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### LTC Antibiogram Comparison

Choice of antibiotic for empiric treatment should differ in the LTC setting, based on the varied antibiotic resistance patterns seen in the LTC setting compared to both the general community and females above age 40.

#### Most Current Antibiogram: January – December 2016

[https://www.calgarylabservices.com/files/HealthcareProfessionals/Micro\\_Antibiograms/NursingHome.pdf](https://www.calgarylabservices.com/files/HealthcareProfessionals/Micro_Antibiograms/NursingHome.pdf)

	Ampicillin/ Amoxicillin	Cloxacillin	Amoxicillin/ Clavulanate	Pip/Tazo	Cephalexin (urine)	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	SXT	Norfloxacin (urine)	Ciprofloxacin	Nitrofurantoin (urine)	Fosfomycin (Urine)	Vancomycin	Gentamicin	Tobramycin	Tetracycline		
	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community	Nursing Home	Community		
Enterococcus faecalis	100	100											87	70		100	100				
Staphylococcus aureus (ALL)			85	77					84	83	74	74	94	97		68				96	99
•MSSA			100	100					86	90	81	85	95	98						96	98
•MRSA			0	0					74	60	32	32	88	97						93	98
Escherichia Coli (ALL)	60	50			86	77	97	95	92	80										92	85
•ESBL						94	90														
Klebsiella oxytoca					95	92	96	95	92	85											
Klebsiella pneumoniae					96	99	96	99	98	98											
Proteus mirabilis	76	65			98	99			97	97											
Pseudomonas aeruginosa						96	99														

All susceptibilities via antibiograms from Calgary Lab Services (<http://www.calgarylabservices.com/education-research/publications/microbiology-Antibiograms.aspx>)

\*These organisms usually produce inducible B-lactamase which cause failure of 3rd generation B-lactam therapy, despite in vitro susceptibility indicated for treatment purposes.

Note: Please refer to the Calgary Lab Services website for the complete LTC antibiogram and others

### Example – Urinary Tract Infection

- Ciprofloxacin *may* be a good option for empiric treatment for a UTI in the community, due to the ~90% susceptibility of likely culprit organisms (see below table).
- However, for empiric treatment of a UTI in the nursing home, environment, ciprofloxacin

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Long-term Care Formulary

AS-04

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has a ~45% chance of resulting in a treatment failure.

<b>Likely causative organisms in UTI</b>	<b>Community Susceptibility</b>	<b>LTC Susceptibility</b>
<i>E. Coli (All)</i>	86	57
<i>Enterococcus</i>	87	70
<i>Proteus mirabilis</i>	89	95