
Blood Pressure Basics

How High Blood Pressure Can Be a Big Problem for Your Arteries

Even as a single risk factor, high blood pressure is a serious condition that can put you at risk for other diseases, such as heart attack, stroke, or kidney failure.

When combined with other risk factors like high cholesterol or smoking, the impact of high blood pressure on your arteries can be alarming. Blood pressure measures the force of blood against the walls of your arteries as your heart pumps blood to circulate it through your body. Of course, it's natural for blood pressure to have its ups and downs throughout the day. But if it stays up over time, it's called high blood pressure (HBP), or hypertension.

Increased blood pressure can speed up the progression of atherosclerosis, the buildup of plaque in arteries. As your arteries continue to harden and become less flexible, your heart struggles to get the blood it needs to function, which raises the risk of a heart attack or stroke.

What Causes High Blood Pressure?

For many people with high blood pressure, doctors can't pinpoint a single, specific cause. This condition is called primary, or essential, high blood pressure. In other cases, when a known medical problem or medication is identified as the cause, it is called secondary high blood pressure.

While it's not often easy to spot a cause, there are many known factors that can make your blood pressure go up. If you can control these factors, you can help manage your blood pressure.

Why Blood Pressure Checks Are So Important

There are usually no signs or symptoms of high blood pressure, making it even more important to have your blood pressure checked regularly. You can have high blood pressure for years without knowing it. There's only one way to find out if you have high blood pressure — getting your blood pressure checked.

Regular “pressure checks” let your doctor and you keep tabs on your important blood pressure numbers. An explanation of what your blood pressure numbers mean is on the next page.

Systolic blood pressure has proven to be a strong predictor of cardiovascular risk. Reducing a high systolic number can help prevent serious complications of high blood pressure. High diastolic blood pressure — the bottom number — is higher than 90 mm Hg (millimeters of mercury). And for each 10-point increase in diastolic blood pressure, your risk of death from heart disease and stroke doubles.

What Do My Blood Pressure Numbers Mean?

When your doctor measures your blood pressure, he or she will generally give you your results as a series of two numbers (for example, 120 over 80). The top (first) number is systolic pressure, which measures the pressure in your arteries when the heart beats and pumps blood. The bottom number is diastolic pressure, which measures the pressure when the heart relaxes between beats.

If your blood pressure is over 120/80 mm Hg (millimeters of mercury) and changes in your diet and exercise haven't helped reduce your blood pressure, you may need medication. High blood pressure is dangerous because it produces increased pressure on artery walls and can damage them, which can speed up the progression of athero. Controlling your blood pressure is especially important if you have other risk factors, such as diabetes or kidney disease.

BLOOD PRESSURE LEVELS FOR ADULTS*		
Category	Systolic	Diastolic
Normal	< 120 mmHg	and < 80 mmHg
Prehypertension	120–139 mmHg	or 80–89 mmHg
Hypertension	≥ 140 mmHg	≥ 90 mmHg

*These categories apply to adults 18 or older who are not taking medicine for high blood pressure, do not have a short-term serious illness, and do not have other conditions such as diabetes or kidney disease. In people with diabetes or chronic kidney disease, a reading of 130/80 mm Hg or higher is considered high blood pressure. According to the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, a blood pressure of 140/90 mm Hg or higher is considered high, but for those with diabetes or chronic kidney disease, a reading of 130/80 signifies high blood pressure.

The Keys to Treating High Blood Pressure

Some people can control high blood pressure with lifestyle changes, as noted below. These changes may even be able to help prevent high blood pressure from developing in the first place. Whether or not you need medicine is a decision only your doctor can make. However, here is a list of five steps that anyone can take to help control blood pressure.**

- 1. Maintain a healthy weight.** Losing weight can help lower your blood pressure. If you need to lose weight, talk with your doctor about **eating a healthy diet** and **developing an exercise plan**.
- 2. Enjoy physical activity.** Get 30 minutes of physical activity most days of the week. Examples include brisk walking, bicycling, raking leaves, and gardening. *Just remember to talk with your doctor before starting any exercise program.*
- 3. Eat right.** Add more fruits and vegetables to your diet and focus on foods low in saturated fat, total fat, and cholesterol. Avoid foods that are high in salt, and try experimenting with other spices, garlic, and onions instead of salt.
- 4. Limit alcohol intake.** Too much alcohol raises blood pressure and adds calories. If you drink, limit yourself to one drink a day (for women) or two drinks a day (for men). A drink is 12 ounces of beer, 5 ounces of wine, or 1½ ounces of liquor.
- 5. Quit smoking.** Smoking can increase your blood pressure, which increases your risk for heart disease as well as a number of other serious health problems. If you smoke, quit smoking right away.

**Medicine for high blood pressure is not a substitute for these healthy-living guidelines. If your doctor prescribes medicine to help lower your blood pressure, it's important that you still follow the lifestyle changes recommended by your doctor.