

Pyelonephritis (kidney infection)

Pyelonephritis (pie-lo-nef-rite-is) is an infection of one or both of your kidneys.

Acute (suddenly occurring) kidney infection needs immediate medical attention with antibiotics. Therefore, if you have these symptoms, see your general practice team or after hours healthcare provider as soon as possible.

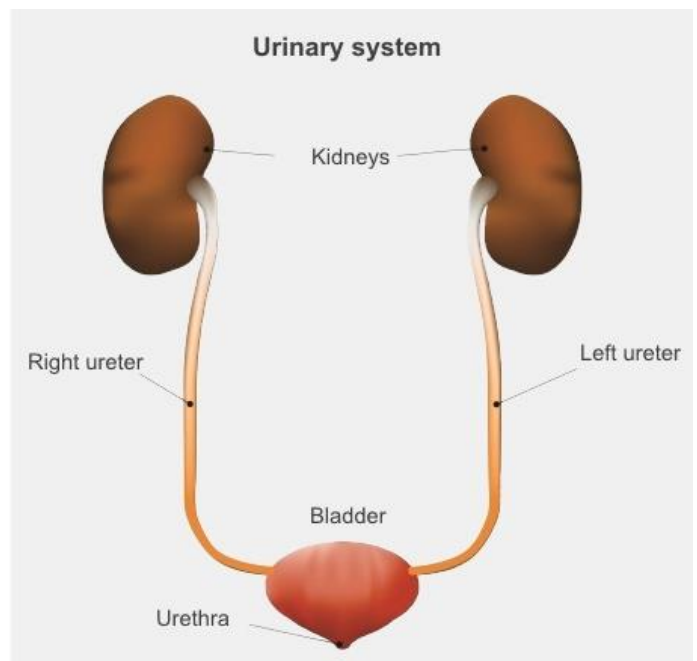
What causes kidney infections?

Kidney infections usually happens because of a germ, or bacteria, that enters your urethra (the tube you pass urine through) from the surrounding skin. It then travels into your bladder, and up into your kidneys.

If the infection stops in your bladder, just causing a urine infection, this is called cystitis. It only becomes pyelonephritis if it travels up to your kidneys. It can also happen because of problems with your kidneys, such as kidney stones, or defects in your kidneys. But often there is no obvious cause. Most kidney infections are one-off, and come on quite quickly. This is called acute kidney infection.

However, repeated episodes of acute kidney infection can lead to chronic (long-lasting) kidney infection. This can lead to long-term kidney problems, or even kidney failure.

Chronic kidney infection is rare. It is usually caused by scarring of your kidneys, repeated urinary infections, or permanent defects in your kidneys at birth.



Who gets kidney infections?

Anyone can get kidney infections, although they are more common in women, especially when they are pregnant, and in children. People with diabetes, who have kidney stones, or who have physical defects in their kidneys are also more likely to get kidney infections.

How do I know if I have a kidney infection?

The symptoms of kidney infection can be vague. But they can include:

- pain and tenderness, on both sides of your tummy (abdomen), or in your back just below your ribs
- a high temperature
- nausea (feeling sick)
- lack of appetite (not feeling hungry)
- vomiting
- confusion (particularly in older people).



You may also notice urinary tract symptoms, which include:

- needing to pass urine (wee) a lot
- pain when you're urinating
- blood in your urine
- cloudy or smelly urine.

In severe cases, a kidney infection can cause blood poisoning (septicaemia), which is a serious illness. Your doctor will diagnose a kidney infection by getting you to have a urine test.

How are kidney infections treated?

While kidney infections can become serious, they can almost always be cured. But it's best to get them treated quickly, to prevent any complications. Although complications are rare, they can cause permanent damage to your kidneys.

Your doctor will usually prescribe antibiotics, to get rid of the infection, and pain relief to dull the pain and lower your temperature. They will also tell you to drink plenty of fluids. If the infection is severe or doesn't clear up quickly with antibiotics, you may need to go to hospital. Make sure you finish all the antibiotics you are prescribed, even if you are feeling better.

You can also do some things to reduce your risk of getting a kidney infection:

- drink plenty of fluids (keep yourself well hydrated)
- make sure you keep your genital area clean
- urinate (wee) after sex
- for women, always wipe from the front to the back after having a bowel motion (poo)
- double voiding – this means every time you urinate, try do so again straight away.

i *Local health professionals recommend the following pages.*

- Patient.info – Kidney infection (pyelonephritis) (patient.info/health/kidney-infection-pyelonephritis)
Factsheet about pyelonephritis, including symptoms, treatment, and prevention. Includes a diagram showing the kidneys and urinary tract.
- Video – NHS Choices – What do our kidneys do? (www.nhs.uk/Video/Pages/CKDwhatkidneysdo.aspx)
A video animation about the kidney (3.39 minutes).

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