

2023 Combined Antibiogram

Gram-positive Streptococci and Enterococci % Susceptible	No. Tested	Ampicillin	Amoxicillin	Penicillin	Ceftriaxone	Meropenem	Clindamycin	Erythromycin	Levofloxacin	Ciprofloxacin	Linezolid	Nitrofurantoin	Tetracycline	Trimeth-Sulfa	Vancomycin
Streptococci															
<i>Grp. B Streptococcus agalactiae</i>	426	100	SP	100	-	-	40	40	98	-	100	-	17	-	100
<i>Grp. A Streptococcus pyogenes</i>	125	100	SP	100	-	-	90	90	100	-	100	-	90	-	100
<i>Grp. G Streptococci</i>	90	100	SP	100	-	-	83	87	96	-	100	-	77	-	100
<i>S. pneumoniae (Non-meningeal)</i>	73	SP[1]	SP[1]	97	100	91	-	65	95	-	-	-	62	87	100
<i>S. pneumoniae (Meningeal)</i>	73	-	-	75	97	91	-	-	-	-	-	-	-	-	100
<i>S. anginosus</i>	65	100	-	100	-	-	84	78	98	-	100	-	65	-	100
<i>S. constellatus</i>	37	100	-	95	-	-	75	81	100	-	100	-	86	-	100
Enterococci															
<i>Enterococcus faecalis</i>	1050	100	-	100	R	-	R	10	87[U]	86[U]	97	100[U]	29[U]	R	100
<i>Enterococcus faecium</i>	103	31	-	31	R	-	R	R	29[U]	28[U]	97	19[U]	30[U]	R	53

Gram-positive Staphylococci % Susceptible	No. Tested	Penicillin	Oxacillin	Ceftaroline	Vancomycin	Erythromycin	Clindamycin	Gentamicin [2]	Trimeth-Sulfa	Linezolid	Daptomycin	Nitrofurantoin	Rifapicin [2]	Tetracycline
<i>Staphylococcus aureus</i>	1905	21	72	100	100	58	78	99	96	100	100	100[U]	100	90
<i>Staphylococcus lugdunensis</i>	110	-	89	-	100	89	88	100	100	100	100	100[U]	100	96
<i>Staphylococcus epidermidis</i>	505	-	37	-	98	30	57	90	57	100	100	100[U]	100	75
<i>Other Coag-Negative Staph [3]</i>	112	-	63	-	100	53	64	84	77	100	100	98[U]	92	68

Notes

[1] Based on susceptibility to standard dose IV penicillin, susceptibility to oral penicillin, and studies of clinical efficacy, nearly all non-meningeal pneumococcal infections can be effectively treated with IV ampicillin or with high dose oral amoxicillin (in children: 80-100 mg/kg/day divided TID; adult dose and maximum dose in children: 1 g TID)

[2] Should only be used in combination with other active agents

[3] Includes *Staphylococcus hominis*, *Staphylococcus intermedius*, and *Staphylococcus haemolyticus*

[U] Breakpoints exist only for urinary isolates

Susceptibility

<60%	60-89%	≥90%
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Analysis Key

R	Intrinsically resistant
-	Antimicrobial is not tested
SP	Susceptibility inferred

Contact Information

- For susceptibility test questions and data analysis please contact: **Dr. Thomas Novicki**, **Dr. Sophi Arbefeville**, or **Dr. Taylor Wahlig** at 715-387-6300 or ext. 16300
- For antimicrobial stewardship questions please contact: **Philip (Logan) Whitfield** at 715-387-7578 or ext. 77578
- For urgent questions regarding specific patient cases, please consult your local infectious diseases physician.

*Inpatient and outpatient isolates have been combined without clinically or statistically significant differences.

Gram-negative Enterobacteriales % Susceptible	No. Tested	Ampicillin	Amoxicillin-clav	Piperacillin-tazo	Ceftriaxone	Cefepime	Ertapenem	Meropenem	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Tetracycline	Trimeth-Sulfa
<i>Citrobacter freundii</i>	175	R	R	-	-	99	99	100	100	95	95	89	86	85	86
<i>Citrobacter koseri</i>	67	R	99	96	100	100	100	100	100	100	100	100	100	99	100
<i>Enterobacter cloacae</i>	381	R	R	-	-	95	93	99	100	98	98	96	92	91	91
<i>Escherichia coli</i>	6589	67	89	97	95	99	100	100	100	95	95	88	85	84	86
<i>Klebsiella aerogenes</i>	133	R	R	-	-	100	99	100	100	99	99	100	96	95	99
<i>Klebsiella oxytoca</i>	274	R	92	91	91	100	100	100	100	97	97	97	99	94	96
<i>Klebsiella pneumoniae</i>	1045	R	98	94	98	100	100	100	100	99	98	95	93	87	96
<i>Morganella morganii</i>	62	R	R	98	90	98	100	100	100	95	98	89	87	58	87
<i>Proteus mirabilis</i>	496	88	94	100	98	99	88	100	100	91	92	86	85	R	85
<i>Serratia marcescens</i>	114	R	R	-	95	99	96	100	100	100	89	96	92	29	100

Gram-negative Non-Enterobacteriales % Susceptible	No. Tested	Piperacillin-tazo	Ceftazidime	Cefepime	Meropenem	Tobramycin	Ciprofloxacin	Levofloxacin	Minocycline	Trimeth-Sulfa
<i>P. aeruginosa</i>	757	94	95	94	94	99	90	84	R	R
<i>S. maltophilia</i>	44	R	66	-	-	R	-	89	100	89

Analysis Key

R	Isolate is intrinsically resistant
-	Not tested or is clinically ineffective

Susceptibility

≥90%
60-89%
<60%

Notes

[U] Breakpoints exist only for urinary isolates

Gram-negative URINE ONLY % Susceptible	No. Tested	Ampicillin	Amoxicillin-clav	Cefazolin	Piperacillin-tazo	Ceftriaxone	Cefepime	Ertapenem	Meropenem	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Tetracycline	Nitrofurantoin	Trimeth-Sulfa
<i>Citrobacter freundii</i> [1]	158	R	R	R	-	-	100	100	100	100	96	96	90	87	87	95[U]	88
<i>Citrobacter koseri</i>	67	R	99	R	96	100	100	100	100	100	100	100	100	100	99	90[U]	100
<i>Enterobacter cloacae</i> [1]	238	R	R	R	-	-	95	92	100	100	97	97	94	92	91	43[U]	91
<i>Escherichia coli</i>	6154	67	89	93[U]	97	95	99	100	100	100	95	95	88	85	84	98[U]	86
<i>Klebsiella aerogenes</i> [1]	105	R	R	R	-	-	100	99	100	100	100	100	100	96	95	15[U]	100
<i>Klebsiella oxytoca</i>	219	R	91	R	90	91	100	100	100	100	98	98	98	99	94	89[U]	97
<i>Klebsiella pneumoniae</i>	927	R	98	97[U]	94	98	99	100	100	100	99	98	94	93	86	29[U]	95
<i>Morganella morganii</i>	62	R	R	R	98	90	98	100	100	100	95	98	89	87	58	R	87
<i>Proteus mirabilis</i>	396	88	94	97[U]	100	98	99	90	100	100	92	93	88	87	R	R	86
<i>Serratia marcescens</i>	55	R	R	R	-	93	98	93	100	100	100	89	95	91	24	R	100