



let's talk about

# High Blood Pressure and Stroke

High blood pressure means that the force of the blood pushing against the blood vessel walls is consistently in the high range. Uncontrolled HBP can lead to stroke, heart attack, heart failure or kidney failure.

Two numbers represent blood pressure. The higher (systolic) number is the pressure in your arteries when your heart beats. The lower (diastolic) number is the pressure while your heart rests between beats. The systolic number is always listed first. Blood pressure is measured in millimeters of mercury (mm Hg).

Normal blood pressure is below 120/80 mm Hg. If you're an adult and your systolic pressure is 120 to 129, and your diastolic pressure is less than 80, you have elevated blood pressure. High blood pressure is a systolic pressure of 130 or higher or a diastolic pressure of 80 or higher that stays high over time.

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120-129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130-139	or	80-89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

## How does high blood pressure increase stroke risk?

High blood pressure is a major risk factor for stroke.

HBP adds to your heart's workload and damages your arteries and organs over time. Compared to people whose blood pressure is normal, people with HBP are more likely to have a stroke.

About 87% of strokes are caused by narrowed or clogged blood vessels in the brain that cut off the blood flow to brain cells. This is an **ischemic stroke**. High blood pressure causes damage to the inner lining of the blood vessels. This will narrow an artery.

About 13% of strokes occur when a blood vessel ruptures in or near the brain. This is a **hemorrhagic stroke**. Chronic HBP or aging blood vessels are the main causes of this type of stroke. HBP strains blood vessels. Over time, they no longer hold up to the pressure and rupture.

## Am I at higher risk for HBP?

There are risk factors that increase your chances of developing HBP. Some you can improve or treat, and some you can't.

Those that can be improved or treated are:

- Cigarette smoking and exposure to secondhand smoke
- Diabetes
- Being overweight or obese
- High cholesterol
- Physical inactivity
- Poor diet (high in sodium, low in potassium, and drinking too much alcohol)

Factors that can't be changed or are difficult to control are:

- Family history of high blood pressure
- Race/ethnicity

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- Increasing age
- Gender (males)
- Chronic kidney disease
- Obstructive sleep apnea

Socioeconomic status and psychosocial stress are also risk factors for HBP. These can affect access to basic living necessities, medication, health care providers, and the ability to make healthy lifestyle changes.

### How can I control high blood pressure?

Even if you have had a prior stroke or heart attack, controlling high blood pressure can help prevent another one. Take these steps:

- Don't smoke and avoid secondhand smoke.
- Reach and maintain a healthy weight.
- Eat a healthy diet low in sodium and saturated and trans fat. Limit sweets and red and processed meats.
- Eat fruits and vegetables, whole grains, low-fat dairy products, poultry, fish and nuts. Include foods rich in potassium.
- Be physically active. Aim for at least 150 minutes of moderate-intensity physical activity per week.



- Limit alcohol to no more than two drinks a day if you're a man and one drink a day if you're a woman.
- Take all medicines as prescribed to control your blood pressure.
- Know what your blood pressure should be and try to keep it at that level.

## HOW CAN I LEARN MORE?

- 1** Call 1-888-4-STROKE (1-888-478-7653) or visit [stroke.org](http://stroke.org) to learn more about stroke or find local support groups.
- 2** Sign up for our monthly *Stroke Connection e-news* for stroke survivors and caregivers at [StrokeConnection.org](http://StrokeConnection.org).
- 3** Connect with others who have also had an experience with stroke by joining our Support Network at [stroke.org/SupportNetwork](http://stroke.org/SupportNetwork).

### Do you have questions for your doctor or nurse?

Take a few minutes to write down your questions for the next time you see your health care provider.

For example:

**What should my blood pressure be?**

**How often should my blood pressure be checked?**

### MY QUESTIONS:

We have many other fact sheets to help you make healthier choices, manage your condition or care for a loved one. Visit [stroke.org/LetsTalkAboutStroke](http://stroke.org/LetsTalkAboutStroke) to learn more.