

Urine Testing Algorithm in LTC/DSL

Long Term Care - Designated Supportive Living | Older Adults



Do not test urine for infection for:

- changes in color, cloudiness & smell alone
- catheter insertion or change



- Multiple Sclerosis: see ACTT/TOP Multiple Sclerosis & Management Of Urinary Tract Infection
- CPG Neurogenic bladder: see Alberta SCI Bladder Management Pathway

If you suspect the resident has a UTI:

Assess for Delirium

- See Delirium, Seniors Knowledge Topic, or
- Site specific assessment tool

Push fluids for 24 hours

- Unless on fluid restriction
- Consider clysis or IV fluids if oral intake is less than 1 L/day

Assess non-specific changes such as:

- Alteration of cognitive/mental status from baseline
- Lethargy
- Weakness
- Malaise
- Falls
- Irritable and/or aggressive behaviour

By addressing these potential causes:

- Depression
- Infections (respiratory, skin/soft tissue)
- Constipation or urinary retention
- Hypoxia/Ischemia
- Hyper/Hypoglycemia
- Dehydration
- Drug interactions/side effects
- Sleep/Environment changes
- Seizures/post seizure state
- Pain
- Restraints

Review Goals of Care Designation / Align further treatment accordingly

Individualize assessment based on resident's ability to verbalize symptoms • Use physical assessment to determine following criteria:

No catheter

At least one of the following:

- Acute dysuria / burning sensation with voiding
- OR**
- Temp >38°C or 1.1°C above baseline on 2 consecutive occasions (4-6 hr apart) Temp 1 _____ Temp 2 _____

PLUS one or more of the following:

- New or increased urinary frequency, urgency, incontinence
- New flank or suprapubic pain or tenderness
- Gross hematuria

Catheter

- No other identifiable cause of infection

AND one or more of the following:

- Temp >38°C or 1.1°C above baseline on 2 consecutive occasions (4-6 hr apart) Temp 1 _____ Temp 2 _____
- New flank or suprapubic pain or tenderness
- Rigors/ Chills
- New onset delirium

Use SBAR to communicate all of the above to prescriber • Indicate urgent if required
Are above criteria met?



Order urinalysis and urine culture * **Yes**

- The role of urine C&S is to guide selection of antibiotic therapy
- Complete all fields on laboratory requisition including signs & symptoms and current or recent antibiotic use
- Repeating C&S after antibiotic therapy is NOT necessary unless typical UTI signs and symptoms persist.

If **mild** symptoms

Await results of urine C&S before starting treatment

If **moderate** to severe symptoms start empiric antibiotic therapy

For treatment recommendations refer to **Bugs & Drugs**

Discuss antibiotic therapy with pharmacist and health care team as needed:

- Verify antibiotic choice and duration of therapy is consistent with recommendations in guidelines / Bugs & Drugs
- When C&S results are available, ensure targeted antibiotic therapy ordered
- Verify antibiotic dosage is appropriate for kidney function
- Review allergies against antibiotic choice

No



If above criteria **NOT** met (no UTI symptoms)
Do not test urine for infection

- Continue to monitor for 24-48 hours
- Apply interventions as per assessment above
- Document findings

Improvement or UTI not suspected?

No improvement & suspected UTI?



Do NOT collect urine for urinalysis or urine culture



Contact prescriber to order urinalysis and urine culture *



C&S Results (From Lab or Netcare)

- Bacteria in the urine (at any bacterial colony count) does not indicate a UTI unless there are signs or symptoms that are due to a UTI
- More than three organisms usually indicates contamination and the need to collect a new specimen
- The frequency of asymptomatic bacteriuria increases with age and is common among LTC/DSL residents