

Atrium Health - Floyd/ Chattooga EMERGENCY DEPARTMENTS 2024

Antibiotic Susceptibility Surveillance Report

Gram Positive Organisms ¹	# of Isolates Tested	Penicillins		Miscellaneous								
		Ampicillin	Oxacillin ²	Clindamycin	Daptomycin	Erythromycin ³	Linezolid	Nitrofurantoin ⁴	Rifampin ⁵	Tetracycline ⁶	Trimethoprim-Sulfamethoxazole	Vancomycin
Staphylococcus aureus - TOTAL	274		52	73	100	37	100	99	99	94	90	100
Staphylococcus aureus - MRSA *	132			78	100	15	100	100	99	93	91	100
Stapylococcus epidermidis	70		28	54	100	31	100	100	100	78	61	100
Enterococcus faecalis ⁷	280	100			100		98	99				99

Grey boxes are for antimicrobials showing ≤ 60% susceptibility

Black boxes are for antimicrobials that are not recommended due to : 1)no *in vivo* activity; 2)sub-optimal clinical activity; or 3)susceptibility testing not performed

¹ Data are presented as percent susceptible. Duplicate isolates from the same patient are excluded. A minimum of 30 isolates is required to achieve statistical significance.

² For *Staphylococcus* species, susceptibility to oxacillin predicts susceptibility to cephalosporins, carbapenems, and β-lactam combination agents.

³ Susceptibility to erythromycin predicts susceptibility to azithromycin and clarithromycin.

⁴ Use for lower UTI only.

⁵ Rifampin should NOT be used as monotherapy due to rapid development of resistance.

⁶ Susceptibility to tetracycline predicts susceptibility to doxycycline, minocycline and tigecycline.

⁷ *Enterococcus* species are always resistant to aminoglycosides (except high concentrations), cephalosporins, clindamycin and trimethoprim-sulfamethoxazole.

* Data also included in the corresponding organism total above

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Gram Negative Organisms ¹	# of Isolates Tested	Penicillins			Cephems				Miscellaneous							
		Ampicillin	Ampicillin-Sulbactam	Pipercillin-Tazobactam	Cefazolin ²	Ceftriaxone	Cefepime	Aztreonam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Amikacin ⁴	Ciprofloxacin	Nitrofurantoin ³	Trimethoprim-Sulfamethoxazole
<i>Escherichia coli</i> - Total	1471	48	61	94	84	88	88	91	100	99	90	90	97	76	96	73
<i>Escherichia coli</i> - ESBL *	175								100	100	74	69	86	16	89	36
<i>Klebsiella pneumonia</i> - Total	322		79	90	87	88	89	89	99	99	92	90	98	86	20	85
<i>Klebsiella pneumonia</i> - ESBL *	39								100	100	48	41	92	12	5	15
<i>Enterobacter cloacae</i> complex	45			80		75	91	77	88	100	100	100	100	91	28	82
<i>Proteus mirabilis</i>	169	70	88	100	85	89	94	98	99	100	87	89	98	72		75
<i>Pseudomonas aeruginosa</i>	105			88			97			94		97	100	88		

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¹ Data are presented as percent susceptible. Duplicate isolates from the same patient are excluded. A minimum of 30 isolates is required to achieve statistical significance.

² In cases of uncomplicated UTI caused by *E. coli*, *Klebsiella* or *Proteus mirabilis* , susceptibility to cefazolin predicts susceptibility to oral cephalosporins.

³ Use for lower UTI only.

⁴ Amikacin should only be considered for *P. aeruginosa* from UTIs, and should not be considered in the use of treating systemic infections caused by *P.aeruginosa*

* Data also included in the corresponding organism total above.