Urinary Tract Infection in Women

What is a urinary tract infection?

A urinary tract infection (UTI) is an infection in the urinary tract. The urinary tract includes the:

- kidneys
- ureters (the tubes draining urine from the kidneys to the bladder)
- bladder
- urethra (the tube that drains urine from the bladder).

Any or all of these parts of the urinary tract can get infected.

How does it occur?

Urinary tract infection is usually caused by bacteria. Normally the urinary tract does not have any bacteria or other organisms in it. Bacteria that cause UTI often spread from the rectum or vagina to the urethra and then to the bladder or kidneys. Urinary tract infection is more common in women than men because the urethra is shorter in women. This makes it easier for bacteria to move up to the bladder. Sometimes bacteria spread from another part of the body through the bloodstream to the urinary tract. Some of the things that can lead to an infection are:

- a blockage in the urinary tract, such as a kidney stone
- sexual activity
- getting older, when it may get harder to empty and flush out the bladder completely.

Women are more likely to have an infection if they:

- are newly sexually active or have a new sex partner
- are past menopause
- are pregnant
- have a history of diabetes, a problem with the immune system, sickle-cell anemia, stroke, kidney stones, or any illness that makes it hard to empty the bladder completely.

What are the symptoms?

The symptoms of UTI may include:

- urinating more often
- feeling an urgent need to urinate
- pain or discomfort (burning) when you urinate
- urine that smells bad
- pain in the lower pelvis, stomach, lower back, or side
- urine that looks cloudy or reddish
- fever or chills
- sweats
- nausea and vomiting
- leaking of urine
• change in amount of urine, either more or less
• pain during sex.

How is it diagnosed?

Your healthcare provider will ask about your symptoms and medical history. Your provider will examine you. The exam may include a pelvic exam. Your provider will check for tenderness of the bladder or kidney. A sample of your urine may be tested for bacteria and pus. If you are having fever and are feeling very ill, you may have a blood test to look for signs of more serious infection.If you keep having infections or symptoms after treatment, your provider may suggest these tests:

• An intravenous pyelogram (IVP). An IVP is a special type of X-ray of the kidneys, ureters, and bladder.
• An ultrasound scan to look at the urinary tract.
• A cystoscopy. This is an exam of the inside of the urethra and bladder with a small lighted instrument. It is usually done by a specialist called a urologist.

How is it treated?

UTIs are usually treated with antibiotics. Your provider can also prescribe a medicine called Pyridium to relieve burning and discomfort. (Pyridium turns your urine a dark orange color.) If the infection is causing fever, pain, or vomiting or you have a severe kidney infection, you may need to stay at the hospital for treatment.

How long will the effects last?

With antibiotic treatment, the symptoms of a bacterial infection stop in 1 to 3 days. Take all of the antibiotic your healthcare provider prescribes, even after the symptoms go away. If you stop taking your medicine before the scheduled end of treatment, the infection may come back. Without treatment, the infection can last a long time. If it is not treated, the infection can permanently damage the bladder and kidneys, or it may spread to the blood. If the infection spreads to the blood, it can be fatal.

How can I take care of myself?

• Follow your healthcare provider's treatment. Take all of the antibiotic that your healthcare provider prescribes, even when you feel better. Do not take medicine left over from previous prescriptions.
• Drink more fluids, especially water, to help flush bacteria from your system.
• If you have a fever: Take aspirin or acetaminophen to control the fever. Check with your healthcare provider before you give any medicine that contains aspirin or salicylates to a child or teen. This includes medicines like baby aspirin, some cold medicines, and Pepto-Bismol. Children and teens who take aspirin are at risk for a serious illness called Reye's syndrome. Keep a daily record of your temperature.
• A hot water bottle or an electric heating pad on a low setting can help relieve cramps or lower abdominal or back pain. Keep a cloth between your skin and the hot water bottle or heating pad so that you don’t burn your skin.
• Soaking in a tub for 20 to 30 minutes may help relieve any back or abdominal pain.
• Follow your healthcare provider's directions for a follow-up urine test. Your provider may want to test your urine soon after you finish taking the antibiotic.
• Call your healthcare provider right away if: You keep having symptoms after taking an antibiotic for 2 days. Your symptoms get worse. You have a fever of 101.5° F (38.6° C) or higher. You have new vomiting. You have new pain in your side, back, or belly. You have any symptoms that worry you.

**How can I help prevent urinary tract infection?**

You can help prevent UTIs if you:

• Drink lots of fluids every day.
• Don’t wait to go to the bathroom when you feel the need to urinate.
• Empty your bladder completely when you urinate.
• Use good hygiene when you use the toilet. For example, wipe from front to back to keep rectal bacteria from getting into the vagina and urethra.
• Avoid using irritating cosmetics or chemicals in the area of the vagina and urethra (such as strong soaps, feminine hygiene sprays or douches, or scented napkins or panty liners).
• Practice safe sex. Always use latex or polyurethane condoms.
• Urinate soon after sex.
• Keep your genital area clean.
• Wear underwear that is all cotton or has a cotton crotch. Pantyhose should also have a cotton crotch. Cotton allows better air circulation than nylon. Change underwear and pantyhose every day.