



# TEST UPDATES

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To: Medical Staff                      Office Managers                      Nurse Managers  
Laboratory Staff

Subject: 2020 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:

- Numbers reported are percent (%) of organisms susceptible to antibiotic.
- 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



**2020 Antibiogram Inpatient Providers (January-December)**

Relative Cost Per Day PO/IV <sup>1</sup>	\$\$\$	\$	\$	\$	\$	\$	\$	\$	\$\$\$	\$\$\$	\$	\$\$\$	\$\$\$	\$\$\$ IV	\$	\$	\$\$\$
<b>Gram Negative Organisms</b> 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 <sup>2</sup>	Cefoxitin	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Levofloxacin	Pip/Tazobactam	Tobramycin	Trimethoprim/sulfa	Nitrofurantoin Urinary Tract Infections only	Cefepime <sup>3</sup>	Aztreonam <sup>7</sup>
<i>Escherichia coli</i> (1923)	100	64	69	93 <sup>2</sup>	94	97	94	89	94	100	89	97	95	86	97	71/118 <sup>3,4</sup>	-
<i>Enterobacter species</i> (171)	99	-	-	0	0	88	86	100	99	100	100	87	99	93	26↓	-	-
<i>Klebsiella species</i> (371)	100	0	80	91 <sup>2</sup>	95	95	93	94	98	100	96	98	97	91	36↓	14/37 <sup>3,4</sup>	-
<i>Proteus species</i> (154)	100	82	86↓	99 <sup>2</sup>	98	100	99	87	99	100	87	100	100	89	0	-	-
<i>Pseudomonas aeruginosa</i> (173)	99	-	-	-	-	96	-	91	95	99	87	96	98	-	-	96	69

Relative Cost Per Day PO/IV <sup>1</sup>	\$	\$	\$	\$	\$	\$\$\$	\$	\$\$\$	\$	\$	\$	\$	\$	\$	\$\$\$ IV	\$\$\$	\$
<b>Gram Positive Organisms</b> 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 <sup>5</sup>	Penicillin	Penicillin Non-meningitis	Penicillin Meningitis	Tetracycline	Trimethoprim/sulfa	Vancomycin	Nitrofurantoin Urinary Tract Infections only	
Methicillin Susceptible <i>Staphylococcus aureus</i> <sup>5</sup> (359)	-	-	-	81	68	99	94	100	100	0	-	-	91	96	100	100	
Methicillin Resistant <i>Staphylococcus aureus</i> (165)	-	-	-	79	14	99	49	100	0	0	-	-	96	96	100	15/15	
<i>Staphylococcus coagulase negative</i> (211)	-	-	-	79↑	54↑	95	70	100	59	0	-	-	79	80↑	100	99	
<i>Enterococcus faecalis</i> (228)	100	-	-	-	-	-	73↓	100	-	98	-	-	-	-	100	100	
<i>Enterococcus faecium</i> <sup>6</sup> (23)	5/23	-	-	-	-	-	4/23	23/23	-	4/23	-	-	-	-	13/23	0/18	
<i>Streptococcus pneumoniae</i> <sup>6</sup> (25)	-	25/25	22/25	18/25	11/25	-	25/25	25/25	-	-	25/25	17/25	19/25	-	18/18	-	
<i>Streptococcus agalactiae</i> (Group B) <sup>6</sup> (24)	23/23	-	-	6/24	3/23	-	24/24	24/24	-	22/22	-	-	-	-	24/24	-	

- Relative Total Cost per Day PO/IV for Treatment: Green = Least expense, Red = Most expense
- 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 species*).
- Reported as actual number of isolates susceptible and includes susceptible dose dependent (SDD).
- Oxacillin is tested as a surrogate for methicillin and nafcillin
- Trend assessment not provided due to low number of isolates.
- Aztreonam tested by manual method on *Pseudomonas aeruginosa* only. Data collection began June, 2020.