Antimicrobial Susceptibility Report January 1, 2017 to December 31, 2017 North Simcoe Muskoka Out Patient (Excluding Hospitals)

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

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim- Sulfamethoxazole
E. coli ^	7514	88	62	93	95	84	93	100	98	81
Enterococcus species ^^^^	2717									
Klebsiella pneumoniae *	1127	98		97	97	97	98	100	32	93
Group B Streptococcus ^^	1072									
Proteus mirabilis +	312	100	85	98	99	91	96	100		87
Staphylococcus saprophyticus ^^^	290									

Organism Notes:

* Includes ESBL and AMP-C isolates (1.4% of total Klebsiella pneumoniae isolates identified as ESBL and AMP-C).

^ Includes ESBL and AMP-C isolates (2.5% of total E.coli isolates identified as ESBL and AMP-C). In Ontario, E.coli is found to be 98.1% susceptible to Fosfomycin.

[^] 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 97.1% and to Nitrofurantoin is 97.4%

+ Includes ESBL and AMP-C isolates (0.6% 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	Gentamicin	Tetracycline (2)	Trimethoprim- Sulfamethoxazole
Group A Streptococcus ^^	845									
Staphylococcus aureus ^^^	803	89			74	89	68		98	100
Pseudomonas aeruginosa	252		94	83				97		
Group B Streptococcus ^^	100									

Organism Notes:

^^ This isolate is predictably susceptible to Penicillin.

M 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 11.2% 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.

