

What is high blood pressure?

Arteries are like hoses that carry blood from your heart to the rest of your body. If you put a crimp in a hose, pressure builds up inside it. High blood pressure (also called hypertension) occurs when your blood moves through your arteries at a higher pressure than normal.

What do the numbers mean?

Blood pressure is really two measurements, separated by a slash when written, such as 120/80. You may also hear someone say a blood pressure is "120 over 80."

The first number is the systolic blood pressure. This is the peak blood pressure when your heart is squeezing blood out. The second number is the diastolic blood pressure. It's the pressure when your heart is filling with blood--relaxing between beats.

A normal blood pressure is less than 120/80. High blood pressure is 140/90 or higher. If your blood pressure is between 120/80 and 140/90, you have what is called "prehypertension," which means that if you don't take important steps, your blood pressure can turn into high blood pressure.

How is high blood pressure diagnosed?

Blood pressure is measured by placing a blood pressure cuff around your arm, inflating the cuff and listening for the flow of blood. Your doctor will measure your blood pressure at more than one visit to see if you have high blood pressure.

How often should I have my blood pressure checked?

After age 18, have your blood pressure checked at least once every year. Do it more often if you have had high blood pressure in the past.

What problems does high blood pressure cause?

Both high blood pressure and prehypertension damage your blood vessels. This in turn raises your risk of stroke, kidney failure, heart disease and heart attack.

Does it have any symptoms?

Not usually. This is why it's so important to have your blood pressure checked regularly.

How is it treated?

Treatment begins with changes you can make to your lifestyle to help lower your blood pressure and reduce your risk of heart disease. If these changes don't work, you may also need to take medicine.

Even if you need to take medicine, making some changes in your lifestyle can help reduce the amount of medicine you must take.

Lifestyle changes

- Don't smoke cigarettes or use any tobacco product.
- Lose weight if you're overweight.
- Exercise regularly.
- Eat a healthy diet that includes lots of fruits and vegetables and is low in fat.
- Limit your sodium, alcohol and caffeine intake.
- Try relaxation techniques or biofeedback.

How do tobacco products affect blood pressure?

The nicotine in cigarettes and other tobacco products causes your blood vessels to constrict and your heart to beat faster, which temporarily raises your blood pressure. If you quit smoking or using other tobacco products, you can significantly lower your risk of heart disease and heart attack, as well as help lower your blood pressure.

What about losing weight and exercising?

If you're overweight, losing weight usually helps lower blood pressure. Regular exercise is a good way to lose weight. It also seems to lower high blood pressure by itself.

Does stress affect my blood pressure?

Stress may affect blood pressure. To help combat the effects of stress, try relaxation techniques or biofeedback. These things work best when used at least once a day. Ask your family doctor for advice.

What is the DASH diet?

DASH stands for **D**ietary **A**pproaches to **S**top **H**ypertension. It is a balanced eating plan that your family doctor might recommend to help you lower your blood pressure. The DASH diet:

- Is low in salt, saturated fat, cholesterol and total fat.
- Emphasizes fruits, vegetables, and fat-free or low-fat milk and milk products.
- Includes whole grains, fish, poultry and nuts.
- Limits the amount of red meat, sweets, added sugars and sugar-containing beverages in your diet.
- Is rich in potassium, magnesium and calcium, as well as protein and fiber.

What about medicine?

Many different types of medicine can be used to treat high blood pressure (see the box below). These are called antihypertensive medicines.

The goal of treatment is to reduce your blood pressure to normal levels with medicine that's easy to take and has few, if any, side effects. This goal can almost always be met.

If your blood pressure can only be controlled with medicine, you'll need to take the medicine for the rest of your life. You may need to take more than one medicine to help control your blood pressure. Don't stop taking the medicine without talking with your family doctor or you may increase your risk of having a stroke or heart attack.

Types of antihypertensive drugs

- **Diuretics:** These drugs help your body get rid of extra sodium and fluid so that your blood vessels don't have to hold so much fluid.
- **Beta-blockers:** These drugs block the effects of adrenaline.
- **Alpha-blockers:** These drugs help your blood vessels stay open.
- **ACE inhibitors:** These drugs prevent your blood vessels from constricting by reducing how much angiotensin II your body makes. Angiotensin II is a chemical that constricts blood vessels (makes them more narrow).
- **ARBs:** These drugs work by blocking the effect of angiotensin II on cells
- **Calcium channel blockers:** These drugs help prevent your blood vessels from constricting by blocking calcium from entering your cells.
- **Combinations:** These drugs combine two medicines, like an ACE inhibitor or a beta-blocker plus a diuretic.