

Urinary Tract Infection (UTI)

Brown Health Services Patient Education Series

What is a UTI?

A UTI is an infection involving any part of the urinary tract which includes the urethra, urinary bladder, ureters and kidneys. The urethra goes between the bladder and the outside. The ureters run between the kidneys and the bladder. Most infections involve the lower tract– the urethra (urethritis) and/or urinary bladder (cystitis).

How common are they?

They are more common in people who have vulvas. One in 5 people with vulvas will likely develop a UTI during their lifetime; many will experience more than one. A more serious kidney infection (pyelonephritis) may occur if the infection spreads from the lower tract into the kidneys.

What are the signs and symptoms of a urinary tract infection?

Although some UTIs can be asymptomatic, common symptoms and signs include:

- A strong persistent urge to urinate
- A burning sensation during or after urination
- Passing frequent, small amounts of urine
- Blood in the urine (hematuria), or cloudy, strong-smelling urine
- A sense of pressure in the pelvis and lower abdomen
- In people with penises, urethritis can sometimes cause a penile discharge

Infection of the kidneys (pyelonephritis) can include all of the above as well as:

- Lower back pain
- High fever
- Shaking chills
- Nausea and Vomiting
- Fatigue

What causes urinary tract infections?

The most common cause of UTIs is bacteria from the bowel such as E. coli that is present on the skin near the rectum or in the vagina. Once bacteria enter the urethra they travel upward causing infection in the bladder and sometimes other parts of the urinary tract. Sexual intercourse is commonly associated with UTIs in women. During intercourse, bacteria in the vaginal area are sometimes transferred into the urethra by the motion of the penis. Sexual intercourse may also irritate the urethra allowing bacteria to more easily travel through the urethra into the bladder.

However, even people with vulvas who are not sexually active are more susceptible to lower UTIs than people with penises because the rectum is closer to the urethra in female genitalia. The shorter urethra also makes it easier for bacteria to enter the bladder and cause infections.

In people with penises, urethritis is usually the result of bacteria acquired during sexual contact. The majority of such infections are caused by gonorrhea or chlamydia. People with vulvas can also develop urethritis due to a sexually transmitted infection such as herpes or chlamydia however; this

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will generally cause vaginal symptoms as well as urinary discomfort.

Another cause of UTIs is waiting too long to urinate. The bladder is a muscle that stretches to hold urine and contracts when urine is released. A bladder that is continually stretched may eventually weaken and not empty completely, leaving some urine inside which may increase the risk of a urinary tract infection. Other risk factors for developing urinary tract infections include:

- Anything that impedes the flow of urine such as an enlarged prostate or kidney stone
- Diabetes and other chronic illnesses that may impair the immune system
- Medications that lower immunity, such as cortisone in higher doses
- Pregnancy and menopause
- Use of spermicides, spermicide-coated condoms and diaphragms

What do I do if I think I have a UTI?

If you have symptoms of a urinary infection, make an appointment to be seen at Health Services. **It is important to be seen as soon as possible if you have fever, lower back pain, nausea, vomiting and chills as these may indicate a more serious kidney infection (pyelonephritis).**

You will be asked to provide a urine sample for urinalysis and possible culture to determine if you have bacteria in your urine. If your initial urinalysis indicates a probable infection, you will be prescribed an antibiotic which should relieve your symptoms within a few days. However, be sure to take the full course of treatment as directed and return to your health provider if you do not feel completely improved. If you are very uncomfortable, you may also be prescribed a medicine that will numb your bladder while the antibiotic starts to work. This medicine colors your

urine bright orange so don't be alarmed by the color when you urinate. A kidney infection may require more intensive treatment.

Drinking plenty of water will help flush out bacteria. Avoid coffee, alcohol, and soft drinks containing citrus juices and caffeine until your infection has cleared because these can irritate your bladder. Apply a warm, but not hot, heating pad to your abdomen to minimize bladder pressure and discomfort. If you tend to get frequent urinary infections, speak to your health provider regarding possible preventative medication.

How can I prevent urinary tract infections?

- Drink plenty of water to flush out bacteria.
- Don't hold your urine. Urinate when you feel like you need to.
- Wipe from front to back after bowel movements.
- Urinate before and after sex emptying the bladder completely each time to help wash away bacteria.
- If you get urinary infections often, you may want to avoid using a diaphragm and or spermicides. Ask your health provider about other birth control options.
- The role of cranberry juice and probiotics in preventing UTIs is not yet documented by replicated, adequately designed large scale studies. While the Natural Center for Complementary Medicine suggests cranberry and probiotics may have some role in preventing urinary tract infections, the evidence is not definite and more research is needed. Cranberry has not been shown to be effective as a treatment for an existing urinary tract infection.