

Asymptomatic Bacteriuria or Urinary Tract Infection

Asymptomatic Patients:

Symptomatic Patients:

DO NOT SCREEN
the following patients:

- Premenopausal, non-pregnant women
- Diabetic women
- Older adults
- Elderly, nursing home residents
- Renal transplant recipients >1 month post-transplant
- Persons with spinal cord injury
- Catheterized patients

SCREEN
the following patients:

- Pregnant women
- Patients undergoing an invasive urinary tract procedure
- Renal transplant recipients less than 1 month post-transplant

Obtain a routine urine culture to see if the patient meets criteria for bacteriuria

If bacteriuria is present, treat appropriately!

Urinary Tract Infection Symptoms:

- Urgency
- Rigors
- Frequency
- Dysuria
- Suprapubic pain or tenderness
- Flank pain
- Fever (>38°C) without other explanation
- Sepsis

****Please note:** The following symptoms on their own are not indicative of a UTI. Please proceed with caution if none of the above signs and symptoms are present:

- Pyuria — WBCs in urine
- Cloudy urine / Sediment in urine
- Dark urine / Change in urine color
- Odorous urine / Change in urine odor
- Falls / Dizziness
- Altered Behavior / Delirium

SCREEN AND TREAT all patients that are symptomatic of urinary tract infection appropriately!

Asymptomatic Bacteriuria (ASB)

What is Asymptomatic Bacteriuria (ASB)?

Asymptomatic bacteriuria refers to the isolation of bacteria in urine culture from a patient without signs or symptoms of Urinary Tract Infection (UTI). A positive urine culture result (with or without pyuria) alone does not meet criteria for initiation of antibiotics according to infectious diseases guidelines.

Urinary Tract Infection (UTI) Symptoms

- Urgency
- Rigors
- Frequency
- Dysuria
- Suprapubic pain or tenderness
- Flank pain
- Fever (>38°C) without other explanation
- Sepsis

What are NOT symptoms of a UTI?

The following symptoms on their own are not indicative of a UTI. Please proceed with caution if none of the symptoms listed above are present.

- Pyuria — White Blood Cells (WBCs) in urine
- Cloudy urine / Sediment in urine
- Dark urine / Change in urine color
- Odorous urine / Change in urine odor
- Falls / Dizziness
- Altered Behavior / Delirium
 - ⇒ Consider other delirium causes:
 - Pain
 - Infection
 - Constipation
 - Dehydration
 - Medication
 - Environment

Who should be treated for ASB?

- Pregnant women
- Patients undergoing an invasive urinary tract procedure
- Renal transplant recipients less than 1 month post-transplant

What's the risk in treating ASB?

Treatment of ASB in patients (not listed above) may lead to:

- Antibiotic resistance
- C. difficile infections
- Antibiotic side effects
- Urinary Tract Infection
- Missing the real, true diagnosis!

How YOU Can Help!

1. Remember it is hard to ignore a positive culture — send urinalysis specimens and urine cultures to the laboratory wisely!
2. Consider other causes for delirium.
3. Ensure good specimen collection! Specimens should be clean catch urine or cath urine from a cleansed sample port. Specimens from cath bags or contaminated voided urine should never be sent for urinalysis or culture!

How common is ASB?

Many older patients have bacteria in urine without symptoms. It is much more common than UTI.

Community-dwelling > 70 years



3.6-19%



10.8-16%

Older adults in LTC



15-50%



25-50%

Persons with indwelling catheters

98% with long-term use

3-8% per day with short term use

Asymptomatic bacteriuria. AHRQ. <https://www.ahrq.gov/sites/default/files/wysiwyg/antibiotic-use/best-practices/ASB-one-page.pdf>. Accessed February 10, 2023.

Fekete T. Asymptomatic bacteriuria in adults. UpToDate. <https://www.uptodate.com/contents/asymptomatic-bacteriuria-in-adults>. Published June 29, 2021. Accessed February 10, 2023.