

Heart Facts

HIGH BLOOD PRESSURE

What is high blood pressure?

High blood pressure, also known as hypertension, is the most prevalent cardiovascular condition. Sixty million men and women have blood pressure that's too high, and up to one third of them are unaware of it. Doctors call hypertension "the silent killer" because it usually causes no physical symptoms and people feel perfectly fine, even when their blood pressure is elevated. But damage to their bodies is occurring nonetheless.

If there are no symptoms, how can I tell if I have high blood pressure?

You can't, only your doctor can. Checking your blood pressure regularly, at least once a year, is the only way to determine if you have this condition. Even if you have a healthy blood pressure reading now, you can't necessarily count on it staying low forever.

What's a normal blood pressure?

A blood pressure reading consists of two numbers. The first and upper number (systolic pressure) represents the pressure in your arteries as the heart contracts to pump blood through the circulatory system. The second and lower number (diastolic pressure) is the pressure in your arteries between beats, when the heart is resting. Either the systolic or diastolic measurement, or both, can be elevated when your blood pressure is too high. High readings mean your heart is working unnaturally hard to circulate blood.

For adults, a blood pressure reading less than 120/80 mmHg, read as "120 over 80," is considered normal blood pressure. Both numbers must be in the normal range for your blood pressure to be considered normal. Stage 1 hypertension is defined as a pressure between 140 and 159 systolic or 90 and 99 diastolic. People with Stage 2 hypertension have a systolic reading of 160 or higher or a diastolic of 100 or higher.

A new category of pre-hypertension has been recognized with blood pressure between 120 and 139 systolic or 80 and 89 diastolic. These patients need to be followed closely. Therapeutic lifestyle changes (diet, exercise) are recommended prior to antihypertensive medication.

If your doctor tells you your blood pressure is a little high, don't panic and assume this permanently places you into the category of hypertensive. Your doctor may do several blood pressure checks over a few months and in a variety of circumstances to get a true reading. Your doctor may also ask you to measure your pressure at home as well. You and your doctor should begin treatment when measurements indicate that your blood pressure is consistently elevated; more severe elevations may require immediate treatment, though.

How serious is high blood pressure?

High blood pressure should not be taken lightly. It's a risk factor for deadly conditions such as coronary heart disease, heart attack, stroke and kidney disease. High blood pressure contributes to atherosclerosis, the build-up of sticky plaque on the artery walls, making it difficult for blood to flow freely. When arteries in the brain or heart become clogged, you can suffer a stroke or heart attack. Impaired vision occurs when tiny blood vessels in the back of the eye rupture or become blocked. Kidney impairment results when vessels in the kidneys are narrowed.

What causes high blood pressure?

It's rare to pinpoint a specific cause of high blood pressure. Doctors do know that hypertension runs in families, and that lack of exercise, stress, being overweight, smoking and drinking heavily contribute to and even worsen hypertension. African Americans have a higher rate of hypertension and tend to have more severe hypertension than whites, but it's not yet known why this occurs. It's suspected that genes and diet play some role, though. Certain medical problems, such as sleep apnea and chronic kidney disease, may cause blood pressure to rise, and some medicines can raise your blood pressure.

Does sodium cause high blood pressure?

Although salt restriction may reduce the blood pressure of some hypertensive people, sodium itself does not cause hypertension. However, most Americans consume way too much salt. Excess sodium can lead to fluid retention. More fluid in the body raises the total volume of blood flowing through your system; the higher the volume, the higher your blood pressure.

Cardiologists typically recommend low-sodium diets for those with hypertension or with a family history of the disease because, in many people, blood pressure falls significantly if salt intake is restricted. These people are “salt sensitive,” meaning their blood pressure rises when they ingest large amounts of sodium, and drops when they reduce sodium intake.

How is high blood pressure treated?

In general, the best approach to prevent and control high blood pressure is one that involves small, easy lifestyle fixes. Exercising regularly, giving up cigarettes, reducing stress and limiting sodium and alcohol intake can bring blood pressure down to safer levels. In fact, for many people with hypertension, losing 10 or 20 pounds can lower their pressure to a more normal range. Making physical activity a regular part of your everyday life, along with a reduced-fat diet, can help you shed excess pounds. Studies show that the DASH diet, which is low in salt, fat and cholesterol and rich in low-fat or non-fat dairy products, fish, poultry, nuts, nutrients, protein and fiber, reduces blood pressure.

These lifestyle improvements are the first step to controlling high blood pressure, no matter your age or risk status. The exception is if your blood pressure is so alarmingly high that immediate antihypertensive medication is needed.

What medications are used to treat high blood pressure?

Adopting a healthier lifestyle is often the only measure many people with high blood pressure need to take to bring their reading down. Others, however, need to combine medication with a healthy lifestyle to make their pressure respond in a more favorable way. Diuretics rid the body of excess salt and water. This reduces the volume and, therefore, the pressure of your blood. Beta-blockers keep your heart from pumping too hard and too fast, thus reducing blood pressure.

Calcium blockers, alpha blockers, ACE (angiotensin-converting enzyme) inhibitors and ARBs (angiotensin receptor blockers) all relax blood vessels, lowering resistance and, therefore, blood pressure. Calcium channel blockers relax the muscles in the blood vessel walls, alpha blockers interfere with impulses from the brain and nerves that constrict vessels, and ACE inhibitors and ARBs block the action of an enzyme that causes arteries to narrow.

Are there any drawbacks to medications?

When trying to bring blood pressure down to normal levels with medication, some people complain of fatigue, depression and a general sense of “not feeling right.” Since high blood pressure rarely has symptoms, the treatment sometimes seems worse than the disease, and some patients stop taking medication, which isn’t a wise idea. Hypertension is a lifelong disease that requires lifelong treatment.

Yet, there’s no reason to tolerate unpleasant side effects if you’re on medication. There are many factors that figure into the choice of antihypertensive medication. With advances in drug therapy, sometimes all that’s needed to get rid of undesirable complications is a minor reworking of the type of medication, the dosage, how frequently you take it or how it’s delivered to your body.

What is the goal of treatment?

The treatment goal for most adults is to get and keep blood pressure below 140/90 mmHg. For adults who have diabetes or chronic kidney disease, the goal is to get and keep blood pressure below 130/80 mmHg.

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