MercyOne Siouxland/UPH Antibiogram January through December 2025

Data-% Susceptible

	Antimicrobial Agent / Gram Negative Bacilli	Number of isolates tested	β-Lactams				Cephalosporins				Carbapenems		Aminoglycosides		FQs				% MDR[2]	
			Ampicillin	Amoxicillin/ Clavulanate	Ampicillin/ Sulbactam	Piperacillin/ Tazobactam	Cefazolin	Ceftazidime	Ceftriaxone	Cefepime	Ertapenem	Meropenem	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Trimethoprim/ Sulfamethoxazole	Nitrofurantoin[1]	ESBL[3]	CP-CRE[4]
	Antibiotic abbreviation		Am	Aug	A/S	P/T	Cfz	Caz	Cax	Cpe	Etp	Mer	Gm	To	Cp	Lvx	T/S	Fd		
Enterobacterales	*Escherichia coli*	**1416**	53	86	60	99	81	86	86	87	99	100	90	89	73	76	72	98 (1284)	12.6 (179)	
	Enterobacter cloacae	**126**	**R**	**R**	**R**	82	**R**	76	69	93	87	100	95	100	88	100	100	15 (65)		
	Klebsiella aerogenes	**42**	**R**	**R**	**R**	90	**R**	81	76	98	93	100	100	100	90	95	98	17 (36)		
	Klebsiella pneumoniae	**319**	**R**	94	83	99	87	88	87	88	99	99	95	94	85	92	84	51 (256)	11.9 (38)	
	Klebsiella oxytoca	**102**	**R**	91	67	94	40	96	93	96	100	100	96	96	93	97	95	89 (53)	3.9 (4)	
	Proteus mirabilis	**248**	80	94	91	99	84	94	92	94	100	100	91	92	56	64	74	**R**	6 (15)	
	Providencia spp.	**49**	**R**	**R**	43	100	**R**	71	94	100	96	100	67	65	78	76	88	**R**		
	Citrobacter freundii	**45**	**R**	**R**	**R**	93	**R**	78	76	100	98	98	96	96	89	96	78↓	100 (28)		2.2 (1: KPC)
	Citrobacter koseri	**38**	**R**	**R**	**R**	100	**R**	97	97	97	100	100	95	97	97	100	97	86 (29)		
	Morganella morganii	**49**	**R**	**R**	*	100	**R**	86	88	100	100	100	73	80	61	63	57↓	**R**		
	Serratia marcescens	**50**	**R**	**R**	**R**	90	**R**	68	74	100	100	100	98	92	92	96	100	**R**		
Non-Enterobacter	*Acinetobacter baumannii*	**47**	**R**	**R**	74↓	*	*	70↓	100	72↓	**R**	83	79↓	79↓	72↓	77↓	85			8.5 (4:OXA-23)
	Pseudomonas aeruginosa	**304**	**R**	**R**	**R**	98	*	94	**R**	93	**R**	91	90	99	85	81	**R**			0.3 (1: IMP)
	Stenotrophomonas maltophilia	**23***	**R**	**R**	**R**	**R**	*	*	**R**	*	**R**	**R**	**R**	**R**	*	87	100			

NOTE: Asterisk (*) indicates drug not tested or drug not indicated; **R** indicates intrinsic resistance; FQs=fluoroquinolones; ↓ or ↑ indicates ≥10% change from previous year. Cell color indicates level of susceptibility: RED ≤60%, YELLOW 61-80%, GREEN ≥81%

The percent susceptible (%S) for each organism/antimicrobial combination was generated by including the first isolate of the organism encountered on a given patient per reporting period per CLSI guidelines. Microscan broth microdilution MIC method for antimicrobial susceptibility testing was performed at Dunes Laboratory.

Haemophilus influenzae isolates have limited data due to inconsistent testing supplies. Thirteen (13) *Haemophilus influenzae* isolates from respiratory and other sterile sources were tested for β-lactamase; 6 tested β-lactamase positive.

[1] Nitrofurantoin results are only reported on urinary isolates. The number of isolates tested are in parenthesis.

[2] The last two columns reflect the percentage of isolates showing a multiple drug resistant strain (MDR). The number of isolates are in parenthesis.

[3] Overall percentage and number of isolates in parenthesis showing Extended Spectrum Beta Lactamase production.

[4] Overall percentage and number of isolates in parenthesis meeting the definition Carbapenemase Producing (CP)- Carbapenem Resistant Enterobacterales (CRE): An isolate from the Enterobactererales group that is intermediate or resistant to one or more third generation cephalosporin and at least one carbapenem. Suspected CP-CRE isolates were sent to Iowa State Hygienic Laboratory for carbapenamase confirmation.

MercyOne Siouxland/UPH Antibiogram January through December 2025

Data-% Susceptible

Antimicrobial Agent / Gram Positive Cocci	Number of isolates tested	β-Lactams					Cephalosporins			Carba	FQs		Others								
		Amoxicillin/ Clavulanate	Ampicillin	Oxacillin	Penicillin	Piperacillin/ Tazobactam	Cefazolin	Ceftriaxone	Ceftaroline	Meropenem	Ciprofloxacin	Levofloxacin	Tetracycline	Vancomycin	Clindamycin	Erythromycin	Daptomycin	Linezolid	Trimethoprim/ Sulfamethoxazole	Nitrofurantoin[1]	Inducible Clindamycin Resistance[2]
Antibiotic abbreviation		Aug	Am	Ox	P	P/T	Cfz	Cax	Cpt	Mer	Cp	Lvx	Te	Va	Cd	E	Dap	Lzd	T/S	Fd	Icd
Enterococcus faecalis	555	*	99	*	99	*	R	R	R	*	71	78	*	100	R	*	99	100	R	99 (355)	*
Enterococcus faecalis (VRE)	4	*	100	*	100	*	R	R	R	*	*	*	*	R	R	*	100	100	R	100 (2)	*
Enterococcus faecium	74	*	28	*	23↓	*	R	R	R	*	18	20	*	100	R	*	91↑	95	R	62↑ (60)	*
Enterococcus faecium (VRE)	35	*	0	*	0	*	R	R	R	*	0	0	*	R	R	*	83	100	R	43 (10)	*
Staphylococcus aureus (MSSA)[3]	441	100	0	100	0	99	100	99	100	100	86	88	89	100	74	64	99	99	99	98 (54)	21 (80)
Staphylococcus aureus (MRSA)[3]	304	0	0	0	0	*	0	0	100	0	26	28	91	100	56	9	99	100	90	100 (47)	16 (41)
Staphylococcus lugdunensis[3]	20*	85	0	85	0	100	85	85	*	83	90	95	85↓	100	88	88	100	100	95	100 (3)	12 (2)
Staphylococcus epidermidis[3]	294	32	0	32	0	100	32	36↑	*	32	64	66	76	100	47	21↓	100	99	49↓	99(85)	8 (17)
Streptococcus pneumoniae[4]	21*	100	*	*	100	*	*	100	*	85	*	100	85	100	100	60↓	*	*	80		*

NOTE: Asterisk (*****) indicates drug not tested or drug not indicated; **R** indicates intrinsic resistance; FQs = fluoroquinolones; ↓ or ↑ indicates ≥10% change from previous year.
Cell color indicates level of susceptibility: RED <60%, YELLOW 61-80%, GREEN >81%
The percent susceptible (%S) for each organism/antimicrobial combination was generated by including the first isolate of the organism encountered on a given patient per reporting period per CLSI guidelines. Microscan broth microdilution MIC method for antimicrobial susceptibility testing performed at Dunes Laboratory.

[1]Nitrofurantoin results are only reported on urinary isolates. The number of isolates tested are in parenthesis.

[2]The last column reflects the overall percentage and number of isolates in parenthesis showing inducible clindamycin resistance (Icd). The number of isolates are in parenthesis.

Beta hemolytic streptococci isolated from blood cultures tested for inducible clindamycin resistance: *Streptococcus pyogenes* (Grp A Strep) - 3 of 4 isolates, *Streptococcus agalactia* (Grp B Strep) - 0 of 5 isolates, Streptococcus Grp C - 0 of 1 and Streptococcus Grp G - 0 of 2 inducible clindamycin resistance.

[3]For *Staphylococcus* spp: clindamycin and erythromycin are reported for isolates from non-urine sources.

[4]*Streptococcus pneumoniae* : Fourteen isolates were from blood sources; all were 100% susceptible to penicillin, ceftriaxone and cefotaxime.

*These statistics are intended solely as a GUIDE to choosing appropriate antimicrobial therapy.
*The greater the number of organisms tested, the more valid (accurate) the percentages of susceptibility become. If less than 30 isolates are tested results may not be statistically valid.

Microbiology Department 712-233-5241

Infectious Disease Clinic 712-279-2550

Pharmacy Antimicrobial Stewardship 712-279-2092

Infection Prevention 712-279-5692

MercyOne/UPH 2025 Candida Isolates

Candida spp. / Specimen Source	Number of isolates per source	C. albicans	C. glabrata	C. parapsilosis	C. dubliniensis	C. krusei	C. lusitaniae	C. tropicalis	Candida sp.
Respiratory (Lower resp and bronch collections)	**26↓**	20	2	*	2	1	*	*	1
Urine (sterile/invasive collection/catheter)	**200**	140	50	1	2	1	*	4	*
Blood (blood culture and catheter tip)	**6**	1	3	*	*	*	1	1	*
Other (Tissue, Sterile fluid, Abscess)	**10**	7	*	2	1	*	*	*	*
Total number of isolates	**295↑**	185 (62%)	67 (22%)	14 (4.7%)	6 (2.0%)	5 (1.7%)	1 (0.3%)	13 (4.4%)	1 (0.3%)

NOTE: Number of isolates were generated using the first isolate reported per patient and source of collection in 2025. Arrow ↓ or ↑ indicates ≥10% change from previous year. Asterisk (*) indicates no isolates recorded.

Candida auris **surveillance:** UPH-St. Luke's Downtown/Dunes Microbiology Department follows the CDC algorithm to identify *Candida auris* based on the phenotypic identification method (API 20C) for *Candida* identification on isolates from blood, normally sterile body sites, invasive collection urines, lower respiratory collections. Any isolate that identifies as *Rhodotorula glutinis* (without characteristic red color present), *Candida sake* or *Candida* spp. using the API 20C method would be suspected as a possible *Candida auris* and is sent to the State Hygienic Laboratory to confirm the identification.

2025 Additional Antimicrobial Agents Not Released, for Infectious Disease Department Information Only.

Data-% Susceptible

Antimicrobial Agent / Gram Negative Bacilli		Number of isolates tested	β-Lactam combo		Tetracycline	Carbapenem
			Ceftazidime/ Avibactam	Meropenem/ Vaborbactam	Eravacycline	Imipenem
	Antibiotic abbreviation		CZA	MEV	ERV	Imp
Enterobacterales	*Escherichia coli*	**1234**	100	100	99	99
	Escherichia coli ESBL	**179**	100	100	100	99
	Enterobacter cloacae	**126**	100	100	96	92
	Klebsiella (Enterobacter) aerogenes	**42**	100	100	95	48↓
	Klebsiella pneumoniae	**281**	100	100	96	99
	Klebsiella pneumoniae ESBL	**38**	100	100	87↓	100
	Klebsiella oxytoca	**98**	100	100	100	100
	Klebsiella oxytoca ESBL	**4**	100	100	50↓	100
	Proteus mirabilis	**223**	100	100	NT	NT
	Proteus mirabilis ESBL	**15**	100	100	NT	NT
	Proteus vulgaris	**20**	NT	NT	NT	35
	Citrobacter fundi	**45**	100	100	98	91
	Citrobacter Kosei	**38**	100	100	100	100
	Morganella morganii	**49↓**	100	100	NT	10
	Serratia marcescens	**50**	100	100	NT	NT
	Providencia spp.	**49**	91	100	NT	61↓
Non-Enterobacter	*Acinetobacter baumannii*	**47**	NT	NT	NT	79↓
	Pseudomonas aeruginosa	**304**	99	NT	NT	86
	Stenotrophomonas maltophilia	**23***	NT	NT	NT	NT

*Imipenem, Meropenem/Vaborbactam and Ervacycline are not on MercyOne Siouxland Medical Center Pharmacy formulary.

NOTE: NT indicates Not Tested; ↓ or ↑ indicates ≥10% change from previous year.