Antimicrobial Susceptibility Report January 1, 2016 to December 31, 2016 Central LTC (Excluding Hospitals)

Urinary Tract Pathogens - % Susceptible

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim- Sulfamethoxazole
E. coli ^	1274	77	37	79		82	49	84	100	95	65
Enterococcus species ^^^^	429										
Klebsiella pneumoniae *	230	98		93		93	95	99	100	35	92
Proteus mirabilis +	191	100	74	97		100	79	96	100		89
Group B Streptococcus ^^	76										
Pseudomonas aeruginosa	52				94		79	94			

Organism Notes:

* Includes ESBL and AMPC isolates (6.5% of total Klebsiella pneumoniae isolates identified).

^ Includes ESBL and AMPC isolates (17.5% 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.

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
Staphylococcus aureus ^^^	202	79			45	79	39		97	99
Pseudomonas aeruginosa	111		94	86				93		
Group B Streptococcus ^^	31									

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 21.3% of total Staphylococcus aureus isolates identified.

Antibiotic Notes:

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

<u>General Notes:</u>

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.