



SUSCEPTIBILITY OF COMMON ORGANISMS

Inpatient 2023

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The susceptibility information reported is based on the Food & Drug Administration (FDA) Minimum Inhibitory Concentration (MIC) breakpoints. **These data may overestimate organism susceptibility particularly with regards to *Pseudomonas aeruginosa* susceptibilities to Piperacillin/Tazobactam and Meropenem.** Please contact the Antimicrobial Stewardship Service at OMC – New Orleans with any questions/concerns related to interpretation of these data

Important Contacts
Microbiology Laboratory
504-842-4831

Antimicrobial Stewardship Service
(EPIC Weblink Resources > Physicians)
<https://ochsnerhealth.sharepoint.com/sites/infectiousdisease/SitePages/ASP%20Home.aspx>

<https://www.ochsner.org/services/infectious-disease>

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IMPORTANT NOTES:

Gram positive organism susceptibilities

1. **Staphylococci that are oxacillin-susceptible** (i.e. MSSA) are also considered susceptible to beta-lactam inhibitor combinations, cephalosporins, and carbapenems. **Oxacillin-resistant** isolates (i.e. MRSA) are also resistant to all currently available beta-lactams (e.g. penicillins, cephalosporins, and carbapenems) **EXCEPT for ceftaroline**.
2. **Beta-hemolytic streptococci (Group A, B, C, F and G)** are routinely susceptible to beta-lactams (e.g. penicillins, cephalosporins, carbapenems). Antibiotic susceptibility testing is not routinely performed on these isolates.
3. Isolates **resistant or intermediate to tetracycline** may be **susceptible to doxycycline, minocycline, or both**. If additional testing for these agents is warranted, please contact the microbiology laboratory.

Gram negative organism susceptibilities

1. Use caution with **third generation cephalosporins** when treating serious ***Enterobacter cloacae*, *Klebsiella aerogenes*, and *Citrobacter freundii*** infections. Resistance may develop on therapy due to beta-lactamase hyperproduction.
2. ***Haemophilus influenzae*** is predictably susceptible to beta-lactam inhibitor combinations. ***Moraxella catarrhalis*** predictably produces a beta lactamase that may not respond to beta lactam beta lactamase inhibitor combinations however may be reliably susceptible to second and third generation cephalosporins.

Candida species susceptibilities

Candida albicans is reliably susceptible to fluconazole and can be used empirically for this ***Candida*** species. For non - ***albicans*** candida, ID involvement for consideration of species-specific characteristics should be sought for ideal management secondary to dose dependent susceptibility.

ANTIBIOTIC SUSCEPTIBILITY OF COMMON ORGANISMS

INPATIENTS Gram Negative Isolates	<i>Acinetobacter baumannii</i> (47% CRG)	<i>Citrobacter freundii</i>	<i>Citrobacter koseri</i>	<i>Escherichia coli</i> (18% ESBL)	<i>Klebsiella (Enterobacter) aerogenes</i>	<i>Enterobacter cloacae</i>	<i>Klebsiella oxytoca</i> (26% ESBL)	<i>Klebsiella pneumoniae</i> (22% ESBL)	<i>Proteus mirabilis</i>	<i>Pseudomonas aeruginosa</i> (10% CRG)	<i>Serratia marcescens</i>	<i>Stenotrophomonas maltophilia</i>
Total isolates	51	47	56	1502	64	182	110	697	423	566	93	70
AMIKACIN	74%	100%	100%	99%	100%	99%	100%	99%	99 %	96%*	100%	
AMPICILLIN				39%					76%			
AMPICILLIN/SULBACTAM	57%		93%	43%			53%	68%	81%			
AMOXICILLIN/CLAVULANATE			98%	66%			63%	73%	88%			
AZTREONAM		87%	88%	81%	84%	71%	66%	77%	90%	74%	86%	
CEFAZOLIN			86%	71%			42%	73%	84%			
CEFTAZIDIME	74%	85%	88%	80%	77%	67%	71%	77%	92%	84%	76%	
CEFEPIME	45%	98%	100%	82%	94%	89%	71%	78%	92%	84%	100%	
CEFTRIAZONE		79%	86%	80%	72%	59%	66%	76%	89%		68%	
CIPROFLOXACIN	49%	89%	89%	68%	95%	90%	87%	83%	77%	81%	89%	
ERTAPENEM		98%	100%	99%	97%	84%	99%	97%	99%		99%	
GENTAMICIN	61%	91%	89%	85%	98%	95%	82%	88%	95%		99%	
LEVOFLOXACIN	61%	94%	95%	68%	94%	92%	82%	89%	83%	81%	98%	91%
MEROPENEM	53%	98%	100%	100%	100%	98%	100%	99%	100%	90%	100%	
NITROFURANTOIN*		93%	42%	96%	17%	27%	60%	36%				
PIPERACILLIN/TAZOBACTAM	44%	94%	100%	80%	89%	74%	68%	75%	92%	95%	89%	
TETRACYCLINE*	53%	83%	86%	67%	86%	85%	69%	69%				
TOBRAMYCIN	65%	94%	89%	84%	98%	95%	78%	84%	94%	95%	88%	
TRIMETH/SULFA	68%	85%	96%	67%	88%	87%	78%	75%	83%		94%	93%

*urine isolates only Restricted antimicrobial

* Cannot infer doxycycline or minocycline susceptibilities from this data; contact ID to request doxycycline susceptibilities if desired

INPATIENTS Gram Positive Isolates	<i>Staphylococcus aureus</i> (MSSA)	<i>Staphylococcus aureus</i> (MRSA)	<i>Staphylococcus epidermidis</i>	<i>Beta-hemolytic streptococci</i>	<i>Streptococcus pneumoniae</i>	<i>Enterococcus faecalis</i>	<i>Enterococcus faecium</i>
Total isolates	402	396	241	41	27	291	97
AMPICILLIN*				100%		99%	16%
CEFTRIAZONE				100%	85%		
CLINDAMYCIN	75%	67%	46%	54%	64%		
LEVOFLOXACIN				100%	93%		
LINEZOLID	100%	100%	100%			99%	96%
OXACILLIN	100%		27%				
PENICILLIN	20%		6%	100%	39%		
TETRACYCLINE	91%	84%	73%	34%	56%		
TRIMETH/SULFA	100%	97%	50%		59%		
VANCOMYCIN	100%	100%	100%	100%	100%	99%	32%

‡ Enterococci that are susceptible to ampicillin are also susceptible to amoxicillin and piperacillin. Isolates resistant to ampicillin are also resistant to above agents. Enterococci are intrinsically resistant to all cephalosporins and trimethoprim/sulfamethoxazole.