Antimicrobial Susceptibility Report

January 1, 2024 to December 31, 2024

Mississauga Halton Out Patient (Excluding Hospitals)

Urinary Tract Pathogens (in Order of Frequency) - % Susceptible

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftriaxone	Ciprofloxacin	Fosfomycin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim-Sulfamethoxazole
E. coli ^	14655	80	57	84	88	67	98	92	100	97	77
Enterococcus species ^^^^	4064										
Klebsiella pneumoniae *	2604	91		92	93	87		98	100	44	92
Group B Streptococcus ^^	1860										
Proteus mirabilis +	871	97 n:870	80	90	99	90		94	100		85
Staphylococcus saprophyticus ^^^	360										

Organism Notes:

* Includes ESBL and AMP-C isolates (6.6% of total Klebsiella pneumoniae isolates identified as ESBL and AMP-C).

^ Includes ESBL and AMP-C isolates (11.4% of total E.coli isolates identified as ESBL and AMP-C).

^^ This isolate is predictably susceptible to Penicillin.

^^^ Acute and uncomplicated urinary tract infections due to Staphylococcus saprophyticus will respond to commonly used antibiotics including Nitrofurantoin, Trimethoprim-Sulfamethaxazole and Fluoroquinolones.

^^^^ Clindamycin, Trimethoprim/Sulfamethoxazole and all Cephalosporins are ineffective against Enterococcus species. Enterococcus isolates recovered from urine are generally susceptible to amoxicillin and nitrofurantoin. Susceptibility to Amoxicillin is 97.9% and to Nitrofurantoin is 96.5%

+ Includes ESBL and AMP-C isolates (1.0% of total Proteus mirabilis isolates identified as ESBL and AMP-C).

Antibiotic Notes:

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

All Other Specimen Types excluding (Urines and Surveillance) - Organisms in Order of Frequency - % Susceptible

Organism	Number of Isolates	Cefazolin	Ceftazidime	Ciprofloxacin	Clindamycin	Cloxacillin	Erythromycin	Tetracycline (2)	Trimethoprim-Sulfamethoxazole
Group A Streptococcus ^^	4637								
Staphylococcus aureus ^^^	1594	85			80	85	73	94	99
Pseudomonas aeruginosa	543		96 n:542	88 n:542					
Group B Streptococcus ^^	165								

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 14.3% of total Staphylococcus aureus isolates identified.

Antibiotic Notes:

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

General Notes:

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.