

Organism (% susceptible)	Maximum # of isolates tested		Cefazolin ^e		Ceftriaxone		Clindamycin		Erythromycin		Levofloxacin ^d		Moxifloxacin		Nitrofurantoin ^b		Oxacillin ^c		Penicillin		Tetracycline		Trimethysulfa		Vancomycin	
	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U
MSSA ^o	990	946	100	100			82	71	66	60	89	90	89	91	100	100	100	100			93	94	98	98	100	100
MRSA (HMC 48%, UWMC 31%)	901	421	0	0			60	50	9	9	18	17	18	18	100	100	0	0			87	85	87	88	100	100
Coagulase-negative <i>Staphylococcus</i>	278	198					64	57	37	24	70	41	70	35			12	37			85	82	56	51	100	100
<i>Staphylococcus lugdunensis</i>		103						80		64		99		100				100				93		99		100
<i>Streptococcus pneumoniae</i> ^a	156	74					83	80	68	69	99	97	99	97											100	100
<i>without meningitis</i>					93	92														89	89					
<i>with meningitis</i>					88	89														56	78					
<i>Streptococcus pyogenes</i> (Beta-hemolytic Strep Group A)	325	57			100		63 ^f	38	62				100 ^g						100	100					100	100

Blank cells = insufficient data or drug is not tested. H = HMC; U = UWMC; MSSA, methicillin-susceptible *S. aureus*; MRSA, methicillin-resistant *S. aureus*.

^a Penicillin or ceftriaxone may still be effective in patients with pneumonia (without meningitis) caused by *S. pneumoniae* with intermediate susceptibility.

^b Indicated in urinary tract infections only.

^c Molecular testing for *mecA* is required for coagulase-negative *Staphylococcus* isolates to be reported as methicillin-susceptible.

^d Current susceptibility methods may fail to detect single-step mutations conferring low-level levofloxacin resistance.

^e Oxacillin, nafcillin, and cefazolin possess superior potency *in vitro* compared to other beta-lactams and have been associated with better outcomes in patients with MSSA bacteremia.

^f At HMC 23% of *Streptococcus pyogenes* (Group A) exhibited inducible clindamycin resistance.

^g No CLSI breakpoints are available for moxifloxacin, therefore 2016 EUCAST breakpoints for Streptococcus Group A (≤0.50 µg/mL susceptible and ≥1.0 µg/mL resistant) were used to determine % susceptible.

Organism (% susceptible)	Maximum # of isolates tested		Ampicillin		Daptomycin ^b		Doxycycline ^b		Levofloxacin ^a		Linezolid ^b		Nitrofurantoin ^a		Penicillin		Tetracycline		Vancomycin	
	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U
<i>Enterococcus faecalis</i>	484	463	100	100					82	80			100	99	99	100	20	23	100	100
<i>Enterococcus faecium</i>	93	98	37	15	98	100	66	51	10	13	100	93	55	80	32	14	16	20	51	43

Blank cells = insufficient data or drug was not tested. H = HMC; U = UWMC.

^a Indicated in urinary tract infections only.

^b Daptomycin, doxycycline, linezolid are tested against VRE only.



2017 Antibigram

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Organism (% susceptible)	Maximum # of isolates tested		Amikacin		Ampicillin		Amp/sulbactam		Aztreonam		Cefazolin		Cefepime ^a		Cefotaxim		Ceftazidime		Ceftiozone		Ciprofloxacin ^a		Doxycycline ⁱ		Ertapenem		Gentamicin		Imipenem		Levofloxacin ^a		Meropenem		Minocycline		Moxifloxacin ^{g/i}		Nitrofurantoin ^c		Pip/azo ^a		Tobramycin ^j		Trimeth/sulfa		
	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U	H	U			
<i>Acinetobacter baumannii/calcoaceticus</i> complex ^h	84		98				90					90				91				89				0		94		95		90		95		96					76		96						
<i>Citrobacter freundii</i> complex ^b	58	86			0	0	76	44	90	71	0	0	100	99			90	71	88	70	93	84	73	59	100	100	97	77			95	86	100	100			79	50	97	98	91	83			88	58	
<i>Enterobacter cloacae</i> complex ^b	179	179			0	0	29	16	81	72	0	0	100	95	69	46	78	69	75	68	93	87	78	79	97	90	100	93			94	93	99	98			83	83	72	57	86	84			89	68	
<i>Escherichia coli</i>	1589	1726	97	98	50	49	60	58	91	90	70	65	97	96	99	99	93	91	87	85	73	66	69	71	100	99	90	86			73	66	100	100			70	68	99	97	97	96	43	23	69	67	
<i>Haemophilus influenzae</i> ^f		113			67															100										98						98								64			
<i>Klebsiella aerogenes</i> ^b	74	89			0	0	34	24	82	85	0	0	99	97	74	53	82	83	80	81	99	97	94	85	95	100	100	97			99	100	95	100			97	93	90	68	82	88			100	94	
<i>Klebsiella oxytoca</i>	107	64			0	0	37	47	91	91	22	23	100	100	100	100	94	97	92	91	94	100	81	93	100	100	94	98			97	100	100	100			84	86	100	95	93	94			91	86	
<i>Klebsiella pneumoniae</i>	415	377			0	0	82	88	93	88	84	75	98	97	100	100	92	89	92	86	90	83	78	67	99	99	93	88			92	89	100	99			85	79	92	79	97	95	32	30	87	72	
<i>Morganella morganii</i> ^b	54	31			0	0	29	20	98	93	0	0	100	100	100	93	90	87	92	87	67	68			100		83	87			81	72	100						98	93			67	65			
<i>Proteus mirabilis</i>	275	154			70	79	86	94	100	100	7	8	100	100	100	100	100	100	98	99	59	72	0	0	100	100	89	86			71	79	100	100			56	68	0	0	100	100	33		62	66	
<i>Pseudomonas aeruginosa</i> (non-CF)	447	604	100	99						67			90	87		50	86	89			79	75					98	96	79	73	79	75	84	84					80	82	99	98					
<i>Pseudomonas aeruginosa</i> (CF) ^e		918		55						62			50				66				45	14					45		39		39		60		17					65		74		51			
<i>Serratia marcescens</i> ^b	122	103			0	0	9	5	97	99	0	0	100	99	98		98	100	93	92	89	96	32			98	98	97	98			92	97	100	100			81		0		98	94			97	100
<i>Stenotrophomonas maltophilia</i> (non-CF)	49	83														37	42												0	0					100	100	86	61					100	91			
<i>Stenotrophomonas maltophilia</i> (CF) ^d		130																											0								91							58			

Blank cells = insufficient data or drug was not tested; H = HMC; U = UWMC; CF = isolates from patients with cystic fibrosis.

^a NOTE: Some organism/antibiotic combinations may exhibit dose-dependent susceptibility (e.g. cefepime, piperacillin-tazobactam, and fluoroquinolones). Current CLSI interpretive breakpoints are not reflective of full susceptibility at all antibiotic dosages and therefore may not predict clinical efficacy. In these cases, the MIC should be used to guide appropriate therapy. See <http://web.labmed.washington.edu/tests/micro/antibiotics> for more information.

^b *Citrobacter freundii*, *Enterobacter* spp., *Hafnia alvei*, *Klebsiella aerogenes*, *Morganella* spp., *Providencia* spp., and *Serratia* spp. have an inducible beta-lactamase. Resistance to penicillins and 3rd generation cephalosporins may arise on therapy.

^c Indicated in urinary tract infections only.

^d Chloramphenicol was tested at UWMC with 16% of CF *S. maltophilia* isolates susceptible.

^e Colistin was tested at UWMC with 97% of CF *P. aeruginosa* isolates susceptible.

^f At HMC 20% (n=122) of *H. influenzae* were beta-lactamase positive; at UWMC 22% (n=58) were beta-lactamase positive. At UWMC 96% of isolates were susceptible to amoxicillin-clavulanate, 92% susceptible to cefuroxime, 90% susceptible to azithromycin, and 98% susceptible to chloramphenicol.

^g No CLSI breakpoints are available for moxifloxacin, therefore 2016 EUCAST breakpoints for Enterobacteriaceae (≤ 0.50 $\mu\text{g/mL}$ susceptible and ≥ 2.0 $\mu\text{g/mL}$ resistant) were used to determine % susceptible.

^h Tigecycline was tested against *Acinetobacter baumannii/calcoaceticus* complex with 85% of HMC isolates exhibiting a MIC of $\leq 0.25\text{mg/mL}$.

ⁱ Doxycycline for urinary isolates only

^j Tobramycin is reported when Enterobacteriaceae are resistant to gentamicin