

OBJECTIVE

Alberta clinicians caring for residents in long term care facilities (LTCF)* will:

- Increase the accuracy of clinical diagnosis of urinary tract infections (UTI)
- Reduce inappropriate prescribing of antibiotics for asymptomatic bacteriuria
- Optimize antibiotic therapy for treatment of UTIs while minimizing short and long term risks associated with antibiotic use
- Optimize testing and use of laboratory services for UTIs

TARGET POPULATION

Older adults living in LTCF

*LTCF is any congregate living environment for older or disabled persons who have high personal and professional care needs

Note: The clinical principles of this guideline apply in general to older adults regardless of where they reside. The [UTI in LTCF Checklist](#) however, is specifically designed for use in LTCF settings.

RECOMMENDATIONS

- ✓ Diagnose UTI based on clinical assessment of signs and symptoms, **NOT** laboratory testing.
- ✓ Initiate the [UTI in LTCF Checklist](#) to ensure accurate communication of clinical findings between nursing and medical staff
- X DO NOT treat asymptomatic bacteriuria (the presence of bacteria in the urine in the absence of clinical signs and symptoms of infection).
- ✓ For medically stable residents with signs/symptoms of UTI, continue to assess and push fluids for 24 hours, before ordering laboratory tests or initiating antibiotics.
- ✓ Use urine culture and sensitivity (C&S) results to guide selection of antibiotics. Collect urine specimens prior to initiation of antibiotics.
- ✓ Impaired renal function is common in older adults and may require antibiotic dose adjustment.
- ✓ If medical status is deteriorating rapidly and antibiotics need to be initiated prior to receiving C&S results:
 - Select a narrow spectrum antibiotic for empiric therapy as per *Bugs & Drugs*
 - Promptly review C&S results and alter empiric antimicrobial therapy, if indicated
 - **STOP ANTIBIOTICS** if C&S results are not consistent with diagnosis of UTI
- ✓ Consider an alternate diagnosis if symptoms do not improve within 48 hours following initiation of appropriate antibiotic therapy.
- ✓ If the resident's medical condition deteriorates, and if consistent with the resident's Goals of Care Designation, consider transfer to acute care.
- ✓ For residents with neurogenic bladder caused by multiple sclerosis and with a suspected UTI see [Appendix A](#) for specific assessment, treatment and management recommendations.

APPENDIX A

Guidelines for Residents with Multiple Sclerosis

<p>SAME DAY ATTENTION IN PRIMARY CARE</p>	<p>ASSESS FOR UTI including:</p> <ul style="list-style-type: none"> • Typical signs and symptoms of UTI OR • New/worsening neurological symptoms PLUS 1 or more of the following: <ul style="list-style-type: none"> ○ history of UTIs or bladder dysfunction ○ fever, chills ○ catheterization ○ new severe fatigue or confusion <p>NOTE: New/worsening neurological symptoms in isolation fall outside the scope of this guideline</p>
	<p>URGENT MANAGEMENT</p> <ul style="list-style-type: none"> • Collect clean catch midstream urine sample. For indwelling catheters, collect from a newly inserted catheter • Order urine for culture and susceptibility (C & S) <p><i>Label requisition: "MS patient symptomatic of UTI, [indicate sample method]. Work up for low colony count of uropathogens. Contact immediately if sample is unsatisfactory."</i></p> <ul style="list-style-type: none"> • Start antibiotic immediately after urine sample collected • Tell patient to phone back if not better within 48-72 hours or sooner if symptoms worsen <ul style="list-style-type: none"> X Do not use dipstick X Do not start antibiotics without collecting urine sample first X Do not wait for results of urine culture to start antibiotic
<p>MONITOR 24 TO 48 HOURS</p>	<p>REVIEW C & S RESULTS</p> <ul style="list-style-type: none"> • Positive growth: Adjust antibiotic, if necessary • No growth: STOP antibiotic <p>NOTE: If microscopic urinalysis is used, stop antibiotics if results are fully negative, i.e., no nitrites, leukocytes, blood, WBC, RBC or bacteria</p>
<p>FOLLOW-UP 14 TO 21 DAYS</p>	<p>ASSESS</p> <ul style="list-style-type: none"> • Review symptoms to ensure UTI has resolved. Repeat urine culture is not required unless patient is symptomatic or pregnant • Recurrent UTI (2 infections in 6 months or ≥ 3 in 12 months) • Overall bladder function: <ul style="list-style-type: none"> ○ impaired emptying ○ overactive bladder ○ difficulty with catheters ○ incontinence
	<p>CONSIDER REFERRAL to specialist if issues with above</p>
	<p>DISCUSS</p> <ul style="list-style-type: none"> • Prevention strategies • <i>MS: My Bladder Management Action Plan.</i> Consider self-management plan if appropriate

Click [here](#) for the complete MS and Urinary Tract Infection Guideline and the MS: My Bladder Management Action Plan