

# Your Blood Pressure:

## What You Don't Know Could Kill You

### Is high blood pressure really that dangerous?

Yes! Uncontrolled high blood pressure can injure or kill you. It is sometimes called “the silent killer” because high blood pressure has no symptoms and it may be damaging your arteries, heart and other organs. As we age, most Americans may see a steady rise in their blood pressure. One in four will suffer from hypertension or chronically high blood pressure.

### What is blood pressure anyway?

Blood pressure is the force of blood pushing against vessel walls. High blood pressure (HBP) means the pressure in your arteries is higher than it should be.

Blood Pressure is typically recorded as two numbers, one over the other in a ratio like the following example:

$$\frac{120}{80} \text{ mm Hg}$$

Read as 120 over 80 millimeters of mercury, the top number (120) is called Systolic and measures pressure in the arteries when the heart is beating. The bottom number (80) is called Diastolic and measures the pressure in the arteries between heartbeats.

### What is a healthy blood pressure?

The American Heart Association recommends as normal, blood pressure readings that are less than 120 for the Systolic (upper#) and readings less than 80 for the Diastolic (lower#) measurements. Your blood pressure rises with each

heartbeat and falls when your heart relaxes between beats. While blood pressure can change from minute to minute with changes in posture, exercise, stress or sleep, it should normally be less than 120/80 mmHg for an adult age 20 or over. Your healthcare providers will want to get an accurate picture of your blood pressure over time and the AHA recommends a blood pressure screening at least every two years even when your blood pressure is normal.

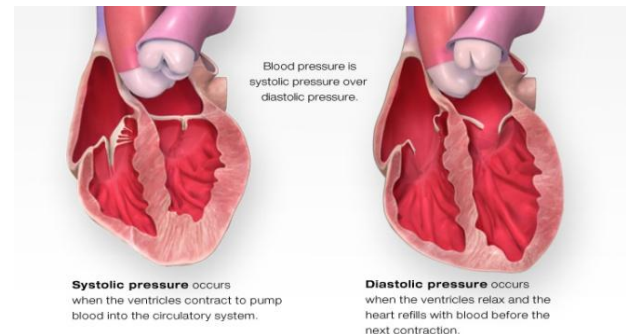


Figure 1: Systolic and Diastolic pressure, American Heart Association, [www.heart.org](http://www.heart.org)

### What is considered high blood pressure?

Blood pressure readings of 120 to 139 Systolic over 80 to 89 Diastolic are categorized as *Prehypertension*. While not dangerous, these readings are an indication that lifestyle changes need to be made to control blood pressure.

- Readings in a range of 140-159 systolic and/or 90-99 diastolic are categorized as **High Blood Pressure (Hypertension) Stage 1**.
- Readings in a range of 160 or higher systolic and/or 100 or higher diastolic are categorized as **High Blood Pressure (Hypertension) Stage 2**.

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- Readings higher than 180 systolic or higher than 110 diastolic are considered a state of **Hypertensive Crisis** and emergency care is needed.

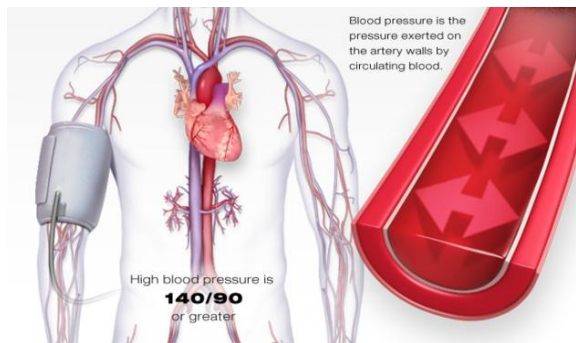


Figure 2: High Blood Pressure  
American Heart Association, [www.heart.org](http://www.heart.org)

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

More attention is typically 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.

### Who is at higher risk for HBP?

- Those with relatives who have HBP
- African Americans
- People over age 35
- Overweight people
- People who aren't physically active
- People who consume too much salt
- People who drink too much alcohol
- People with diabetes, gout or kidney disease

- Pregnant women
- Woman who take birth control pills, (especially in combination with other risks listed above)

### How is high blood pressure diagnosed?

The only way to know if your blood pressure is higher than it should be is to get it checked regularly by a doctor. High blood pressure typically does not present any symptoms and many people do not realize they have it.

If your blood pressure reading is higher than normal, your doctor may take several readings over time 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 over time, your doctor will likely want you to begin a treatment program. A treatment program will almost always include lifestyle changes and often prescription medication.

Digital self-reading blood pressure cuffs are available for those who want to monitor their own blood pressure and self-monitors are accessible in many grocery stores and pharmacies.

### But I'm young or my blood pressure is normal...

Even if your blood pressure is normal, you should consider making lifestyle changes to prevent the development of high blood pressure and to improve your overall health.

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### What lifestyle changes will help?

- Weight reduction if you are overweight – even losses of 5 to 10 pounds can make an important difference.
- Eating healthy meals – meals rich in fruits, vegetables, low fat dairy and reduced fat. Reduce amounts of saturated fat, trans fat, cholesterol, salt (sodium) and added sugars in the foods you eat.
- Moderate alcohol consumption (2 drinks/day for men and 1 drink/day for women) or none at all if not a drinker.
- Physical activity (including at least 30 minutes of regular aerobic exercise such as walking most days of the week).
- Don't smoke!
- Follow your doctor's instructions if you take medications.

### Is high blood pressure inevitable with age?

Two recent studies published by the American Heart Association would seem to indicate that high blood pressure may be more directly related to lifestyle and diet than to aging. Studies conducted in villages of Bolivia's tropical lowlands found that:

- “Traditional “hunter-gatherer” and “horticulturalist” populations have significantly lower age-related increases in blood pressure and less

risks of atherosclerosis than “modernized” populations.

- Lifestyle factors of these traditional populations — high physical activity and high fruit and vegetable diets — may protect against normal aging phenomena, high blood pressure and hardening of the arteries.

The Tsimane villagers studied have lifestyles much closer to those of our ancestors who had active lifestyles and more traditional diets.

### References:

[http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure-or-Hypertension\\_UCM\\_002020\\_SubHomePage.jsp](http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure-or-Hypertension_UCM_002020_SubHomePage.jsp)

[http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/Understanding-Blood-Pressure-Readings\\_UCM\\_301764\\_Article.jsp](http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/Understanding-Blood-Pressure-Readings_UCM_301764_Article.jsp)

*What Is High Blood Pressure?* Patient Information Sheet. <http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm300310.pdf>

*What Can I Do to Improve My Blood Pressure?* Patient Information Sheet.

<http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm445845.pdf>

<http://newsroom.heart.org/news/hunter-gatherers-and-horticulturalist-234052>

<http://www.healthy.arkansas.gov/programsServices/communications/features/Pages/CDC-BloodPressureEducation.aspx>

**This handout is adapted from material and content from American Heart Assoc.**  
<http://www.heart.org>.