

Hypertension

Hypertension or high blood pressure is often called the “silent killer” because usually there are no symptoms. Research shows, however, that symptoms such as weakness, fatigue, dizziness, sleep disturbance, headache and shortness of breath during exertion may occur with hypertension.

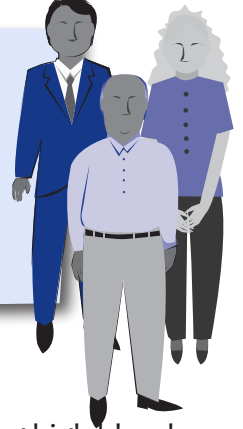
Incidence of high blood pressure in the United States

About 1 in 3 U.S. adults (73 million people)

One-third unaware of it

More than 40 percent of African-Americans

About two-thirds of people over age 65



Risk of developing hypertension

Middle-age Americans face a 90 percent chance of developing high blood pressure during their lives. Men have a greater risk of high blood pressure than women until age 45. From ages 45–54, the percentages of men and women are similar. After age 55, women are more likely to develop high blood pressure than men are.

People whose parents or other close blood relatives have high blood pressure are more likely to develop it themselves.

African-Americans are more likely to have high blood pressure than Caucasians, and it tends to occur earlier and be more severe.

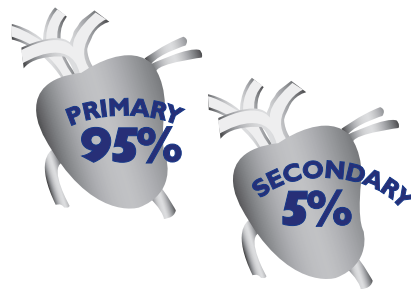
Two types of hypertension

Primary hypertension

- No known cause
- 95 percent of cases

Secondary hypertension

- Caused by other conditions
- 5 percent of cases

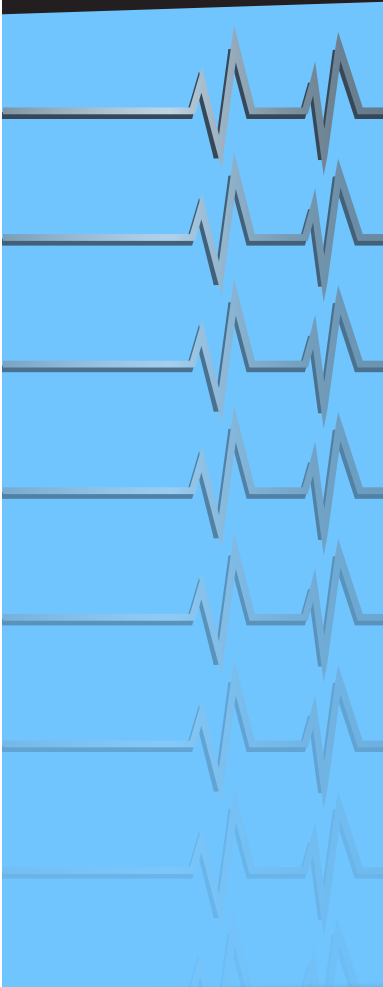


Being overweight or obese also increases your risk of hypertension.

Dangers of hypertension

Hypertension damages body tissues and vital organs. It is one of leading causes of heart attack, congestive heart failure, stroke, kidney failure, premature death, damage to the retina of the eye and blindness.

High blood pressure makes your heart work harder than it should to pump blood. If this pressure isn't controlled, your heart enlarges and your arteries become scarred, hardened and less elastic. Your overworked heart and stiff arteries may not be able to pump blood properly, leading to congestive heart failure (backup of fluid into the lungs.)



High blood pressure can also damage the inner linings of arteries, which leads to a buildup of fatty deposits and other substances called plaque. This condition is called atherosclerosis and is a major cause of heart attack and stroke. This damage to arteries may also cause kidney disease, vision loss and shrinkage of the brain, leading to memory loss and damage to thinking processes.

What is blood pressure?

Blood pressure is the force of blood against the blood vessel walls that keeps blood flowing through the body. Blood doesn't flow in a steady stream as it moves through your body; it spurts. The spurts are determined by your heart's beats. With each beat, about 2 ounces of blood are forced out of your heart's left ventricle into the aorta (a major artery) and then into the body's 60,000 miles of blood vessels.

How is blood pressure measured?

Blood pressure is measured by two numbers and is usually shown with a slash between the numbers, such as 110/70 mmHg. The usual way of reading these two numbers is 110 over 70.

The higher number is called the systolic pressure. The systolic pressure is the highest pressure in your arteries when your heart contracts and exerts a strong force on the walls during a heartbeat. The lower number is called the diastolic pressure. The diastolic pressure is the lowest pressure in your blood vessels when your heart relaxes between beats and fills with blood.

Your blood pressure changes constantly depending on how hard your heart is working. Blood pressure readings vary depending on physical activity, emotions and other factors. During exercise, your heart can pump up to three times as fast as during rest.

All levels above 120/80 mmHg raise your risk, and the risk grows as blood pressure levels rise.


“Prehypertension” means you're likely to develop high blood pressure, unless you take steps to prevent it.

Your systolic and diastolic numbers may not be in the same blood pressure category. According to the National Heart, Lung

Classification of blood pressure

| Blood pressure category | Systolic (mm Hg) | and | Diastolic (mm Hg) |
|----------------------------|------------------|-----|-------------------|
| Normal | less than 120* | and | less than 80* |
| Prehypertension | 120–139 | or | 80–89 |
| High blood pressure | | | |
| Stage 1 | 140–159 | or | 90–99 |
| Stage 2 | 160 or higher | or | 100 or higher |

*Your doctor should evaluate unusually low readings.



and Blood Institute, the more severe category is the one you're in. For example, if your systolic number is 160 and your diastolic number is 80, you have stage 2 high blood pressure. If your systolic number is 120 and your diastolic number is 95, you have stage 1 high blood pressure.

If you have diabetes or chronic kidney disease, high blood pressure is defined as 130/80 mmHg or higher. HBP numbers also differ for children and teens.

It's important to remember that if you're being treated for high blood pressure and your blood pressure readings are normal, you still have the condition and should see your doctor and stay on treatment to keep you blood pressure under control.

ISH

A common form of high blood pressure in older adults is isolated systolic hypertension (ISH). ISH is high blood pressure, but only the top (systolic) number is high (140 or higher). ISH can be as harmful as high blood pressure in which both numbers are high. It is the most common form of high blood pressure for older adults. About two out of three people over age 60 with high blood pressure have ISH.

If not treated, ISH can cause damage to arteries and body organs. It is treated the same way as high blood pressure in which both systolic and diastolic pressures are high – by making changes in your health habits and with blood pressure medicines.

Have your blood pressure checked regularly

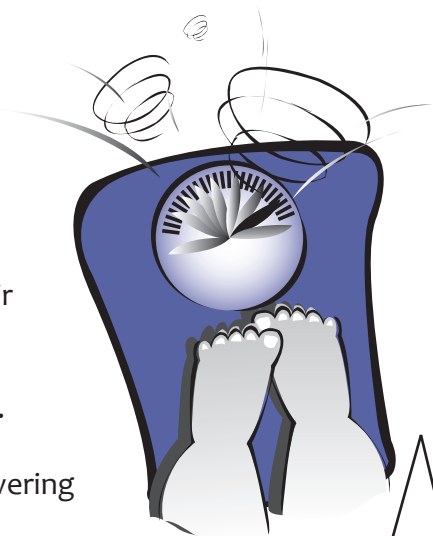
To avoid the many problems caused by high blood pressure, have your blood pressure checked yearly for diagnosis and treatment. Go to a health care provider to assure accuracy. A one-time high reading, unless it's extremely high, doesn't necessarily mean you have hypertension. Treatment used to be recommended only if you had severe high blood pressure. Now, even mild hypertension is treated because health risks increase with every point over normal your blood pressure climbs.

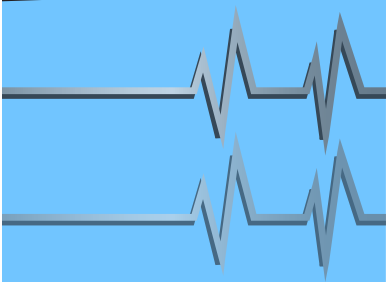
Controlling hypertension

You don't have to know what's causing your hypertension to bring it under control. About half of all people with mild hypertension can control their condition by adopting these healthy habits:

- **Lose weight**, if you're overweight.

Dropping excess pounds is the most effective nonmedication method of lowering





References:

National Institutes of Health:
National Heart, Lung and Blood
Institute
The American Dietetic
Association American Heart
Association

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blood pressure. Losing as few as 10 pounds may lead to a meaningful drop in your blood pressure.

- **Exercise.** Get at least 30 minutes of moderate physical activity most days of the week. Check with your doctor about the type of physical activity best for you.

- **Limit alcohol.** Alcohol raises your blood pressure even if you don't have hypertension and reduces your heart's pumping ability. If you drink, limit alcohol to no more than one drink a day for women and two for men. One drink is defined as 1 1/2 fluid ounces (fl oz) of 80-proof spirits (such as bourbon, Scotch, vodka, gin, etc.), 1 fl oz of 100-proof spirits, 5 fl oz of wine, or 12 fl oz of beer.

- **Eat a healthy diet.** Follow the MyPyramid recommendations for healthy eating by including the daily recommended amounts for your calorie needs from each group: grains, fruits, vegetables, milk and meat/beans.

An eating plan called Dietary Approaches to Stop Hypertension (DASH), which is rich in low-fat dairy foods, fruits and vegetables, may help reduce the risk of high blood pressure. Dietary potassium from fruits, vegetables and fat-free or low-fat dairy may help lower your blood pressure. In a large study funded by the National Heart, Lung and Blood Institute (NHLBI), the DASH eating plan was shown to be most effective among plans tested. The low-fat eating plan includes 2-3 servings of low-fat dairy foods and 8-10 servings of fruits and vegetables a day.

Studies have shown that people with hypertension lowered their blood pressure by 11.5 mmHg systolic and 5.5 mm Hg diastolic through diet alone. Forty percent of the dieters were able to stop their medication. Benefits of the diet were that people lost weight, and the diet was higher in the minerals, calcium, potassium and magnesium, which are associated with lower blood pressure.

- **Hold the salt.** A high-sodium intake increases blood pressure in some people. The Dietary Guidelines for Americans recommends limiting sodium intake to 2,300 mg a day (about 1 teaspoon of salt).

- **Medication.** Lifestyle changes help, but they may not be enough for you. You also may need to take medication to bring your blood pressure under control. Blood pressure medications work by keeping the blood vessels from constricting, allowing the arteries to relax or reducing the heart rate. Most of these medications must be taken for a lifetime. More than 50 percent of patients with hypertension, however, stop their medication within six months of starting it. If patients stick with their blood pressure medication, they gradually feel better, have a higher quality of life and greatly reduce their risk of heart attack, stroke and kidney failure.

