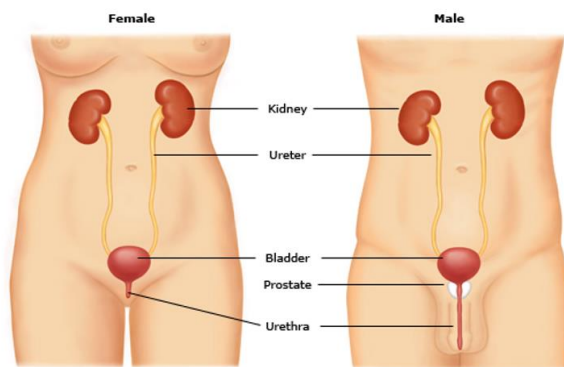


Urinary tract infection (UTI)

A urinary tract infection (UTI) is an infection involving any part of the urinary system. The urinary system is comprised of two kidneys, and two tubes called ureters, which join the kidneys to the bladder. The urinary system filters blood to eliminate waste and fluid from the body (as urine). The urine leaves the kidneys through the ureters and enters the bladder. Urine is stored in the bladder until you get the urge to urinate. Urine leaves the body through a tube called the urethra.

Infection most commonly occurs in the bladder (cystitis) but can also occur in the urethra (urethritis), the kidneys (pyelonephritis), or a combination of these.



Urinary tract in adults (female and male)

What causes UTIs?

Sometimes germs can enter the urinary system through the urethra. Most UTIs are caused by bacteria that usually live harmlessly in the gut (e.g.,

E. coli). If these bacteria spread, from the anus to the urethra, they can get into the urinary system and cause an infection.

Signs and symptoms of a UTI

Common symptoms of a UTI may include:

- > burning or stinging sensation when passing urine
- > passing urine much more frequently than usual
- > feeling an urge to urinate, but being unable to, or only passing a few drops
- > feeling the bladder is still full after urination
- > passing some urine before getting to the toilet (wetting or incontinence)

A person with a kidney infection (pyelonephritis) can also experience:

- > fever and/or chills
- > nausea and/or vomiting
- > loin (lower abdominal) pain
- > back pain

Signs of UTIs in children can also include:

- > irritability
- > day or night wetting in a child who has been toilet trained
- > feeding problems in babies

When should I see my doctor?

If you have no symptoms of a UTI but your urine is cloudy, you probably do not need to see a doctor or get antibiotics. If you have symptoms of a UTI such as burning pain or needing to go to the toilet more frequently, make an appointment with your doctor.

Bladder infections can be treated with antibiotics, but if left untreated the infection may spread to your kidneys (pyelonephritis) which is a serious infection and needs immediate treatment.

If your child has symptoms of a UTI you should see a doctor as it may indicate a more serious condition.

Who is most at risk of developing a UTI?

- > women
- > pregnant women
- > people with urinary catheters (a catheter is a tube inserted into the bladder to drain urine)
- > people with diabetes, or people with altered immune systems are more vulnerable to infection
- > men with prostate problems
- > babies, especially those born with a urinary tract abnormality

How are UTIs diagnosed?

A doctor may diagnose a UTI based on your symptoms. A urine test in the doctor's surgery (urine dipstick) can provide evidence to support the diagnosis of a UTI. A urine sample will usually be sent to a laboratory to identify the specific cause of the infection and to help determine the correct antibiotic for treatment.

Urinary Tract Infection (UTI)

Treatment of a UTI

Proven UTIs can usually be treated effectively with antibiotics. It is important to complete the full course that your doctor has prescribed, even if you are feeling better. If the full course is not completed, this can lead to antimicrobial resistance (see below). If your symptoms do not improve, or only improve slightly, then you will need to see your doctor again.

It is important to drink plenty of water while you are taking antibiotics to treat your UTI, in order to flush your urinary system. Make sure you empty your bladder completely each time you urinate.

Paracetamol (e.g., Panadol®) or ibuprofen (e.g., Nurofen®) may be used to help relieve the pain or burning sensation when passing urine. The effectiveness of urinary alkalinisers (e.g., Ural®) in reducing symptoms is not clear. Ask your doctor or pharmacist before using a urinary alkaliniser as they reduce the effectiveness of some antibiotics.

What is antimicrobial resistance?

Antimicrobial resistance occurs when germs become resistant to the effects of antimicrobials (such as antibiotics). Taking antibiotics when they are not required can increase the risk of antimicrobial resistance occurring, which means that the antibiotics may not work in the future, making infections harder to treat. Antimicrobial resistance is increasing and is caused by the overuse of antimicrobials or not using them as directed by your doctor. This is why it is important to use antibiotics only for a proven UTI and under the instruction of your doctor.

Prevention of UTIs

- > drink plenty of water to flush the urinary system
- > urinate as soon as you feel the need rather than holding on
- > for women and girls, after going to the toilet wipe yourself from front to back to prevent bacteria from around the anus entering the urethra
- > urinate shortly after sex to flush away bacteria that might have entered your urethra during sex
- > avoid constipation

Useful links

- > [Antimicrobial stewardship – what you need to know \(for consumers\)](#)
- > [Do I really need antibiotics?](#)
- > [Non-specific urethritis](#)

Disclaimer: The health information contained in this pamphlet is designed for general educational purposes only. Consult with your doctor or other healthcare professional to make sure that this information is right for you.

For more information

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