

Mesa County, CO

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	Cefuroxime	Ciprofloxacin	Ertapenem	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin*	Piperacillin/Tazobactam	Tetracycline	Tobramycin	Trimethoprim/Sulfamethoxazole
790	<i>Escherichia coli</i>	89	65	87	94	95	92	88	76	99	92	84	100	97	98	80	92	81
187	<i>Klebsiella pneumoniae</i> group	90	75	83	91	90	90	84	86	97	96	88	100	46	85	82	93	87
142	<i>Pseudomonas aeruginosa</i>				97	95			86			87	95		92		95	
74	<i>Proteus mirabilis</i>	100	97	70	98	100	98	98	86	100	89	86			100		90	94
59	<i>Enterobacter cloacae</i> comp.				89	76	72		89	77	98	93	98	20	72	86	98	89
55	<i>Klebsiella oxytoca</i> group	92	47	27	96	96	92	90	94	98	98	100	100	93	92	92	94	89
32	<i>Klebsiella aerogenes</i>				100	78	78	68	100	100	100	100	100	35	75	93	100	96
31	<i>Citrobacter freundii</i> complex				100	74	74		90	100	100	93	100	96	77	87	96	96

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

N (#)	Species/Organism	Ampicillin	Ceftriaxone	Clindamycin <i>Not For UTI</i>	Daptomycin	Doxycycline	Levofloxacin	Linezolid	Nafcillin	Nitrofurantoin*	Penicillin	Trimethoprim/Sulfamethoxazole	Vancomycin
263	MSSA			86	100	98	92	100	100	100	99	100	
129	<i>Enterococcus faecalis</i>	100			100		94	100		100		100	
105	MRSA			77	100	96	36	100		100	95	100	
56	<i>Staphylococcus epidermidis</i>			44	100	88	75	100	28	100		100	
29	<i>Staphylococcus</i> sp. coagulase (-)			73	100	89	79	100	62	100		100	
25	<i>Streptococcus pneumoniae</i>		100	84			96	100			90	72	100
19	<i>Enterococcus faecium</i>	21			100			100			100		31

* For cystitis only

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

- 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.**