





About High Blood Pressure

KEY POINTS

- High blood pressure, also called hypertension, is blood pressure that is higher than normal.
- High blood pressure usually has no warning signs or symptoms.
- High blood pressure usually develops over time.

MORE INFORMATION

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Definition of blood pressure

Blood pressure is the pressure of blood pushing against the walls of your arteries. Arteries carry blood from your heart to other parts of your body.

What are normal blood pressure numbers?

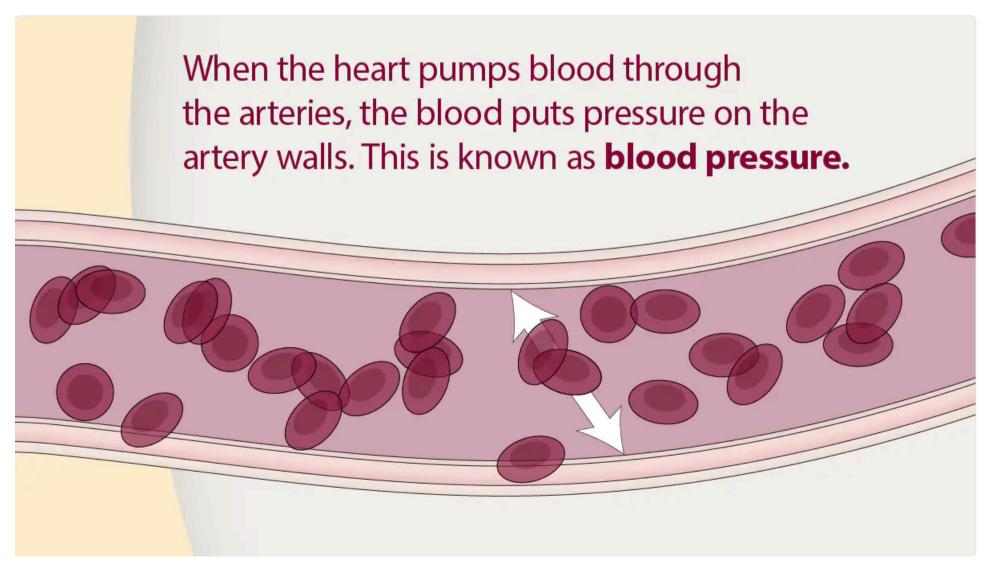
A normal blood pressure level is less than 120/80 mmHg. [1]

No matter your age, you can take steps each day to keep your blood pressure in a healthy range.

What is high blood pressure (hypertension)?

High blood pressure, also called hypertension, is blood pressure that is higher than normal. Your blood pressure changes throughout the day based on your activities. Having blood pressure consistently above normal may result in a diagnosis of high blood pressure (or hypertension).

The higher your blood pressure levels, the more risk you have for other health problems, such as heart disease, heart attack, and stroke.



When the heart pumps blood through the arteries, the blood puts pressure on the artery walls. This is called blood pressure.

Your health care team can diagnose high blood pressure. They can also make treatment decisions by reviewing your systolic (first number) and diastolic (second number) blood pressure levels and comparing them to guidelines.

The guidelines used to diagnose high blood pressure may differ from one health care provider to another:

- Some health care professionals diagnose patients with high blood pressure if their blood pressure is consistently 140/90 mm Hg or higher. [2] This limit is based on a guideline released in 2003, as seen in the table below.
- Other health care professionals diagnose patients with high blood pressure if their blood pressure is consistently 130/80 mm Hg or higher.
 This limit is based on a guideline released in 2017, as seen in the table below.

Blood pressure levels according to The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003 Guideline)[2]

Normal	systolic: less than 120 mm Hg diastolic: less than 80 mm Hg
At risk (prehypertension)	systolic: 120–139 mm Hg diastolic: 80–89 mm Hg
High blood pressure (hypertension)	systolic: 140 mm Hg or higher diastolic: 90 mm Hg or higher

Blood pressure levels according to The American College of Cardiology/American Heart Association Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults (2017 Guideline) [1]

Normal	systolic: less than 120 mm Hg diastolic: less than 80 mm Hg
Elevated	systolic: 120–129 mm Hg diastolic: less than 80 mm Hg
High blood pressure (hypertension)	systolic: 130 mm Hg or higher diastolic: 80 mm Hg or higher

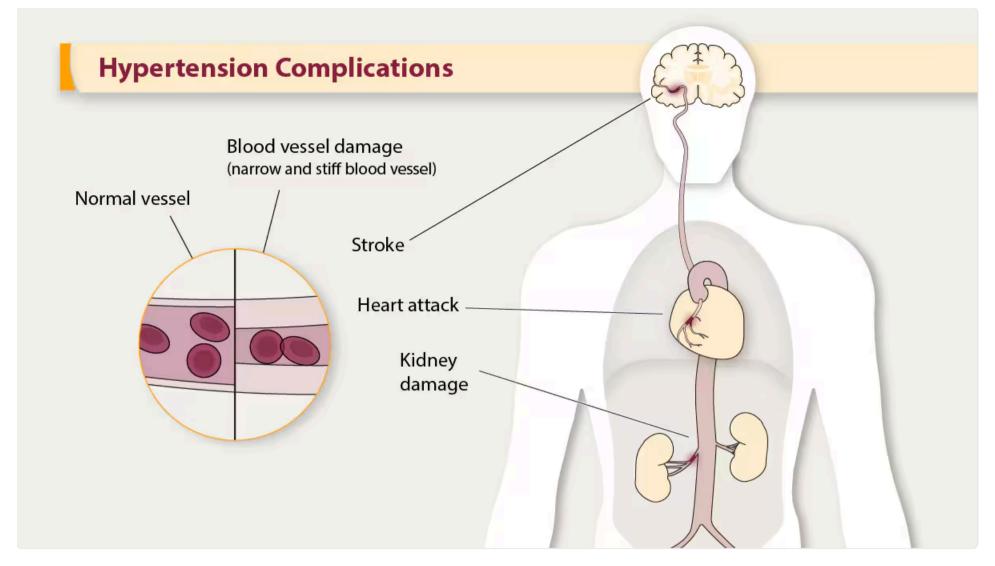
If you are diagnosed with high blood pressure, talk with your health care team about your blood pressure levels and how these levels affect your treatment plan.

Signs and symptoms

High blood pressure usually has no warning signs or symptoms, and many people do not know they have it. <u>Measuring your blood pressure</u> is the only way to know whether you have high blood pressure.

Causes

High blood pressure usually develops over time. It can happen because of unhealthy lifestyle choices, such as not getting enough regular physical activity. Certain health conditions, such as diabetes and having obesity, can also increase the risk for developing high blood pressure. High blood pressure can also happen during pregnancy.



You can manage your blood pressure to lower your risk for serious health problems that may affect your heart, brain, kidneys, and eyes.

Potential problems having high blood pressure could cause

High blood pressure can damage your health in many ways. It can seriously hurt important organs like your heart, brain, kidneys, and eyes.

The good news is that, in most cases, you can manage your blood pressure to lower your risk for serious health problems.

Heart attack and heart disease

High blood pressure can damage your arteries by making them less elastic. This decreases the flow of blood and oxygen to your heart and leads to <u>heart disease</u>. In addition, decreased blood flow to the heart can cause:

- Chest pain, also called angina.
- Heart attack, which happens when the blood supply to your heart is blocked and heart muscle begins to die without enough oxygen. The longer the blood flow is blocked, the greater the damage to the heart.
- Heart failure, a condition that means your heart can't pump enough blood and oxygen to your other organs.

Stroke and brain problems

High blood pressure can cause the arteries that supply blood and oxygen to the brain to burst or be blocked, causing a <u>stroke</u>. Brain cells die during a stroke because they do not get enough oxygen. Stroke can cause serious disabilities in speech, movement, and other basic activities. A stroke can cause death.

Having high blood pressure, especially in midlife, is linked to having poorer cognitive function and dementia later in life. Learn more about the link between high blood pressure and dementia from the National Institutes of Health's $\underline{\text{Mind Your Risks}}^{\$}$ $\underline{\mathbb{C}}$ campaign.

Kidney disease

Adults with diabetes, high blood pressure, or both have a higher risk of developing chronic kidney disease than those without these conditions.

Prevention

Many people with high blood pressure can lower their blood pressure into a healthy range or keep their numbers in a healthy range by making **lifestyle changes**. Talk with your health care team about:

- Physical activity each week (about 30 minutes a day, 5 days a week)
- Not smoking
- Eating a healthy diet, including limiting sodium (salt) and alcohol

- Keeping a healthy weight
- Managing stress

Learn more about ways to manage and prevent high blood pressure.

In addition to making positive lifestyle changes, some people with high blood pressure need to take medicine to manage their blood pressure.

Talk with your health care team right away if:

- You think you have high blood pressure.
- If you've been told you have high blood pressure but do not have it under control.

By taking action to lower your blood pressure, you can help protect yourself against heart disease and stroke, also called cardiovascular disease (CVD).

SOURCES

CONTENT SOURCE:

National Center for Chronic Disease Prevention and Health Promotion; About the Division for Heart Disease and Stroke Prevention

REFERENCES

- 1. Whelton PK, Carey RM, Aronow, WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol.* 2018;71(19):e127–e248.
- 2. National High Blood Pressure Education Program. <u>The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure [PDF 223K] PDF 2. National Heart, Lung, and Blood Institute; 2003.</u>