

Overview

Kidney stones

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Kidney stones can develop in 1 or both kidneys and most commonly affect people aged 30 to 60. But they can occur at any age.

Your body will try to pass out a kidney stone in your pee (urine) when you go to the toilet. This means it will often travel through the urinary system.

Around 3 in 20 men and up to 2 in 20 women develop them at some stage of their lives.

The medical term for kidney stones is nephrolithiasis. If they cause severe pain it's known as renal colic.

Symptoms of kidney stones

Small kidney stones may go undetected and be passed without any pain while you pee.

But it's common for a stone to block part of the urinary system particularly the ureter. The ureter is the tube connecting the kidney to the bladder.

A stone could also block the urethra – the tube pee passes through on its way out of the body. But this is rare.

A blockage can cause severe pain in the abdomen or groin. It can sometimes cause a urinary tract infection (UTI).

Read more about the [symptoms of kidney stones](#)

Causes of kidney stones

The waste products in the blood can form crystals that collect inside the kidneys. Over time, the crystals may build up to form a hard stone-like lump.

This is more likely to happen if:

- you do not drink enough fluids
- you're taking certain types of medication
- you have a medical condition that raises the levels of certain substances in your pee

Read more about the [causes of kidney stones](#)

Treatment of kidney stones

Most kidney stones are small enough to be passed in your pee. It may be possible to treat the symptoms at home with medication.

Larger stones may need to be broken up in hospital using ultrasound or laser energy. You may need keyhole surgery to remove very large kidney stones.

Read more about [treating kidney stones](#)

Preventing kidney stones

To avoid getting kidney stones, drink plenty of water every day so you don't become dehydrated. Drinking water will keep your pee diluted (clear). This will prevent waste products from forming into kidney stones.

Up to half of all people who have had kidney stones will experience them again within the following 5 years.

Read more about [preventing kidney stones](#)

The kidneys

The kidneys are 2 bean-shaped organs that are roughly 10cm (4 inches) in length. They're located towards the back of the abdomen on either side of the spine.

The kidneys remove waste products from the blood. The clean blood is transferred back into the body. Then the waste products are passed out of the body in your pee.

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