

# Urinary Tract Infection

## WHAT IS A URINARY TRACT INFECTION?

A urinary tract (or bladder) infection occurs when bacteria enter the normally sterile urinary system, and multiply there. Bacteria are one-celled plants which cannot use sunlight to manufacture their own food, instead producing enzymes which allow them to feed off other tissues, damaging them. This is what causes the discomfort and irritation of a bladder infection. While some bacteria are beneficial, such as those in the gastrointestinal tract which help digest food, others are harmful. A helpful bacteria, when in a different part of the body, may become a harmful bacteria.

Women have more bladder infections than men due to the differences in the anatomy in the urinary tract. The adult female has a urethra that is about three inches long, as opposed to about eight inches long in the male. This, along with the fact that females have three openings in a very small area, (the rectum, the vagina, and the meatus of the urethra), contributes to the problem, which most often begins to occur once the women becomes sexually active.

In most cases, the bacteria travel up the urethra to the bladder. However, in a small percentage, the bacteria may travel upward through the urethra and into the kidneys. This produces more serious symptoms, such as a fever over 101 degrees Fahrenheit, a dull ache in the small of the back or flank, and a generalized weakness.

## HOW DO I KNOW IF I HAVE A URINARY TRACT INFECTION?

Symptoms you may experience could include:

- difficulty in urination
- burning or pain during urination
- passing small amounts frequently
- a constant urge to empty bladder
- cloudy or bloody urine
- foul smelling urine
- discomfort low in the abdomen

**NOTE: SOME OF THESE SYMPTOMS MAY INDICATE OTHER PROBLEMS. IT IS IMPORTANT TO HAVE YOUR SYMPTOMS EVALUATED!**

To diagnose a urinary tract infection, a clean urine sample is tested for the presence of white blood cells and other components. An increase in the number of white cells indicates a probable infection. The white cells multiply to fight off the infection.

A sample may also be placed in a culture medium to allow any bacteria to grow for 24 or more hours, so that it may be identified. *Escherichia coli*, an intestinal organism, is a frequently found bacteria due to the nearness of the female urinary opening to the rectum.

## IF I SHOULD GET A URINARY TRACT INFECTION, HOW WOULD IT BE TREATED?

Often, if you notice the symptoms early, you may be able to clear the infection from your system by simply making sure that you drink plenty of non-alcoholic, non-caffeinated fluids (at least two additional quarts, and possibly more), and getting adequate rest.

If these simple measures do not suffice, you may need an antibiotic medication. There are a number of drugs which target the urinary system, many of which kill a wide variety of bacteria.

You should begin to feel better after at least twenty-four hours. You will need to continue to drink additional fluids throughout the course of your treatment to flush your bladder, as well as to help prevent some of the possible side effects of the medications.

In some cases, you may be given a special medication for urinary tract pain. If this is the case, your urine may be discolored. (At least one of the antibiotic drugs can change your urine's color, also.)

### **ONCE I'VE BEEN TREATED, CAN I GET A BLADDER INFECTION AGAIN?**

Urinary tract infections can recur. If the recurrence is very soon after the original infection, it is often because the individual did not complete the treatment as it was ordered. It is important that you finish all of the medication, so that all of the infecting organisms are killed. Between 48 and 72 hours after completing the medication, return to the clinic to have another sample tested, so that you are sure the infection has been completely healed.

Another reason for recurrence of the same infection might be that the organism is resistant to that particular drug, in which case a different drug must be ordered for you.

Some women have frequent bladder infections. When possible, the cause of these infections is located so that appropriate preventive measures can be taken, especially in the case of structural defects or other pathology. For some women, no cause is identifiable. These women may need prophylactic antibiotics.

### **HOW CAN I PREVENT A BLADDER INFECTION?**

- Empty your bladder frequently, so that bacteria can't multiply.
- Always wipe from front to rear.
- Empty your bladder before and after intercourse.
- Wash your genital area before intercourse.
- Wear cotton underwear — it breathes, allowing air to circulate.
- Drink two to three quarts of liquid daily, to dilute your urine, and flush any bacteria out.
- Eat plenty of foods, including juices, that are rich in vitamins, and which acidify the urine, making it more difficult for bacteria to grow. (Yes, this includes cranberry juice.)