

# Antibiogram

## Chatham-Kent Health Alliance

### **A Guide to Interpreting the Antibiogram**

- The antibiogram is an annual cumulative report of the antimicrobial susceptibility rates of common pathogens recovered from patients receiving care at Chatham-Kent Healthcare Alliance facilities and is to be used as a resource to inform empirical antimicrobial therapy.
- Susceptibility rates are calculated from the compilation of susceptibility results from all 'first' clinical isolates of a specific pathogen recovered from an individual patient per 30-day period. The rationale for this referral period is based on the need to represent 'wild-type' susceptibility profiles and avoid over-representing antimicrobial resistance that may develop de novo during a patient's prolonged hospital stay.
- Susceptibility rates for pathogens or clinical scenarios represented by less than 30 isolates are not calculated due to their limited statistical significance and interpretive value.
- The appropriateness of empiric therapy is highlighted using a colour range that corresponds to susceptibility rates. Green, 80-100%; Yellow, 70-79%; Red, <70%.

# 2020 Antibiogram

## Chatham-Kent Health Alliance

Organism	Number of Isolates	Ampicillin	Amoxicillin-Clavulanate	Piperacillin-Tazobactam	Cloxacillin	Cephalexin (urinary tract)	Cefazolin	Ceftriaxone	Ceftazidime	Imipenem	Meropenem	Ciprofloxacin	Clindamycin	Gentamicin	Tobramycin	TMP-SMX	Vancomycin
<i>Escherichia coli</i>	1014	60	88			90	77	91	99			79		94	93	83	
<i>Klebsiella pneumoniae</i> complex	171		98			98	93	98	99			95		100	99		
<i>Proteus mirabilis</i>	76	95	97					100			100	99		95	92	99	
<i>Enterobacter cloacae</i> complex	61							72	100			90		97	95	92	
<i>Klebsiella oxytoca</i>	49		92					94	100			92		98	98	94	
<i>Pseudomonas aeruginosa</i>	97			93					91	85	89	83		92	98		
<i>Staphylococcus aureus</i>	360				76									74			100
MRSA	87				0									63			100
<i>Enterococcus faecalis</i>	30	100												79			100

*Enterobacter*, *Citrobacter*, *Klebsiella aerogenes* and *Serratia* species are intrinsically resistant to ampicillin, cefazolin, and cefuroxime and may develop resistance to broader-spectrum beta-lactams during prolonged beta-lactam therapy.