

# Chronic Kidney Disease (CKD)

Patient Information



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Chronic kidney disease (CKD) is a long-term condition where the kidneys work less well than they should. This leaflet gives more information about CKD, its treatments and what to expect.

## What do your kidneys do?



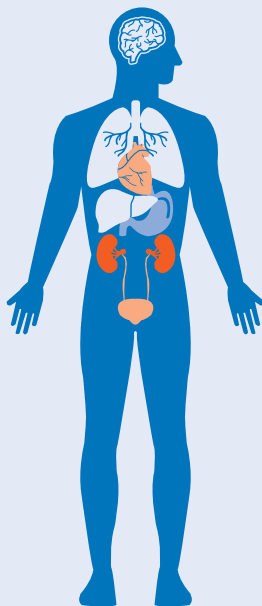
**Most people have two kidneys**

They are about the size of your clenched fist, they each weigh around 150g and are shaped like kidney beans.



**They sit in your lower back under the bottom ribs**

Only 50% of the population know that kidneys produce urine.



**They filter your blood every minute of the day**

Your blood goes through the kidneys 40 times in 24 hours. There are 140 miles of tubes and a million filters in your kidneys.



**They are the hardest working organs in your body**

They use 25% of the blood from every heartbeat.

**Kidneys make urine**



Regulate salt and water in your body, making about 3-4 pints of urine each day

**Kidneys Produce Hormones**



Regulate your blood pressure

**Kidneys Activate Vitamin D**



Keep bones Healthy



Remove waste products from your blood into your urine



Create erythropoietin to control the production of red blood cells

**Kidneys Clean your blood**



Remove many drugs that some people take for other conditions

## What is CKD?

**Chronic kidney disease usually means that your kidneys do not work in the normal way.**

The kidneys then can't remove waste products from your body. Damage to the filter system can also allow blood and protein to leak into the urine. However the vast majority of people with CKD have no symptoms and do not need any specialist input.

## How is CKD diagnosed?

- Most people are diagnosed by a blood and urine test. You may have these tests by chance or because you are at risk of developing CKD
- Once you are diagnosed your doctor will work out what stage of CKD you have. This is done by measuring the amount of creatinine, a waste product which builds up in kidney disease. Using this we can estimate how well your kidneys are working. You may hear this referred to as your estimated glomerular filtration rate (e-GFR)
- CKD is divided into stages with 1 being least damage and 5 most damaged
- CKD can gradually get worse slowly over time although for the majority of people it remains stable and only a very small number of people will require dialysis. It is unusual for kidney function to improve dramatically once your kidneys have been damaged but it does depend on the cause of the problem.
- The majority of people with CKD stages 1 to 3 can manage the condition themselves with their GP and do not need any specialist input from kidney doctors.



## Is CKD common?

**Yes. Around 10% of people in the UK have CKD.**

In people over the age of 80 this increases to 20%. Usually this is mild and it may not become severe. The vast majority of patients with CKD do not have any symptoms and do not need specialist input.

## Who gets CKD?

**Anyone can get CKD.**

It can affect children and adults of any age. Some people are born with it and some develop it as they get older. It can run in some families.

## What can increase the risk of developing CKD?

**There are lots of causes of CKD. The most common causes include:**

- Diabetes
- Heart disease
- High blood pressure (hypertension)
- Inflammation within the kidneys (glomerulonephritis)
- Blockages to the flow of urine such as prostate problems or cancers in the bladder
- Certain medications such as non-steroidal anti-inflammatory drugs (NSAIDs) which include ibuprofen (Brufen or Nurofen) or diclofenac (Voltarol) among others
- Family history of kidney disease which may include inherited diseases.

Your doctor will try to find out what has caused CKD in your case. For the majority of people, your GP will look after you but some people will need to see a kidney specialist and have further tests. It is not always possible to find out what has caused the damage.

## What are the symptoms of CKD?

Most people do not have symptoms related to CKD. Your kidneys develop with extra capacity and therefore even when there is damage to the kidneys, they can still work well enough to prevent you having symptoms of CKD. In fact you can donate a kidney or be born with just the one kidney and remain healthy.

**Symptoms may only be noticeable with more advanced kidney disease. These include:**

- Generally feeling ill, lack of interest in everyday activities and loss of concentration
- Tiredness, low energy levels
- Finding it difficult to breathe (due to a build-up of fluid in the lungs)
- Difficulty sleeping at night (insomnia)
- Passing urine more often at night or, in the later stages of CKD, passing very little urine
- Feeling sick
- Headaches
- Itching
- Aching bones
- Muscle cramps
- However – many people do not have any symptoms



## Why does it matter if I have CKD and no symptoms?

Although you may have no symptoms from CKD, damage to the kidney can affect your health. CKD can increase your chance of having high blood pressure, heart disease or a stroke. It is therefore important that you are reviewed regularly by either your GP or your kidney doctor.

## What will my kidney doctor do if I am found to have CKD?

At the first visit, your specialist kidney doctor will try and find out the cause of your CKD. After that visit, each time you go you will have your weight and blood pressure measured and a sample of your urine will be checked for signs of blood, protein or infection. You will have a blood test to measure the function of the kidney, as well as for signs of anaemia, bone health and blood acidity levels. You will then speak to the doctor about your symptoms and discuss what treatments are available.

## What will the doctors do then?

- Find out the cause of your CKD and treat it if possible
- Work with you to make important choices on how to manage your condition
- Discuss possible lifestyle changes and medication that may relieve symptoms and slow the CKD progression
- Assess and reduce your risk of heart disease and strokes
- Try to relieve any symptoms
- Treat any complications such as anaemia and mineral changes



## What treatment is available?

You may receive treatment for some of the symptoms of kidney disease, including anaemia, fluid retention and treatment to keep your bones healthy.

If you are approaching the later stages of CKD you should start to be given information about the possible treatments available.

This may include different types of dialysis, kidney transplantation and conservative management. There are big decisions to be made and support and advice will be given to you by all the professionals in the kidney unit to help you decide what you want to do.

## What can I do to help myself?

- If you smoke, stop. Ask for help in stopping if you need to. There are lots of treatments to help.
- Having controlled blood pressure is key. Take any blood pressure medications regularly and as directed by your doctor. Reduce the amount of salt in your diet to less than 6g per day. You can find advice on how to reduce your salt intake on [www.foodswitch.co.uk](http://www.foodswitch.co.uk). 'Lo salt' products are not usually recommended as they contain a salt substitute, potassium. Excess potassium can be harmful for some people with kidney disease.
- Take regular exercise and try to maintain a healthy weight. If you are overweight, have diabetes or advanced kidney disease, and need advice on your diet, ask your GP about the services available in your area. They may refer you to a Dietitian for specialist advice.
- Eat a healthy and balanced diet, with support from your GP and dietician where this is available.
- Avoid drugs that may make things worse such as anti-inflammatory medication. Ask your pharmacist each time you are given a new drug to check that it is okay for you to take with your kidneys
- When you are unwell it may be necessary to temporarily stop taking certain medications. This is particularly important if you take blood pressure medications. Please discuss this with your GP or kidney specialist.

## Where can I find out more information?

Kidney Care UK: [www.kidneycareuk.org](http://www.kidneycareuk.org)

National Kidney Federation: [www.nkf.org](http://www.nkf.org)

NHS Choices website: [www.nhs.uk](http://www.nhs.uk)

Patient View: [www.patientview.org](http://www.patientview.org) - online access to your health records. Ask your renal unit for details about how to join

[www.patient.info](http://www.patient.info)


[www.nhs.uk/Livewell/Goodfood/Pages/Goodfoodhome.aspx](http://www.nhs.uk/Livewell/Goodfood/Pages/Goodfoodhome.aspx)

[www.actiononsalt.org.uk](http://www.actiononsalt.org.uk)



 [www.kidneycareuk.org](http://www.kidneycareuk.org)

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