

Healthy People

Understanding Blood Pressure Readings and What Do Blood Pressure Numbers Mean?

Systolic

The top number which is also the higher of the two numbers, measures the pressure in the arteries when the heart beats (when the muscle contracts).

Diastolic

The bottom number, which is also the lower of the two numbers, measures the pressure in the arteries between heartbeats (when the muscle is resting between beats and refilling with blood).

What is the AHA recommendation for healthy blood pressure?

This chart reflects blood pressure categories defined by the American Heart Association.

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Prehypertension	120 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 1	140 – 159	or	90 – 99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	or	Higher than 110

* Your doctor should evaluate unusually low blood pressure readings.

How is high blood pressure diagnosed?

Your healthcare providers will want to get an accurate picture of your blood pressure and chart what happens over time. Starting at age 20, the American Heart Association recommends a blood pressure screening at your regular healthcare visit or once every 2 years, if your blood pressure is less than 120/80 mm Hg.

Your blood pressure rises with each heartbeat and falls when your heart relaxes between beats. While BP can change from minute to minute with changes in posture, exercise, stress or sleep, **it should normally be less than 120/80 mm Hg (less than 120 systolic AND less than 80 diastolic) for an adult age 20 or over. About one in three U.S. adults has high blood pressure. If your blood pressure reading is higher than normal, your doctor may take several readings over time and/or have you monitor your blood pressure at home before diagnosing you with high blood pressure.**

A single high reading does not necessarily mean that you have high blood pressure. However, if readings stay at 140/90 mm Hg or above (systolic 140 or above OR diastolic 90 or above) over time, your doctor will likely want you to begin a treatment program. Such a program almost always includes lifestyle changes and often prescription medication for those with readings of 140/90 or higher. If, while monitoring your blood pressure, you get a systolic reading of 180 mm Hg or higher OR a diastolic reading of 110 mm Hg or higher, wait a couple of minutes and take it again. If the reading is still at or above that level, you should seek immediate emergency medical treatment for a **hypertensive crisis**. If you can't access the emergency medical services (EMS), have someone drive you to the hospital right away. Even if your blood pressure is normal, you should consider making lifestyle modifications to prevent the development of HBP and improve your heart health.

Which number is more important, top (systolic) or bottom (diastolic)?

Typically more attention is given to the top number (the systolic blood pressure) as a major risk factor for cardiovascular disease for people over 50 years old. In most people, systolic blood pressure rises steadily with age due to increasing stiffness of large arteries, long-term build-up of plaque, and increased incidence of cardiac and vascular disease.

There are some main ways you can control your blood pressure.

- Eat a better diet, which may include reducing salt
- Enjoy regular physical activity
- Maintain a healthy weight
- Manage stress
- Avoid tobacco smoke
- Comply with medication prescriptions
- If you drink, limit alcohol

Lifestyle modifications are essential. These changes may reduce your blood pressure without the use of prescription medications. Adopting a healthy lifestyle is critical for the prevention of HBP and an indispensable part of managing it. Think of these changes as a "lifestyle prescription" and make every effort to comply with them. Whether you have been diagnosed with high blood pressure, also called hypertension, or are concerned because you have some of the risk factors for the disease, understand this: while there is no cure, **high blood pressure is manageable**