Antimicrobial Susceptibility Report January 1, 2017 to December 31, 2017 South East LTC (Excluding Hospitals)

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

| Organism | Number of Isolates | Amox clavulanic | Ampicillin | Cefazolin (1) | Ceftazidime | Ceftriaxone | Ciprofloxacin | Gentamicin | Meropenem | Nitrofurantoin | Trimethoprim- Sulfamethoxazole |
|---------------------------|--------------------------|-----------------|------------|---------------|-------------|-------------|---------------|------------|-----------|----------------|-----------------------------------|
| E. coli ^ | 953 | 82 | 45 | 79 | | 81 | 57 | 84 | 100 | 93 | 72 |
| Enterococcus species ^^^^ | 343 | | | | | | | | | | |
| Klebsiella pneumoniae * | 220 | 99 | | 95 | | 95 | 92 | 93 | 100 | 30 | 92 |
| Proteus mirabilis + | 167 | 96 | 74 | 93 | | 99 | 80 | 75 | 100 | | 60 |
| Group B Streptococcus ^^ | 90 | | | | | | | | | | |
| Pseudomonas aeruginosa | 82 | | | | 99 | | 93 | 91 | | | |

Organism Notes:

* Includes ESBL and AMP-C isolates (5.0% of total Klebsiella pneumoniae isolates identified as ESBL and AMP-C).

^ Includes ESBL and AMP-C isolates (18.4% 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.

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 |
|---------------------------|--------------------------|-----------|-------------|---------------|-------------|-------------|--------------|------------|------------------|-----------------------------------|
| Staphylococcus aureus ^^^ | 230 | 65 | | | 56 | 65 | 48 | | 100 | 99 |
| Pseudomonas aeruginosa | 83 | | 86 | 81 | | | | 93 | | |
| Group B Streptococcus ^^ | <30 | | | | | | | | | |

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 32.2% 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.

