

High blood pressure



High blood pressure, or *hypertension*, is a common condition in which blood flows through blood vessels and arteries with greater than normal pressure. Accounting for 7.5 million deaths annually, hypertension is the leading risk factor for heart disease, stroke, and premature death.

Blood pressure monitoring, typically performed by your healthcare provider as part of your regular wellness appointments, is necessary for routine screening and for diagnosing and monitoring hypertension. Blood pressure readings are reported using a pressure cuff (sphygmomanometer). Readings are measured in millimeters of mercury (mmHg) and are determined by two numbers.

120



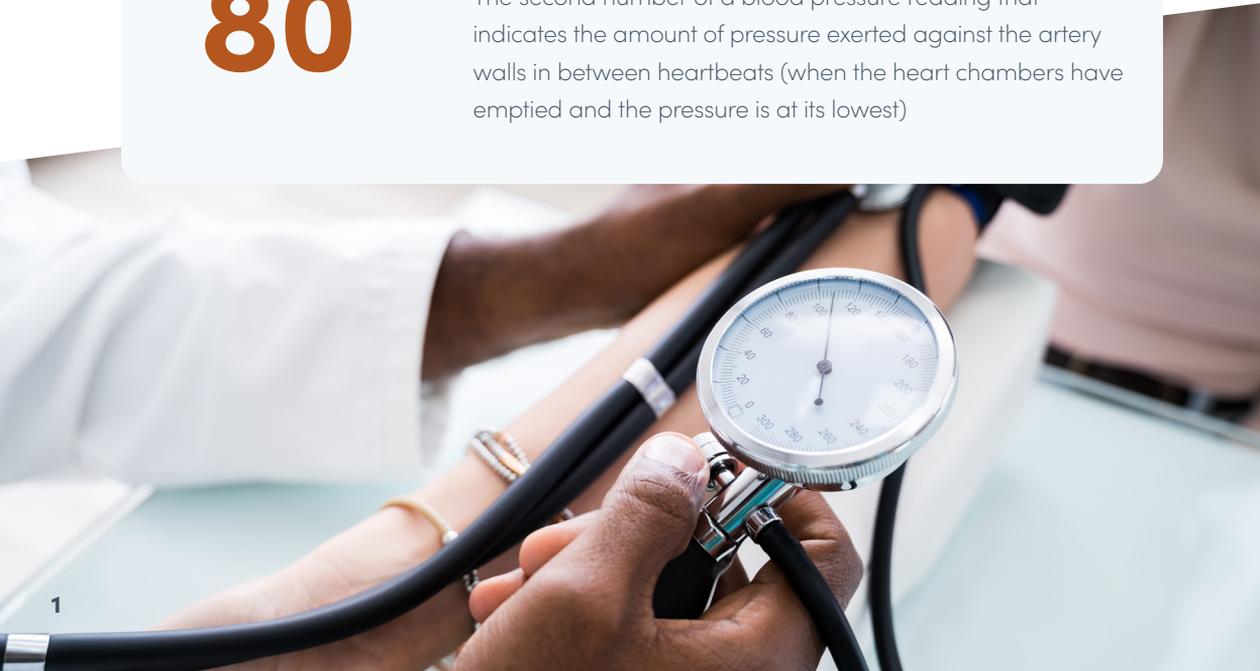
80

Systolic blood pressure

The first number of a blood pressure reading that indicates the amount of pressure exerted against the artery walls with each heartbeat (when the heart chambers are full and the pressure is at its highest)

Diastolic blood pressure

The second number of a blood pressure reading that indicates the amount of pressure exerted against the artery walls in between heartbeats (when the heart chambers have emptied and the pressure is at its lowest)



Stages of hypertension

The blood pressure ranges outlined in the table below are determined by the American Heart Association.

Classification	Systolic (mmHg)	Diastolic (mmHg)
Normal blood pressure	<120	<80
Elevated blood pressure	120-129	<80
Stage 1 hypertension	130-139	80-89
Stage 2 hypertension	≥140	≥90
Hypertensive crisis	>180	>120

Signs, symptoms, and complications

Hypertension is most often asymptomatic until the occurrence of a severe medical event such as a heart attack or stroke. However, some individuals may experience symptoms such as lightheadedness, fainting episodes, vertigo, or altered vision.

Complications associated with high blood pressure include:

- Aneurysms
- Heart failure
- Myocardial infarction
- Peripheral artery disease
- Renal impairment
- Stroke
- Vascular dementia
- Visual impairment and retinal hemorrhage

Causes and risk factors

- Age: the risk of developing hypertension increases with age
- Certain medical conditions (e.g., chronic kidney disease, obesity, sleep apnea, thyroid conditions, certain tumors)
- Certain medications (e.g., contraceptive pills, cold-relief medications)
- Excess alcohol intake
- Excess dietary intake of sodium
- Family history/genetic predisposition
- Gender: men are more likely to develop high blood pressure before age 55, while women are at an increased risk after 55
- Race: hypertension is more common in African American individuals compared to Caucasian, Hispanic, and Asian individuals
- Sedentary lifestyle

Preventing and addressing hypertension

Specific lifestyle approaches, such as eating a healthy diet, exercising, and managing stress, have been shown to help prevent and treat hypertension.

Diet

The Dietary Approaches to Stop Hypertension (DASH) diet is a dietary pattern recommended for improving cardiovascular health and managing hypertension. The diet emphasizes the consumption of minimally-processed, blood pressure-lowering foods and limits foods that may contribute to hypertension.

Enjoy	Limit
Beans and legumes	Alcohol
Fruit	Partially hydrogenated vegetable oils
High-quality fats (e.g., avocado, flaxseeds or flaxseed oil, hemp seeds, olive oil, omega-3-rich fish)	Processed and cured meats
Lean meats (e.g., poultry, fish)	Red meat (e.g., beef, lamb, pork)
Low-fat dairy	Refined and processed foods (e.g., cereals, frozen entrees, fast foods)
Nuts and seeds (unsalted)	Sugar (e.g., desserts, soda, candy, syrups, baked goods, fruit drinks)
Vegetables	
Whole grains	

Stress management

Chronic (long-term) stress is associated with an increased risk of hypertension. To minimize stress and mitigate the risks associated with chronic stress, it's important to find effective and healthy stress management techniques, such as:

- Connecting with friends and family for emotional support
- Engaging in a relaxing hobby or activity
- Practicing mindfulness, meditation, and breathing exercises
- Spending time outdoors
- Staying active and exercising regularly

Physical activity

Engaging in regular physical activity can be beneficial for managing weight and regulating blood pressure. Aim to engage in at least two and a half hours of moderate-intensity aerobic exercise (e.g., brisk walking) per week or one hour and 15 minutes vigorous-intensity aerobic exercise (e.g., high-intensity interval training) per week.



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This handout was developed and medically reviewed by Fullscript's Integrative Medical Advisory team.

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