Intermountain® Healthcare

Antimicrobial Stewardship and Laboratory Services

Find antimicrobial stewardship resources.

- **The Antimicrobial Stewardship Website** — A single source for the latest guidelines, care process models, and other resources. Go to **intermountain.net**, and find "**Antimicrobial Stewardship**" in the A-to-Z Index or by typing "**abx/**" in the browser. From the left navigation, select:
  - "Tracking and Reporting" for online antibiograms
  - "Guidelines and Education" for related care process models
- **GermWatch** — The best resource for finding out "what's going around." Click on "**GermWatch**" in the A-to-Z Index on **intermountain.net**. Scroll down to select "Antibiogram Pocket Cards" under Resources.
- **Formulary** — Go to **intermountain.net**, hover over "Clinical," and click on "Pharmacy" listed under Clinical Support Services. Select "Formulary Resources" within the left navigation.
- **Antibiogram Tool** — Access this online, interactive reporting tool by typing "**antibiogram/**" in the address bar of either your Google or Internet Explorer browser.

Consult with infectious disease experts.

Infectious diseases experts can answer your patient-related questions. Consider a full infectious diseases consult for:

- Home IV antibiotic therapy
- *S. aureus* and Candida bloodstream infections
  Note: never bloodstream contaminants
- Endocarditis
- Central nervous system infections
- Resistant organisms
- Herpes simplex virus in children < 60 days old
- Pediatric bone and joint infections
- Non-formulary and these restricted antimicrobials (see formulary):
  - Ceftazidime/avibactam
  - Ceftolozane/tazobactam
  - Isavuconazole
  - Posaconazole
  - Voriconazole

Contact information:

Infectious Diseases Pharmacist
Peggy Nicholson
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ID Consult Phone Number
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Micro Lab (Dixie)
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Antibiograms are internal tools for inpatient use only and represent all sample types. Please do not share with commercial vendors.

For organisms with less than 30 isolates, interpret cautiously as they may not be accurate.

Patient and Provider Publications ABS018f - 08/18 (Last update: March 19, 2019)

2018 Antibiogram

Dixie Regional Medical Center

Antibiograms help clinicians select empiric antibiotics until organism susceptibility has been determined. Percentages are based on isolates processed in the microbiology lab over the previous one-year period. **Determine definitive antibiotic therapy based on the susceptibility profile of the identified organism(s) and the infection site.**

Gram-Negative Bacilli % Susceptible

# Tests	Species / Organism	Amikacin	Ampicillin / Sulbactam	Aztreonam	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Cefuroxime	Ciprofloxacin	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin (CYSTITIS ONLY)	Piperacillin / Tazobactam	Tobramycin	Trimethoprim / Sulfamethoxazole
53	Citrobacter species	100	0	89	0	100	87	85	0	96	96	96	100	90	92	96	94
30	Enterobacter species	97	0	77	0	97	73	70	0	93	93	93	97	11	80	97	93
64	Enterobacter cloacae	100	0	70	0	89	69	67	0	97	98	100	97	28	75	97	93
1181	Escherchia coli	100	60	93	88	94	94	93	90	84	91	84	100	98	99	91	78
48	Klebsiella oxytoca	100	65	88	40	92	92	90	77	98	94	100	100	91	94	94	94
268	Klebsiella pneumoniae	100	84	93	90	93	93	93	89	94	93	96	99	53	95	93	89
65	Proteus mirabilis	100	72	94	74	91	93	91	89	69	72	74	100	0	100	75	65
146	Pseudomonas aeruginosa	97	0	79	0	80	90	0	0	73	84	71	88	0	95	97	0

Gram-Positive Cocci % Susceptible

# Tests	Species / Organism	Ampicillin	Azithromycin	Ceftriaxone	Ceftriaxone (meningitis)	Clindamycin (NOT FOR UTI)	Daptomycin	Levofloxacin (CYSTITIS ONLY)	Linezolid	Nafcillin	Nitrofurantoin (CYSTITIS ONLY)	Penicillin	Penicillin (oral)	Tetracycline	Trimethoprim / Sulfamethoxazole	Vancomycin
164	Enterococcus faecalis	100	0	0	0	0	100	84	99	0	98	99		17	0	99
24	Enterococcus faecium	13	0	0	0	0	96	5	100	0	53	17		5		42
547	Staphylococcus aureus									62						
204	Staphylococcus aureus MRSA	0	0	0	0	82	99		100	0	100	0	0	98	98	100
277	Staphylococcus aureus MSSA	0	0	99		84	100		100	100	95	0	0	97	99	100
110	Staphylococcus epidermidis	0	0	32		56	100		100	32	100	0	0	91	69	100
66	Staphylococcus sp coag neg	0	0	58		71	100		100	58	94	0	0	86	79	100
24	Streptococcus pneumoniae	100	96	100	90	100		100				100	90	100	78	100

BASIC COVERAGE TIPS

- Aminoglycoside monotherapy is not recommended to treat any infection except for plague and tularemia.
- Certain organisms, including Serratia spp., Citrobacter spp., Enterobacter spp., and *Klebsiella aerogenes* can become resistant to 3rd-generation cephalosporins (ceftriaxone, cefotaxime, ceftazidime) during treatment for severe infections despite initial in vitro susceptibilities. Consult infectious diseases or antibiotic stewardship if use is desired.
- 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.
- Beta-lactamase positive Haemophilus spp. are resistant to penicillin, ampicillin, and amoxicillin.
- β-hemolytic streptococci (Groups A, B, C, G) are universally susceptible to β-lactams (penicillins, cephalosporins) and vancomycin, so routine susceptibility testing is not indicated. Resistance to clindamycin and azithromycin can be present.
- Methicillin-susceptible *Staphylococcus aureus* (MSSA) are resistant to penicillin and ampicillin / amoxicillin. First-line agents are nafcillin / dicloxacillin and cefazolin / cephalexin. Second-line agents include: amoxicillin / clavulanate, ampicillin / sulbactam, cefuroxime, ceftriaxone, cefepime, piperacillin / tazobactam, and carbapenems. *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.**