**High Blood Pressure** 



# High Blood Pressure

High Blood Pressure Home

# High Blood Pressure Symptoms and Causes

# What is 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.

Your blood pressure normally rises and falls throughout the day.

# What do blood pressure numbers mean?

Blood pressure is measured using two numbers:

The first number, called systolic blood pressure, measures the pressure in your arteries when your heart beats.

The second number, called *diastolic* blood pressure, measures the pressure in your arteries when your heart rests between heats

If the measurement reads 120 systolic and 80 diastolic, you would say, "120 over 80," or write, "120/80 mmHg."

# What are normal blood pressure numbers?

A normal blood pressure level is less than 120/80 mmHg.<sup>1</sup>

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)?

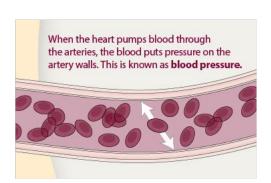
High blood pressure, also called hypertension, is blood pressure that is higher than normal. Your blood pressure changes throughout the day based on your activities. Having blood pressure measures consistently above normal may result in a diagnosis of high blood pressure (or hypertension).

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

Your health care team can diagnose high blood pressure and make treatment decisions by reviewing your systolic and diastolic blood pressure levels and comparing them to levels found in certain guidelines.

The guidelines used to diagnose high blood pressure may differ from health care professional to health care professional:

• Some health care professionals diagnose patients with high blood pressure if their blood pressure is consistently 140/90 mm Hg or higher.<sup>2</sup> 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.

The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003 Guideline) <sup>2</sup>		The American College of Cardiology/American Heart Association Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults (2017 Guideline) <sup>1</sup>	
Normal	systolic: less than 120 mm Hg diastolic: less than 80 mm Hg	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	Elevated	systolic: 120–129 mm Hg diastolic: less than 80 mm Hg
High Blood Pressure	systolic: 140 mm Hg or	High blood pressure	systolic: 130 mm Hg or

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.

(hypertension)

higher

higher

diastolic: 80 mm Hg or

# What are the signs and symptoms of high blood pressure?

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

# What causes high blood pressure?

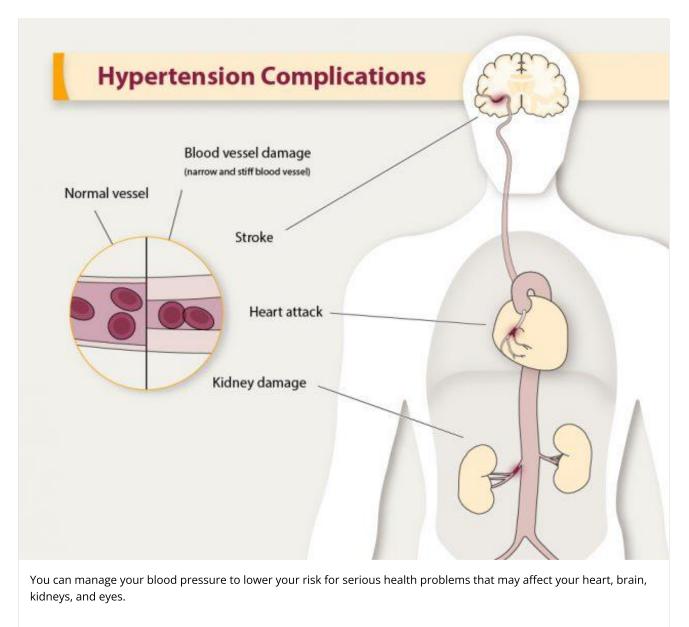
higher

higher

diastolic: 90 mm Hg or

(hypertension)

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.



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# What problems does high blood pressure 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, which decreases the flow of blood and oxygen to your heart and leads to heart disease. 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 stroke. 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 also kill you.

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 Mind Your Risks® 🗹 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.

# How do I know if I have high blood pressure?

There's only one way to know if you have high blood pressure: Have a doctor or other health professional measure it. Measuring your blood pressure is quick and painless.

Talk with your health care team about regularly measuring your blood pressure at home, also

called self-measured blood pressure (SMBP) monitoring.

Learn about conditions related to high blood pressure

- Cholesterol
- Heart Disease
- High Blood Pressure During Pregnancy
- High Blood Pressure in Kids and Teens
- Pulmonary Hypertension
- Stroke

High blood pressure is called the "silent killer" because it usually has no warning signs or symptoms, and many people do not know they have it.

# What can I do to prevent or manage high blood pressure?

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

- Getting at least 150 minutes of 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. Learn more about medicines for high blood pressure.

Talk with your health care team right away if you think you have high blood pressure or 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 sometimes called cardiovascular disease (CVD).

### **Learn More**

## Measure Your Blood Pressure

Learn how and why to get your blood pressure checked.



# Know Your Risk for High Blood Pressure

Find out what increases your risk for high blood pressure.



## Prevent and Manage Your Blood Pressure

Learn what you can do to keep a healthy blood pressure.



### References

- 1. Whelton PK, Carey RM, Aronow, WS, Casey DE, Collins KJ, Himmelfarb CD, 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.

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