

Chronic Kidney Disease (CKD) – Patient Information Leaflet

Where are my kidneys?

The kidneys are normally deep in your back, one either side of the spine. They are surrounded by a layer of protective fat and are covered by the lower ribs.

What is chronic kidney disease?

Chronic kidney disease occurs when your kidneys are permanently damaged so that they no longer work normally. The damage can vary from very mild to severe.

Often CKD does not cause any symptoms, and is found because blood or urine tests are abnormal.

What is normal kidney function?

Kidney function is measured by a simple blood test called creatinine. From this result, an estimate is made of how well both kidneys are working together.

This is called the “Glomerular Filtration Rate” or GFR. The GFR is adjusted for your age, sex and body size.

There is normally a big variation in kidney function between different people. Normal healthy people in their 20's can have a GFR value between 90 and 180 ml/min/1.73m².

Because normal GFR is about 100, we often talk about percentage (%) kidney function. As we get older, kidney function slowly goes down (see also the graph below):

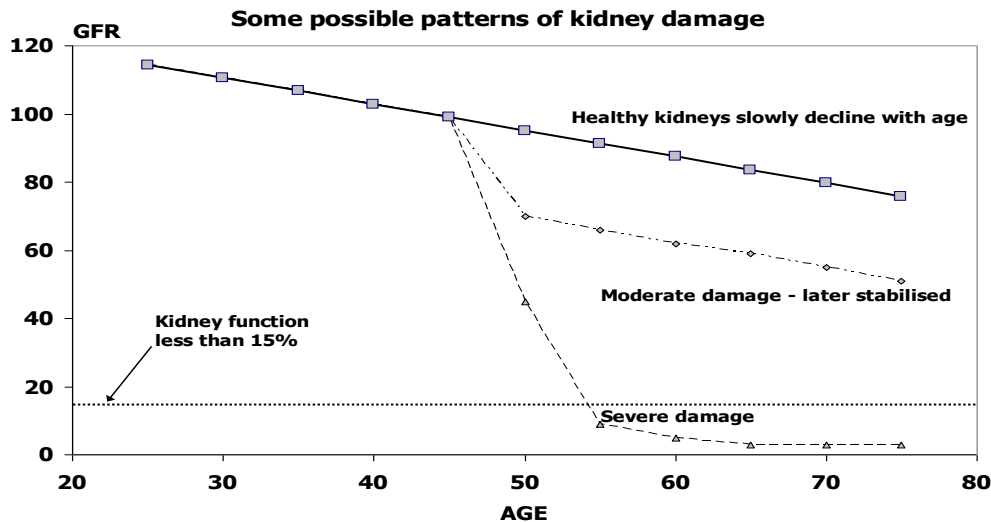
Age	Typical healthy kidney function or GFR
25 years	115 ml/min/1.73m ²
35 years	105 ml/min/1.73m ²
45 years	100 ml/min/1.73m ²
55 years	90 ml/min/1.73m ²
65 years	85 ml/min/1.73m ²
75 years	75 ml/min/1.73m ²

Your kidney function:

Your creatinine blood result is: _____ µmol / l (remember the test results here only show one day's kidney function)

From this we estimate that your kidney function (GFR) is: _____ ml/min/1.73m²

Information for Patients



What stage of chronic kidney disease do I have?

CKD stage 1	GFR over 90ml/min/1.73 ²	Signs of kidney damage on other tests No particular loss of kidney function
CKD stage 2	GFR 60-90ml/min/1.73 ²	Mild fall in kidney function
CKD stage 3	GFR 30-59ml/min/1.73 ²	Moderate fall in kidney function
CKD stage 4	GFR 15-29ml/min/1.73 ²	Severe fall in kidney function
CKD stage 5	GFR under 15ml/min/1.73 ²	Severe kidney failure; dialysis or a kidney transplant needed.

What causes chronic kidney disease?

There are many possible causes. Often the problem may have been present for many years without you knowing about it. The NKF website (www.kidney.org.uk) gives information on different kidney diseases.

How will chronic kidney disease make me feel?

Chronic kidney disease is often a “silent” condition with few symptoms. Usually symptoms only appear when it is fairly advanced. In some patients it may cause tiredness, loss of stamina, shortness of breath, swollen ankles, poor appetite, and sickness, difficulty sleeping at night and itching.

What tests will I have?

You will need further blood and urine tests and possibly a scan, such as an ultrasound scan, of your kidneys. Your blood pressure will be checked and you will be encouraged to measure your blood pressure at home with your own blood pressure meter.

What treatments are available?

This depends on the cause of your kidney damage but is likely to include taking pills, particularly for blood pressure. If you have high blood pressure it is important that it is **well** controlled. “Treatment” also includes regular monitoring of your condition. These treatments can often stabilise your kidney function.

Information for Patients

What happens if I don't want treatment?

If you do not have regular monitoring and treatment of your condition, your kidney function is **much** more likely to get worse and give you major problems.

How may chronic kidney disease affect my life?

Most people with CKD can lead normal lives. Further information is available on the NKF website (www.kidney.org.uk) on topics such as keeping fit, insurance, relationships and having children:

- Life insurance and holiday insurance may be more difficult to get or more expensive.
- Chronic kidney disease increases your chances of high blood pressure, heart attack and stroke.
- In some patients, kidney function gets to the stage where kidney dialysis or a kidney transplant is needed. Your doctor will tell you how likely this is.

What can I do to help myself?

Chronic kidney disease does not occur because you have done anything wrong. You can still help yourself:

- **You should control your weight and take regular exercise**
- **Eat a healthy diet low in salt**
- **DO NOT SMOKE (see below)**
- Follow the advice in this leaflet.
- Attend for your appointments at the surgery or clinic

If you are expecting an appointment with a doctor or nurse and it does not arrive, please get in touch with us.

Advice on vaccinations:

People with chronic kidney disease should have the yearly 'flu' jab, unless there is a specific reason for not having it.

People with chronic kidney disease or the nephrotic syndrome should also have the pneumonia jab (pneumococcal vaccine). In patients with severe chronic kidney disease or the nephrotic syndrome, the pneumonia vaccine may need to be given again after 5 years or more.

People with moderate or severe chronic kidney disease may need vaccination against Hepatitis B.

Taking painkillers in chronic kidney disease:

You should avoid taking the arthritis painkillers called non-steroidal drugs. These can worsen your kidney function.

Many have "fen" or "coxib" in their names. Examples include Ibuprofen, Brufen, Nurofen, Diclofenac and Celecoxib. If you need a painkiller you should use a Paracetamol based painkiller. These are Paracetamol and other drugs such as Cocodamol. If you suffer from severe arthritis and must use arthritis drugs please discuss this with your kidney specialist.

Check with your doctor before taking these drugs:

Arthritis type painkillers (non-steroidal drugs – see above)
"Lo-salt" (from the supermarket)

Information for Patients

Spironolactone
Amiloride
Co-Amilorfruse

} it may be safe to take these but check first

Travel within the UK and abroad:

When travelling anywhere you should eat and drink from safe sources to avoid the risk of a tummy bug or diarrhoea. If you travel abroad, you should take oral rehydration salts with you in case you catch a “tummy bug” with diarrhoea or vomiting. These are widely available from pharmacies, for example Boots Oral Rehydration Treatment.

For most people with even severe chronic kidney disease, international travel is possible. Travel insurance should be obtained for all foreign travel. If you are travelling to an area with malaria then you must discuss malarial prevention with your GP and/or kidney specialist.

Prevention of heart attack and stroke:

Chronic kidney disease increases the risk of heart attack and stroke. If you smoke, you can reduce the risks by stopping. Please talk to us or your GP about planning the best way to stop, and then quit!

You should have good control of your blood pressure. For people less than 75 years old, the top blood pressure number should ideally be less than 130 most of the time. Your blood pressure may be better if you purchase a blood pressure monitor, and measure your blood pressure at home. Talk to us about this and reducing your risk of heart attack and stroke.

Follow up if you are discharged from this clinic:

Most patients will require regular monitoring of their kidney condition, either by hospital clinic or GP surgery. If you are to be discharged from the hospital clinic, please attend regularly for follow up at the GP surgery. You need to remember to book the appointment with the surgery yourself.

Usually the check up will include a blood test. Please remind the surgery to put your hospital number on the blood test form. Our own computer system then gets the result and alerts us if your kidney function is getting worse.

Contact us:

If you would like more information about your condition, please contact:

Department of Renal Medicine

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Dr I Dasgupta	Tel: 0121 424 2158	Email: indranil.dasgupta@heartofengland.nhs.uk
Dr B Ajayi	Tel: 0121 424 2156	Email: bamidele.ajayi@heartofengland.nhs.uk
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Information for Patients

National Kidney Federation (NKF)

Telephone 01909 487795 or visit them on the internet at <http://www.kidney.org.uk>

Renal PatientView (RPV)

Renal PatientView (RPV) is the UK renal community's pioneering project that gives patients rapid access to their results and information about their diagnosis and treatment, via a secure Internet login. **If you have access to the Internet you can try the system** www.renalpatientview.org demo logins are available from the foot of the home page (limited; no TP status etc). For more information about the project please ask a member of the Renal Team.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email patientexperience@uhb.nhs.uk.