

# AN INFECTION CONTROL MODULE:

## URINARY TRACT INFECTIONS

Your Role in Recognizing,  
Preventing & Treating UTIs



...Developing top-notch caregivers, one inservice at a time.



*An Infection Control Module:*  
**URINARY TRACT INFECTIONS**  
Your Role in Recognizing,  
Preventing & Treating UTIs

We hope you enjoy this inservice, prepared by registered nurses especially for caregivers like you!

## Instructions for the Learner

*If you are studying the inservice on your own, please do the following:*

- Read through **all** the material. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that you feel is especially important.
- If you have questions about anything you read, please ask your supervisor.
- Take the quiz. Think about each statement and pick the best answer.
- Check with your supervisor for the right answers. You need **8 correct** to pass!
- Print your name, write in the date, and then sign your name.
- Email In the Know at [feedback@knowingmore.com](mailto:feedback@knowingmore.com) with your comments and/or suggestions for improving this inservice.

**THANK YOU!**

**After finishing this inservice, you will be able to:**

*Discuss the main structures and functions of the urinary system.*



*Describe how bacteria can get into the urinary system and the best ways to prevent it.*



*List at least three symptoms of a UTI.*



*Examine the link between incontinence and UTIs.*



*Demonstrate how to recognize, prevent and treat UTIs in your daily work.*



## URINARY TRACT INFECTIONS

Your Role in Recognizing, Preventing & Treating UTIs

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## MARGARET'S STRANGE BEHAVIORS

Krystal was assigned to care for Margaret, a 72-year-old woman with mild dementia. Despite the dementia, Margaret was still high functioning. She ambulated with a cane and was able to use the bathroom independently.

Then she started **falling**. Over the course of one week, Krystal reported to the Nurse Practitioner that Margaret had fallen four times.

"I keep telling her to wait for me before getting up, but she forgets. And then I find her on the floor," Krystal explained. "I think we need some sort of restraint to keep her from getting up."

"Well, we can't restrain her," the NP explained. "But we can get a chair alarm. That will alert you when she gets up."

The Nurse Practitioner asked, "Have you noticed any other changes?"

"Hmmm," Krystal thought. "She has been more **combative** lately. She won't let me help her get dressed and she **refused her breakfast** this morning. Oh, and she started **having 'accidents'** overnight. She's waking up soaked in the morning."

"Okay. Do you think you can get a urine sample from her?" The NP asked.

"I can try!" Krystal replied.

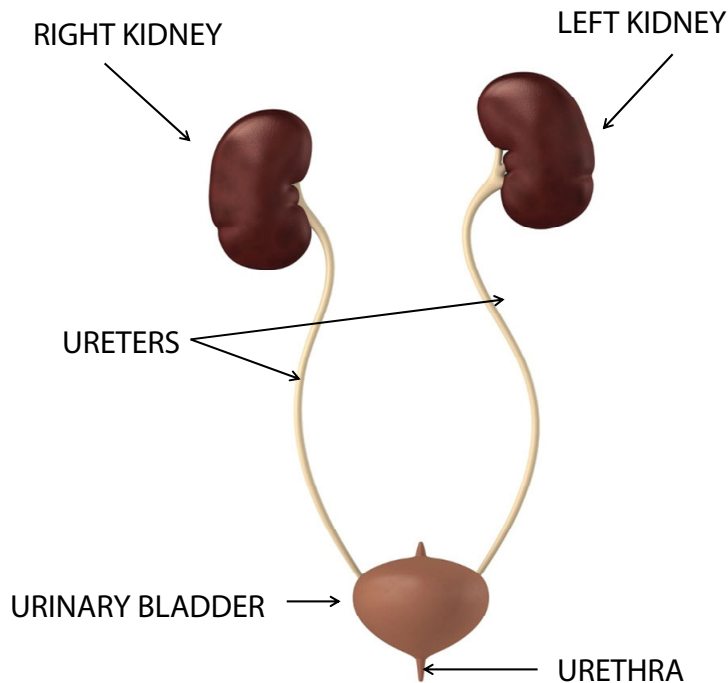
It wasn't easy, but Krystal was able to get a urine sample from Margaret. The results showed Margaret had bacteria in her urine. She was diagnosed with a urinary tract infection (or UTI, for short). She started antibiotics and was back to her old self in a few days.

In healthy adults, a UTI is fairly easy to detect. You have pain, maybe more frequent urination, and you go to your doctor to get tested. In older adults, it's a little trickier. Sometimes, mental changes or confusion are the *only* signs that a UTI may be developing. And when you add dementia into the mix, those signs can easily get missed.

**Keep reading to learn all about UTIs and your role in recognizing, preventing, and treating them.**



# ANATOMY OF THE URINARY SYSTEM



## WHAT DOES THE URINARY SYSTEM DO?

The main function of the urinary system is to flush waste from the body. Fluids in the blood are filtered by the kidneys. Excess water and waste are combined and eliminated in the form of urine.

### The pathway:

1. Urine is produced in the kidneys.
2. The ureters drain the urine from the kidneys to the bladder where it collects.
3. Urine collects in the bladder until the bladder is full enough to trigger the sensation to urinate.
4. Urine travels from the bladder, through the urethra, to the outside of the body. **Harmful bacteria that cause urinary tract infections usually enter the body through the urethra.**



## KEY TERMS

**Asymptomatic bacteriuria**—Bacteria in urine without signs or symptoms of UTI.

**Cystitis**—Infection of the urinary bladder. This is the infection most people think of when they say “UTI.”

**Dysuria**—The medical term for pain or discomfort when urinating (usually described as burning with urination).

**Hematuria**—Blood in urine.

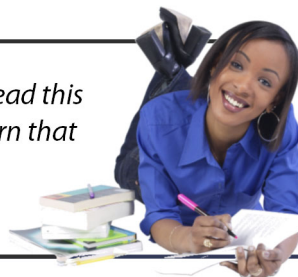
**Pyelonephritis**—This infection is commonly referred to as a “kidney infection.” It usually results from a bladder infection that travels up through the ureter to the kidney.

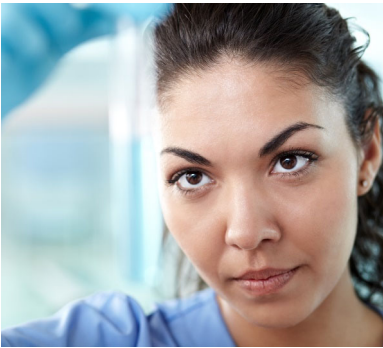
**Urinary Incontinence**—The unintentional loss (or leakage) of urine that is frequent enough to cause physical and/or emotional distress in the person experiencing it.

**Urinary Retention**—An inability to completely empty the bladder. It is a common complication for men who have an enlarged prostate and can cause frequent UTIs.

## WHAT'S NEW?

Grab your favorite highlighter! As you read this inservice, **highlight five things** you learn that you didn't know before. Share this new information with your co-workers!





## WHAT EXCITES YOU?

### WHAT'S NEW IN UTI RESEARCH?

You may think there can't possibly be a new breakthrough in such a common infection. But there is!

In the spring of 2016, a Pennsylvania woman became the first in the U.S. to have a UTI that was resistant to all available antibiotics.

The case created an urgency in the medical field to find a solution.

In response, scientists are now testing a new class of small molecules that fight the bacteria and prevent it from developing resistance.

Unlike antibiotics, which try to kill the bacteria, these molecules make changes to the surface of the bacteria so they can't stick to the bladder lining.

If the bacteria can't "stick" around, they flush away with regular urination!

## WHAT ARE THE RISK FACTORS FOR UTI?

***Anyone can get a UTI, anytime, for a variety of reasons. However, there are certain factors that are known to increase the risk. Recognizing the risk factors and protecting those who have them are your key roles in preventing UTIs. The risk factors are:***

- **Gender**—Urinary tract infections are more common in women. Women have a shorter urethra, making the distance bacteria must travel to reach the bladder much shorter.
- **Menopause**—After menopause, urinary tract infections may become more common for two reasons:
  1. Estrogen decreases after menopause. Lack of estrogen may allow bacteria to grow more easily in the vagina or urethra and can cause an infection in the bladder.
  2. Estrogen also helps keep the muscles in and around the vagina strong. When estrogen decreases, those muscles tend to weaken, which can cause a prolapsed (or fallen) bladder. When this happens, the bladder cannot empty completely, making infections more likely.
- **Incontinence**—Loss of bladder or bowel control can lead to sitting in wet or soiled garments. This can lead to frequent infections. ***(You'll learn more about incontinence on page 7.)***
- **Enlarged Prostate**—An enlarged prostate can block the flow of urine, making it difficult to completely empty the bladder. This is known as *urinary retention*. Urinary retention makes an infection more likely.
- **Diabetes**—Studies show that UTIs are generally more common and more severe in people with diabetes. There are several reasons that people with diabetes have a higher risk for developing a UTI.
  1. People with diabetes may have poor circulation, which reduces the ability of white blood cells to travel and fight off infections.
  2. High blood sugar levels can also raise the risk of a UTI. Bacteria thrive on sugar. So, higher sugar concentrations in urine may promote the growth of bacteria.
  3. Some people with diabetes have problems with urinary retention. As a result, urine stays in the bladder too long and becomes a breeding ground for bacteria.
- **Catheters**—People who need catheters have an increased risk of urinary tract infections. ***(More about catheters on page 8.)***
- **Medications**—Many medications can interfere with normal urination. Some cause urinary retention. Others contribute to urinary incontinence. Common medications that cause problems are antihistamines (such as Benadryl), diuretics ("water pills"), antidepressants, and muscle relaxers.

## COMMON SYMPTOMS OF A UTI

- **Urgency:** An urgent need to urinate, with only a few drops of urine to pass.
- **Frequency:** The need to urinate often, usually at least once every hour.
- **Pain:** A burning feeling during urination, or lower abdominal, stomach, or back pain.
- **Abnormal Urine:** Cloudy or blood-tinged urine, or urine with a strong odor. (See below for more information about abnormal urine.)



- **Fever:** Fever is the body's way of fighting an infection.
- **Nausea and/or vomiting:** If the infection has spread to the kidneys, the person may have nausea, vomiting, and complain of pain in the lower back.
- **Behavior changes:** You may notice behavioral or mental changes in your elderly clients. Sometimes this is the **only** sign that something is wrong. A UTI can cause:
  - Agitation, confusion, and restlessness.
  - Balance problems, dizziness, falls.
  - Lethargy (sleeping more than usual), decreased mobility.
  - Decreased appetite.



## CONNECT IT!

### UTIs IN PEOPLE WITH DEMENTIA OR ALZHEIMER'S DISEASE

Detecting the signs and symptoms of a UTI in older adults who have dementia or Alzheimer's disease can be especially challenging.

Some symptoms, such as agitation and confusion may be passed off as just part of the dementia.

But UTIs can cause distressing behavior changes in this population too. These changes, referred to as delirium, can develop in as little as one to two days.

Symptoms of delirium can range from agitation and restlessness to hallucinations or delusions.

It's important to know your client and to be able to detect subtle changes—and to report those changes right away!

If a UTI goes unrecognized and untreated for too long, it can spread to the bloodstream and become life-threatening.

## URINE: KNOWING WHAT'S NORMAL

	NORMAL	NOT NORMAL
<b>Urine Output</b>	1200-1400 ml per day.	<ul style="list-style-type: none"> <li>• Less than 1200 ml may mean the person is dehydrated.</li> <li>• More than 1500 ml of urine output may be seen in diabetics or people who are on diuretics (water pills).</li> </ul>
<b>Clarity</b>	Crystal clear.	<ul style="list-style-type: none"> <li>• Urine that is cloudy, thick, or has specks or "floaters" means the person has an infection.</li> </ul>
<b>Color</b>	May range from clear to dark yellow.	<ul style="list-style-type: none"> <li>• Dark amber may mean the person is dehydrated.</li> <li>• Dark red or brown probably has blood in it.</li> </ul>
<b>Odor</b>	A light "nutty" odor.	<ul style="list-style-type: none"> <li>• Foul smelling urine may indicate an infection.</li> </ul>



## CONNECT IT!

### UTIs IN SEXUALLY ACTIVE WOMEN

It's estimated that nearly 80 percent of young women who are diagnosed with a UTI have had sex within the previous 24 hours.

During intercourse, bacteria from the genital area and anus can come in contact with the urethra. This is the point at which the bacteria can enter the urinary system and cause a UTI.

The chances of getting a UTI are highest when a woman has sex with a new partner for the first time.

Having frequent sex and having multiple sexual partners also increase the risk of developing a UTI.

#### How can you prevent UTIs related to sex?

- Urinate before sex, and promptly after.
- Clean the genital and anal areas before and after sex.
- Stay hydrated and drink plenty of water; this will help rid the urinary tract of bacteria.

## UTIs IN INFANTS AND CHILDREN

**Just like common colds and ear infections, children can also get urinary tract infections. Factors that make certain children more prone to UTIs include:**

- **“Holding it”**—Some kids will wait until the last possible minute to use the bathroom! The problem with “holding it” is that it gives the bacteria time to attach and grow. Regular urination helps flush away the bacteria.
- **Unskilled Wipers**—Not properly wiping after a bowel movement increases the risk of bacteria from the stool entering the urinary system.
- **Dehydration**—Children who don't drink enough fluids throughout the day may not make enough urine to flush away bacteria.
- **Constipation**—The hard stool in the bowel may press against the urinary tract and block the flow of urine, allowing bacteria to grow.
- **Vesicoureteral reflux (VUR)**—Normally, urine flows down from the kidneys to the bladder. Children born with VUR have a defect that allows the urine to flow backwards. This means the urine flows back into the kidneys which increases the risk of urinary tract infections. Some children grow out of it. Others need treatment or surgery.
- **Uncircumcised boys**—Uncircumcised boys have more UTIs because of the risk for bacteria to build up under the foreskin and enter the urethra.

## SYMPTOMS OF A UTI IN CHILDREN

**There may not be any obvious urinary symptoms in children with UTIs. At times, a child with a UTI may have NO symptoms at all. If symptoms are present they may include one or more of the following:**

- Fever. This may be the only symptom in infants.
- Irritability.
- Lack of appetite.
- Foul-smelling urine.
- Crying during urination.
- Vomiting or diarrhea.

## TIPS FOR PREVENTING UTIs IN CHILDREN

- Teach children not to hold their urine.
- Train them to wipe properly after using the bathroom.
- If the child has constipation, talk with a healthcare provider about the best treatment options to relieve the constipation—before it causes a UTI.
- Encourage children to drink plenty of fluids throughout the day. Water is the best option. Avoid sugary juices and sodas.

## OBTAINING A URINE SAMPLE

If your client is experiencing symptoms of a UTI, you may be asked to obtain a “clean-catch” urine sample. The clean-catch urine method is used to prevent germs from the penis or vagina from getting into a urine sample.

### **What you’ll need:**

- A sterile container with a lid
- An identification label (but don’t put it on the cup yet)
- A biohazard bag (to place the cup in for transport)
- Wipes
- Gloves

### **What you’ll do:**

1. Gather your supplies and wash your hands.
2. Explain what you are going to do.
3. Have the client sit on the commode, if possible.
4. Cleanse the urinary opening. For women, spread the labia and clean from front to back. For men, wipe the tip of the penis.
5. Ask your client to begin to urinate into the toilet.
6. Pass the collection container into the urine stream.
7. Collect at least 1 to 2 ounces (30 to 60 milliliters) in the collection container.
8. Allow client to finish urinating into the toilet.
9. Place lid securely on specimen cup. Do not touch the inside of the cup or the lid.
10. Wipe off any drips.
11. Place the label on the cup now. (If you place the label on the cup before getting the specimen, you risk of getting urine on the label and making it unreadable.)
12. Place the cup in the biohazard bag.
13. Deliver per your employer policy. The specimen may need to be refrigerated if testing will not be completed within one hour.



# GET OUT!

## THINK OUTSIDE OF THE BOX!

*Working with clients in the home often requires coming up with creative solutions to uncommon problems.*

**THE PROBLEM:** You are caring for Roberta, an 84-year-old woman who is having signs and symptoms of a UTI. The doctor ordered a urinalysis and asked you to obtain the specimen.

When you explain to Roberta what you need, she screams and takes a swing at you.

**WHAT YOU KNOW:** You know her behavior is probably the result of an infection. And you know how important it is to get the sample.

**GET CREATIVE:** Think of 3 creative solutions you might try to get Roberta to cooperate with the urine collection.

**TALK ABOUT IT:** Share your ideas with your co-workers and supervisor and find out how they would solve the problem.



## A CLOSER LOOK AT INCONTINENCE

The brain controls the bladder and other parts of the urinary tract system by exchanging “messages” with these body parts using the nerves as messengers.

As the bladder fills with urine, its walls begin to stretch. After a while, you begin to feel an uncomfortable pressure or an urge to empty your bladder. The bladder is sending a message to your brain letting you know that it’s time to go!

- If everything is working right, you can control the urge to urinate until you find a toilet.
- If things aren’t working properly, then an “accident” could happen



## TYPES OF INCONTINENCE AND THEIR SYMPTOMS

There are two main categories of incontinence: *transient* incontinence and *chronic* incontinence.

- **Transient incontinence is a temporary or short-term condition that can be fixed.** It’s usually triggered by an illness like a UTI, a medical problem like a stroke, medications, or constipation. Once the problem is treated, the incontinence goes away.
- **Chronic incontinence is a long-term condition that can be fixed most of the time—but not always.** It’s caused by a damaged lower urinary tract and/or a weak pelvic floor. **There are five types of chronic incontinence. They are:**

TYPE	DESCRIPTION	SYMPTOMS
<b>Stress Incontinence</b>	Poor pelvic muscle control. Any extra pressure or stress causes urine to leak out.	Urine leaks out when coughing, laughing, sneezing, exercising, lifting, sitting, and standing.
<b>Urge Incontinence</b>	AKA “overactive bladder.” Even small amounts of urine can trigger the bladder to “let go!”	Urge to go is strong and frequent. The bladder can’t “hold it” once the urge is felt and it empties right away.
<b>Reflex Incontinence</b>	There is no urge sensation to urinate. The bladder just empties when full.	Loss of urine at inappropriate times. Birth defects like spina bifida, a spinal cord injury, or surgery can cause this.
<b>Overflow Incontinence</b>	Weak bladder muscles or a blockage. The bladder is always full and urine dribbles out constantly.	Bladder never empties. Urine leaks out all the time. Sometimes urine backs up into the kidneys which is dangerous.
<b>Functional Incontinence</b>	The person is unable to get to the toilet in time because of problems with moving, thinking, and communicating.	Memory problems like dementia may prevent timely trips to the bathroom. Physical conditions like severe arthritis can cause delays with walking or removing clothing.



## THINK ABOUT IT!

### BASIC CATH CARE GUIDELINES

**Empty the Bag:** The urinary drainage bag should be emptied at least once every shift or before becoming 3/4 full.

**Measure the Output:** If ordered, measure and record the output. A typical output target is 240 ml per 8 hour shift.

**Check the Urine:** As you empty the bag, notice the color, clarity, and odor. Report any abnormal findings.

**Disposal:** Urine can only be disposed of in the commode. Never pour urine in the sink, shower, trash can, or outside.

**Positioning:** To avoid back flow, the drainage bag should always remain *below* the level of the bladder.

**Tubing:** The tubing should be secured to the upper thigh with either a leg strap or tape to keep it from being tugged or pulled out of the bladder.

## UNDERSTANDING CATHETERS

### *Our thinking and practice has changed . . .*

You may have noticed that there are a lot fewer catheters in long term care today than there was just 10 years ago. That's because we know now that catheters severely increase the risk for urinary tract infections. Today, healthcare providers only use catheters as a last resort, and only when **absolutely necessary**.

- **Please note:** Urinary incontinence alone is never a reason to catheterize someone. While it may be convenient for staff, the risk of infection and the damage it can cause, far outweigh the benefits.

### SO, WHO MIGHT NEED A CATHETER?

- **Urinary Retention or Blockage**—Men with enlarged prostates commonly need the help of a catheter. Some men will use an “In and Out” cath as needed. Others may need a permanent solution, such as a suprapubic catheter (see below for descriptions of these types of catheters).
- **Surgical Procedures & Emergencies**—When a surgical procedure or medical emergency limits movement for a period of time, a catheter will be inserted.
- **End of Life Care** —Indwelling catheters may be used to improve comfort for end of life.

## TYPES OF CATHETERS YOU MAY SEE

Type	Description
<b>Indwelling Catheters</b>	<ul style="list-style-type: none"> <li>• A <b>Urethral</b> Catheter is inserted in the urethra</li> <li>• A <b>Suprapubic</b> Catheter is inserted through a hole in the lower abdomen that goes right into the bladder.</li> </ul> <p>Both have a flexible tube that goes into the bladder. A small balloon on the tip is inflated to keep the tube in place. The tubing drains urine from the bladder into a bag.</p>
<b>External (Condom) Catheters</b>	<p>A condom catheter is a temporary, non-invasive catheter for men only. It is placed over the penis and secured with adhesive. The condom is attached to tubing which drains urine into a bag. These carry the least risk of infection but are not useful for men with urinary retention from an enlarged prostate.</p>
<b>Intermittent (In and Out) Catheters</b>	<p>“In and Out” cath are used for temporary relief from urinary retention. The tube is inserted through the urethra into the bladder, urine is drained, then the tube is removed.</p> <p>This catheter may also be used to obtain a sterile urine specimen for laboratory tests.</p>

## PERINEAL CARE IS THE ULTIMATE UTI PREVENTION!

**The perineal area is everything from the genitals to the anus.** Excellent perineal care not only cleans and refreshes, it prevents infections, too! The perineal area should be cleaned EVERY DAY, whether the person gets a complete bath or not.

### GET STARTED:

1. Prepare a basin of warm, clear water. If you are performing peri-care as part of a complete bed bath, take the time to **change the water** before you clean the perineal area.
2. Put on gloves and place a waterproof pad under the hips and buttocks. Position client on back.
3. Wet a clean washcloth in the basin of clear water. Then, place soap on the washcloth, not in the basin. This will keep the basin water clear for rinsing.
4. Fold the washcloth in half, then in half again, making a square. Folding the washcloth into a square gives you four separate clean surfaces to work with.

### FOR WOMEN:

1. Spread the labia majora (the outside folds) and wipe down the center, from front to back.
2. Turn the washcloth over and wipe each side of the perineal area, using a clean section of the washcloth for each wipe.
3. Get a clean washcloth and wet it in the clean water. Rinse the perineal area with the same technique you used to wash.
4. Thoroughly dry the area using a blotting motion.
5. Now, have client turn on side. Wash, rinse and dry the anal area.

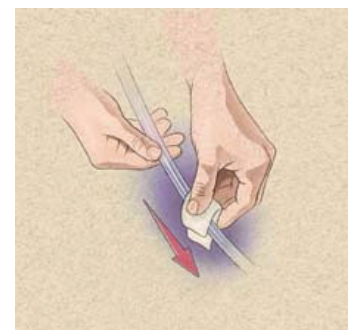
### FOR MEN:

1. If your client is uncircumcised, retract the foreskin by sliding the skin gently toward the base of the penis.
2. Wash the penis in a circular motion, starting at the tip and working your way down. Use a different part of the wash cloth for each wipe.
3. Next, clean the scrotum and the groin area.
4. Rinse with clean water, dry and replace foreskin (if present).
5. Thoroughly dry the area using a blotting motion.
6. Now, have client turn on side. Wash, rinse and dry the anal area.

## PERI-CARE FOR CLIENTS WITH CATHETERS

**Peri-care for the client with a catheter is the same as routine peri-care of other clients with one added step, cleaning the tubing. Here's how you do it:**

- Hold the tubing firmly at the point of insertion with one hand.
- With your other hand, clean at least the first four inches of the tubing with a soapy washcloth.
- Use a clean area of the wash cloth for each swipe of the tubing, and move in only one direction (away from the body).
- Rinse with clean water in the same manner.
- Dry the tubing and the perineal area completely.



## HOW ARE UTIs TREATED?

**Urinary tract infections are usually treated with an antibiotic. Symptoms should begin to clear up within a few days of starting the medication.**



- Remind your clients to take their antibiotic at the same time every day and to take the full course. Stopping the antibiotic early can cause the infection to come back—and it will be much worse.
- Watch for side effects of antibiotics, including: nausea, diarrhea, rash, and, in women, yeast infection.
- A simple, one-time UTI usually requires antibiotics for a week. Someone with frequent urinary tract infections may take antibiotics for a longer period of time.
- Since antibiotics don't help with pain, the doctor may recommend the client also take an over the counter pain reliever, such as ibuprofen (Motrin) or acetaminophen (Tylenol).
- In cases of severe infection, a hospital admission may be necessary for treatment with IV antibiotics.

## THE TRUTH ABOUT CRANBERRY JUICE

The research is not completely clear, but many scientists believe cranberry juice may be able to help **prevent** urinary tract infections in certain people.

**How does it work?** Researchers think cranberry juice prevents bacteria from sticking to the walls of the bladder where it can multiply and cause infection.

The good news is that even though we don't have conclusive evidence that it helps, we know for sure that (for most people) it does no harm!

- Please note, people on the blood-thinning medication, warfarin, should not drink cranberry. **Drinking cranberry juice while taking warfarin may lead to bleeding.**

Keep in mind that at this time, studies only recommend using cranberries to **prevent** UTIs. There is no evidence that cranberries can **treat** UTIs.

- **Cranberry products should not be used in place of antibiotics.**



## TALK ABOUT IT!

### WHICH ANTIBIOTIC IS THE RIGHT ONE?

There are well over 100 options when it comes to antibiotics. Ever wonder why providers choose one over another?

Well, why not ask! Here are a few questions to get the conversation started with the MD, NP, PA or pharmacist.

1. Does each antibiotic kill a certain *type* of bacteria?
2. Are there any antibiotics that kill all types of bacteria? If so, why not just choose those all the time?
3. How important is the cost when you choose an antibiotic?
4. What options are there for people who are allergic to antibiotics?
5. What happens when an antibiotic doesn't work?

# HOW CAN YOU HELP PREVENT AND TREAT UTIs?

## HELPING WITH PREVENTION

- **Avoid bath tubs**—Whenever possible, shower your clients rather than bathing in a tub. Bacteria in the bath water may enter the urethra.
- **Personal Perineal Hygiene**—Teach continent clients to clean the perineal area thoroughly after each bowel movement. Remind them to wipe from “front to back” so germs from the bowels don’t get into the urinary system.
- **Prompt Incontinence Care**—Clean incontinent clients as soon as they are soiled. Allowing them to sit in soiled briefs sharply increases the risk for a UTI.
- **Increase fluid intake**—Encourage all clients to drink plenty of fluids throughout the day to flush out bacteria.
- **Avoid urinary tract irritants**—Beverages such as coffee, tea, colas, alcohol, and others contribute to UTI.
- **Don’t Avoid Voiding**—Remind clients to void at least every 2 to 3 hours during the day and to completely empty the bladder. “Holding it” increases the risk for a UTI.
- **Hand Hygiene**—Wash your hands before providing personal care (and help your clients wash their hands, too).
- **Glove It!**—Always wear gloves when cleaning the genital area.



## HELPING WITH TREATMENT

**The antibiotics should help clear up the symptoms of a UTI in a few days, but until then:**

- **Get Up and Go**—Be prepared for more frequent trips to the bathroom!
- **When You Gotta Go...NOW!**—Never make your client wait to use the toilet. It’s embarrassing to have an accident and may lead to an unsafe attempt to use the bathroom without assistance.
- **Fluids Are More Important than Ever!**—Offer plenty of fluids, including cranberry juice. Drinking fewer fluids to avoid going to bathroom so often can actually make matters worse.
- **Watch for Side Effects**—Antibiotics can cause upset stomach, diarrhea, and even a yeast infection as a side effect. Report these side effects to your supervisor.
- **YUM! Yogurt**—Yogurt with live active cultures can help prevent diarrhea and yeast infections.
- **Say “No” to Caffeine**—Remind your client to avoid caffeine during a bladder infection because it can increase bladder spasms. Caffeine is usually found in coffee, tea, chocolate, and soda.
- **Help Ease the Pain**—A heating pad on the stomach or back can help with pain. But, don’t let your client lie on the pad or fall asleep with it on. This could cause a burn.
- **Assist with Antibiotics**—Make sure clients take all of their antibiotics as prescribed for their UTI. Let your supervisor know if unpleasant side effects are keeping your client from taking the antibiotic as ordered. Alternatives may be available.

***Remember, it’s much easier to prevent a UTI than it is to treat it!***



## FIVE KEY POINTS!

### REVIEW WHAT YOU LEARNED!

1. Cystitis is an infection of the urinary bladder. This is the infection most people think of when they say "UTI."
2. Risk factors for UTIs include being a woman, menopause, diabetes, and being a man with an enlarged prostate.
3. Common symptoms of a UTI are pain, frequency, and abnormal urine.
4. In elderly clients, behavioral changes such as agitation, confusion, or falling may be the only signs that something is wrong.
5. It's much easier to prevent a UTI than it is to treat one!

## WHAT'S THE BIG DEAL?

*You may be thinking, "Why should I care? I've had a UTI before. It was no big deal." Well, in healthy adults, a UTI is uncomfortable, but treatment is usually quick and easy.*

However, UTIs in the elderly, and in people who are battling other serious diseases, can be **dangerous** and even **deadly**.

To make matters worse, **mental changes or confusion** are often the only signs that a UTI may be developing.

Early recognition of UTI and prompt treatment are essential to prevent recurrent infection and the possibility of complications. Some dangerous complications that may occur include:

- **Renal failure**—UTIs that are not treated promptly could spread through the entire urinary system and become the cause of renal failure.
- **Urosepsis**—The bacteria may invade the urinary system and result in sepsis. If untreated, urosepsis can progress to septic shock, a serious and life-threatening condition.

## THE FACTS ABOUT UTIs

- Urinary tract infections are the second most common type of infection in the body, accounting for about 8.1 million visits to health care providers each year.
- For women, the lifetime risk of having a UTI is greater than 50 percent.
- One in five women will have at least one UTI in her lifetime. Nearly 20 percent of women who have a UTI will have another, and 30 percent of those will have yet another. Of this last group, 80 percent will have recurrences.
- About 80 to 90 percent of UTIs are caused by a single type of bacteria called Escherichia coli (E. coli), which normally lives in the colon.
- Some strains of E. coli have become resistant to the commonly used antibiotics that treat them. Sometimes, doctors must try two, three, or even four antibiotics to treat these stubborn bacteria.
- UTIs are the most common type of healthcare-associated infection. Approximately 75% of UTIs acquired in the hospital, are associated with a urinary catheters.
- Fever with a UTI may be a sign that the infection has gone into the kidneys. Symptoms of pyelonephritis often begin suddenly with chills, fever, pain in the lower part of the back on either side, nausea, and vomiting.





## URINARY TRACT INFECTIONS

Your Role in Recognizing, Preventing & Treating UTIs

EMPLOYEE NAME  
(Please print):

DATE: \_\_\_\_\_

- ***I understand the information presented in this inservice.***
- ***I have completed this inservice and answered at least eight of the test questions correctly.***

EMPLOYEE SIGNATURE:

SUPERVISOR SIGNATURE:

### Inservice Credit:

<input type="checkbox"/> Self Study	1 hour
<input type="checkbox"/> Group Study	1 hour

***File completed test in employee's personnel file.***

***Are you "In the Know" about urinary tract infections? Circle the best choice or fill in your answer. Then check your answers with your supervisor!***

1. **Harmful bacteria that cause urinary tract infections usually enter the body through the:**
  - A. Bladder.
  - B. Break in the skin.
  - C. Urethra.
  - D. Ureter.
2. **All of the following are risk factors for urinary tract infections, EXCEPT:**
  - A. Diabetes.
  - B. Heart Disease.
  - C. Menopause.
  - D. Catheters.
3. **Your normally mild-mannered client is suddenly agitated. He is refusing daily care and most meals. You should:**
  - A. Request a medication for agitation.
  - B. Ignore him. He'll be nice when he really needs something.
  - C. Report the symptoms to his provider and ask if a urine specimen is needed.
  - D. Provide care, even if he refuses, and make him eat at least one meal.
4. **A person with a UTI may have:**
  - A. Pain with urination.
  - B. Frequency.
  - C. Confusion.
  - D. All of the above.
5. **True or False**  
Cleaning the perineal area every day is not necessary; it only causes irritation.
6. **True or False**  
Incontinence is linked to more frequent urinary tract infections.
7. **True or False**  
Kidney pain is usually felt in the lower abdomen.
8. **True or False**  
A rash is a common side effect of antibiotics and does not need to be reported.
9. **True or False**  
A natural cure for UTI is cranberry juice.
10. **True or False**  
It's normal to urinate at least once every 2 to 4 hours during the day.

