

**Antibiogram for Commonly Encountered Bacteria**  
 St. Luke's Hospital Laboratory  
 Duluth, MN 55805

2023 Published 2024

All isolates recovered from cultures collected between January 1st, 2023 and December 31st, 2023

Organism (Gram Positive Cocci)	# Isolates Tested	% Interpretation Susceptible	Penicillin	Ampicillin	Oxacillin	Amoxicillin/K. Clavulanate	Ampicillin/ Subactam	Cefazolin	Gentamicin	Rifampin ⑤	Ciprofloxacin	Levofloxacin	Moxifloxacin	Trimeth/sulfa	Clindamycin	Daptomycin ③	Erythromycin	Nitrofurantoin ①	Linezolid	Vancomycin	Tetracycline	Gentamycin Synergy Screen	Streptomycin Synergy Screen
Methicillin Susceptible Staph aureus	552	S	--	--	100	100	100	100	99	99	90	93	99	100	83	--	75	100	--	100	96	--	--
Methicillin Resistant Staph aureus	247	S	--	--	0	0	0	0	97	98	41	42	89	98	70	--	15	100	--	100	89	--	--
Total Staph aureus	799	S	--	--	69	69	69	69	98	99	75	77	96	99	79	--	57	100	--	100	94	--	--
Staphylococcus (coagulase-negative)	580	S	--	--	56	56	56	56	91	99	78	79	88	75	65	--	51	99	--	100	85	--	--
Enterococcus faecalis	410	S	99	100	--	--	--	--	--	48	75	83	--	--	--	100	37	99	100	99	31	81	92
Enterococcus faecium	65	S	20	23	--	--	--	--	--	17	17	22	--	--	--	97	19	80	100	52	45	95	89

Organism (Gram Negative Rods)	# Isolates Tested	% Interpretation Susceptible	Ampicillin	Piperacillin/Tazobactam	Cefazolin	Ceftazidime	Ceftriaxone	Meropenem ②	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin ①
Escherichia coli	3356	S	65	99	90	96	95	100	95	96	86	86	86	98
Klebsiella pneumoniae	699	S	--	99	96	98	96	100	98	98	97	99	92	48
Proteus mirabilis	301	S	85	100	93	99	97	100	93	94	90	94	93	0
E. aerogenes	64	S	--	92	0	83	78	100	100	98	100	100	100	24
E. cloacae	175	S	--	85	0	81	71	100	98	98	99	99	95	28
Serratia marcescens	46	S	--	87	0	74	67	100	98	89	91	96	100	0
P. aeruginosa	219	S	--	98	--	97	--	99	91	99	92	92	--	--
C. freundii	86	S	--	98	0	74	71	100	93	90	94	95	85	90
M. morgani	47	S	--	98	0	87	94	100	87	98	85	91	83	0
Klebsiella oxytoca	189	S	--	98	47	95	94	100	98	95	96	98	90	88

- ① Nitrofurantoin reported on urine isolates only
- ② Meropenem reported on systemic isolates only
- ③ Daptomycin is not appropriate for isolates recovered from the respiratory tract
- ⑤ Rifampin should not be used alone for therapy.

Notes:

- a. Number of isolates (N) is based on the highest number of organism/antimicrobial combinations tested. Certain subsets of isolates are not tested against all drugs (e.g Nitrofurantoin) and the N will be smaller for such combinations.
- b. Data excludes duplicate isolates recovered within a 365 day period.
- c. Only verified, finalized results included.
- d. Antimicrobial Susceptibility Testing includes direct MIC using Microscan microdilution panels.
- e. Data from organisms with fewer than 30 isolates (n=30) may lead to interpretation errors. The number of observations available is a factor in deciding whether to include or exclude certain clinically relevant organisms
- f. For Enterococcus species, aminoglycosides (except for high-level resistance testing), cephalosporins, clindamycin, and trimethoprim-sulfamethoxazole may appear active in-vitro, but are not effective clinically.
- g. Enterococci are intrinsically resistant to aminoglycosides. However, isolates that demonstrate susceptibility to high-level aminoglycoside testing (i.e. streptomycin synergy screen or gentamycin synergy screen) are predictably susceptible to the synergistic killing effect of that aminoglycoside used in combination with ampicillin,

Antibiogram prepared 2024. reviewed and approved by:

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