



Lake Forest Hospital (LFH) 2022 Antibigrams

I. Facility-Wide Antibiogram

II. Blood Antibiogram

III. Urinary Antibiogram

LFH 2022 Facility-Wide Antibiogram

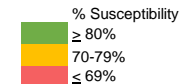


Isolates	Amikacin	Ampicillin	Ampicillin/Sulbactam	Aztreonam	Cefazolin	Cefepime	Ceftazidime	Ceftazidime/Avibactam ^e	Ceftolozane/Tazobactam ^e	Ceftriaxone	Ciprofloxacin	Clin damycin	Daptomycin	Gentamicin	Levofloxacin	Linezolid	Meropenem ^h	Oxacillin	Penicillin G	Piperacillin/Tazobactam	Rifampin	Sulfamethoxazole/Trimethoprim	Tetracycline	Vancomycin	
GRAM POSITIVES																									
Enterococcus faecalis	363	99 ^a										73 ⁱ			99										96
Enterococcus faecium	40	30 ^a													95 ^a										50
Vancomycin-Resistant Enterococci	31	33 ^a													99								38		
Staphylococcus coagulase negative	131											70	100			98		40 ^j			98	80	81 ^l		99
Staphylococcus aureus	482											79	99			100		65 ^l			100	93	89 ^l		100
Methicillin-resistant Staphylococcus aureus	168											56	99			100					100	93	81 ^l		100
Viridans streptococci	82									95		82			96				91						100
GRAM NEGATIVES																									
Citrobacter species	102	97		90		96	91			90	91			95	89		100			91		91		92	
Enterobacter species	102	99		76		93	76				93			99	91		98			77		93		88	
Escherichia coli	1151	99	50 ^b	62	88	78	88	87		86	71			90	66		99			95		72		73	
Klebsiella species	373	98		78 ^c	86	73 ^c	88	87		86	72			92	84		99			92		85		83	
Morganella morganii	48	90		83			79				73			81	73		97			88		75			
Proteus species	212	96	81 ^b	87	96	71	96	97		95	81			92	82		99			100		89			
Pseudomonas aeruginosa	260	89		79		94	87	100	98		75				72		86			91					
Serratia species	50	98		96		100	98			90	96			96	94		100					100		44	
MULTI-DRUG RESISTANT GRAM NEGATIVES																									
Extended-Spectrum β-Lactamase Enterobacterales (ESBL-E)	193	78						99	90		12			61	8		98			73		41			

Antibiogram data helps guide clinicians to choose appropriate empiric antibiotics for many infectious syndromes.

[See asp_nm.org for organ specific empiric prescribing guidance](#)

[See protocol for multi-drug resistant gram-negative agents for guidance](#)



^a Results of ampicillin susceptibility tests should be used to predict the activity of amoxicillin.

Ampicillin may be used to predict susceptibility to amoxicillin-clavulanate, ampicillin-sulbactam, and piperacillin-tazobactam among non-β-lactamase-producing enterococci in clinically stable/non-immunocompromised patients.

^b Results of ampicillin can predict results for amoxicillin.

^c Klebsiella (formerly Enterobacter) aerogenes is intrinsically resistant to ampicillin/sulbactam and cefazolin. If final culture results in Klebsiella aerogenes, empiric therapy with ampicillin/sulbactam or cefazolin should be changed to a susceptible definitive agent.

^e Recommend infectious diseases consultation for ongoing use

^f %S based on dosage regimen of 6 mg/kg every 24 hours for daptomycin

^g %S based on dosage regimen of 8-12 mg/kg every 24 hours for daptomycin

^h Should be reserved for patients who are intolerant to penicilins and cephalosporins or in patients who are suspected of having a drug-resistant bacteria.

1) β-lactam combination agents (amoxicillin-clavulanate, ampicillin-sulbactam, piperacillin-tazobactam); 2) oral cephalosporins (cefaclor, cefdinir, cephalexin, cefpodoxime, cefprozil, cefuroxime);

3) IV cephalosporins (cefazolin, cefepime, ceftriaxone); and 4) carbapenems (ertapenem, imipenem, meropenem)

^l Organisms that are susceptible to tetracycline are also considered susceptible to doxycycline and minocycline. However, some organisms that are intermediate or resistant to tetracycline may be susceptible to doxycycline, minocycline, or both.

Abbreviations: %S, percent susceptible; SDD, susceptible-dose-dependent

30 isolate threshold

Blank boxes indicate organism has intrinsic resistance to corresponding antimicrobial or resistance testing is not applicable

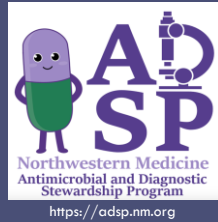
When risk for mortality or significant morbidity is high (eg. meningitis, sepsis, ICU patients) agents with %S at least 90-95% should be selected.

Less significant concerns for mortality within the next 24 to 48 hours (eg. uncomplicated UTIs or community-acquired infections), %S of 80-85% may be appropriate.

Antibiogram Guidance (CLSI M100-Ed32)

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LFH 2022 Blood Antibiogram



GRAM POSITIVES

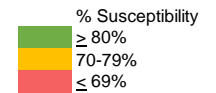
Isolates	Amikacin	Ampicillin	Ampicillin/Sulbactam	Aztreonam	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Ciprofloxacin	Clindamycin	Daptomycin	Gentamicin	Levofloxacin	Linezolid	Meropenem ^h	Oxacillin	Penicillin G	Piperacillin/Tazobactam	Sulfamethoxazole/Trimethoprim	Tetracycline	Vancomycin
Staphylococcus coagulase negative	33									57	100			97		62 ⁱ			72	84 ^j	100
Staphylococcus aureus	53									69	98			100		65 ⁱ			98	94 ^j	100

GRAM NEGATIVES

Escherichia coli	98	90	44 ^c	53	86	71	86	88	82	64			75	58		100			93	68		
Klebsiella species	32	97		74 ^d	91	82 ^d	91	91	88	77			93	75		99			82	76		

Antibiogram data helps guide clinicians to choose appropriate empiric antibiotics for many infectious syndromes.

[See protocol for multi-drug resistant gram-negative agents for guidance](#)



^a %S using MIC breakpoint for urine sources (≤ 16 mcg/ml). If amikacin is preferred for *P. aeruginosa*, recommend using in combination empirically for sources outside the urine.

^b Results of ampicillin susceptibility tests should be used to predict the activity of amoxicillin.

Ampicillin may be used to predict susceptibility to amoxicillin-clavulanate, ampicillin-sulbactam, and piperacillin-tazobactam among non- β -lactamase-producing enterococci in clinically stable/non-immunocompromised patients.

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^d Klebsiella (formerly Enterobacter) aerogenes is intrinsically resistant to ampicillin/sulbactam and cefazolin.

If final culture results in Klebsiella aerogenes, empiric therapy with ampicillin/sulbactam or cefazolin should be changed to a susceptible definitive agent.

^f %S based on dosage regimen of 6 mg/kg every 24 hours for daptomycin

^h Should be reserved for patients who are intolerant to penicillins and cephalosporins or in patients who are suspected of having a drug-resistant bacteria.

1) β -lactam combination agents (amoxicillin-clavulanate, ampicillin-sulbactam, piperacillin-tazobactam); 2) oral cephalosporins (cefactor, cefdinir, cephalexin, cefpodoxime, cefprozil, cefuroxime);

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Antibiogram Guidance (CLSI M100-Ed32)

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LFH 2022 Urinary Antibiogram



GRAM POSITIVES

Isolates	Amikacin	Ampicillin	Ampicillin/Subbactam	Aztreonam	Cefazolin	Cefepime	Ceftazidime	Ceftazidime/Avibactam ^e	Ceftolozane/Tazobactam ^e	Ceftriaxone	Ciprofloxacin	Clindamycin	Gentamicin	Levofloxacin	Linezolid	Meropenem ⁱ	Nitrofurantoin	Oxacillin	Piperacillin/Tazobactam	Sulfamethoxazole/Trimethoprim	Tetracycline	Vancomycin
Enterococcus faecalis	231	100 ^b													98		99				21	97

GRAM NEGATIVES

Citrobacter species	58	100		73		96	89			82	91		93	87		100	84		91	92		
Enterobacter species	42	100		73		95	73				95		100	95		97	38		73	92		
Escherichia coli	945	94	50 ^c	62	88	84	88	87		87	71		90	65		99	97		95	73		
Klebsiella species	269	98		79 ^d	85	80 ^d	88	85		84	85		92	83		99	34		91	84		
Proteus species	113	97	86 ^c	90	97	93	97	97		95	83		95	84		99			99	92		
Pseudomonas aeruginosa	91	93 ^a		76		98	87	100	98		71			75		83			91			

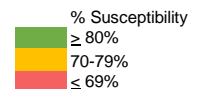
MULTI-DRUG RESISTANT GRAM NEGATIVES

Extended-Spectrum β -Lactamase Enterobacterales (ESBL-E)	140	77						99	90		10		62	7		99	68			74		
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Several agents have the potential to concentrate in the urine with an intermediate MIC. Contact ADSP for appropriate indication and recommended dosing.

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