

Overview

How common are urinary tract infections (UTIs)?

Urinary tract infections (UTIs) are common infections. Many women get them at some point in their lives. Some women have repeat infections and may have them often. But most UTIs are not serious. These infections can be treated with [antibiotics](#), and symptoms can usually be relieved quickly.

What is the urinary tract?

The urinary tract has a lower part and an upper part. The upper urinary tract is made up of the [ureters](#) and [kidneys](#). The lower tract is made up of the [urethra](#) and the [bladder](#). The organs work together in the following ways:

- The two kidneys produce urine.
- The two tubes called ureters carry urine from the kidneys to the bladder.
- The bladder stores urine.
- The urethra carries urine from the bladder out of the body.

Where do UTIs start?

Most UTIs start in the lower urinary tract. [Bacteria](#) enter through the urethra and spread upward to the bladder. This can cause [cystitis](#), a bladder infection. In some cases, an

infection of the urethra called [urethritis](#) can develop at the same time.

How does a kidney infection start?

Bacteria that have infected the bladder may travel up the ureters to the kidneys. This can cause [pyelonephritis](#), a kidney infection. An infection in the upper tract may cause a more severe illness than infection in the lower tract.

Possible Causes

What can cause UTIs?

It's normal for bacteria from the bowel to live on the skin near the [anus](#) or in the [vagina](#). Sometimes these bacteria spread to the area around the urethra. If they move up the urethra, they may cause infections in the bladder and, sometimes, in other parts of the urinary tract.

Do women get UTIs more often than men?

Yes, research shows that women are more likely than men to get UTIs. This is because the urethra is shorter and closer to the anus in a woman than in a man. This means bacteria can reach the bladder more easily.

Can I get a UTI from sex?

The anatomy of women makes them prone to getting UTIs after having sex. The opening of the urethra is in front of the vagina. During sex, bacteria near the vagina can get into the urethra from contact with the [penis](#), fingers, or sex toys.

UTIs tend to occur when you first start having sex or start having it more often. Using [spermicide](#) or a diaphragm for birth control can also cause more frequent UTIs.

What else can cause UTIs?

Infections can also develop when the bladder does not empty completely. This may be caused by the following:

- A stone in the ureters, kidneys, or bladder that blocks the flow of urine through the urinary tract. Stones develop when minerals in urine stick together and there is not

enough fluid to flush them out.

- Problems with the urethra.
- A problem with the nerves or muscles of the pelvis that makes it difficult for the bladder to empty.

What other factors increase the risk of getting a UTI?

You are more likely to get an infection if you

- have had a UTI before
- have had several children
- have [diabetes mellitus](#)
- are going through [menopause](#)
- are pregnant

If you are pregnant and think you may have a UTI, call your [obstetrician–gynecologist \(ob-gyn\)](#) right away. Severe infections can cause problems for both you and your [fetus](#), so it's important to treat UTIs early. Read “UTIs and Pregnancy” below for more information.

Symptoms

What are the symptoms of a UTI?

Symptoms of UTIs can come on quickly. One sign is a strong urge to urinate that cannot be delayed (urgency). As urine flows, a sharp pain or burning may be felt in the urethra. The urge to urinate then returns minutes later (frequency). There may be soreness in the lower abdomen, in the back, or in the sides.

How does an infection affect my urine?

If you have a UTI, your urine may

- have a strong odor
- look cloudy

- be tinged with blood

Blood in the urine may be caused by a UTI, but it may also be caused by other conditions. Call your ob-gyn right away if you see blood in your urine.

What are the symptoms of a kidney infection?

If the bacteria enter the ureters and spread to the kidneys, symptoms may include

- back pain
- chills
- fever
- nausea
- vomiting

If you have any of these symptoms, call your ob-gyn right away. Kidney infections are serious. They need to be treated promptly.

Could my symptoms be something else?

Pain when urinating can be caused by other conditions, such as [infection of the vagina](#) or [vulva](#). Tests may be needed to confirm the diagnosis of a UTI. Talk with your ob-gyn in detail about your symptoms.

Diagnosis

How are UTIs diagnosed?

The diagnosis of a UTI is often made based on symptoms, including pain with urination or frequent urination.

A simple test called [urinalysis](#) may show if you have a UTI. For this test, you are asked to provide a urine sample. This sample is studied in a lab to look for white blood cells, red blood cells, and bacteria. The urine sample may also be grown in a culture (a substance that promotes the growth of bacteria) to see which bacteria are present.

What are the steps to provide a urine sample?

For urinalysis, it's important to provide a clean sample of urine. Your ob-gyn or a nurse should give you a sterile cup and a special wipe. Follow these steps:

1. Open the cup and place it at easy reach. Place the cap nearby with the inside lid up.
2. Separate the [labia](#) with one hand. With the other hand, clean your genital area with the wipe. Wipe from front to back and do not touch or wipe your anus.
3. While still holding the labia open, pick up the opened container with your other hand, pass a little bit of urine into the toilet, and catch the rest in the cup. Place the cap back on the cup.

Do not touch the inside of the lid or the inside of the cup at any time. This helps keep the sample from picking up bacteria from your hands.

Why would I need more testing?

You and your ob-gyn may discuss testing to look at your urinary tract if

- your infection does not clear up with treatment
- you have had several UTIs in a short time
- you have pain, fever, and chills

Your ob-gyn may recommend an [ultrasound exam](#) or [computed tomography \(CT\)](#) of the upper urinary tract.

Treatment

How are UTIs treated?

Antibiotics are used to treat UTIs. The type, dose, and length of antibiotic treatment depend on the type of bacteria causing the infection and your medical history. A simple UTI rarely leads to infection of the upper urinary tract.

How long do I need to take antibiotics?

In most cases, treatment lasts a few days and is very effective. Most symptoms go away in 1 to 2 days. It's very important to finish medication prescribed for a UTI, even

after your symptoms go away.

What if I have a more severe infection?

For more severe infections, such as a kidney infection, you may need to stay in the hospital. Severe infections take longer to treat, and you may need medication given through an [intravenous \(IV\) line](#).

Should I drink cranberry juice to stop a UTI?

Unsweetened cranberry juice and cranberry pills may decrease the risk of getting a UTI. The exact amount of juice or pills needed and how long you need to take them to prevent infection are being studied.

Recurrent UTIs and Prevention

What does it mean if I get UTIs often?

If you have three or more UTIs in a year or two or more UTIs in 6 months, it is called a recurrent infection. The first step in treatment is finding the cause. Factors that increase the risk of recurrent infection are

- frequent sex
- long-term spermicide use
- diaphragm use
- a new sexual partner
- young age at first UTI
- a history of UTIs

How are recurrent UTIs treated?

Recurrent infections are treated with antibiotics. A week or two after you finish treatment, a urine test may be done to see if the infection is gone.

How can recurrent UTIs be prevented?

Changing your birth control method may be recommended.

- A single daily dose of antibiotic may be recommended for 6 to 12 months.
- If you often get UTIs from sexual activity, your ob-gyn may recommend you take a single dose of antibiotic after each time you have sex.
- If you are past [menopause](#), your ob-gyn may recommend vaginal [estrogen](#). This medication is a cream, tablet, or ring that is inserted into the vagina.

UTIs and Pregnancy

How common are UTIs during pregnancy?

About 8 in 100 pregnancies are affected by UTIs. Changes in the body that happen during pregnancy can increase the risk of developing a UTI, including

- the pressure of the fetus in the uterus pressing down on the bladder
- increased levels of the hormone [progesterone](#)

How can prenatal care help prevent UTIs?

Your urine should be tested for bacteria during one of your first prenatal care visits. Your urine may have bacteria even if you don't have symptoms. By treating a UTI before symptoms appear, you can avoid the possible problems it can cause.

Why are UTIs a concern during pregnancy?

Most UTIs can be easily treated before any problems develop. But without treatment, even UTIs without symptoms can cause problems, including [preterm](#) birth and fetal growth problems.

If a kidney infection develops, it can cause severe [complications](#), including [sepsis](#), blood clotting problems, and trouble breathing.

What should I do if I think I have a UTI during pregnancy?

Call your ob-gyn right away if you have symptoms of a UTI. If you cannot reach your ob-gyn, go to an urgent care clinic. Do not wait for treatment.

It can be easy to confuse UTI symptoms with common pregnancy symptoms, such as needing to urinate more often. A urine test should be done to confirm whether you have a UTI.

How are UTIs treated during pregnancy?

UTIs in pregnancy are treated with antibiotics for 5 to 7 days. The antibiotics used to treat UTIs are safe and effective during pregnancy.

If a kidney infection develops, you will need to stay in the hospital for treatment.

Glossary

Antibiotics: Drugs that treat certain types of infections.

Anus: The opening of the digestive tract through which bowel movements leave the body.

Bacteria: One-celled organisms that can cause infections in the human body.

Bladder: A hollow, muscular organ in which urine is stored.

Complications: Diseases or conditions that happen as a result of another disease or condition. An example is pneumonia that occurs as a result of the flu. A complication also can occur as a result of a condition, such as pregnancy. An example of a pregnancy complication is preterm labor.

Computed Tomography (CT): A type of X-ray that shows internal organs and structures in cross section.

Cystitis: An infection of the bladder.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Estrogen: A female hormone produced in the ovaries.

Fetus: The stage of human development beyond 8 completed weeks after fertilization.

Intravenous (IV) Line: A tube inserted into a vein and used to deliver medication or fluids.

Kidneys: Organs that filter the blood to remove waste that becomes urine.

Labia: Folds of skin on either side of the opening of the vagina.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Obstetrician–Gynecologist (Ob-Gyn): A doctor with special training and education in women's health.

Penis: The male sex organ.

Preterm: Less than 37 weeks of pregnancy.

Progesterone: A female hormone that is made in the ovaries and prepares the lining of the uterus for pregnancy.

Pyelonephritis: A kidney infection caused by bacteria.

Sepsis: A condition in which infectious toxins (usually from bacteria) are in the blood. It is a serious condition that can be life threatening. Symptoms include fever, rapid heart rate, breathing difficulty, and mental confusion.

Spermicide: Chemicals (creams, gels, foams) that inactivate sperm.

Ultrasound Exam: A test in which sound waves are used to examine inner parts of the body.

Ureters: A pair of tubes, each leading from one of the kidneys to the bladder.

Urethra: A tube-like structure. Urine flows through this tube when it leaves the body.

Urethritis: Infection of the urethra, the organ through which urine flows out of the body.

Urinalysis: A test to check a urine sample.

Urinary Tract Infections (UTIs): Infections in any part of the urinary system, including the kidneys, bladder, or urethra.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

Vulva: The external female genital area.

If you have further questions, contact your ob-gyn.

Don't have an ob-gyn? [Learn how to find a doctor near you.](#)

FAQ050

Last updated: January 2024

Last reviewed: November 2023

Copyright 2024 by the American College of Obstetricians and Gynecologists. All rights reserved. Read [copyright and permissions information](#).

This information is designed as an educational aid for the public. It offers current information and opinions related to women's health. It is not intended as a statement of the standard of care. It does not explain all of the proper treatments or methods of care. It is not a substitute for the advice of a physician. Read [ACOG's complete disclaimer](#).

[About ACOG](#)

[Disclaimer](#)

[Contact Us](#)

[How to Find an Ob-Gyn](#)



Copyright 2024 American College of Obstetricians and Gynecologists

[Privacy Statement](#)

|

[Terms and Conditions of Use](#)