

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%.

2021 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>	986	67	88			91	79	93		100		82		94	92	85	
<i>Klebsiella pneumoniae</i> complex	238		97			96	89	98		99		92		98	98	95	
<i>Proteus mirabilis</i>	66	91	98					98			100	95		95	97	94	
<i>Enterobacter cloacae</i> complex	38							82		92		97		100	100	97	
<i>Klebsiella oxytoca</i>	54		91					91		96		96		100	100	100	
<i>Pseudomonas aeruginosa</i>	93			86					84	63	85	75		88	91		
<i>Staphylococcus aureus</i>	321					76							79			100	100
MRSA	78					0							83			100	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.