

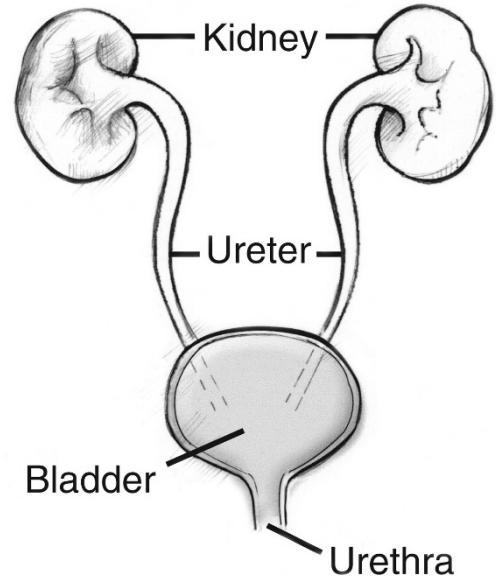
Catheter-Associated Urinary Tract Infection (CAUTI)

What is a urinary tract infection?

A urinary tract infection (also called “UTI”) is an infection in the **urinary system**, which includes:

- The kidneys (which filter the blood to make urine)
- The ureters (pass urine from the kidneys to the bladder)
- The bladder (which stores the urine)
- The urethra (where urine exits the body)

Germs (for example, bacteria or yeasts) do not normally live in these areas, but if they do an infection can occur.



National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health.

What is a urinary catheter?

A **urinary catheter** is a thin tube placed in the bladder to drain urine. Urine drains through the tube and into a bag that collects the urine. A urinary catheter may be used:

- If you are not able to urinate on your own
- To measure the amount of urine that you make, for example, during intensive care
- During and after some types of surgery
- During some tests of the kidneys and bladder

What is a Catheter-Associated Urinary Tract Infection (CAUTI)?

Germs can travel along a catheter and cause an infection in your bladder or your kidney. This is called a **catheter-associated urinary tract infection** (or

“CAUTI”). People with urinary catheters have a much higher chance of getting a urinary tract infection than people who don’t have a catheter.

Germs can enter the urinary tract when the catheter is being put in or while the catheter remains in the bladder.

What are the symptoms of a urinary tract infection?

Some of the common symptoms of a urinary tract infection are:

- Burning or pain in the lower abdomen (that is, below the stomach)
- Fever
- Bloody urine. This may be a sign of infection, but is also caused by other problems
- Burning during urination or an increase in the frequency of urination after the catheter is removed.

Sometimes people with CAUTIs do not have these symptoms of infection.

Is it possible to treat CAUTIs?

Yes, most CAUTIs can be treated with antibiotics and removal or change of the catheter. Your doctor will determine which antibiotic is best for you.

What are some of the steps Michigan Medicine does to prevent CAUTIs?

Standard practice at Michigan Medicine is to only use a urinary catheter when necessary and remove the catheter as soon as possible.

To prevent urinary tract infections in people who do need catheters doctors and nurses take the following steps:

During catheter insertion:

- Allow only people who are properly trained to insert catheters using a sterile (clean) technique.

- Thoroughly clean the skin in the area where the catheter will be inserted before inserting the catheter.
- Use other methods to drain the urine, such as
 - **External catheters:** these look like condoms for men, and soft flexible catheters with a wicking material for women). They are placed over the urethral opening rather than in it, and suction may be used to draw urine away from body
 - A temporary catheter which is removed right away after draining the urine. This is called **intermittent urethral catheterization**.

During catheter care

- Thoroughly clean hands by washing them with soap and water or using an alcohol-based hand rub before and after touching your catheter.
- Avoid disconnecting the catheter and drain tube. This helps to prevent germs from getting into the catheter tube.
- Make sure the catheter is secured to the leg to prevent pulling on the catheter.
- Avoid twisting or kinking the catheter.
- Keep the bag lower than the bladder to prevent urine from flowing back into the bladder.
- Empty the bag regularly. The drainage spout should not touch anything while emptying the bag.

If you do not see your providers clean their hands, please ask them to do so.

What can I do to help prevent a CAUTI?

- Always clean your hands before and after doing catheter care.
- Always keep your urine bag below the level of your bladder.
- Do not tug or pull on the tubing.
- Do not twist or kink the catheter tubing.
- Ask your healthcare provider each day if you still need the catheter.

What will I need to do at home after discharge?

If you will be going home with a catheter, your doctor or nurse should explain everything you need to know about taking care of the catheter. Make sure you understand how to care for it before you leave the hospital.

- Contact your doctor or nurse immediately if you develop any of the symptoms of a urinary tract infection, such as:
 - Burning or pain in the lower abdomen (belly)
 - Fever
 - Increase in the frequency of urination
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.

If you have questions, please ask your doctor or nurse.

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Adapted from: SHEA. FAQ's about Catheter-Associated Urinary Tract Infection. Access at:
<http://www.shea-online.org>

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