## YKHC Annual Antibiogram

January 1, 2024 - December 31, 2024

			Penicillins Cephalosporins Carbapenem Fluoroquinolone													Missallanassa								
I			Penicillins						Cephalosporins				Carbapenem	Fluoroqu	inoiones		Miscellaneous							
YKHC		Total # of Isolates	Penicillin	Oxacillin	Ampicillin	Ampicillin/Sul	Amoxicillin/Clav	Piperacillin/Tazo	Cefazolin	Ceftriaxone	Ceftazidime	Cefepime	Meropenem	Ciprofloxacin	Levofloxacin#	Gentamicin	Nitrofurantoin**	Tetracycline	Trimethoprim/Sulfa	Clindamycin^	Azithromycin	Vancomycin	Linezolid	
	E. coli	1025			49	55	83	98	86	93	93	94	100	81		90	98	78	77					
Ve.	E. coli (ESBL isolates)	66					41	86					100	23		56	98	76↓	61					
n Negative	Enterobacter cloacae *	48						98		83	92	100	100	98		98	47↑	96	100					
	Klebsiella aerogenes *	32						100		91	94	100	100	97		100	46↑	100	100					
	Klebsiella oxytoca *	48				75	88	98	65	98	98	98	100	86		98	87	88	83					
ram	Klebsiella pneumoniae	48				90	98	100	96	96	94	98	100	94		100	83↑	85	96					
้อ	Proteus mirabilis	46			93	100	100	100	96	96	76↓	96	100	98		100			100					
	Pseudomonas aeruginosa *	35						94			80	89	94	77↓		R								
	Enterococcus faecalis	33			100	100								82	97		100	36				97	97	
itive	Coagulase Neg Staph sp.	230		42					42	42				88	89		91	84	78↓	64		88	91	
osit	MRSA	205		R					R	R							100	95	98	86		98	98	
Ъ	MSSA	341		100					100	100				93	94		100	94	99	88		98	99	
E	Staph. aureus	546		62					62	62				73	74		100	94	99	87		98	98	
Gram	Strep. pneumoniae (CSF)	44	77							98												98		
9	Strep. pneumoniae (non-CSF)	44	97		97	97	93			98					100			95	60	98	93	98		

## **GENERAL NOTES:**

- a. Percent susceptible for each organism/antimicrobial combination was generated by including the first isolate
  of that organism recovered from a given patient per year.
- b. Statistical validity of estimates of percent susceptible is lowered when <30 isolates obtained:
  (\*) 2023 & 2024 data combined to increase # of isolates for reporting
- c. Enterobacterales that are ESBL producers (resistant to 3rd gen. cephalosporins) are also resistant to most penicillins, cephalosporins, and aztreonam.
- d. Beta-hemolytic Streptococcus, Group A (Strep. pyogenes) are generally considered beta-lactam susceptible.
- e. Vancomycin resistant Streptococcus pneumoniae, Viridans Streptococcus, or Beta-hemolytic Streptococci are extremely rare.
- f. Carbapenems & Pip/tazo have reliable coverage for B. fragilis; adding metronidazole is unnecessary.
- g. Organisms susceptible to tetracycline are also susceptible to doxycycline.

## MDRO NOTES SPECIFIC FOR THIS PERIOD:

- a. 66 (6.4% of *E.coli*) were ESBLs (Extended spectrum beta-lactamase producing).
  - (Susceptible: 23% Ciprofloxacin; 61% TMP/SMX; 98% Nitrofurantoin)
  - 2 Proteus mirabilis and 1 Klebsiella pneumoniae were also ESBLs
  - Nitrofurantoin is reliable for ESBL cystitis. CARBAPENEMS are preferred for most severe ESBL infections.
- b. 38% of Staphylococcus aureus were MRSA.

## KEY/DEFINITIONS:

- ( or ↑): Indicates a >10% change from previous year.
- (R): Indicates intrinsic resistance to this antibiotic; inappropriate for use.

(Gray Cell): Antibiotic is not tested, known to be clinically ineffective, and/or suppressed per CLSI limitations.

MRSA: Methicillin resistant Staph aureus; MSSA: Methicillin sensitive Staph aureus

- (++): Nitrofurantoin should be used only for cystitis in afebrile patients with CrCl > 30.
- (^): Isolates with inducible clindamycin resistance (+ D test) are considered resistant.
- (#): Levofloxacin is no longer on the suscceptibility cards for gram negative pathogens. No data is available for reporting.