

Hypertension

Definition

Hypertension is the term used to describe high blood pressure.

Blood pressure is a measurement of the force against the walls of your arteries as your heart pumps blood through your body.

Blood pressure readings are usually given as two numbers -- for example, 120 over 80 (written as 120/80 mmHg). One or both of these numbers can be too high.

The top number is called the systolic blood pressure, and the bottom number is called the diastolic blood pressure.

- Normal blood pressure is when your blood pressure is lower than 120/80 mmHg most of the time.
- High blood pressure (hypertension) is when your blood pressure is 140/90 mmHg or above most of the time.
- If your blood pressure numbers are 120/80 or higher, but below 140/90, it is called pre-hypertension.

If you have pre-hypertension, you are more likely to develop high blood pressure.

If you have heart or kidney problems, or if you had a stroke, your doctor may want your blood pressure to be even lower than that of people who do not have these conditions.

Alternative Names

Hypertension; HBP; Blood pressure - high

Causes

Many factors can affect blood pressure, including:

- How much water and salt you have in your body
- The condition of your kidneys, nervous system, or blood vessels
- The levels of different body hormones

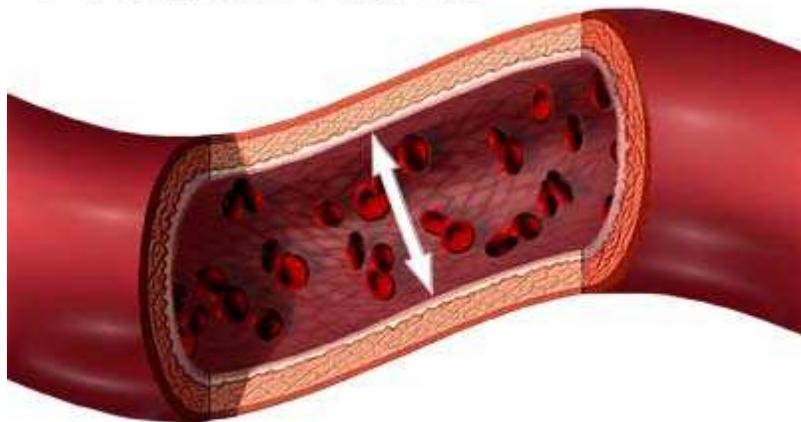
You are more likely to be told your blood pressure is too high as you get older. This is because your blood vessels become stiffer as you age. When that happens, your blood pressure goes up. High blood pressure increases your chance of having a stroke, heart attack, heart failure, kidney disease, and early death.

You have a higher risk of high blood pressure if you:

Every health care visit should include a blood pressure reading



Blood pressure is the measurement of force applied to artery walls



- Are African American
- Are obese
- Are often stressed or anxious
- Drink too much alcohol (more than one drink per day for women and more than two drinks per day for men)
- Eat too much salt in your diet
- Have a family history of high blood pressure
- Have diabetes
- Smoke

Most of the time, no cause of high blood pressure is found. This is called essential hypertension.

High blood pressure that is caused by another medical condition or medication is called secondary hypertension. Secondary hypertension may be due to:

- Chronic kidney disease
- Disorders of the adrenal gland (pheochromocytoma or Cushing syndrome)
- Pregnancy (see: preeclampsia)
- Medications such as birth control pills, diet pills, some cold medications, and migraine medications
- Narrowed artery that supplies blood to the kidney (renal artery stenosis)
- Hyperparathyroidism

Symptoms

Most of the time, there are no symptoms. For most patients, high blood pressure is found when they visit their health care provider or have it checked elsewhere.

Because there are no symptoms, people can develop heart disease and kidney problems without knowing they have high blood pressure.

If you have a severe headache, nausea or vomiting, bad headache, confusion, changes in your vision, or nosebleeds you may have a severe and dangerous form of high blood pressure called malignant hypertension.

Exams and Tests

Your health care provider will check your blood pressure several times before diagnosing you with high blood pressure. It is normal for your blood pressure to be different depending on the time of day.

Blood pressure readings taken at home may be a better measure of your current blood pressure than those taken at your doctor's office. Make sure you get a good quality, well-fitting home device. It should have the proper sized cuff and a digital readout.

Practice with your health care provider or nurse to make sure you are taking your blood pressure correctly. See also: [Blood pressure monitors for home](#)

Your doctor will perform a physical exam to look for signs of heart disease, damage to the eyes, and other changes in your body.

Tests may be done to look for:

- High cholesterol levels
- Heart disease, such as an echocardiogram or electrocardiogram
- Kidney disease, such as a basic metabolic panel and urinalysis or ultrasound of the kidneys

Treatment

The goal of treatment is to reduce blood pressure so that you have a lower risk of complications. You and your health care provider should set a blood pressure goal for you.

If you have pre-hypertension, your health care provider will recommend lifestyle changes to bring your blood pressure down to a normal range. Medicines are rarely used for pre-hypertension.

You can do many things to help control your blood pressure, including:

- Eat a heart-healthy diet, including potassium and fiber, and drink plenty of water. See: [High blood pressure and diet](#)
- Exercise regularly -- at least 30 minutes of aerobic exercise a day.

- If you smoke, quit -- find a program that will help you stop.
- Limit how much alcohol you drink -- one drink a day for women, two a day for men.
- Limit the amount of sodium (salt) you eat -- aim for less than 1,500 mg per day.
- Reduce stress -- try to avoid things that cause you stress. You can also try meditation or yoga.
- Stay at a healthy body weight -- find a weight-loss program to help you, if you need it.

Your health care provider can help you find programs for losing weight, stopping smoking, and exercising. You can also get a referral from your doctor to a dietitian, who can help you plan a diet that is healthy for you.

There are many different medicines that can be used to treat high blood pressure. See: High blood pressure medicines

Often, a single blood pressure drug may not be enough to control your blood pressure, and you may need to take two or more drugs. It is very important that you take the medications prescribed to you. If you have side effects, your health care provider can substitute a different medication.

Outlook (Prognosis)

Most of the time, high blood pressure can be controlled with medicine and lifestyle changes.

Possible Complications

When blood pressure is not well controlled, you are at risk for:

- Bleeding from the aorta, the large blood vessel that supplies blood to the abdomen, pelvis, and legs
- Chronic kidney disease
- Heart attack and heart failure
- Poor blood supply to the legs
- Stroke
- Problems with your vision

When to Contact a Medical Professional

If you have high blood pressure, you will have regular appointments with your doctor.

Even if you have not been diagnosed with high blood pressure, it is important to have your blood pressure checked during your yearly check-up, especially if someone in your family has or had high blood pressure.

Call your health care provider right away if home monitoring shows that your blood pressure is still high.

Prevention

Adults over 18 should have their blood pressure checked regularly.

Lifestyle changes may help control your blood pressure.

Follow your health care provider's recommendations to modify, treat, or control possible causes of high blood pressure.

References

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