

# 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