

Understanding & Controlling Your High Blood Pressure

Why is blood pressure important?

Everybody has and needs blood pressure. Without it, blood can't circulate through your body. And without circulating blood, your vital organs can't get the oxygen and food they need to work.

That's why it's important to know about blood pressure and how to keep it in the healthy range.

When your heart beats, it pumps blood into your arteries and creates pressure in them. This pressure (blood pressure) causes your blood to flow to all parts of your body.

If you're healthy, your arteries are elastic. They stretch when your heart pumps blood through them. How much they stretch depends on how much force the blood exerts.

Your heart beats about 60-80 times a minute under normal conditions. Your blood pressure rises on contractions and falls when your heart relaxes between beats. Your blood pressure can change rapidly, with changes in stress levels, posture, physical activity, using OTC medications, caffeine use or during sleep.

What is blood pressure?

Two numbers are recorded when measuring your blood pressure, such as 117/78mmHg. The top or larger number (systolic pressure) measures the pressure in your arteries when your heart beats. The bottom or smaller number (diastolic pressure) measures the pressure while your heart rests between beats.

B/P CATEGORY	SYSTOLIC		DIASTOLIC
Normal	Less than 120	and	less than 80
Prehypertension	120-139	or	80-89
Hypertension, stage 1	140/159	or	90-99
Hypertension, stage 2	160 or higher	or	100 or higher

Source: Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure

Your doctor may take several readings over time before making a judgment about high blood pressure.

What causes high blood pressure?

High blood pressure, also called hypertension, isn't nervous tension. People who have high blood pressure don't have to be tense, compulsive or nervous. In fact, **you can have high blood pressure and not know it. High blood pressure usually has no symptoms. That's why it's called the "silent killer."**

About 90-95 percent of the cases of high blood pressure have no known cause. But some factors increase your chances of developing this disease. These are called risk factors.

Risk factors you can control

***Obesity**-People with a body mass index (BMI) of 30.0 or higher are more likely to develop high blood pressure.

***Eating too much salt**-This increases blood pressure in some people.

***Alcohol**-Heavy and regular use of alcohol can increase the chance of high blood pressure.

***Stress**-This is often mentioned as a risk factor. However, stress levels are hard to measure, and responses to stress vary from person to person.

Risk factors you can't control

***Race**-African Americans develop high blood pressure more often than Caucasians do, and it tends to occur earlier and be more severe.

***Heredity**-A tendency to have high blood pressure runs in families. If your parents or other close blood relatives have it, you're more likely to develop it.

***Age**-In general, the older you get, the greater your chance of developing high blood pressure. A higher percentage of men have HBP until age 45. From 45-54, the percentages of men and women are similar. After that, a much higher percentage of women have HBP than do men.

Can you tell when your blood pressure is high?

No, definitely not. High blood pressure usually has no symptoms. In fact, many people have it for years without knowing it. That's why it's so dangerous.

The only way to find out if you have this disease is to have your blood pressure measured. Your doctor or another health professional can check it for you. See the chart on page 1 to see where your blood pressure falls.

Can high blood pressure damage your body?

Yes! It can hurt your body in many ways. Mainly it adds to the workload of your heart and arteries. Because your heart must work harder than normal for a long time, it tends to get bigger. A slightly enlarged heart may still work well, but if it's enlarged too much, it may have a hard time meeting your body's demands.

As you grow older, your arteries will harden and become less elastic. This occurs in all people, regardless of blood pressure. But having high blood pressure tends to speed up this process.

High blood pressure increases your risk of stroke. It can also damage your kidneys and eyes. Compared with people with controlled high blood pressure, people with uncontrolled high blood pressure are also more likely to develop coronary heart disease and heart failure.

If you have high blood pressure, follow your doctor's advice. Most high blood pressure can't be cured, but it usually can be controlled. And its effects can be prevented or reduced if it's treated and controlled early, and kept under control.

What can be done about high blood pressure?

***Diet**-Eat more fruits, vegetables, whole-grain cereals, rice and bread. Eat less fried foods, fatty meats and salt.

***Weight Reduction**-By losing weight you may help reduce your blood pressure.

***Physical Activity**-Physical activity should be part of your daily program.

***Medication**-Some people need medication to help them reduce high blood pressure.

What about drug treatment?

Diuretic agents are often the first treatment chosen. These drugs help control blood pressure by removing excess salt and water from your body through urination. If diuretic therapy doesn't bring your pressure down to normal, your doctor may have you take other drugs.

ACE inhibitors expand blood vessels and decrease resistance. This allows blood to flow more easily and makes the heart's work easier or more efficient.

ARB's prevent angiotensin 2 from having any effects on the heart and blood vessels. They may be better tolerated because they produce less cough.

Beta blockers decrease the heart rate and cardiac output, which lowers blood pressure.

Calcium channel blockers interrupt the movement of calcium into heart and vessel cells.

Reference: American Heart Association booklet