Antimicrobial Susceptibility Report January 1, 2016 to December 31, 2016 North East Out Patient (Excluding Hospitals)

Urinary Tract Pathogens - % Susceptible

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim- Sulfamethoxazole
E. coli ^	6275	89	62	94	96	85	94	100	97	81
Enterococcus species ^^^^	1238									
Klebsiella pneumoniae *	972	99		98	99	98	99	100	35	94
Group B Streptococcus ^^	956									
Staphylococcus saprophyticus ^^^	195									
Proteus mirabilis +	185	99	89	98	100	99	95	100		88

Organism Notes:

* Includes ESBL and AMPC isolates (0.5% of total Klebsiella pneumoniae isolates identified).

^ Includes ESBL and AMPC isolates (2.1% 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.

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.

+ Includes ESBL and AMPC isolates (0.0% 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
Group A Streptococcus ^^	1420									
Staphylococcus aureus ^^^	828	90			82	90	73		98	99
Pseudomonas aeruginosa	207		96	86				95		
Group B Streptococcus ^^	129									

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 9.4% 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.