

# Blood pressure and chronic kidney disease

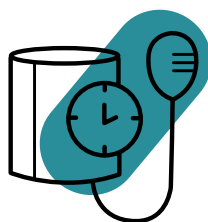
## What is blood pressure?

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.



## 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.

The only way to know if your blood pressure is high is to have it regularly checked by your Healthcare team (including your doctor, pharmacist, nurse) or via home blood pressure monitoring.

If you have chronic kidney disease, it is recommended that your blood pressure is maintained consistently below 130/80 mmHg.

## 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.

# Blood pressure and chronic kidney disease

## 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 heart disease, stroke 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.** See our 'Salt and your Kidneys' factsheet for tips to reduce your intake of salt.



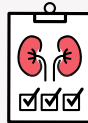
**Say no to smoking.** For information on quitting smoking, call the Quitline on 13 78 48.



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



**Undertake regular physical activity.**



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



**Achieve and maintain a healthy body weight.**



**Try to reduce stress in your life.**



**Take medications prescribed by your doctor.**



**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 prescribed by your doctor. Do not stop taking your medication 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 and have regular check ups. It is important to remember that high blood pressure can be successfully treated.

Some blood pressure medications help to slow down the progression of your kidney disease, so your doctor may also have prescribed them for this reason.

# Blood pressure and chronic kidney disease



## Things to remember:

- ✓ The only way to know if your blood pressure is high is to have it regularly checked.
- ✓ Blood pressure can cause kidney damage and kidney damage can cause high blood pressure.
- ✓ There are many ways to reduce your risk of high blood pressure, including reducing your salt intake, achieving a healthy body weight and undertaking regular exercise.
- ✓ Remember to take the medications prescribed by your doctor

## What does that word mean?

**Albuminuria** – Occurs when albumin is present in the urine. There are filters in the kidneys that prevent large molecules, such as albumin, from passing through. If these filters are damaged, albumin passes from the blood into the urine.

**Artery** – A blood vessel taking blood from the heart to other parts of the body.

**Fluid retention** – When the body does not remove enough liquid (water). This can cause swollen or puffy ankles, face or hands.

**Pharmacist** – A health professional who is qualified to prepare and dispense medications.

**Chronic kidney disease (CKD)** – Progressive reduction in kidney function or kidney damage which is present for at least three months.

**Renin** – Your kidneys use the enzyme called renin to control the level of water and salt in your body.

**Cholesterol** – A naturally occurring, waxy substance made by the body. It is an essential building block of cell membranes, hormones, and vitamin D.



### For more information

To access more information about kidney disease, please scan the QR code.

Freecall 1800 454 363  
kidney.org.au



If you have a hearing or speech impairment, contact the National Relay Service on 1800 555 677 or [relayservice.com.au](http://relayservice.com.au)  
For all types of services ask for 1800 454 363

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or care provider'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 care provider.