

Preventing Antibiotic Overuse with Asymptomatic Urinary Tract Infections (UTIs)

This fact sheet is for healthcare providers to help assess asymptomatic bacteriuria and to reduce the risk of developing other infections like *C. difficile* and multidrug-resistant organisms due to the overuse of antibiotics.

Key Points:

- Treatment of asymptomatic bacteriuria isn't recommended. Up to 50% of seniors living in a long-term care facility have colonized bacteria in their urinary system with no UTI symptoms.
- A change in mental status can be due to a variety of causes other than a UTI, like delirium, dehydration, medication, pain, malnutrition, dementia, stress and more.
- Overuse of antibiotics can create multidrug-resistant organisms that are difficult to treat, 12% of residents treated with antibiotics for UTIs develop *C. difficile* infections.
- When you test, order a urine microscopy with reflex to culture.

If you want additional information, please email us at ahs.vdhhaiepi@vermont.gov

When and When Not to Test

NO SYMPTOMS OF UTI

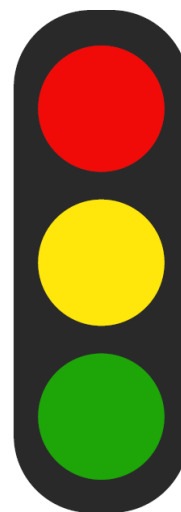
- Don't test or culture urine
- Don't treat with antibiotics if the resident doesn't have localizing signs/symptoms or warning signs
- Don't treat with antibiotics even if urine culture is positive

ISOLATED NON-LOCALIZING SIGNS/SYMPTOMS

- Initiate active monitoring
- Don't test or treat with antibiotics
- Consider testing and treatment with antibiotics if resident develops localizing urinary signs and symptoms

LOCALIZING SIGNS/SYMPTOMS

- Test if symptoms are severe or not resolving during observation
- Consider need for immediate antibiotic therapy and/or transfer to higher level of care if warning signs are present



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Resources:

[Improving Management of Suspected UTI \(urinary tract infections\) in Nursing Homes](#) (infographic) – University of Wisconsin-Madison

[Assessment of a Resident with a Suspected UTI](#) (PowerPoint Presentation) – Agency for Healthcare Research & Quality

Patient and Family Education



- Consider an alternative diagnosis when no localizing UTI symptoms are present
- Discuss the risks of antibiotic overuse with the patient and/or their family
- Make a contingency plan to monitor the patient for the development of localizing symptoms
- **Resources:**
 - [Family Education Brochure](#) - University of Wisconsin-Madison
 - [Effective Communication with Residents and Families](#) - CDC

Memory Care Patients



- UTI symptoms that can be assessed with a non-verbal or confused patient:
 - CVA tenderness
 - Fever
 - Increased urinary frequency or new onset of incontinence
 - Visible blood in the urine (gross hematuria)
- **Resources:**
 - [Video on When to Test for a UTI](#) – Wisconsin Healthcare-Associated Infections in LTC Coalition, key info at 6:26 min.
 - [Delirium information poster](#) – Agency of Healthcare Research and Quality

Scientific Resources



- [Urinary Tract Infection and Asymptomatic Bacteriuria in Older Adults](#) - National Library of Medicine, December 2017
- [Upstream Intervention Effective in Reducing Unnecessary Antibiotic Prescriptions](#) – Infectious Disease Society of America, October 2022
- [Asymptomatic bacteriuria in critical-access hospitals: Prevalence and patient characteristics driving treatment](#) – National Library of Medicine, March 2024
- [Use of Multiplex Molecular Panels to Diagnose Urinary Tract Infection in Older Adults](#) – National Library of Medicine, November 2024