

Weber and Davis Counties, 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	Amoxicillin/ Clavulanate	Ampicillin/ Sulbactam	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Ciprofloxacin	Ertapenem	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin*	Piperacillin/ Tazobactam	Tetracycline	Tobramycin	TMP/SMX
1988	<i>Escherichia coli</i>	80	62	81	89	89	88	78	100	91	81	100	94	99	75	91	76
412	<i>Klebsiella pneumoniae</i>	85	80	83	87	86	86	81	98	93	90	99	46	96	84	92	86
226	<i>Pseudomonas aeruginosa</i>				92	90		81			80	90		87		97	
155	<i>Proteus mirabilis</i>	91	85	75	97	96	95	72	100	85	72	100		99		86	70
122	<i>Enterobacter cloacae</i> complex				92	75	67	91	92	99	93	100	45	83	90	98	90
93	<i>Klebsiella oxytoca</i>	82	67	23	85	89	84	83	100	90	91	100	83	95	80	89	81
51	<i>Klebsiella aerogenes</i> (Entero)				96	76	69	96	98	100	100	100	32	84	88	98	100
38	<i>Citrobacter freundii</i> complex				92	79	79	89	97	95	95	97	87	95	83	95	92
31	<i>Citrobacter koseri</i>	97	94	94	100	97	97	97	100	100	97	100	86	97	95	100	100

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

N (#)	Species/Organism	Ampicillin	Ceftriaxone†	Clindamycin Not For UTI	Daptomycin	Levofloxacin	Linezolid	Nafcillin	Nitrofurantoin*	Penicillin†	Tetracycline	TMP/SMX	Vancomycin
481	MSSA			86	99	100	100	100		94	100	100	
423	<i>Enterococcus faecalis</i>	99			56	83*	99		99	99	25		100
208	MRSA			76	100		100		100	78	96	100	
122	<i>Staphylococcus epidermidis</i>			57	100		100	36	100	82	59	100	
70	<i>Staphylococcus</i> sp coag neg			72	100		100	67	100	94	84	100	
68	<i>Streptococcus anginosus</i>	100	100	75		100	100			97			99
53	<i>Streptococcus intermedius</i>	100	100	74						100			100
47	<i>Enterococcus faecium</i>	40			77	23*	93		80	40	37		74
45	<i>Streptococcus viridans</i> group		100	73			100			76			100
36	<i>Streptococcus pneumoniae</i>		100	91		100	100			84	92	84	100

* For cystitis only

† Not for meningitis

TMP/SMX=
trimethoprim/
sulfamethoxazole

- In 2024, 10% of *E. coli*, 11% of *K. oxytoca*, 3% of *P. mirabilis*, and 11% 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 azithromycin 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.**