YKHC Annual Antibiogram

January 1, 2017 - December 31, 2017

	Yukon-Kuskokwim Health Corporation	Total # of Isolates	Penicillins					Cephalosporins						Carbapenem	Fluoroquinolones		AMG	Miscellaneous					
			Penicillin	Oxacillin	Ampicillin	Amoxicillin/Clav	Piperacillin/Tazo	Cefazolin	Cefuroxime	Cefotaxime	Ceftriaxone	Ceftazidime	Cefepime +++	Meropenem	Ciprofloxacin	Levofloxacin	Gentamicin	Nitrofurantoin ++	Tetracycline	Trimethoprim/Sulfa	Clindamycin^	Erythromysin	Vancomycin
Gram Negative	*E. coli*	1045			48	88	99	92			97		97	100	83	84	89	99	78	72			
	Enterobacter cloacae	27					81				74		100	100	100	100	100	35	100	96			
	Klebsiella aerogenes	31*					90				94		100	100	100	100	97		95	100			
	Klebsiella pneumoniae	37				100	100	100			100		100	100	97	97	100	50	95	97			
	Proteus mirabilis	38			97	100	97	100			100		100	100	100	100	100			100			
	Pseudomonas aeruginosa	29*					93					90	92	100	97	97	90						
Gram Positive	*Enterococcus faecalis*	48	98		100											98		98	23				100
	Coagulase Neg Staph sp.	219	19	47							47					94		99	94	83	74	36	100
	MRSA	207														53		100	97	100	99	28	100
	MSSA	332	18	100		100		100			100					93		100	99	100	94	67	100
	Staph. aureus	539	11	62							62					78		100	98	100	96	52	100
	Streptococcus pneumoniae +	46	98		98				96	100	100					100			96	87	93	90	100

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 suspectible is lowered when <30 isolates obtained:
(*) 2016 & 2017 data combined to increase # of isloates for reporting

c. Enterobacteriaceae that are ESBL producers (resistant to 3rd gen. cephalosporins) are also resistant to most penicillins, cephalosporins, and aztreonam.

d. Worldwide, there have been no penicillin resistant Beta-hemolytic Streptococcus, Group A (*Strep. pyogenes*) reported to date.

e. Worldwide, there have been no vancomycin resistant *Streptococcus pneumoniae*, Viridans Streptococcus, or Beta-hemolytic Streptococci reported to date.

f. Carbapenems & Pip/tazo have reliable coverage for *Bacteroides fragilis*; adding metronidazole is unnecessary.

g. Organisms susceptible to tetracycline are also susceptible to minocycline and doxycycline.

MDRO NOTES SPECIFIC FOR THIS PERIOD:

a. 35 (3.3% of *E.coli*) were ESBLs (Extended spectrum beta-lactamase producing). Macrobid is reliable for ESBL cystitis. (Susceptible: 37% FQs; 40% TMP/SMX; 100% Macrobid) CARBAPENEMS are preferrred for most severe ESBL infections.

b. 38% of *Staphylococcus aureus* were MRSA.

KEY/DEFINITIONS:

(Gray Cell): Drug is either not tested, known to be clinically ineffective, or Indicates intrinsic resistance to this antibiotic

MRSA: Methicillin resistant *Staph aureus*

MSSA: Methicillin sensitive *Staph aureus*

(+): *S. pneumoniae* susceptibility using meningitis PCN & Cephalosporin breakpoints

(++): Nitrofurantoin for UTIs in afebrile patients with CrCl > 30.

(+++): data only from 2016

(^): Isolates with inducible clindamycin resistance (+ D test) are considered resistant for the purposes of antibiogram reporting.