

What is a Urinalysis? What is a Urine Culture and Sensitivity Test?

Urinalysis is a test for:

- physical and chemical characteristics of urine
- it provides information such as pH (acidity)
- presence of sugar, proteins, nitrites and white blood cells to help determine conditions such as kidney function
- diabetes and possible UTIs

Urine culture and sensitivity (C&S) is a test used for the identification of bacteria and the appropriate antibiotic treatment options. This test is only ordered for residents that have symptoms of a UTI.

How do you Diagnose a UTI?

In order to correctly diagnose a UTI, clinical staff check residents for specific symptoms. A clean/sterile urine sample is then sent to the lab for urinalysis and urine C&S. Both symptoms and a positive urinalysis/urine C&S must be present to diagnose a UTI.



The nursing staff/doctor will **not** perform urinalysis or urine C&S for residents with **non-specific symptoms**, because it may lead to unnecessary antibiotic treatment which can be **dangerous** for the resident.

Visit our website at:
www.rqhealth.ca/asp



Ask us a question:
antimicrobial.stewardship@saskhealthauthority.ca

The Antimicrobial Stewardship Program is an interdisciplinary collaboration of health care professionals that promotes optimal use of antibiotics by assessing:

- the **indication**
- the right **drug**
- the right **strength (dose)**
- the right **length of treatment**

Inappropriate use of antibiotics leads to **antibiotic resistance**.

This is a change in bacteria that will prevent antibiotics from treating an infection.

Antibiotics are limited resources that should be used only when necessary.

We all have the responsibility to ensure there are available treatments for people who really need it.

For further health concerns, call



URINARY TRACT INFECTIONS (UTIs)

&

ASYMPTOMATIC BACTERIURIA (ASB)

Information for Long-term Care Residents and Family Members



Antimicrobial Stewardship Program
Stopping Bugs. Saving Drugs.



What is a Urinary Tract Infection?

A Urinary Tract Infection (UTI) is a **bacterial infection** in any part of the urinary tract system (urethra, bladder, ureter, kidneys). It is usually caused by bacteria such as *E. coli*. UTIs are common in elderly people because of their weakened immune systems and weakened bladder muscles. Residents with UTIs are treated with appropriate antibiotics.

What is Asymptomatic Bacteriuria?

Asymptomatic bacteriuria is the presence of bacteria in the urine **without the resident having symptoms** of a UTI.

- Many elderly people have bacteria in their urinary tract or their bladder.
- Asymptomatic bacteriuria is very common in people that are catheterized and residents of long-term care homes.
- The presence of asymptomatic bacteriuria does not cause harm to the resident.

People with asymptomatic bacteriuria **are not treated with antibiotics** because it is not associated with complications such as UTI or blood infections. Furthermore, the use of antibiotics:

- Can cause recurring infections with more resistant bacteria (bacteria that does not respond to antibiotics).
- Can cause adverse drug reactions such as diarrhea, vomiting, nausea and upset stomach.
- Can cause *Clostridium difficile* infections.

When a resident has asymptomatic bacteriuria, the nursing staff will continuously **monitor** the resident and **encourage fluid intake**, instead of administering antibiotics.

URINARY TRACT INFECTIONS

Using Antibiotics Only When Necessary

In Long-Term Care...

25-75%
of antibiotic prescriptions
are inappropriate

20-60%
of antibiotic prescriptions
are for treating UTIs

Up to 50%
of residents have
asymptomatic bacteriuria

Signs/Symptoms of a Urinary Tract Infection...



PAIN OR BURNING
WHEN URINATING



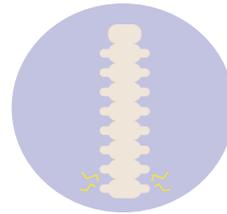
FEVER



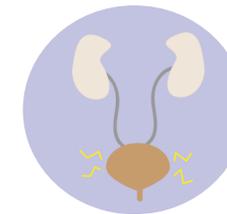
INCREASE IN URGENCY,
FREQUENCY OR
INCONTINENCE



BLOOD IN THE
URINE



RAPID-ONSET
LOWER BACK PAIN



LOWER
ABDOMINAL PAIN

Symptoms Which Do NOT Indicate a UTI



DARK-COLORED, CLOUDY
OR SMELLY URINE



CHANGE IN MENTAL STATUS
(CONFUSION, AGGRESSION)



Treatment of asymptomatic bacteriuria with antibiotics may lead to adverse drug reactions and antibiotic resistance.

Before your loved one starts antibiotics, ask your health care providers:

- Is this antibiotic necessary?
- What are the possible benefits and dangers of this treatment?
- Are there other non-medicinal treatments available?