

Hypertension

Hypertension, also known as high blood pressure, is a common condition in the 21st century. Blood pressure refers to the force of the blood against the walls of arteries. The more blood a heart is pumping into narrowed arteries, the higher the person’s blood pressure will be. Blood pressure is also affected by the size and elasticity of the arteries. Two numbers are used to evaluate blood pressure—systolic and diastolic. Systolic blood pressure is the pressure when the heart is contracting, sending blood forward, and thus represents the higher blood pressure value. Diastolic blood pressure is the pressure when the heart is relaxed and filling with blood, and thus represents the lower blood pressure value. High blood pressure is generally defined as a systolic pressure of 130 mm Hg (millimeters of mercury) or higher or a diastolic pressure of 80 mm Hg or higher. Given the seriousness of hypertension, health professionals also encourage individuals to be aware of elevated blood pressure, a condition that often develops into hypertension if not given proper medical attention. Elevated blood pressure is defined as a systolic pressure of 120-129 mm Hg and a diastolic pressure of less than 80 mm Hg. Blood pressure categories are as follows:

Blood Pressure Category	Systolic mm Hg (upper number)		Diastolic mm Hg (lower number)
Normal	Less than 120	and	Less than 80
Elevated	120-129	and	Less than 80
Hypertension Stage 1	130-139	or	80-89
Hypertension Stage 2	140 or greater	or	90 or greater

Hypertension affects nearly half of American adults, meaning more than 100 million adults have this serious condition. The likelihood of developing hypertension increases with age, with more than three-fourths of adults 65 years of age or older affected by it. Other risk factors for developing hypertension include race/ethnicity (African Americans have the greatest risk), a family history of hypertension, and overweight/obesity.

The Risks of Ignoring Information on Hypertension

Although hypertension frequently produces no symptoms, it can have many serious health consequences, including severe disability and death. During the asymptomatic or “silent” period, the high pressures are damaging both large and small arteries directly. This damage leads to disease in the tissues and organs receiving blood from the arteries. The damage can result in strokes, heart attacks, and kidney disease (which can lead to the need for dialysis). Hypertension also may lead to heart failure, as the heart muscle must work harder and can become overdeveloped and thickened, resulting in reduced pumping efficiency. People with heart failure from hypertension may tire easily and experience shortness of breath with even minor exertion.

What Can Be Done to Prevent Hypertension and Its Complications?

Given the widespread occurrence of hypertension and the fact that it often produces no symptoms until it has seriously damaged the heart, brain, or kidneys, it is important that people be screened for the condition. Fortunately, the assessment of blood pressure is easy and inexpensive. In addition to having it checked at your health provider's office, you can check it yourself at automated monitors that are easy to use in many drugstores and grocery stores. Regular screening is especially important for those who have certain risk factors that cannot be changed—individuals with a family history of high blood pressure, older adults, and African Americans. Although these individuals are at greater risk of developing hypertension, they should not be discouraged. There are other risk factors—modifiable risk factors—that they can influence and thus reduce their chances of developing hypertension or at least allow them to control their condition and reduce the risk of complications. Modifiable risk factors associated with the development of hypertension include being overweight, not staying physically active, using tobacco, and consuming too much alcohol. Diet, especially one high in sodium (salt), also has been linked with hypertension development as well as impacting the ability to control the disease.

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The good news about hypertension is that the interventions that can be used to prevent it also treat it. Once it is diagnosed, lifestyle modifications are frequently effective in controlling blood pressure. These include weight loss, restriction of salt intake, exercise, smoking cessation, and reduced alcohol consumption. These lifestyle modifications are generally recommended as an initial method of controlling blood pressure, but if such changes fail to bring blood pressure under control, numerous medications are available. If medication is needed, it is still recommended that individuals continue with their lifestyle modifications.

