Antimicrobial Susceptibility Report January 1, 2016 to December 31, 2016 Mississauga Halton LTC (Excluding Hospitals)

## Urinary Tract Pathogens - % Susceptible

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim- Sulfamethoxazole
E. coli ^	754	82	41	74		77	46	84	100	92	72
Enterococcus species ^^^^	223										
Klebsiella pneumoniae *	179	98		97		98	98	100	100	32	94
Proteus mirabilis +	130	99	72	94		96	50	98	100		78
Group B Streptococcus ^^	66	_			_						
Pseudomonas aeruginosa	34				100		85	94			

### Organism Notes:

\* Includes ESBL and AMPC isolates (2.2% of total Klebsiella pneumoniae isolates identified ).

^ Includes ESBL and AMPC isolates (22.1% of total E.coli isolates identified). In Ontario, E.coli is found to be 99.5% susceptible to Fosfomycin.

^ This isolate is predictably susceptible to Penicillin.

Clindamycin, Trimethoprim/Sulfamethoxazole and all Cephalosporins are ineffective against Enterococcus species. Enterococcus isolates recovered from urine are generally susceptible to amoxicillin and nitrofurantoin.

+ Includes ESBL and AMPC isolates (0.8% of total Proteus mirabilis isolates identified).

### Antibiotic Notes:

(1) Cefazolin interpretation predicts results for Cephalexin (Keflex) in accordance with CLSI standards for urinary sites only (not systemic).

# All Other Sources (Excluding Surveillance) - % Susceptible

Organism	Number of Isolates	Cefazolin	Ceftazidime	Ciprofloxacin	Clindamycin	Cloxacillin	Erythromycin	Gentamicin	Tetracycline (2)	Trimethoprim- Sulfamethoxazole
Staphylococcus aureus ^^^	87	79			38	79	35		95	99
Pseudomonas aeruginosa	46		91	89				96		
Group B Streptococcus ^^	<30									

### Organism Notes:

^^ This isolate is predictably susceptible to Penicillin.

Includes Methicillin Resistant S.aureus (MRSA). MRSA is resistant to all B-Lactams (penicillins, cephalosporins, B-lactam/B-lactamase inhibitor combinations, and carbapenems). MRSA constitutes 19.5% of total Staphylococcus aureus isolates identified.

### Antibiotic Notes:

(2) Organisms that are susceptible to Tetracycline are also considered susceptible to Doxycycline.

#### <u>General Notes:</u>

Antibiogram results, patient risk factors for resistant organisms, and resistance epidemiology should be considered together to help guide empiric treatment of initial infections. Treatment should be re-evaluated as additional information from culture and sensitivity become available.

Calculation of results based on first isolate per patient.

90-100% of isolates are susceptible to the antibiotic indicated (GOOD CHOICE) 21-89% of isolates are susceptible to the antibiotic indicated (INTERMEDIATE CHOICE) 0-20% of isolates are susceptible to the antibiotic indicated (POOR CHOICE) Value based on < 30 isolates. Statistical comparison on results with less than 30 isolates is unreliable. n = # of isolates tested. Antibiotic susceptibility testing is not typically performed on the organism.