

Antibiotic Susceptibility Patterns of Commonly Isolated Bacteria

July 2023 – June 2024

NOTES Box color: intrinsic resistance Less susceptible

 More susceptible

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

¹ Percentages are not calculated for organisms with <10 isolates. For N of < 30 isolates, results may not be statistically relevant. Interpret with caution.

GRAM NEGATIVE CHAM July 2021 - June 2024	N	Percent Susceptible									
		AMPI	AMPI/SULB	PIP/TAZO	CEFAZOL	CEFTRIAX	CEFEPM	MERO	CIPROFLX	TMP/SMX	NITRO (urine only)
<i>Enterobacter cloacae</i>	31	-	-	-	-	-	100	100	87	90	36
<i>Haemophilus influenzae</i> ^{1*}	27	52	-	-	-	100	-	-	100	52	-
<i>Klebsiella pneumoniae</i>	90	-	71	81	77	82	87	100	81	79	60
<i>Proteus mirabilis</i> ¹	35	69	80	91	-	94	94	-	91	86	-
<i>Pseudomonas aeruginosa</i> ⁺	169	-	-	86	-	-	93	89	88	-	-
<i>Salmonella sp.</i> ¹	27	85	85	93	-	96	96	96	-	100	-
<i>Serratia marcescens</i>	41	-	-	95	-	93	100	100	80	97	-
<i>Stenotrophomonas maltophilia</i> ¹	26	-	-	-	-	-	-	-	‡	°	-

* *Haemophilus influenzae* susceptibility to azithromycin is 96%
+ Tobramycin should only be used for *Pseudomonas aeruginosa* and the susceptibility is 98%
‡ *Stenotrophomonas maltophilia* susceptibility to levofloxacin is 73%
° The use of TMP/SMX monotherapy should be cautioned against for serious disease. Please consult infectious disease for further assistance

ESCHERICHIA COLI CHAM July 2021 - June 2024	N	Percent Susceptible										
		AMPI [°]	AMPI/SULB*	PIP/TAZO	CEFAZOL ^Δ	CEFTRIAX	CEFEPM	MERO	GENT	CIPROFLX	TMP/SMX	NITRO (urine only)
Admitted Patients												
Urine [Cystitis]	171	44	49	85	75	89	91	99	87	62	68	97
All sources	289	38	44	86	66	89	91	100	83	62	63	97
ICU Patients												
All sources	95	27	34	78	65	80	81	100	80	56	57	91
ED and Clinic Patients												
Urine [Cystitis]	554	42	46	92	88	93	95	100	86	72	63	99
All sources	568	42	46	92	74	93	94	100	86	71	63	99

° Ampicillin can be used as a marker for using amoxicillin in uncomplicated UTIs.
* Ampicillin-sulbactam can be used as a marker for using amoxicillin-clavulanic acid in uncomplicated UTIs
Δ Susceptibility to cefazolin indicates that the use of oral cephalosporins such as cefaclor, cefdinir, cefpodoxime, cefprozil, cefuroxime, cephalexin and loracarbef **may be considered** for **UNCOMPLICATED UTIS [Cystitis] ONLY** due to *E.coli*, *K. pneumoniae*, and *P. mirabilis* with the 2015 CLSI revised breakpoints.

STAPHYLOCOCCUS AUREUS CHAM July 2021 - June 2024	OXA/CEFN		CLINDA		TET		MINO		TMP/SMX		VANC		GENT SYN	
	N	% S	N	% S	N	% S	N	% S	N	% S	N	% S	N	% S
OUTPATIENT														
MSSA	142	100	142	84	142	92	142	100	141	84	142	100	142	94
MRSA	111	0	111	86	111	59	111	99	111	89	111	100	111	96
INPATIENT														
MSSA	185	100	185	74	185	93	185	99	186	91	186	100	186	96
MRSA	86	0	86	84	86	66	86	99	86	84	86	100	86	95

STREPTOCOCCUS PNEUMONIAE All Campuses Adult & Pediatrics 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 susceptibility 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.

ENTEROCOCCUS Adult and Pediatric Sterile Sites All Campuses 2023-2024	AMPI ^C		DAPTO ^A		LINEZD		VANC		GENT SYN ^B		STREP SYN ^B	
	N	% S	N	% S	N	% S	N	% S	N	% S	N	% S
<i>Enterococcus faecalis</i>	143	100	143	85	143	99	143	93	143	76	143	85
<i>Enterococcus faecium</i>	93	11	92	96	93	98	93	31	92	89	92	59

^A For *E. faecalis*, daptomycin is not recommended due to the possibility of resistance and the cost and 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.
^C Ceftriaxone may be used for synergy. Please contact ID in regards to its use.

ENTEROCOCCUS Adult and Pediatric Urine* MOSES 2023-2024	AMPI		LEVOFLX		NITRO		TETRACYC		VANC	
	N	% S	N	% S	N	% S	N	% S	N	% S
<i>Enterococcus faecalis</i>	150	100	149	83	150	100	150	21	150	93
<i>Enterococcus faecium</i>	48	2	47	6	39	0	47	4	48	40

*Urine cultures with 10⁵ 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.

CANDIDA All Campuses 2023-2024	<i>C. albicans</i>					<i>C. parapsilosis</i> ²					<i>C. tropicalis</i> ²					<i>C. glabrata</i>					<i>C. auris</i> ^{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.