



TEST UPDATES

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Date: May 22, 2019

To: Medical Staff Office Managers Nurse Managers
Laboratory Staff

Subject: 2018 Antimicrobial Susceptibility Trend Report

We are pleased to once again provide separate antibiograms for our outpatient and inpatient providers. If you require further assistance, please contact Microbiology or our Infectious Disease Department.

Susceptibility Trend Notes:

- Susceptibilities are reported as Percentages (%) of organisms tested.
- Maximum number (#) of strains tested is listed in ()
- ↑ Demonstrates a greater than (>) 5% increase in susceptibility from previous year
- ↓ Demonstrates a greater than (>) 5% decrease in susceptibility from previous year
- Trend assessment from the previous year is not provided for less than 100 isolates per species.



2018 Antibiogram Inpatient Providers (January-December)

Relative Cost Per Day PO/IV ¹	\$\$\$	\$	\$	\$	\$	\$	\$	\$	\$\$\$	\$\$\$	\$	\$\$\$	\$\$\$	\$\$\$ IV	\$	\$
Gram Negative Organisms Legend: • Susceptible Reported as % • (Maximum # strains tested) ↑ > 5% increase in Susceptibility from Previous Year ↓ > 5% decrease in Susceptibility from Previous Year	Amikacin	Ampicillin	Amp/sulbactam	Cefazolin ³	Cefoxitin	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Levofloxacin	Pip/Tazobactam	Tobramycin	Trimethoprim/sulfa	Nitrofurantoin Urinary Tract Infections only	Cefepime
<i>Escherichia coli</i> (2145)	100	63	69	93 ³	93	98	95	89	94	100	89	98	96	85	96	71/89 ^{4,7}
<i>Enterobacter species</i> (144)	100	-	-	0	0	88	88	100	99	100	100	89	99	97↑	24↓	-
<i>Klebsiella species</i> (442)	100	0	81	91 ³ ↑	97	95	91	93	97	100	93	94	94	90	43	20/34 ^{4,7}
<i>Proteus species</i> (177)	100	87	94	99 ³	98	99	98	88↑	98	100	89↑	98	98	87↑	0	-
<i>Pseudomonas aeruginosa</i> (182)	99	-	-	-	-	93	-	89↑	97↑	98	85↑	99	99	-	-	94

Relative Cost Per Day PO/IV ¹	\$	\$	\$	\$	\$	\$\$\$	\$	\$\$\$	\$	\$	\$	\$	\$	\$	\$\$\$ IV	\$\$\$	\$
Gram Positive Organisms Legend: • Susceptible Reported as % • (Maximum # strains tested) ↑ > 5% increase in Susceptibility from Previous Year ↓ > 5% decrease in Susceptibility from Previous Year	Ampicillin	Ceftriaxone Non-meningitis	Ceftriaxone Meningitis	Clindamycin	Erythromycin	Gentamicin	Levofloxacin	Linezolid	Oxacillin ⁸	Penicillin	Penicillin Non-meningitis	Penicillin Meningitis	Tetracycline	Trimethoprim/sulfa	Vancomycin	Nitrofurantoin Urinary Tract Infections only	
<i>Staphylococcus aureus</i> ⁵ (723)	-	-	-	75	44	99	76	100	62	0	-	-	95	96	100	98	
<i>Staphylococcus coagulase negative</i> (214)	-	-	-	75	52	95	75↑	100	61	0	-	-	89	75	100	99	
<i>Enterococcus faecalis</i> ⁶ (235)	100	-	-	-	-	-	74	100	-	99	-	-	-	-	100	97	
<i>Enterococcus faecium</i> ^{2,6} (28)	7/28	-	-	-	-	-	7/28	28/28	-	5/28	-	-	-	-	14/28	4/25	
<i>Streptococcus pneumoniae</i> ² (35)	-	34/35	28/35	25/35	17/35	-	35/35	35/35	-	-	34/35	24/35	27/35	-	-	-	
<i>Streptococcus agalactiae</i> (Group B) ² (35)	35/35	-	-	13/35	12/35	-	32/35	35/35	-	35/35	-	-	-	-	35/35	-	

- Relative Total Cost per Day PO/IV for Treatment: Green = Least expense, Red = Most expense
- Trend assessment not provided due to low number of isolates. Reported as actual number of isolates susceptible.
- Cannot differentiate Cefazolin Susceptible from Intermediate categories by testing method on non urinary tract specimens. Results valid only when used as therapy for uncomplicated UTI for *Escherichia coli*, *Klebsiella pneumoniae* or *Proteus mirabilis*.
- Cefepime tested by manual method on ESBL positive only (*Escherichia coli* and *Klebsiella pneumoniae*)
- Staphylococcus aureus* oxacillin data are based on the first isolate per patient within the calendar year.
- For serious enterococcal infections, combination therapy with a beta lactam and an aminoglycoside should be used. *E. faecium* data are based on first isolate per patient within calendar year.
- Due to low number of isolates, reported as actual number of isolates susceptible and includes susceptible dose dependent (SDD).
- Oxacillin is tested as a surrogate for methicillin and nafcillin