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

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

	Percentage (%) of Organisms Susceptible														
Organism	**Number Tested**	**Penicillin (Nonmeningitis)**	**Penicillin (Meningitis)**	**Ampicillin**	**Oxacillin [a]**	**Ceftriaxone (Nonmeningitis)**	**Ceftriaxone (Meningitis)**	**Vancomycin**	**Tetracycline**	**Levofloxacin**	**Clindamycin**	**TMP/SMX**	**Ceftaroline [c]**	**Daptomycin [b,c]**	**Linezolid**
Staphylococcus aureus	1447				67			99	90		68	97	100	99	99
Staphylococcus lugdunensis	54				83			100			81	100		100	100
Coagulase negative *Staphylococcus* species	330				38			100				56		98	100
Enterococcus faecalis	799			98				98						95	99
Enterococcus faecium	204			10				28						98	100
Streptococcus pneumoniae	57	92	54			89	74	100	85	96					
Streptococcus species Viridans group	137	81				87					81				

[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

	Percentage (%) of Organisms Susceptible												
Organism	**Number Tested**	**Ampicillin**	**Pip/Tazo [d]**	**Cefazolin**	**Cefepime [d]**	**Ceftriaxone**	**Meropenem**	**Gentamicin**	**Ciprofloxacin**	**Levofloxacin**	**TMP/SMX**	**Amp/Sulb**	**Nitrofurantoin**
Acinetobacter species	89	IR			71		84	82	76	80	70	86	
Citrobacter koseri (diversus)	95	IR	97	92	97	97	100	98	98	100	100		
Citrobacter freundii complex [a]	69	IR	86	IR	98	81	98	98	86	97	92		
Klebsiella (Enterobacter) aerogenes [a]	156	IR	78	IR	97	75	99	98	95	98	97		
Enterobacter cloacae complex [a]	162	IR	87	IR	96	76	98	96	88	95	82		
Escherichia coli	3231		99	87	95	91	100	89	78	81	74		98
Klebsiella oxytoca	138	IR	89	65	99	89	100	96	95	98	94		
Klebsiella pneumoniae	1021	IR	96	86	93	90	99	93	83	92	82		
Morganella morganii	99	IR	98	IR	100	95	100	89	75	78	78		
Proteus mirabilis [b]	537	88	100	90	99	99	99	97	84	86	85		
Pseudomonas aeruginosa	683	IR	91		92	IR	93	90	85	80[c]	IR		
Serratia marcescens	168	IR	98	IR	99	98	99	100	92	95	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-ed32 and M60-ed2 Interpretation breakpoints were applied unless otherwise stated.