

Urinary tract infection - adults

Definition

A urinary tract infection, or UTI, is an infection that can happen anywhere along the urinary tract. Urinary tract infections have different names, depending on what part of the urinary tract is infected.

- Bladder -- an infection in the bladder is also called cystitis or a bladder infection
- Kidneys -- an infection of one or both kidneys is called pyelonephritis or a kidney infection
- Ureters -- the tubes that take urine from each kidney to the bladder are only rarely the site of infection
- Urethra -- an infection of the tube that empties urine from the bladder to the outside is called urethritis

Causes

Urinary tract infections are caused by germs, usually bacteria that enter the urethra and then the bladder. This can lead to infection, most commonly in the bladder itself, which can spread to the kidneys.

Most of the time, your body can get rid of these bacteria. However, certain conditions increase the risk of having UTIs.

Women tend to get them more often because their urethra is shorter and closer to the anus than in men. Because of this, women are more likely to get an infection after sexual activity or when using a diaphragm for birth control. Menopause also increases the risk of a UTI.

The following also increase your chances of developing a UTI:

- Diabetes
- Advanced age (especially people in nursing homes)
- Problems emptying your bladder completely (urinary retention)
- A tube called a urinary catheter inserted into your urinary tract
- Bowel incontinence
- Enlarged prostate, narrowed urethra, or anything that blocks the flow of urine
- Kidney stones
- Staying still (immobile) for a long period of time (for example, while you are recovering from a hip fracture)
- Pregnancy
- Surgery or other procedure involving the urinary tract

Symptoms

The symptoms of a bladder infection include:

- Cloudy or bloody urine, which may have a foul or strong odor
- Low fever (not everyone will have a fever)
- Pain or burning with urination
- Pressure or cramping in the lower abdomen (usually middle) or back
- Strong need to urinate often, even right after the bladder has been emptied

If the infection spreads to your kidneys, symptoms may include:

- Chills and shaking or night sweats
- Fatigue and a general ill feeling

- Fever above 101 degrees Fahrenheit
- Flank (side) back, or groin pain
- Flushed, warm, or reddened skin
- Mental changes or confusion (in the elderly, these symptoms often are the only signs of a UTI)
- Nausea and vomiting
- Severe abdominal pain (sometimes)

Treatment

Your doctor must first decide whether you have a mild or simple bladder or kidney infection, or whether your infection is more serious.

MILD BLADDER AND KIDNEY INFECTIONS

Antibiotics taken by mouth are usually recommended because there is a risk that the infection can spread to the kidneys.

- For a simple bladder infection, you will take antibiotics for 3 days (women) or 7 - 14 days (men). For a bladder infection with complications such as pregnancy or diabetes, OR a mild kidney infection, you will usually take antibiotics for 7 - 14 days.
- It is important that you finish all the antibiotics, even if you feel better. If you do not finish all your antibiotics, the infection could return and may be harder to treat.

Commonly used antibiotics include trimethoprim-sulfamethoxazole, amoxicillin, Augmentin, doxycycline, and fluoroquinolones. Your doctor will also want to know whether you could be pregnant.

Your doctor may also recommend drugs to relieve the burning pain and urgent need to urinate. Phenazopyridine hydrochloride (Pyridium) is the most common of this type of drug. You will still need to take antibiotics.

Everyone with a bladder or kidney infection should drink plenty of fluids.

Some women have repeat or recurrent bladder infections. Your doctor may suggest several different ways of treating these.

- Taking a single dose of an antibiotic after sexual contact may prevent these infections, which occur after sexual activity.
- Having a 3-day course of antibiotics at home to use for infections diagnosed based on your symptoms may work for some women.
- Some women may also try taking a single, daily dose of an antibiotic to prevent infections.

MORE SEVERE KIDNEY INFECTIONS

If you are very sick and cannot take medicines by mouth or drink enough fluids, you may be admitted to the hospital. You may also be admitted to the hospital if you:

- Are elderly
- Have kidney stones or changes in the anatomy of your urinary tract
- Have recently had urinary tract surgery
- Have cancer, diabetes, multiple sclerosis, spinal cord injury, or other medical problems
- Are pregnant and have a fever or are otherwise ill

At the hospital, you will receive fluids and antibiotics through a vein.

Some people have urinary tract infections that keep coming back or that do not go away with treatment. Such infections are called chronic UTIs. If you have a chronic UTI, you may need antibiotics for many months, or stronger antibiotics may be prescribed.

If a structural (anatomical) problem is causing the infection, surgery may be recommended.

Outlook (Prognosis)

A urinary tract infection is uncomfortable, but treatment is usually successful. Symptoms of a bladder infection usually disappear within 24 - 48 hours after treatment begins. If you have a kidney infection, it may take 1 week or longer for your symptoms to go away.

Possible Complications

- Life-threatening blood infection (sepsis) - risk is greater among the young, very old adults, and those whose bodies cannot fight infections (for example, due to HIV or cancer chemotherapy)
- Kidney damage or scarring
- Kidney infection

When to Contact a Medical Professional

Contact your health care provider if you have symptoms of a UTI. Call right away if the following symptoms develop:

- Back or side pain
- Chills
- Fever
- Vomiting

These may be signs of a possible kidney infection.

Also call if you have already been diagnosed with a UTI and the symptoms come back shortly after treatment with antibiotics.

Prevention

Lifestyle changes may help prevent some UTIs.

After menopause, a woman may use estrogen cream in the vagina area to reduce the chance of further infections.

BATHING AND HYGIENE

- Choose sanitary pads instead of tampons, which some doctors believe make infections more likely. Change the pad each time you use the bathroom.
- Do not douche or use feminine hygiene sprays or powders. As a general rule, do not use any product containing perfumes in the genital area.
- Take showers instead of baths. Avoid bath oils.
- Keep your genital area clean. Clean your genital and anal areas before and after sexual activity.
- Urinate before and after sexual activity.
- Wipe from front to back after using the bathroom.

CLOTHING

- Avoid tight-fitting pants.
- Wear cotton-cloth underwear and pantyhose, and change both at least once a day.

DIET

- Drink plenty of fluids (2 to 4 quarts each day).
- Drink cranberry juice or use cranberry tablets, but NOT if you have a personal or family history of kidney stones.
- Do NOT drink fluids that irritate the bladder, such as alcohol and caffeine.

For more information, visit the Franciscan Health Library at www.FHSHealth.org/Health_Education.aspx