

**Table I.  
Gram-Negative Bacilli [1]**

**Norton Outpatient  
Practices  
2022**

	Number Tested	Penicillins					Cephalosporins				Monobactam	Carbapenems			Aminoglycosides			Others					
		Ampicillin	Amoxicillin/Clavulanate	Ampicillin/Sulbactam	Piperacillin/Tazobactam (%S) [2]	Piperacillin/Tazobactam (%SDD) [2]	Oral cephalosporins for uncomplicated UTI	Cefazolin	Cefepime (%S) [3]	Cefepime (%SDD) [3]	Ceftazidime	Ceftriaxone	Aztreonam	Ertapenem	Meropenem	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Nitrofurantoin [4]	Tetracycline	Trimeth/Sulfa
<b>Achromobacter species</b>	14				86					R		21		79	29	29	21	57	86				100
<b>Acinetobacter baumannii complex [5]</b>	12	R	R	58			83	83			R		R	100	91	75	92	67	83				75
<b>Other Acinetobacter species</b>	15	R	R	93			100	93						100	100	93	100	100	100				87
<b>Aeromonas species</b>	10	R	R	90		R	100	100	80		*			80	*	100		100	100				80
<b>Citrobacter freundii complex [6]</b>	138	R	R	R	100	0	R	98	1	87	88	89	99	100	100	99	98	95	100	94			94
<b>Citrobacter koseri</b>	194	R	99	97	100	0	96	99	1	98	97	93	100	100	100	99	99	95	93	70			97
<b>Enterobacter cloacae complex [7]</b>	155	R	R	R	95	0	R	90	5	79	65	76	88	100	100	98	98	97	97	25			90
<b>Escherichia coli</b>	10087	56	88	63	98	1	91	75	96	1	96	94	94	99	99	93	95	82	84	98			78
<b>Ewingella americana</b>	11		91	73	*	*	82	100	0	100	100	*	100	100	*	100	100	*	*	73			91
<b>Hafnia alvei</b>	15	R	R	R	*	*	R	100	0	67	53	75	100	100	100	100	100	*	*	42			87
<b>Klebsiella aerogenes</b>	203	R	R	R	76	6	R	99	1	84	83	85	98	100	100	100	99	90	92	13			98
<b>Klebsiella oxytoca</b>	161	R	88	69	*	*	25	91	2	93	88	86	99	100	100	94	94	84	88	80			83
<b>Klebsiella pneumoniae</b>	1353	R	96	86	93	3	96	88	97	1	97	96	99	100	100	98	98	91	96	41			92
<b>Kluyera ascorbata</b>	25	20	84	44	*	*	40	96	4	80	80	91	100	100	100	96	100	*	*	96			60
<b>Morganella morganii</b>	55	R	R	2	100	0	R	96	2	78	84	61	100	100	98	96	95	75	75	R			87
<b>Proteus mirabilis</b>	657	87	98	96	100	0	97	79	98	1	99	98	88	99	99	97	97	99	99	R			88
<b>Proteus vulgaris</b>	23	R	87	74	*	*	R	78	0	83	30	37	100	100	100	96	100	*	*	R			96
<b>Providencia rettgeri</b>	13	R	R	46	*	*	R	85	15	31	100	20	100	100	100	100	100	*	*	R			92
<b>Pseudomonas aeruginosa</b>	257	R	R	R	95		R	95	95	R		84	R	96	95	83	98	90	90	R			R
<b>Pseudomonas putida/fluorescens</b>	18				94			100	89			35		72	100	100	100	100	100				39
<b>Serratia marcescens</b>	50	R	R	R	62	10	R	82	18	30	46	31	100	100	95	92	86	*	*	R			94
<b>Stenotrophomonas maltophilia</b>	29	R	R	R	R	R	R			34	R	R	R	R	R	R	R	100					100

For antimicrobials listed, number shown is the percentage of unique isolates susceptible by current CLSI breakpoints, unless otherwise noted.

Please exercise discretion when data are reviewed for species with fewer than 30 isolates due to reduced statistical validity.

\*Data is not shown for species or species/antimicrobial combinations that have fewer than 10 isolates.

A value of R indicates that this organism is intrinsically resistant to the antimicrobial agent.

[1] All organisms in this table are intrinsically resistant to oxacillin, penicillin, clindamycin, erythromycin, vancomycin, linezolid, and daptomycin.

[2] Interpretation of Susceptible (S) is based on dosage regimen of 3.375-4.5g administered every 6 h as a 30 minute infusion. Interpretation of Susceptible Dose-Dependent (SDD) is based on a dosage regimen of 4.5g administered every 6 h as a 3 hour infusion or 4.5g administered every 8 hour as a 4 hour infusion.

[3] Interpretation of Susceptible (S) is based on dosage regimen of 1g administered every 12 hours. Interpretation of Susceptible Dose-Dependent (SDD) is based on 1-2 g administered every 8-12 hours.

[4] Nitrofurantoin susceptibility is based on urine isolates only.

[5] A. baumannii complex consists of the species A. baumannii, A. calcoaceticus, A. nosocomialis, and A. pittii.

[6] C. freundii complex consists of the species C. braakii, C. freundii, C. murlinae, C. sedlaki, C. werkmanii, and C. youngae.

[7] E. cloacae complex consists of the species E. asburiae, E. cloacae, E. hormaechei, E. kobei, E. ludwigii, and E. nimipressuralis.

Table II. Gram-Positive Cocci [1]  Norton Outpatient Practices 2022	Number Tested	Penicillins				Cephalosporins		Gram + Coverage					Others				
		Amoxicillin/Clavulanate	Ampicillin	Oxacillin	Penicillin	Cefazolin	Ceftriaxone	Gentamicin Synergy	Clindamycin [2,3]	Erythromycin [3]	Vancomycin	Linezolid	Daptomycin [4]	Levofloxacin	Nitrofurantoin [3]	Tetracycline	Trimeth/Sulfa
<b>Staphylococcus aureus</b>	1423	62		62		62			81	45	100	100	99			93	99
<b>Methicillin-resistant S. aureus</b>	546	0		0		0			80	19	100	100	99			96	99
<b>Methicillin-susceptible S. aureus</b>	877	100		100		100			82	62	100	100	100			91	99
<b>Staphylococcus epidermidis</b>	584	49		49		49			64	45	99	99	99		99	79	66
<b>Staphylococcus haemolyticus</b>	61	48		48		48			*	*	100	100	100		100	77	82
<b>Staphylococcus hominis</b>	36	56		56		56			*	*	100	100	100		100	67	69
<b>Staphylococcus lugdunensis</b>	146	88		88		88			85	80	100	100	100		100	92	99
<b>Staphylococcus simulans</b>	46	74		74		74			*	*	100	100	100		100	93	93
<b>Other coagulase-negative staphylococci</b>	31	68		68		68			93	87	97	100	100		100	90	94
<b>Enterococcus faecalis</b>	176		100		100	R	R	88	R	35	100	100	100		100	30	R
<b>Other Enterococcus species</b>	16		81		75	R	R	100	R	*	81	100	94		*	44	R
<b>Group B Streptococcus (S. agalactiae)</b>	536		100		100		100		44	29	100			99		13	R
<b>Streptococcus anginosus [5]</b>	29		100		100		100		76	59	100			100		41	
<b>Streptococcus constellatus [5]</b>	16		100		94		100		69	62	100			100		50	
<b>Streptococcus intermedius [5]</b>	13		100		92		100		92	85	100			100		77	
<b>Streptococcus pneumoniae</b>	18	100			See Table III		See Table III		*	*	100			100		83	100
<b>Viridans streptococci</b>	19		68		63		94		90	30	100			95		74	
<b>Aerococcus urinae</b>	165		99		99		98		*	*	100			81		82	R
<b>Aerococcus viridans</b>	21		90		90		90		*	*	100			62		86	86

For antimicrobials listed, number shown is the percentage of unique isolates susceptible by current CLSI breakpoints, unless otherwise noted.

Please exercise discretion when data are reviewed for species with fewer than 30 isolates due to reduced statistical validity.

\*Data is not shown for species or species/antimicrobial combinations that have fewer than 10 isolates.

A value of R indicates that this organism is intrinsically resistant to the antimicrobial agent.

[1] All organisms in this table are intrinsically resistant to aztreonam. All Enterococcus species are intrinsically resistant to cephalosporins, clindamycin, trimethoprim/sulfamethoxazole, and aminoglycosides (except for synergy).

[2] MRSA: 8% inducible resistance, 12% constitutive resistance; MSSA: 15% inducible resistance, 3% constitutive resistance; Coag-neg Staph (all species): 4% inducible resistance, 17% constitutive resistance.

[3] Clindamycin and erythromycin data are based on non-urine isolates only. Nitrofurantoin susceptibility is based on urine isolates only.

[4] For E. faecium only, daptomycin interpretation of SDD is based on dosage regimen of 8-12 mg/kg administered every 24 hours and is intended for serious E. faecium infections only. There is no S category for E. faecium with daptomycin. For other Enterococcus species, daptomycin interpretation of S is based on a dosage regimen of 6 mg/kg administered every 24 hours.

[5] S. anginosus, S. constellatus, and S. intermedius together comprise the S. anginosus complex.

**Table III.**  
***Streptococcus***  
***pneumoniae***  
**Penicillin & Ceftriaxone**

**Norton Outpatient**  
**Practices 2022**

	Penicillin - IV meningitis	Penicillin - IV non-meningitis	Penicillin - Oral	Ceftriaxone - IV meningitis	Ceftriaxone - IV non-meningitis
<b>Percent Susceptible</b>	88	100	88	100	100
<b>Percent Intermediate</b>	-	0	12	0	0
<b>Percent Resistant</b>	12	0	0	0	0