

# High blood pressure

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Blood pressure is the name given to the force that the beating heart causes in the arteries, veins, and blood vessels which carry blood around the body. When the heart contracts, forcing blood through the arteries and other blood vessels, your blood pressure goes up, and it falls when the heart relaxes. High blood pressure can cause [heart problems](#) and [strokes](#).

When blood pressure is measured, the result is given as two figures, one higher than the other, for example 120/80. This is because tests measure the pressure in vessels when the heart is contracting (the higher figure, also called systolic blood pressure), and then when it is relaxing (the lower figure, also called diastolic blood pressure).

## Measuring blood pressure

Blood pressure is measured using a cuff which is placed around the upper arm and inflated until tight. It then deflates and a blood pressure reading is taken.

The target for adults is for blood pressure to be below 140/90, or below 130/80 in people with diabetes. It is advised that if blood pressure is above this range, action should be taken to bring it down.

Your HIV clinic should monitor your blood pressure as part of your routine care. Your GP may also measure your blood pressure and if you are pregnant you will have your blood pressure measured as part of your antenatal care.

## Why high blood pressure is a concern

If blood pressure is high (also referred to as 'hypertension'), it causes a strain on blood vessels and the heart. High blood pressure can also cause kidney problems, and heart failure, when the heart is unable to pump blood around the body properly.

The higher the blood pressure is, the greater the risk of stroke, heart problems and kidney failure.

## Causes of high blood pressure

People with a family history of high blood pressure, stroke, or heart disease are more likely to have high blood pressure. Diabetes and kidney disease also increase the risk.

Blood pressure can also be affected by diet and lifestyle. Being overweight increases blood pressure, as does eating a fatty diet and drinking too much alcohol. Smokers, people who consume too much salt, and those who do not take regular vigorous exercise are also more likely to have high blood pressure.

There is some evidence that black and Asian people may be at higher risk of having high blood pressure than white people.

High blood pressure can also be caused by certain common drugs such as the contraceptive pill; ibuprofen; some herbal remedies; and recreational drugs such as cocaine. It's important to tell your doctor or pharmacist about any drugs you are taking.

## High blood pressure and HIV drugs

Some HIV drugs, particularly protease inhibitors, can cause increases in blood fats, similar to those caused by a fatty diet. Because of this, people taking HIV treatment may be at increased risk of high blood pressure, particularly if they have other risk factors such as a family history of the condition, a fatty diet, are heavy drinkers, smokers or do not exercise.

You should have your blood pressure monitored regularly if you are taking HIV drugs. Your HIV clinic should do this at least once a year, as part of your routine care.

HIV drugs can interact with other medicines to affect blood pressure, and this can be harmful. For example, the anti-impotence drugs *Viagra*, *Cialis* and *Levitra* should not be taken with the full dose of the protease inhibitor ritonavir. The dose of *Viagra* or *Cialis* should be reduced by half if they are taken with other protease inhibitors, and the dose of *Levitra* should be reduced by three-quarters, and they should not be taken with poppers – this can cause a drop in blood pressure that can result in blackouts or even in death.

## Reducing blood pressure

If you smoke, stopping will help reduce your blood pressure. Regular exercise that is vigorous enough to leave you out of breath and break a sweat can help you lose weight and reduce blood pressure, however if you have very high blood pressure you are recommended to consult a doctor about what type of exercise is safe for you.

Eating a diet low in saturated fat and rich in fresh fruit and vegetables will also help reduce your blood pressure and improve your general health. If you have high blood pressure you may also need to reduce the amount of salt in your diet.

Medicines may be prescribed to help control blood pressure. These include diuretics, sometimes called water pills as they work to flush out excess fluids and salt from the kidneys. Heart drugs, like beta-blockers and ACE inhibitors can also help reduce blood pressure, by making the heart beat more slowly.