

Community Antibiograms



South Salt Lake County, UT

Antibiograms summarize local antimicrobial resistance profiles, supporting clinicians in selecting appropriate empiric antibiotics prior to the availability of organism-specific susceptibility. The tables below show the **percentage of microbial isolates susceptible to various antibiotics**. The data was collected in 2024 from Intermountain Health emergency departments and inpatient facilities within the stated geographical region.

Definitive antibiotic therapy should be based on the causative organism(s) susceptibility profile and clinical context once identified.

Susceptibility Rates (%) of Gram-Negative Isolates to Common Antimicrobials

N (#) Species/Organism		Antimicrobial Susceptibility (%)																																											
		Escherichia coli		Klebsiella pneumoniae		Pseudomonas aeruginosa		Proteus mirabilis		Klebsiella oxytoca		Enterobacter cloacae		Amoxicillin/Clavulanate		Ampicillin/Sulbactam		Cefazolin		Cefepime		Ceftazidime		Ceftriaxone		Ciprofloxacin		Ertapenem		Gentamicin		Levofloxacin		Meropenem		Nitrofurantoin*		Piperacillin/Tazobactam		Tetracycline		Tobramycin		Trimethoprim/Sulfamethoxazole	
1250	<i>Escherichia coli</i>	83	65	85	91	91	91	79	100	93	83	100	94	99	75	93	75																												
214	<i>Klebsiella pneumoniae</i>	85	80	89	90	90	89	81	100	96	92	100	42	98	79	93	82																												
87	<i>Pseudomonas aeruginosa</i>				95	97		86			89	99		98																															
73	<i>Proteus mirabilis</i>	93	90	79	95	95	93	84	100	90	85	100		100																															
61	<i>Klebsiella oxytoca</i>	90	70	23	95	97	90	93	100	100	95	100	93	87	97	100	95																												
57	<i>Enterobacter cloacae</i>		30		89	77	63	96	93	100	98	100	52	84	91	100	93																												

Susceptibility Rates (%) of Gram-Positive Isolates to Common Antimicrobials

N (#) Species/Organism		Antimicrobial Susceptibility (%)																																			
		<i>Enterococcus faecalis</i>		<i>Staphylococcus aureus</i> MSSA		<i>Staphylococcus aureus</i> MRSA		<i>Staphylococcus epidermidis</i>		<i>Streptococcus anginosus</i> grp		<i>Staphylococcus</i> sp. coag neg		Ampicillin		Ceftriaxone		Clindamycin		Daptomycin		Levofloxacin		Linezolid		Nafcillin		Nitrofurantoin*		Penicillin		Tetracycline		Trimethoprim/Sulfamethoxazole		Vancomycin	
232	<i>Enterococcus faecalis</i>	100				53	93*	98		100	99	21			99															99							
196	<i>Staphylococcus aureus</i> MSSA			82	100			100	100	100					94															100							
88	<i>Staphylococcus aureus</i> MRSA			85	96			100		100					89															95	100						
62	<i>Staphylococcus epidermidis</i>			60	100			100	46	100					81														86	100							
44	<i>Streptococcus anginosus</i> grp	100	100	80			100								100															98							
37	<i>Staphylococcus</i> sp. coag neg			81	100			100	81	100					92														91	100							
18	<i>Enterococcus faecium</i>	44			83	33*	94		50	44	41				72																						
15	<i>Streptococcus pneumoniae</i>		100	92		100	100		100	100					79															100							

* For cystitis only

Interpret the data cautiously in organisms with ≤ 30 isolates, as they may not be accurate.

- In 2024, 8% of *E. coli*, 3% of *K. oxytoca*, 5% of *P. mirabilis*, and 10% of *K. pneumoniae* screened positive for extended spectrum β-lactamase (ESBL).
- Aminoglycoside monotherapy is not recommended for most infections. Gentamicin is no longer recommended for *P. aeruginosa*.
- Certain organisms, including *Enterobacter cloacae*, *Klebsiella aerogenes*, and *Citrobacter freundii* can become resistant to 3rd-generation cephalosporins (ceftriaxone, cefotaxime, ceftazidime) during treatment of severe infections despite initial *in vitro* susceptibility. Cefepime may be an alternative option and higher doses may be required.
- Enterococcus* spp. are intrinsically resistant to cephalosporins. Fluoroquinolones (e.g., ciprofloxacin, levofloxacin) should not be used to treat any enterococcal infection except uncomplicated cystitis in patients with severe penicillin allergy.
- Ertapenem is not active against *Pseudomonas*, *Acinetobacter*, or *Enterococcus* spp.
- Beta-lactamase positive *Haemophilus* spp. are resistant to penicillin, ampicillin, and amoxicillin.
- Beta-hemolytic streptococci (Groups A, B, C, G) are universally susceptible to β-lactams (penicillins, cephalosporins) and vancomycin; therefore routine susceptibility testing is not needed for these agents. However, resistance to clindamycin and aztreonam can be present.
- Methicillin-susceptible *Staphylococcus aureus* (MSSA) are resistant to penicillin, ampicillin, and amoxicillin. First-line agents are nafcillin/dicloxacillin and cefazolin/cephalexin. Second-line agents include: amoxicillin/clavulanate, ampicillin/sulbactam, cefuroxime, and ceftriaxone.
- S. aureus* bacteremia in adults must be treated with intravenous antibiotics and infectious diseases should be consulted. Outcomes with β-lactam treatment for MSSA are better than vancomycin. *S. aureus* in the blood is never a contaminant.