# Antimicrobial Susceptibility Report January 1, 2017 to December 31, 2017 Erie St. Clair 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 ^	4365	87	63	93	95	86	94	100	97	82
Enterococcus species ^^^^	1351									
Klebsiella pneumoniae *	670	98		98	99	99	99	100	36	94
Group B Streptococcus ^^	527									
Proteus mirabilis +	185	100	84	94	96	92	95	100		87
Staphylococcus saprophyticus ^^^	141									

#### Organism Notes:

\* Includes ESBL and AMP-C isolates (0.6% of total Klebsiella pneumoniae isolates identified as ESBL and AMP-C).

^ Includes ESBL and AMP-C isolates (2.7% of total E.coli isolates identified as ESBL and AMP-C). In Ontario, E.coli is found to be 98.1% susceptible to Fosfomycin.

<sup>^</sup> 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 ( 3.2% 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 ^^	654									
Staphylococcus aureus ^^^	501	82			79	82	71		95	99
Pseudomonas aeruginosa	134		96	94				96		
Group B Streptococcus ^^	44									

### **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 16.4% 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.

