

# The basics of urinary tract infection (UTI) prevention and identification

## Urinary Health in Continuing Care Settings



A urinary tract infection (UTI) is the laboratory confirmed presence of bacteria in the urinary tract and the presence of clinical signs and symptoms of a urinary tract infection.

### We know that:

- UTIs are the most common bacterial infection in the elderly due to age-related changes in the body.
- UTIs negatively affect the physical, mental and emotional health of the elderly.
- UTIs are the most misdiagnosed infection in the elderly and can lead to inappropriate antibiotic use and other drug-related adverse effects.

### UTI or not a UTI?

Asymptomatic bacteriuria, defined as bacteria in the urine without the signs and symptoms of an infection, is often mistaken for a UTI.

To find out more about the difference, refer to the *UTIs and Asymptomatic Bacteriuria* resource online:

<http://www.health.gov.sk.ca/UTIs-and-asymptomatic-bacteriuria-poster-jan2014>

It is often difficult to know if the change or symptom is caused by a UTI or some other reason. For information on how to assess for a UTI and what to do next, refer to the *ABCs for Diagnosing UTIs in Continuing Care* resource online:

<http://www.health.gov.sk.ca/ABCs-for-diagnosing-UTIs-in-continuing-care-jan2014>

## Collecting a Urine Specimen for C&S

Proper collection, storage and transport of urine specimens will ensure that the best antibiotic will be chosen for treatment of the infection.

Collect urine before antibiotics are given for best results.

### Urine collection from the resident without a catheter

- Provide good pericare before urine collection.
- If possible, obtain a clean catch or midstream urine to avoid contamination of the specimen. If this is not possible, then obtain urine by:
  - » in and out catheterization
  - » freshly applied condom catheter for men

### Urine collection from a resident with a catheter

Catheter in place less than 14 days?

- Collect from sampling port only, not the drainage bag.

Catheter in place 14 days or more?

- Remove old catheter and collect urine from new catheter.

### Urine specimen handling and transport

- Refrigerate at 4°C, if not sent to lab within 30 minutes.
- Transfer to lab in cooler bag, within 24 hours of collection.

## Promoting Urinary Health to Prevent UTIs

### Ensure resident receives adequate hydration

- Promote increased fluid intake and a variety of fluids during fluid rounds, meal times and especially during social gatherings.
- Individually monitor residents on fluid restrictions and thickened fluids as they are more at risk of dehydration.
- Assess for cultural preferences in fluids, as well as hot or cold fluid preferences.

### Promote healthy voiding habits

- Encourage regular toileting and privacy if possible.
- Schedule toileting assist or reminders every 2-3 hours when patient is awake.
- Prevent constipation and fecal impaction.
- Maintain or improve function and mobility through regular ambulation, transfers and therapies.

### Promote and provide good perineal care

- Ensure perineal area is clean and dry.
- Wash and wipe from front to back.
- Wash area with warm water and mild soap and pat dry (avoid bubble baths and scented wipes).
- Change incontinence pads and briefs frequently.

## Summary

- Urinary tract infections (UTIs) are the most common bacterial infection in the continuing care setting.
- Maintaining or improving urinary health improves the quality of life for the elderly, therefore preventing UTIs should be part of our daily care routine.
- Due to age related changes in the body and/or a history of previous urinary catheter insertion, many residents may have naturally occurring (or colonized) bacteria in their bladder and urine tests (asymptomatic bacteriuria).
- A UTI diagnosis depends on clinical signs and symptoms of infection plus a culture and sensitivity test (C&S). Dipsticks should not be used to test urine.
- Taking antibiotics, for the right or wrong reason, is not without risks, such as antibiotic resistance, diarrhea, adverse reactions, etc.

#### Additional Online Resources

##### **Guidelines for the Prevention and Treatment of (UTIs) in Continuing Care Settings**

<http://www.health.gov.sk.ca/UTI-guidelines-apr2013>

##### **UTI Prevention Collaborative, Virginia Dept. of Health**

[http://www.vdh.virginia.gov/epidemiology/surveillance/hai/documents/pdf/UTI\\_GarciaSlides.pdf](http://www.vdh.virginia.gov/epidemiology/surveillance/hai/documents/pdf/UTI_GarciaSlides.pdf)

##### **Best Practices: Urinary Tract Infections in LTC**

<http://www.cnca.ca/pdf/Cowie%20-%20UTI%20Paper%20Presentation%20slide%20deck.pdf>

##### **Judicious Antibiotic Use in LTC Facilities Program: Urinary Tract Infections**

<http://www.minnesotaarc.org/ltc/uti/index.html>