

# Understanding Blood Pressure

In order to survive and function properly, your tissues and organs need the oxygenated blood that your circulatory system carries throughout the body. When the heart beats, it creates pressure that pushes blood through a network of tube-shaped blood vessels, which include arteries, veins, and capillaries. This pressure—blood pressure—is the result of two forces: The first force—*systolic pressure*—occurs as blood pumps out of the heart and into the arteries that are part of the circulatory system. The second force—*diastolic pressure*—is created as the heart rests between heart beats.



The primary way high blood pressure causes harm is by increasing the workload of the heart and blood vessels—making them work harder and less efficiently. Over time, the force and friction of high blood pressure damages the delicate tissues inside the arteries. In turn, LDL (bad) cholesterol forms plaque along tiny tears in the artery walls. The more the plaque and damage increases, the narrower the insides of the arteries become—raising blood pressure and starting a vicious cycle that further harms your arteries, heart, and the rest of your body. This can ultimately lead to other conditions ranging from arrhythmia to heart attack and stroke.

The only way to know if you have high blood pressure (HBP or hypertension) is to have your blood pressure tested. Understanding your results is key to controlling high blood pressure.

Blood Pressure Category	Systolic mm Hg (upper number)	and/or	Diastolic mm Hg (lower number)
Normal	< 120	and	< 80
Elevated	120-129	and	< 80
Hypertension Stage 1	130-139	or	80-89
Hypertension Stage 2	≥ 140	or	≥ 90
Hypertensive Crisis (Seek medical care immediately!)	> 180	and/or	> 120

Source: American Heart Association ([www.heart.org](http://www.heart.org))

# Blood Pressure Categories

## Normal

Blood pressure numbers of less than 120/80 mm Hg are considered within the normal range. If your results fall into this category, stick with heart-healthy habits like following a balanced diet and getting regular exercise.

## Elevated

Elevated blood pressure is when readings consistently range from 120-129 systolic and less than 80 mm Hg diastolic. People with elevated blood pressure are likely to develop high blood pressure unless steps are taken to control the condition.

## Hypertension Stage 1

Hypertension Stage 1 is when blood pressure consistently ranges from 130-139 systolic or 80-89 mm Hg diastolic. At this stage of high blood pressure, doctors are likely to prescribe lifestyle changes and may consider adding blood pressure medication based on your risk of atherosclerotic cardiovascular disease (ASCVD), such as heart attack or stroke.

## Hypertension Stage 2

Hypertension Stage 2 is when blood pressure consistently ranges at 140/90 mm Hg or higher. At this stage of high blood pressure, doctors are likely to prescribe a combination of blood pressure medications and lifestyle changes.

## Hypertensive Crisis

This stage of high blood pressure requires medical attention. If your blood pressure readings suddenly exceed 180/120 mm Hg, wait five minutes and then test your blood pressure again. If your readings are still unusually high, contact your doctor immediately. You could be experiencing a hypertensive crisis.

If your blood pressure is higher than 180/120 mm Hg and you are experiencing signs of possible organ damage such as chest pain, shortness of breath, back pain, numbness/weakness, change in vision or difficulty speaking, do not wait to see if your pressure comes down on its own. **Seek immediate medical care!**

*Source: American Heart Association ([www.heart.org](http://www.heart.org))*