URINARY TRACT INFECTIONS

Kidneys

Ureters

Bladder

Urethra

Trusted Information Creator
Patient Information Forum

Urinary Tract Infections

Urinary tract infections (UTIs) are very common conditions. They can sometimes harm your kidneys if untreated. Learn about symptoms, treatments, and prevention to protect your kidney health.

What is the Urinary Tract?

The urinary system (also called the "urinary tract") is the part of your body that makes urine. It is made up of two kidneys, the ureters, the bladder, and the urethra.

How is urine made?

Your kidneys make urine by removing waste product and extra water from your blood. The urine travels from your kidneys through two thin tubes called ureters, and then fills the bladder. When the bladder is full, a person urinates through the urethra to get rid of the waste.

What is a urinary tract infection?

A urinary tract infection (also called a "UTI") is what happens when bacteria (germs) get into the urinary system and cause inflammation in the bladder.. If the infection is not treated promptly, the bacteria can sometimes travel up to the kidneys and cause a more serious type of infection, called pyelonephritis.

Are certain people more likely to get UTIs?

- Women get UTIs much more often than men. This may be because women have a shorter urethra, which may make it easier for bacteria to reach the bladder. Women are even more likely to get UTIs after the menopause.
- People with diabetes may have changes in their bodies' defence system, making it easier to get urinary infections.
- People with blockages in their urinary tract, such as a kidney stone, are more likely to get urinary infections.
- People who take medication to suppress the immune system, such as kidney transplant patients, are more likely to get a UTI.

What are the symptoms of a UTI?

Most people will have one or more of the following:

•   an urgent need to urinate, often with only a few drops of urine to pass
a feeling of needing pass urine much more often than usual
•   a burning or stinging feeling during urination
•   an aching feeling, pressure or pain in the lower abdomen (stomach)
•   cloudy or blood-tinged urine
•   a strong odour to the urine
If the infection spreads to the kidneys and becomes more serious, you may also have:
•   pain in the lower back
•   fever and chills
•   nausea and vomiting

See your doctor right away if you have any of these symptoms
It is possible to have bacteria in the urine, without any symptoms.
This is especially common in post-menopausal women and does not necessarily need treatment with antibiotics.

How do I know if I have a UTI?
A "bedside" urine dipstick test can indicate that there may be a problem, but this test is not definitive. There are many reasons why the urine dipstick test can be positive. If there is any doubt in the diagnosis, your doctor will often send a sample of your urine to the lab to look for bacteria and blood cells – called a urine culture, or Mid-Stream Urine (MSU) A culture of the urine will tell your healthcare provider whether bacteria are present.

How are UTIs treated?

UTIs are treated with antibiotics. Antibiotics are medicines that destroy bacteria and stop them from growing. You may be told to take the antibiotics for 3-7 days if the bacteria are just in the bladder, but for longer periods for kidney infections.. This helps make sure the infection has been cured. You may also be asked to drink plenty of water – bearing in mind if you are on a fluid restriction Simple painkillers such as paracetamol can help. Additionally, some people find cystitis sachets (usually containing citrate) helpful for symptoms, although they have not been studies extensively.

What if the infection does not clear up with treatment?

Most infections clear up with treatment with oral antibiotics. However, if an infection does not clear up, or if you have repeated infections, further tests may be required. If you are unwell with a UTI, sometimes intravenous antibiotics (given in hospital) are required.
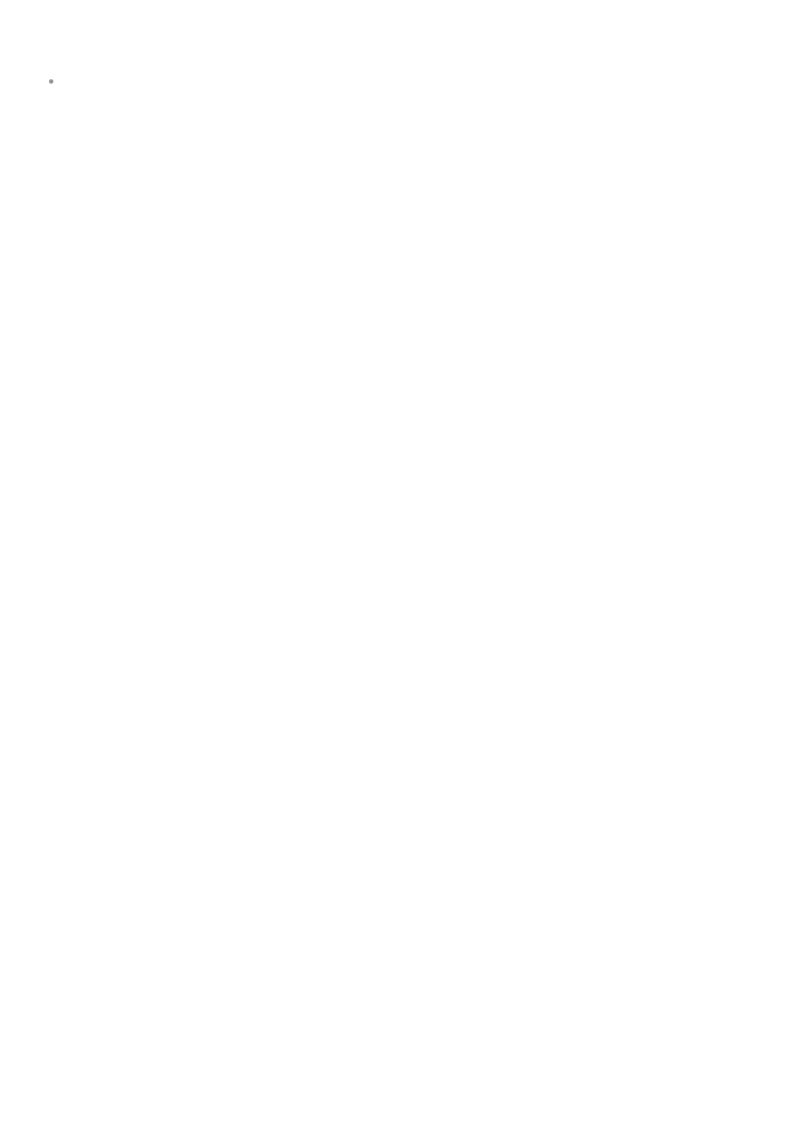
Can anything be done to help prevent UTIs?

Yes, the following steps may help :

- drink plenty of fluids, but only if you aren't on a fluid restriction
- do not postpone going to the bathroom. Urinate when you feel the urge. Try to ensure you empty your bladder fully, even trying again after a few minutes after you've just passed urine (Double-voiding).
- Wipe from front and back to prevent bacteria from the bowels (poo) from getting into the urinary tract.
- Wash the genital area every day, and before having sex
- Empty your bladder as soon as possible after having sex
- Avoid using scented soaps or bubble bath
- Although the evidence is limited, some people find D-Mannose (a sugar you can buy in health food shops) and Cranberry supplements helpful. Talk to your doctor or pharmacist about these
- In difficult cases, your doctor may prescribe long-term low -dose antibiotics ("prophylaxis") or other treatments to change the chemistry of the urine, but these medications aren't risk free. There are also specific treatments for peri and post-menopausal women who have UTIs.

Do UTIs lead to kidney damage?

Not usually. In most cases, UTIs can be treated successfully without causing kidney damage. UTIs caused by problems like an enlarged prostate gland (men) or a kidney stone can lead to kidney damage if the problem is not corrected, and the infection continues. Recurrent UTIs in young children that are associated with high fevers may sometimes cause kidney damage if not treated promptly.

-

The National Kidney Federation cannot accept responsibility for information provided. The above is for guidance only. Patients are advised to seek further information from their own doctor.

Written October 2025
Reviewed by Jacqueline Nevols : Consultant Nephrologist Wessex Kidney Centre
Next review October 2028

To view this leaflet on our website and to access further kidney related information please scan the QR Code

Trusted
Information
Creator
Patient Information Forum