

High Blood Pressure

A blood pressure that stays above 140/90. It usually has no symptoms, is very common, and for most people improves when metabolic health improves.

What it is

Blood pressure is written as two numbers, the pressure as the heart beats over the pressure between beats, in mmHg. High blood pressure (hypertension) is a clinic reading of 140/90 or higher, confirmed by a home or 24-hour average of 135/85 or higher. Stage 2 is a clinic reading of 160/100 or higher (or 150/95 at home). A reading of 180/120 or higher is severe and needs urgent assessment.

Symptoms to look out for

Usually none. Rarely, with very high readings: headaches, blurred vision or chest pain. The only way to know is to measure it.

Get checked at least every five years from age 40, sooner if a close relative has it or you have a large waist, prediabetes, type 2 diabetes or fatty liver.

What causes it

For most people the roots are metabolic: insulin resistance, usually showing as extra weight around the middle. Signals from excess abdominal fat, and possibly high insulin itself, switch on the salt-retaining hormones and the fight-flight nervous system, the kidneys hold on to salt and water, and the pressure rises. Age, family history, Black African, Black Caribbean or South Asian family background, alcohol, smoking, poor sleep, sleep apnoea and some medicines can add to it.

Part of the metabolic picture

High blood pressure travels with a bigger waist, prediabetes, fatty liver and raised triglycerides. These are all linked to insulin resistance. When insulin resistance improves, blood pressure usually falls with it: systolic pressure fell by around 5 mmHg in trials of lower-carbohydrate eating, and by around 11 mmHg in a two-year UK practice study, with medicines cut by a fifth.

What you can do

- **Food.** Reduce sugar, refined carbohydrate and ultra-processed food. Build meals on protein and non-starchy vegetables, with starchy carbohydrate reduced or personalised. This also reduces salt intake, which NICE advises keeping low. See the Metabolic Health 28 Day Plan at healthshelf.org/28-day-plan.
- **Movement.** At least 150 minutes a week, plus strength work twice a week. In people with hypertension, regular exercise lowers blood pressure by about 8/5 mmHg.
- **Alcohol and smoking.** Keep alcohol under 14 units a week; cutting down lowers it. Stopping smoking protects your arteries.
- **Home monitor.** Use a validated upper-arm monitor: two readings a minute apart, morning and evening, for 4 to 7 days, and average them.

Medicines

Medications are typically offered to everyone at stage 2, and discussed at stage 1 for people under 80 with diabetes, kidney disease, heart disease, organ damage or a 10-year heart risk of 10% or more. Clinic targets: below 140/90 under 80 years (home below 135/85), and below 150/90 at 80 years and over (home below 145/85). First choice is an ACE inhibitor (such as ramipril) or ARB (such as losartan) for people with type 2 diabetes, or under 55 years and not of Black African or Caribbean family origin; otherwise a calcium-channel blocker (such as amlodipine). A second medicine, if needed, comes from the other groups, for example indapamide (a thiazide-like diuretic). As blood pressure falls with lifestyle change, medicines can be reduced one at a time with your clinician.

When to get help

- Get urgent advice (NHS 111) for frequent headaches or blurred vision.
- A repeated reading of 180/120 or higher needs same-day advice from your GP or NHS 111.
- Do not stop or change medicines without your clinician, even when readings improve.

This is general information, not medical advice. Always speak to a qualified healthcare professional about your own symptoms and treatment, including before changing any medication.

Sources: NICE guideline NG136 (updated 2026), the NHS high blood pressure pages and seven research papers. Full references: healthshelf.org/conditions/high-blood-pressure-in-depth#references