

➤ 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 MyIntermountain, and find “Antimicrobial Stewardship” under Clinical Resources > Clinical References or by typing “[abx/](#)” in the address bar. The website is also available directly from Epic via weblinks > IMH Guidelines Resources > Antimicrobial Stewardship

From the left navigation, select:

- “Tracking and Reporting” for online antibiograms
- “Inpatient Guidelines” for clinical recommendations
- **Formulary** — Refer to Lexicomp and Epic preference lists.

Consult with infectious diseases experts:



Infectious diseases experts can answer your patient-related questions. Formal Infectious Disease consults are required for:

- *S. aureus* and Candida bloodstream infections

Infectious Disease consults are strongly recommended for:

- Endocarditis
- Central nervous system infections
- Resistant organisms
- Prosthetic joint and graft infections
- Osteomyelitis
- Rarely encountered infection
- ID-restricted antimicrobials (see formulary):
 - Ceftazidime/avibactam
 - Ceftolozane/tazobactam
 - Ceftazidime
 - Ciprofloxacin
 - Colistimethate IV
 - Fidaxomicin
 - Imipenem
 - Isavuconazole
 - Moxifloxacin
 - Oritavancin
 - Posaconazole
 - Tedizolid

Contact information

Infectious Diseases Pharmacist
Kelly Kuk (303) 897-0304

Infectious Diseases Consults

Kaiser Permanente ID:
Patients with KP insurance and non-insured patients (odd days)

Infectious Disease consultants:
Patients with non-KP insurance and non-insured patients (even days)

Infectious Disease consult providers located on the Landing
<https://intermountainhealth.sharepoint.com/sites/Locations-Departments/SitePages/Peaks-Physician-Call-Schedules.aspx#saint-joseph>

Micro Lab Technical Questions
Kristen Robbins (303) 812-3245

Micro Lab
(303) 812-3250

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.

2024 Antibioqram

Saint Joseph Hospital

Antibiograms help clinicians select empiric antibiotics until organism susceptibility has been determined. Percentages are based on emergency room and inpatient 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	Amoxicillin/ Clavulanate	Ampicillin/ Sulbactam	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Ciprofloxacin	Ertapenem	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin*	Piperacillin / Tazobactam	Tetracycline	Tobramycin	TMP / SMX
826	Escherichia coli	86	58	82	90	88	88	68	99	88	79	100	96	98	70	88	74
184	Klebsiella pneumoniae	92	78	82	85	84	84	82	99	93	86	100	42	94	82	92	84
154	Pseudomonas aeruginosa				92	94		83			79	92		91		94	
81	Proteus mirabilis	97	92	53	98	100	98	86	100	87	86			100		90	88
77	Enterobacter cloacae complex	0	0	0	93	72	72	96	87	98	97	100	28	76	89	98	90
53	Klebsiella oxytoca group	86	43	16	94	94	86	86	100	92	98	100	96	88	84	92	86
35	Stenotrophomonas maltophilia					34					80						100
The organisms below have <30 isolates, interpret cautiously as they may be inaccurate.																	
26	Citrobacter freundii complex				100	53	50	80	100	92	88	100	100	73	76	88	76
18	Klebsiella aerogenes				100	88	88	100	94	100	100	100	18	88	88	100	94

BASIC COVERAGE TIPS

- In 2024, 12% of *E. coli*, and 16% 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 for severe infections despite initial *in vitro* susceptibilities. Cefepime may be an 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.

Gram-Positive Cocci % Susceptible													
# Tests	Species/Organism	Ampicillin	Ceftriaxone †	Clindamycin	Daptomycin	Doxycycline	Levofloxacin	Linezolid	Nafcillin	Nitrofurantoin *	Penicillin †	TMP /SMX	Vancomycin
267	MSSA			74	100	96	93	100	100	100		98	100
215	Enterococcus faecalis	100		76		87*	99			98			100
164	MRSA			74	100	83		100		100		91	100
147	Staphylococcus epidermidis			63	100	83	80	99	39	100		57	100
83	Streptococcus viridans		100	79			100	100			92		100
42	Enterococcus faecium	35			97	100	33*	100			100		69
40	Strep. pneumoniae		100	92			97	100			87	72	100
38	CNS grouper			70	100	91	80	100	63	100		46	100
35	Staph. lugdunensis			78	100	100	100	100	94	100		100	100
33	Strep. anginosus		100	86			100	100			100		100

*Urine only † Not for meningitis TMP/SMX = trimethoprim/sulfamethoxazole

- Beta-lactamase positive *Haemophilus* spp. and *Moraxella* 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, so routine susceptibility testing is not indicated. 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.**