Altru Health System – 2024 Antibiogram

Gram-positive % susceptible	No. Isolates	Penicillin IV (non-meningitis/ meningitis)	Penicillin	Ampicillin	Oxacillin	Piperacillin/tazobactam	Cefotaxime/Ceftriaxone (non-meningitis/meningitis)	Erythromycin	TMP/SXT	Clindamycin	Doxycycline/Tetracycline	Vancomycin	Linezolid	Daptomycin[4]	Nitrofurantoin (Urine only)
E. faecalis	359			100		See amp						99	98	100	100
E. faecium	57			28								61	97	Not tested	30
S. aureus	738				75	See ox			93	81	98/93	100	100	100	
MRSA	186								86	80	98/91	100	100	100	
S. epidermidis	202				40	See ox			NR	53	88/83	100	99	100	
S. pneumoniae[1]	54	97 / 78					96/95	65		96	-/75	100			
β-hemolytic Strep: GAS/GBS	25/89		100/98				100/100			52/47		100/100			
Streptococcus viridans:															
S. anginosus	27		96				95			65		92			
S. intermdius	21		100				100			72		95			
S. mitis/oralis	27		70				92			77		100			

NOTE: Data include the 1st isolate of each organism for a given patient

	Sensitivity ≥ 90%
	Sensitivity ≥ 60% - < 90%
	Sensitivity < 60% or Not Recommended (NR)

1. S. pneumoniae: Penicillin (oral) => 80% sensitive; For erythromycin => non-blood isolates
2. Cefazolin => E. coli, K. pneumoniae, P. mirabilis breakpoints for uncomplicated UTI only
3. Haemophilus gp (H. influenzae & H. parainfluenzae only) => azithromycin 93% susceptible
4. Daptomycin activity against E faecalis => 80% S; 20% S-DD (daptomycin dose 8-12 mg/kg)

Inpatient Empiric Antibiotic Regimens by Source of Infection:

1. **Skin & Soft Tissue (SSTI):**
   - **No purulence or MRSA risk => cefazolin**
   - **MRSA risk (purulence, systemic symptoms (fever, hypotension), prior MRSA SSTI, IVDU, severe neutropenia) => vancomycin or daptomycin or linezolid**
   - **Diabetic foot infection => piperacillin/tazobactam + vancomycin or daptomycin**
2. **Pneumonia**
   - **CAP => azithromycin or doxycycline + ceftriaxone**
   - **HAP/VAP => cefepime + vancomycin or linezolid (de-escalate MRSA coverage if MRSA nasal screen negative)**

Altru Health System – 2024 Antibiogram

Gram-negative % susceptible	No. Isolates	Ampicillin	Ampicillin/sulbactam	Piperacillin/tazobactam	Cefazolin[2] (Urine only)	Ceftriaxone	Cefepime	Ertapenem/Meropenem	Ciprofloxacin	Gentamicin/Tobramycin	TMP/SXT	Nitrofurantoin (Urine only)
E. coli	2008	63	72	95	93	95	97	100/100	79	94/-	84	97
E. cloacae	151			82		NR	94	91/100	96	98/-	94	11
K. aerogenes	47			69		NR	100	94/100	91	100/-	97	33
K. oxytoca	128		77	92		93	96	99/99	95	97/-	92	87
K. pneumoniae	354		89	95	94	97	96	99/99	92	98/-	94	34
P. aeruginosa	267			89			93	-/93	87	-/99		
P. mirabilis	211	86	93	98	96	99	100	100/99	87	93/-	89	NR
Citrobacter gp	127			94		NR	99	100/100	94	97/-	94	89
S. marcescens	26					NR	100	100/100	96	100/-	100	
Haemophilus gp[3]	60		90			96			100		77	

NOTE: Data include the 1st isolate of each organism for a given patient

	Sensitivity ≥ 90%
	Sensitivity ≥ 60% - < 90%
	Sensitivity < 60% or Not Recommended (NR)

Inpatient Empiric Antibiotic Regimens by Source of Infection (cont):

3. **Intra-abdominal => piperacillin/tazobactam**
   - **Low-risk/uncomplicated => ceftriaxone + metronidazole**
   - **High-risk/complicated => piperacillin/tazobactam**
4. **Urinary tract:**
   - **Uncomplicated => ceftriaxone**
   - **Complicated => piperacillin/tazobactam (gives Enterococcal coverage)**
5. **Sepsis of unknown etiology**
   - **Cefepime or piperacillin/tazobactam + vancomycin**
   - **De-escalate at 48-72hrs based on culture results; if no growth on cultures at 48-72hrs then consider discontinuing MRSA coverage**

Penicillin allergies => before considering alternative antibiotics verify nature of penicillin allergy (many charted reactions are not true allergies). Based on chemical structure/side chains, cefazolin and the 3rd and 4th generation cephalosporins can generally be used safely in most patients with noted penicillin allergy. Exceptions => severe reaction resulting in ICU; delayed beta-lactam antibiotic allergy causing interstitial nephritis, hepatitis, hemolytic anemia; severe skin reactions (e.g. Stevens-Johnson, toxic epidermal necrolysis, acute generalized exanthematous pustulosis, DRESS).

The 2024 Antibiogram can be found on AltruLink (Physician's => Forms & Tools => Antimicrobial Stewardship => Antibiograms) as well as on the provider dashboard under "AHS Provider Links".