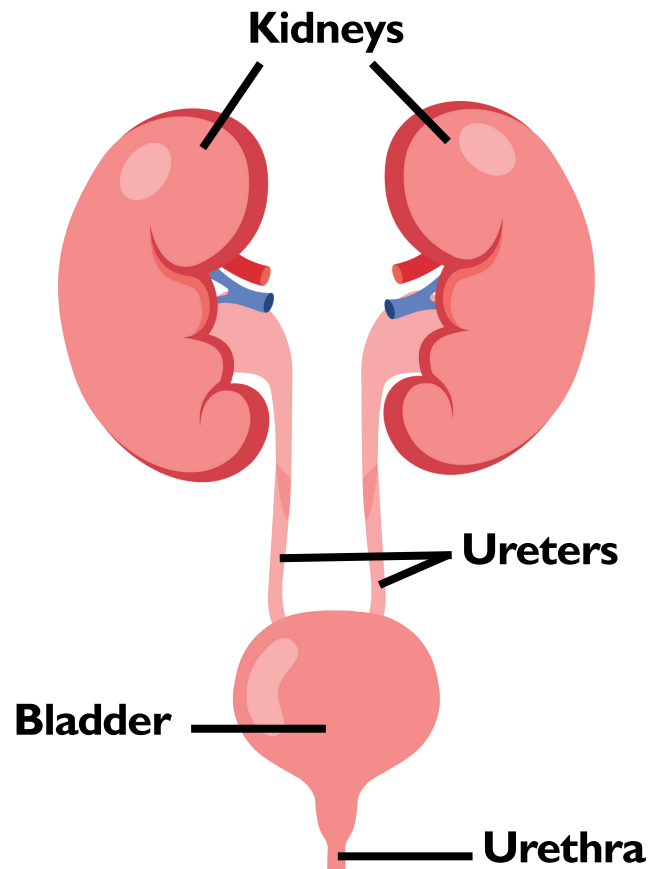


Urinary Tract Infection: A Guide

What is a Urinary Tract Infection?

A urinary tract infection (UTI) is an infection in the urinary system, which includes the urethra, bladder, and kidneys. UTIs are common in females and people with catheters.

The kidneys make urine to remove waste and extra water from the blood. Normally, urine stays clean as it moves through the urinary system. A UTI happens when bacteria enter and cause an infection.



What is the Urinary Tract?

The urinary tract makes and stores urine. It includes:

- **Kidneys** – Small, bean-shaped organs that filter waste and water from the blood to make urine.
- **Ureters** – Thin tubes that carry urine from the kidneys to the bladder.
- **Bladder** – A balloon-like organ that holds urine before it leaves the body.
- **Urethra** – The tube that carries urine out of the body.

What Causes a UTI?

The body usually fights off bacteria in the urinary system, but sometimes bacteria enter and multiply, causing an infection.

The large intestine has bacteria like E. coli, which can move from the anus to the urethra and cause a UTI. Females have a higher risk because their urethra is shorter and closer to the anus, making it easier for bacteria to reach the bladder and kidneys.



Types of UTIs

Bladder Infection (Cystitis)

Symptoms: Blood in urine, lower belly pain, frequent urination, pelvic pressure.

Kidney Infection (Pyelonephritis)

Symptoms: Fever, chills, nausea, vomiting, and back pain.

Urethra Infection (Urethritis)

Symptoms: Discharge, burning while urinating.

A bladder infection is a lower UTI, while kidney infections are upper UTIs. Kidney infections are more serious and need medical treatment.

UTI Symptoms

- Pain or burning while urinating
- Strong-smelling urine
- Frequent urination with little output
- Little or no urine output for several hours
- Cloudy or bloody urine
- Back pain
- Fever, chills, nausea, vomiting
- Confusion

When to Seek Medical Help

Seek medical help if experiencing:

- **Confusion**
- **Fever**
- **Pain in the lower back, stomach, or groin**
- **Blood in urine**
- **Nausea or vomiting**
- **Chills**
- **Feeling very sick**
- **UTI symptoms lasting more than a few days**



Treatment for UTI

Antibiotics are the main treatment for UTIs. The type of medicine and how long it's needed depend on health and the kind of bacteria causing the infection.

Symptoms usually get better in a few days, but antibiotics may be needed for a week or more. It's important to take all medicine as prescribed.

For mild infections in healthy people, a doctor may prescribe antibiotics for just one to three days, depending on symptoms and medical history.

Pain relievers may help with discomfort while urinating, but the pain usually goes away soon after starting antibiotics.

Easing UTI Discomfort

- **Drink plenty of water** – Helps flush bacteria.
- **Avoid bladder irritants** – Skip coffee, alcohol, and citrus or caffeinated drinks until healed.
- **Use a heating pad** – Warm (not hot) heat on the belly can ease pressure and pain.

UTI Prevention

- **Practice good hygiene** – Wipe front to back after using the restroom.
- **Use gentle cleaning products** – Unscented soap and alcohol-free wipes.
- **Stay hydrated** – Water helps flush bacteria; urine should be light yellow and clear.
- **Avoid bladder irritants** – Limit caffeine and alcohol.
- **Use the restroom regularly** – Holding urine too long increases UTI risk.
- **Change soiled briefs and underwear quickly** – Sitting in wet briefs and underwear promotes bacterial growth.
- **People with diabetes should keep blood sugar levels stable** – High blood sugar can increase infection risk.
- **Wear loose-fitting clothing** – Promotes airflow and reduces bacteria growth.
- **Consider cranberry extract** – May reduce UTI risk (consult a doctor).
- **Low-dose antibiotics** – Sometimes used for prevention (consult a doctor).



Catheter Care

- **Colonization vs. Infection** – A urine test may show bacteria, but this doesn't always mean an infection. Symptoms help determine if treatment is needed.
- **Use sterile technique** – Always insert catheters in a clean way.
- **Change catheters regularly** – At least once a month or as directed.
- **Clean catheter site daily** – Use warm water and gentle soap.
- **Keep the catheter bag lower than the bladder** – Prevents backflow and infection.
- **Flush tubing if needed** – Follow doctor's instructions.
- **Use antimicrobial or silicone catheters** – May help lower infection risk.
- **Check urine output** – There should be at least $\frac{1}{3}$ cup of urine per hour in the bag.