

Antibiogram

St. Thomas-Elgin General Hospital

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 St. Thomas-Elgin General Hospital 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

St. Thomas-Elgin General Hospital

Organism	Number of Isolates	Ampicillin	Amoxicillin-Clavulanate	Piperacillin-Tazobactam	Cloxacillin	Cephalexin (urinary tract)	Cefazolin	Ceftriaxone	Ceftazidime	Imipenem	Meropenem	Ciprofloxacin	Clindamycin	Doxycycline	Gentamicin	Tobramycin	TMP-SMX	Vancomycin
<i>Escherichia coli</i>	727	65	89			93	79	93		99		83			93	94	86	
<i>Klebsiella pneumoniae</i> complex	128		95			91	87	91		98		88			97	97	91	
<i>Proteus mirabilis</i>	46	96	98					98			100	98			96	96	96	
<i>Enterobacter cloacae</i> complex	47							68		100		96			96	96	94	
<i>Klebsiella oxytoca</i>	36		100					100		100		94			100	97	97	
<i>Pseudomonas aeruginosa</i>	108			91					87	81	93	89			95	98		
<i>Staphylococcus aureus</i> (incl. MRSA)	219				62								89	100			100	100
MRSA	84				0								94	100			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.