

## High blood pressure overview

High blood pressure (hypertension) is very common and the proportion of both men and women with high blood pressure increases steadily with age.

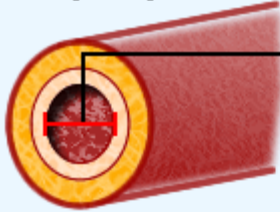
High blood pressure sneaks up on you. Except at extreme levels, high blood pressure is a silent condition causing no symptoms. If you wait until you feel unwell, you may have left things too late, therefore it is important to get regular blood pressure checks.



### HOW YOUR BLOOD VESSELS AFFECT YOUR BLOOD PRESSURE

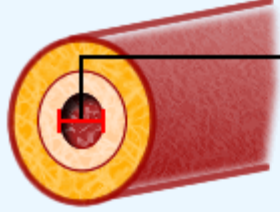
Blood pressure depends on the force and amount of blood that is pumped through your arteries, as well as the size and flexibility of the arteries.

#### Healthy artery



The diameter of the inside of your arteries (the lumen) contributes to how high your blood pressure is. In a healthy artery the lumen is wide.

#### Constricted artery



When the lumen is narrowed, blood is forced to travel through a smaller space, causing an increase in blood pressure.

## Why is high blood pressure important?

High blood pressure can cause the heart muscle to enlarge and the heart to weaken. It also damages the blood vessels, especially if you also have raised blood cholesterol or diabetes, or if you smoke cigarettes.

Narrowing or blockage of the blood vessels is a hallmark of cardiovascular diseases such as heart attack, stroke, and poor circulation in the legs — which can cause pain and even gangrene.

High blood pressure can increase the risk of cardiovascular disease by 2 to 4 times. The higher the blood pressure, the higher the risk of both coronary heart disease and stroke. High blood pressure can also damage your kidneys.

## How is blood pressure measured?

When the heart pumps, it produces pressure inside the arteries and moves the blood forward. This is called systolic pressure. Then the heart relaxes as it fills again and the pressure in your arteries falls. This is called diastolic pressure.

The pressure is measured in millimetres of mercury (mmHg). Acceptable blood pressure is often quoted as being less than 140 mmHg (systolic pressure) over 90 mmHg (diastolic pressure) — written as 140/90.

Doctors often subdivide this category into:

- ▶ normal (less than 120/80 mmHg); and
- ▶ high-normal (120–139 over 80–89 mmHg).

## What is high blood pressure?

High blood pressure, or hypertension, means that the systolic or diastolic pressure or both are above the normal range. A reading above 140/90 mmHg is usually considered to be 'hypertension', though hypertension is further divided up by doctors into mild, moderate or severe depending on the blood pressure reading. The divisions are as follows.

- ▶ **Mild hypertension:** more than 140/90 mmHg up to 159/99 mmHg.
- ▶ **Moderate hypertension:** more than 160/100 mmHg up to 179/109 mmHg.
- ▶ **Severe hypertension:** 180/110 mmHg or more.

When deciding whether your blood pressure reading is of concern or not, your doctor will take various factors, particularly your age, into account. He or she will also want to check your pressure on more than one occasion before deciding whether you have high blood pressure or not. Your doctor may ask you to check your blood pressure at home — machines can be purchased from some pharmacies.

It is important to remember that our blood pressure rises at certain times, and that is not necessarily a bad thing. During exercise, for example, the pulse rate and blood pressure increase in order to carry extra blood and oxygen to the muscles. When you finish exercising, the blood pressure returns to normal.

Blood pressure also rises with excitement, anger or fear but this usually does not last long.

## How do I know if I have high blood pressure?

There is only one way: get your blood pressure measured. See your family doctor for a blood pressure check. Every adult should have their blood pressure checked regularly. Your doctor will advise you how often. This depends on your age, your general health and whether you are taking any herbal products, supplements or medicines, including the contraceptive pill.

## What causes high blood pressure?

In most people, there is no obvious cause. High blood pressure often runs in families but occasionally kidney or other diseases may be responsible. Other contributory factors include:

- ▶ being overweight;
- ▶ smoking;
- ▶ not getting enough physical activity;
- ▶ having a high alcohol intake; and
- ▶ eating a diet high in salt (sodium chloride).

## What can be done for high blood pressure?

### Lifestyle measures

- ▶ Achieve and maintain a healthy weight. Being overweight often means a higher blood pressure.
- ▶ Eat a balanced diet, with lots of fruit, vegetables and grains. Eat moderate amounts of fish, skinless chicken and lean meat cuts and reduced fat dairy foods. Avoid fatty, fried food, especially foods containing saturated fat.
- ▶ Eat less salt: use herbs, spices, fruit and vinegar for flavouring and dressings; choose low salt pre-prepared foods; avoid pickled and takeaway foods which have a high salt content.
- ▶ Get regular physical activity. Strive to put a little bit more activity in your day at every opportunity. Aim to accumulate 30 minutes of moderate physical activity most days of the week. Walking, cycling and swimming are ideal. Find activities you enjoy so you can keep them up.
- ▶ Have no more than 2 standard alcoholic drinks a day; it's probably best to stick to one if you're a woman.
- ▶ Avoid liquorice: it contains a chemical that can raise blood pressure.
- ▶ Stop smoking: quitting could reduce your risk of heart attacks or strokes.

### Drug treatments

Medicines can help control high blood pressure but do not cure it. Usually blood pressure medicines need to be taken long-term.

You cannot tell how your blood pressure is doing by the way you feel. Regular check-ups are essential and it is unwise to change your own dose of tablets.

To control blood pressure successfully, you may need 2 or more medicines, each working in a different way. Using a combination of medicines often means lower doses can be used. We all react differently to medicines, so it may take some time to find the combinations and doses that suit you best.

It is important to tell your doctor about any other health products you are taking — this includes eyedrops, ointments, over-the-counter preparations, herbs and supplements.

It is also important to follow your doctor's instructions about taking blood pressure medicines.

### Side effects

Like all medicines, those for high blood pressure may occasionally cause side effects. These vary among the medications and from patient to patient, and often decrease with time or by your doctor adjusting your dosage. If your blood pressure gets too low on the medicine, you may feel faint or dizzy. If you sit or lie down, these feelings should pass. You may also notice a feeling of excessive tiredness or heaviness in your legs.

Some medicines act more strongly when you stand and those with long action may make you feel faint if you get up at night, if you leap out of bed too quickly in the morning, if you suddenly exert yourself or when you get out of a hot shower or bath. Standing up slowly can help avoid this problem.

You should let your doctor know about any reactions you have to the medicines. With the range of blood pressure medicines now available, it is nearly always possible to find one that will give you minimal or no side effects.

### Taking your tablets effectively

- ▶ Get into a routine. Take your pills at the same time every day, and in the same way, so it becomes second nature. Some people, for example, like to put their day's supply in a small bottle by their bed so they take the morning dose when they first get up.
- ▶ The midday dose is often forgotten. Make sure you take it, if it has been prescribed.
- ▶ Do not keep your pills in the kitchen or bathroom where higher temperatures or humidity can lead to deterioration.
- ▶ On long journeys, keep separate labelled supplies of your tablets in more than one bag.
- ▶ All blood pressure medicines are dangerous to children and should be kept out of their reach.
- ▶ If you are taking several medicines, ask your pharmacist about using a dosing aid, such as a pill container divided by days of the week and/or the time of day, to help you take your medicines safely.

### Do other medicines interfere with blood pressure treatment?

If you are prescribed another medicine, you should ask whether it might affect your blood pressure treatment. Medicines that may affect blood pressure control include:

- ▶ oral contraceptives;
- ▶

- arthritis tablets;
- ▶ steroids such as prednisone and prednisolone;
- ▶ antidepressants or tranquillisers; and
- ▶ some nasal sprays and cough elixirs for colds.

## What happens if I need an operation?

Always tell the anaesthetist and surgeon what treatment you are having and they will make any necessary adjustments. Patients on medicines for high blood pressure usually have no special problems with surgical operations. If you are asked to fast before an operation, check with your surgeon or anaesthetist whether you can still take your pills with a sip of water.

## Who should have regular blood pressure checks?

All adults should have their blood pressure checked regularly. Your doctor may check your blood pressure when you make routine visits to the surgery.

If you fall into one of the categories listed below, you should have your blood pressure checked more regularly.

- ▶ Anyone who has had high blood pressure, a stroke, heart attack, raised blood cholesterol or diabetes or who has had high blood pressure during pregnancy.
- ▶ Smokers.
- ▶ Those who are overweight.
- ▶ Women taking the oral contraceptive pill.
- ▶ Pregnant women.
- ▶ Those with a family history of heart disease.
- ▶ Anyone who has had an immediate family member have a heart attack under 60 years of age.

## Check-ups

If you have had high blood pressure, you need to have regular checks throughout your life. This is true even if you are not currently receiving any treatment, or if you are being treated by diet and lifestyle changes or with medicines.

Your doctor will tell you how often is advisable, but generally speaking it will be at least every 6 months.

In the early stages of drug treatment, you may need to be seen weekly or fortnightly, but once your blood pressure is controlled checks may be spaced out to once every 3 or 6 months.

If you have high blood pressure, it's also worth being checked for other conditions that may further increase your risk of cardiovascular disease, such as diabetes and high cholesterol.

High blood pressure often runs in families. Suggest to others in your family that they also have their blood pressure measured.

Last Reviewed: 12/06/2009

**Reproduced from [www.mydr.com.au](http://www.mydr.com.au). Copyright: myDr, UBM Medica Australia, 2000-2011. All rights reserved.**

The material provided by UBM Medica Australia Pty Ltd is intended for Australian residents only, is of a general nature and is provided for information purposes only. The material is not a substitute for independent professional medical advice from a qualified health care professional. It is not intended to be used by anyone to diagnose, treat, cure or prevent any disease or medical condition. No person should act in reliance solely on any statement contained in the material provided, and at all times should obtain specific advice from a qualified health care professional. UBM Medica Australia Pty Ltd, its servants and agents are not responsible for the continued currency of the material or for any errors, omissions or inaccuracies in the material, whether arising from negligence or otherwise, or from any other consequences arising there from.