Antibiotic Susceptibility Patterns of Commonly Isolated Bacteria
July 2023 – June 2024 (12 months)
MOSES

NOTES

1. Minimum inhibitory concentrations (MIC) and interpretations are based on the CLSI standards and an advanced antibiotic expert system.
2. Percentages are not calculated for organisms with <10 isolates. For *N* of < 30 isolates, results may not be statistically relevant. Interpret with caution.

KEY

Text color: • > 10% increase in susceptibility from previous year • > 10% decline in susceptibility from previous year

Box color: intrinsic resistance

Less susceptible ⟷ More susceptible

	AMPI		AMPI/SULB		AZTREO		CEFAZOL		CEFEPM		CEFOXTN		CEFTRIAX		CIPROFLX		GENT		MERO		NITRO		PIP/TAZO		TOBRA		TMP/SMX	
	N	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S
Acinetobacter baumannii complex			69	59					69	33			69	32	69	36	69	51	68	40			53	43	69	67	69	51
Citrobacter freundii[2]					24	67			24	96			24	71	24	88	24	92	24	100	14	93	24	71	24	92	24	88
Citrobacter koseri			47	85	47	94	47	87	47	98	47	91	47	96	47	89	47	100	47	96	30	60	47	89	47	100	47	98
Enterobacter cloacae					97	67			97	85			97	58	97	78	97	95	97	97	32	47	97	64	97	93	97	84
Escherichia coli	1129	36	1128	41	1128	77	1129	58	1128	77	1127	73	1127	76	1128	52	1129	85	1127	99	832	98	1127	73	1127	83	1129	63
Klebsiella (Enterobacter) aerogenes					39	72			39	97			39	69	39	100	39	100	39	100	14	64[2]	39	64	39	97	39	100
Klebsiella oxytoca			58	28	58	78	58	29	58	79	58	76	58	78	58	74	58	93	58	97	30	77	58	69	58	91	58	79
Klebsiella pneumoniae			468	60	467	74	467	63	468	74	468	68	468	74	466	69	468	91	467	97	264	61	467	68	468	87	468	75
Morganella morganii			56	20	56	89			56	96	56	75	56	88	56	63	56	75	56	100	49	0	56	89	56	75	56	61
Proteus mirabilis	209	62	209	75	209	84	209	2	208	87	209	82	209	84	209	68	209	67			153	0	209	83	209	70	209	80
Providencia stuartii			33	18	33	82			33	85	33	82	33	76	33	24			33	97	14	0[2]	33	67			33	70
Serratia marcescens					77	86			77	99			77	78	77	70	77	91	77	96	13	0[2]	77	78	76	49	42	98

	AZTREO		CEFEPIME		CIPROFLX		GENT		MERO		PIP/TAZO	
	N	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S
Pseudomonas aeruginosa	388	73	391	87	395	78	391	97	396	84	395	77

	LEVOFLX		MINO		TMP/SMX	
	N	% S	*N*	% S	*N*	% S
Stenotrophomonas maltophilia	70	70	70	96	70	96

ENTEROCOCCUS **Urine*** MOSES	LEVOFLX		NITRO		TETRACYC		VANC	
	N	% S	*N*	% S	*N*	% S	*N*	% S
Enterococcus faecalis	*149*	83	*150*	100	*150*	21	*150*	93
Enterococcus faecium	*47*	6	*39*	0	*47*	4	*48*	40

*Urine cultures with 10^5 colonies of enterococci as a single organism have a routine susceptibility test. Infectious Diseases generally recommends susceptibility testing when patients do not respond to empiric therapy.

STAPHYLOCOCCUS[A]	CLINDA		OXA / CEF		GENT[D]		PEN G		TETRACYC		TMP/SMX		VANC	
	N	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S
S. aureus (**MSSA**)	382	78	383	100	383	98	383	0	382	95	382	96	383	100
S. aureus (**MRSA**)[B]	297	81	297	0	297	95	297	0	297	63	297	85	297	100
S. epidermidis	317	51	319	29	307	81	319	0	315	75			317	100
S. haemolyticus	39	31	39	31	39	38	39	0	39	74			39	100
S. lugdunensis[2]	29	69	29	86	30	97	30	0	28	89	22	95	29	100

A. All staphylococci may rapidly develop resistance during prolonged therapy with quinolones. Use with staphylococci is not recommended.
B. MRSA isolates with reduced susceptibility to daptomycin have been detected at Montefiore Campuses.
C. Oxacillin-resistant staphylococci are also resistant to all penicillins, cephalosporins, and carbapenems. Oxacillin-susceptible staphylococci are also susceptible to dicloxacillin, nafcillin, ampicillin-sulbactam, piperacillin-tazobactam, amoxicillin-clavulanic acid, cefazolin, cephalexin, cefotetan, ceftriaxone, cefepime, and meropenem (as well as other penicillins, cephalosporins, and carbapenems that are non-formulary).
D. Gentamicin should not be used as single agent and only for synergy for treatment of staphylococcal infections.

	AMPI		CEFTRIAX		CIPROFLX		TMP/SMX	
	N	% S	*N*	% S	*N*	% S	*N*	% S
Salmonella species (all inpatient isolates)[2]	27	93	7	[2]	26	73	27	96

	PEN		CEFTRIAX		VANC	
	N	% S	*N*	% S	*N*	% S
viridans *Streptococcus* (sterile sites)	57	70	62	97	60	98

ENTEROCOCCUS **Sterile Sites** All Campuses 2023-2024	AMPI		DAPTO[A]		GENT SYN[B]		LINEZD		STREP SYN[B]		VANC	
	N	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S	*N*	% S
Enterococcus faecalis	*143*	100	*143*	85	*143*	76	*143*	99	*143*	85	*143*	93
Enterococcus faecium	*93*	11	*92*	96	*92*	89	*93*	98	*92*	59	*93*	31

A. For *E. faecalis*, daptomycin is not recommended due to cost and the availability of an agent with a narrower spectrum of activity (i.e. ampicillin/amoxicillin).
B. Susceptibility indicates synergy with penicillin, ampicillin, piperacillin-tazobactam, and vancomycin.

CANDIDA All Campuses 2023-2024	*C. albicans*					*C. parapsilosis*[2]					*C. tropicalis*[2]					*C. glabrata*					*C. auris*[A,2]		
	N	S	SDD	I	R	N	S	SDD	I	R	N	S	SDD	I	R	N	S	SDD	I	R	N	S	R
Fluconazole	*88*	93	2		3	*23*	87	9		13	*12*	42	33		25	*56*		82		18	*21*	5	95
Voriconazole	*88*	93		3	3	*23*	91		9	0	*12*	42		58	0								
Micafungin	5	[2]		[2]	[2]	*6*	[2]		[2]	[2]	*3*	[2]		[2]	[2]	*56*	96		0	4	*20*	100	0
Amphotericin B																					*20*	90	10

*Data is shown for epidemiologic purposes; contact ID for questions about use of antifungals.
A. Breakpoints for *C. auris* have not been established by CLSI. Breakpoints used here are defined by the CDC and are based on those established for closely related *Candida* species and on expert opinion.

STREPTOCOCCUS PNEUMONIAE All Campuses 2023-2024		Sterile Site				Non-Sterile Site			
		N	S	I	R	*N*	S	I	R
PENICILLIN[A,B]	Meningitis	*52*	62		38				
	Non-CNS	*52*	98	0	2				
	Parenteral					*65*	91	6	3
	Oral					*65*	62	15	23
CEFTRIAXONE[A]	Meningitis	*53*	98	2	0	*65*	95	2	3
	Non-CNS	*53*	100	0	0	*65*	97	0	3
LEVOFLOXACIN		*60*	96	2	2	*72*	94	3	3
TRIMETH/SULFA[C]						*71*	76	8	15

A. Pneumococcal susceptibility rates against penicillin and ceftriaxone from sterile sites are reported as if isolates came from both CSF and all other sterile sites. Susceptibility rates are higher for non-CSF sites because higher antibiotic concentrations can be reached.
B. For pneumococcal isolates from non-sterile sites (sputum), penicillin susceptibility rates are also reported separately for oral and parenteral formulations. The suceptibility rate is higher for parenteral than oral penicillin because higher concentrations are achieved when penicillin is given parenterally.
C. Pneumococci from sterile sites are not tested against erythromycin and trimethoprim-sulfamethoxazole because those antimicrobials generally should be used only for pneumococcal respiratory infections.