

Long-term Care Formulary
AS -XX

SECTION	SUBJECT	PAGE
Antimicrobial Stewardship	P&T Position Statement on Antibiotic Use in Long-term Care	1 of 4
	Original	YY MM DD 14 09 25
	Last Update	17 12 04

1. Bugs in LTC are NOT the same as Bugs in the Community

Bottom Line:	Empiric therapy for common organisms is not the same in the Calgary LTC system as it is for community based patients
---------------------	---

	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	99	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						41	39	29	2	29	2	93	88		
Klebsiella oxytoca					95	92	96	95	92	85			96	95	98	98	98	98	91	90		
Klebsiella pneumoniae					96	99	96	99	98	98			94	93	98	97	98	96	43	48		
Proteus mirabilis	76	65							98	100			85	72	97	85	97	83		94	95	
Pseudomonas aeruginosa						96	99												94	93	97	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

As indicated by 2017 Calgary Lab Services data, there is significant variation in susceptibility amongst the same organisms in a nursing home setting. There is concern that overuse of currently effective antimicrobials may lead to the evolution of resistant mechanisms.

See [AS-04](#) for in-depth discussion and references.

Long-term Care Formulary

AS -XX

SECTION	SUBJECT	PAGE
Antimicrobial Stewardship	P&T Position Statement on Antibiotic Use in Long-term Care	1 of 4
	Original	YY MM DD 14 09 25
	Last Update	17 12 04

2. Don't Treat Asymptomatic Bacteriuria

Bottom Line:	In the majority of cases, asymptomatic bacteriuria should not be treated with antibiotics.
<p>To reduce unnecessary antibiotic treatment of ASB:</p> <ol style="list-style-type: none"> 1. UTI must be diagnosed clinically by patient symptoms and signs 2. Send urine for culture only AFTER a clinical diagnosis of UTI is made 3. Do NOT order "ROUTINE" or screening urinalysis or urine culture in patients without symptoms/signs of UTI <p>See Appropriateness of Care: Asymptomatic Bacteriuria and Antimicrobial Stewardship Backgrounder "Understanding Asymptomatic Bacteriuria" for in-depth discussion and references.</p>	

3. Don't Use UTI Prophylaxis

Bottom Line:	There is no evidence-based support for antibiotic prophylaxis for urinary tract infections in the geriatric population
<p>While there is <i>some</i> evidence for antibiotic prophylaxis in recurrent urinary tract infection, such recommendations are based off of evidence that includes younger, less medically complex clients and excludes those with significant and common co-morbidities seen in the LTC population (e.g. impaired renal function).</p> <p>As well, there are concerns that long-term use of antibiotics will artificially select for resistance organisms to cause infections in the future.</p> <p>See AS-02 for in-depth discussion and references.</p>	

© 2017 Alberta Health Services. This material is provided on an "as is", "where is" basis. Alberta Health Services does not make any representation or warranty, express, implied or statutory, as to the accuracy, reliability, completeness, applicability or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional. Alberta Health Services expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

Long-term Care Formulary

AS -XX

SECTION	SUBJECT	PAGE
Antimicrobial Stewardship	P&T Position Statement on Antibiotic Use in Long-term Care	1 of 4
	Original	YY MM DD 14 09 25
	Last Update	17 12 04

4. Bacterial Conjunctivitis is just Short Term

Bottom Line:	For treatment of bacterial conjunctivitis, ophthalmic antibiotic products should be used for a maximum of 7 days
True bacterial conjunctivitis should typically be treated for 5-7 days, with a therapeutic response seen in 1-2 days	
Bacterial infection marked by thick, purulent discharge that appears spontaneously and continuously throughout the day. Viral or non-infectious conjunctivitis is typically more watery, with sensation of burning/itching/grittiness.	
See AS-03 for in-depth discussion and references.	

5. Review Early/Prescribe Surely

Bottom Line:	The clinical pharmacist and medical team should optimally be reviewing each antibiotic order by Day 3 for the following:
<ul style="list-style-type: none"> • Reassess initial diagnosis • Review all microbiology results (C&S) • Tailor antimicrobials; <ul style="list-style-type: none"> ○ Redirect empiric therapy • Switch IV/IM to oral (if applicable) 	
See Antimicrobial Stewardship Backgrounder "The "Day 3 Bundle": Tailoring Empiric Antimicrobial Therapy for Inpatients on Day 3" for in-depth discussion (modify for LTC clients).	

Long-term Care Formulary

AS -XX

SECTION	SUBJECT	PAGE		
Antimicrobial Stewardship	P&T Position Statement on Antibiotic Use in Long-term Care	1 of 4		
	Original	YY	MM	DD
	Last Update	14	09	25
		17	12	04

6. Don't use IV or IM when you can use oral

Bottom Line:	IV to PO conversion is a simple but important antimicrobial stewardship strategy
<p>Moving from IM/IV to oral antibiotics has many advantages:</p> <ul style="list-style-type: none"> • Less invasive care for the client • Reduced risk of line-related infection and adverse events • No IV related mobility restrictions for patients, nor pain associated with IM injections • Decreased costs (↓ medication preparation and administration time, ↓ IV supplies, ↓ drug costs) <p>Switch (or don't start!) therapy to PO when the oral form has rapid absorption and high oral bioavailability</p> <p>See Antimicrobial Stewardship Backgrounder "Intravenous to Oral Antimicrobial Therapy Conversion" for in-depth discussion and references.</p>	