Fact sheet

Blood Pressure and Chronic Kidney Disease

What is blood pressure?

Blood pressure is the pressure of the blood in the arteries as it is pumped around the body by the heart. Blood pressure does not stay the same all the time. It changes to meet the demands of your body. It is usually at its highest when we exercise and lowest when we sleep. It can also rise due to anxiety, excitement, activity or nervousness.

How is blood pressure measured?

Blood pressure is usually measured by wrapping an inflatable pressure cuff around the upper arm. Blood pressure is recorded as two numbers, for example 140/90 mmHg. The larger number indicates the pressure in the arteries as the heart squeezes out blood during each beat. This is called the systolic blood pressure. The lower number indicates the pressure as the heart relaxes before the next beat. This is called the diastolic blood pressure.

What is a normal blood pressure reading?

There are no fixed rules about what defines high blood pressure. If you have chronic kidney disease, it is recommended that your blood pressure is maintained consistently below 140/90 mmHg. If you have diabetes or albumin in your urine (albuminuria), it is recommended that your blood pressure stays below 130/80 mmHg.

How will I know that my blood pressure is high?

Although some people with high blood pressure can get headaches, dizziness, or nosebleeds, high blood pressure does not always give warning signs. Often high blood pressure is found accidentally. The only way to know if your blood pressure is high is to have it regularly checked by your doctor.

Does one high reading mean I have high blood pressure?

A single high reading is not enough to make a diagnosis of high blood pressure. You need to have a series of high readings taken on several different days, at different times, before high blood pressure (also called hypertension) can be confirmed.
Why is blood pressure important?

If blood pressure is left uncontrolled and remains high it can damage the vessels that supply blood to your internal organs. High blood pressure is a major risk factor for coronary heart disease, stroke, heart failure, peripheral vascular disease and kidney disease.

Is blood pressure related to kidney function?

Blood pressure is closely related to kidney function. High blood pressure can cause kidney damage and kidney damage can cause high blood pressure. High blood pressure damages the blood vessels to the kidney, making them thickened and narrowed. Uncontrolled blood pressure may lead to kidney failure.

Damaged kidneys release increased amounts of renin (a hormone which controls blood pressure). Renin causes raised blood pressure. If you have kidney failure, salt and fluid retention can also cause high blood pressure.

Ways to reduce your risk

Reduce your salt intake.

Be a non-smoker.
For information on quitting smoking, call the Quitline on 13 78 48.

Undertake regular physical activity.

Have a Kidney Health Check.
Blood test for kidney function, urine test for kidney damage, blood pressure once a year.

Consider if you can reduce stress in your life.

Limit your alcohol intake.
No more than two standard drinks per day.

Achieve and maintain a healthy body weight.

Maintain healthy cholesterol levels.

Medication for high blood pressure

Many people with high blood pressure will need to take medication. Sometimes three or four different blood pressure medications are needed. It is important that you take any blood pressure medication exactly as it is prescribed. Do not stop taking it or changing the dose without talking with your doctor or pharmacist first.

You and your doctor will need to work together to keep your blood pressure under control. It is important to remember that high blood pressure can be successfully treated.
For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363. Or visit our website kidney.org.au to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor’s or Health Professional’s advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person’s experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.