

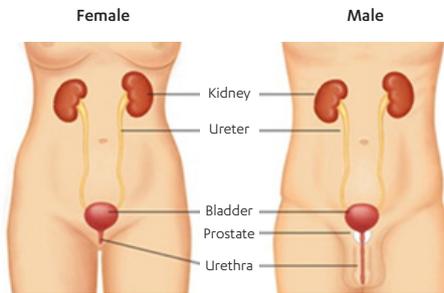
# Urinary tract infections

## What is a urinary tract infection?

Urinary tract infections (UTIs) are a group of infections of the urinary tract (the body's drainage system for removing urine) (see Figure 1).

The most common UTI is cystitis, which is an infection of the bladder (where urine is stored). Other UTIs involve the urethra (the tube between the bladder and the outside known as urethritis) or kidneys (pyelonephritis).

Figure 1: Urinary tract infections in males and females



## What causes a urinary tract infection?

The most common cause of infection is a type of bacteria that normally lives in the bowel (called *Escherichia coli* or *E. coli*). The bacteria can be left on the skin after going to the toilet. They then travel from the skin up the urethra to the bladder. Once inside the bladder, these bacteria quickly grow and cause an infection.

Other causes may be related to:

- An obstruction (blockage) in the flow of urine (such as a large kidney stone or an enlarged prostate gland in men)
- An indwelling urinary catheter (IDC) – these are often used to drain urine after surgery or if people have trouble urinating on their own
- Sexual intercourse, especially in women, which increases the transfer of bacteria from the skin to the urethra

Women and children are more likely to get UTIs than men. Females naturally have a shorter urethra than males, which means there is less distance for bacteria to travel to reach the bladder. Also, the urethra, vagina and anal opening are close to each other, making it easy for bacteria to be spread from one to the other.

Babies in nappies commonly get UTIs. Bacteria from a dirty nappy can easily cause infection, especially in girls. Even babies who are regularly changed and cleaned can get a UTI.

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For the same reasons, people who have incontinence are at higher risk of getting UTIs.

## What are the symptoms?

- Stinging or burning when passing urine
- Passing very small amounts of urine
- Feeling the need or 'urges' to pass urine frequently
- Feeling that the bladder is still full after passing urine
- Smelly, cloudy, dark or bloody urine
- Pain low down in the abdomen or in the lower back or sides
- Feeling unwell with nausea and fever
- In children the symptoms may be vague and commonly include vomiting, fever and abdominal pain
- In the elderly, the symptoms may be vague and include confusion, agitation or behaviour change and a decline in mobility

## Investigations

A urine sample is necessary to test for infection. This sample should be a mid-stream urine, meaning that urine is passed into the toilet first, then into the jar. Passing urine straight into the jar can lead to a false-positive result.

A 'dipstick' test can be done to immediately check for infection. This test is quick and may rule out infection, but most positive dipstick samples will need to be sent to a laboratory for further testing, with results taking a few days. It is important to follow up with your doctor for this result.

UTIs are uncommon in males, so more investigations may be needed to look for other causes. Your doctor will advise on which investigations are needed for you.

## Treatment

- Antibiotics are used to treat the infection. You should take the full course, even if you are feeling better, because some bacteria may still be active and cause more serious infection if left half-treated.
- Urinary alkalinisers (such as Citralite®, Citravescent® or Ural® sachets) can help improve symptoms such as stinging. You can buy these products at a pharmacy and some supermarkets. Please check with your doctor if these can be taken with any other medications you, or your child, may be taking.

### Home care

- Make sure you completely empty your bladder each time you pass urine
- Women should wipe from front to back after going to the toilet
- Get plenty of rest to give your body a chance to fight the infection
- If you have pain, take mild pain medication such as paracetamol. Check the packet for the correct dose. If treating a child, carefully check the label for the correct dose and make sure you are not giving your child any other products containing paracetamol (such as some cough medicines and cold and flu preparations).
- Place a warm pack, such as a wheat bag or hot water bottle wrapped in a towel, on your abdomen or back to help relieve pain

### What to expect

While UTIs such as cystitis can be very uncomfortable, it is easy to treat with antibiotics. Antibiotics act quickly and the symptoms often improve within two days. Other UTIs, such as pyelonephritis (kidney infection), may need a longer course of antibiotics, or sometimes intravenous antibiotics in hospital.

If your symptoms are not getting better, and particularly if you develop pain in your side or fever and chills, see your local doctor. Some UTIs can become serious if left untreated and may lead to a kidney infection, which may cause permanent kidney damage.

### Can UTIs happen again?

Some people (including children) can suffer from UTIs more than once. There are many reasons why this may happen, ranging from poor toilet habits (such as wiping from back to front, which transfers bacteria from your bowel to the opening of the urethra) to having a shorter urethra than normal.

If an infection comes back, it should be treated early. See your doctor promptly if your symptoms return.

If infections are an ongoing problem you may need to see a urologist (a doctor who specialises in urinary problems) for further tests and treatment. Some people may need low-dose antibiotics to prevent repeat infections for a period of three to six months, or longer.

### Prevention

Here are some simple ways you can try to help prevent another UTI.

- Drink plenty of water
- Pass urine often. Empty your bladder completely and do not 'hold on' when you need to go.

#### Advice for women

- Wipe yourself from front to back after going to the toilet
- Wear cotton underwear or at least underwear with a cotton gusset (the piece at the crotch)
- Avoid synthetic or tight-fitting clothing such as jeans or pantyhose
- Use a lubricant during sex and go to the toilet immediately after sex

### Seeking help

**Cabrini Emergency Department (ED)** is staffed by experienced emergency doctors and nurses 24 hours a day, 7 days per week. If you have any questions about your ED treatment our qualified ED staff can be contacted on **(03) 9508 1500** at any time. If you need to return to Cabrini ED for ongoing care we would be glad to take care of you again and if this occurs within a week of your initial consultation the doctor's fee will be bulk-billed.

You can also expect to receive a phone call or SMS message from one of our emergency nurses the day after you have been discharged. The nurse will be able to clarify any aspect of your diagnosis, treatment, or follow-up.

In a medical emergency return to Cabrini ED if it is safe to do so or go to the nearest hospital emergency department or call an ambulance – dial triple zero (000).

#### Return to Cabrini ED if you have:

- **Severe pain in your back or loin area**
- **Fever or chills**
- **Nausea or vomiting**
- **Blood in your urine**
- **Are not getting better even if taking antibiotics**

### Want to know more?

- Contact Cabrini ED on **(03) 9508 1500**
- Ask your local doctor or healthcare professional
- Visit the Better Health Channel at [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)