceftaroline ^c	Daptomycin ^{b,c}	Linezolid
<i>Staphylococcus aureus</i>	289				66			100	90	76	95	100	100	100
Coagulase negative <i>Staphylococcus</i> species	51				39			100		37	52		96	100
<i>Enterococcus faecalis</i>	80			100				100					97	98
<i>Streptococcus pneumoniae</i> ^d	63	93	51			91	75	100	82					

^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.

^d Data included from January 2023 until December 2024 due to data with fewer than 30 isolates being considered statistically unreliable.

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

Organism	Percentage (%) of Organisms Susceptible														
	Number Tested	Ampicillin	Amp/Sulb	Pip/Tazo ^d	Cefazolin	Cefazolin (Urine)	Cefepime ^d	Ceftriaxone	Meropenem	Gentamicin	Ciprofloxacin	Levofloxacin	TMP/SMX	Nitrofurantoin	Tobramycin
<i>Enterobacter cloacae</i> complex	35	IR	IR	74	IR	IR	100	74	100	100	97	100	88		
<i>Escherichia coli</i>	478	47	81	99	91	94	97	94	99	89	89	91	69	98	
<i>Klebsiella pneumoniae</i>	84	IR	75	98	87	88	94	91	100	92	83	90	75		
<i>Proteus mirabilis</i> ^b	46	86	97	100	95	100	100	100	100	95	100	100	89		
<i>Pseudomonas aeruginosa</i>	92	IR	IR	97			98	IR	96		95	85 ^c	IR		95

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-ed34 and M27M44-ed3 Interpretation breakpoints were applied unless otherwise stated.