

# High Blood Pressure (Hypertension)

## What is Hypertension?

Hypertension, often called high blood pressure, occurs when blood moving through your arteries places too much force against the artery walls. A person is told they have high blood pressure if their blood pressure readings are repeatedly above normal for a long time.

## What do the Numbers Mean?

The top (first) number is the **systolic pressure**. This is the pressure in the arteries when the heart contracts. The bottom (second) number is the **diastolic pressure**. This is the pressure in the arteries when the heart relaxes and refills between each heartbeat.

**Table 1:**

Classification of Blood Pressure		
	Systolic BP, mm Hg	Diastolic BP, mm Hg
Normal	<120	and <80
Prehypertension	120-139	or 80-89
Stage 1 hypertension	140-159	or 90-99
Stage 2 hypertension	>160	or >100

Adapted from JNC VII

## Why is High Blood Pressure a Problem?

High blood pressure usually has no symptoms; it is a "silent" disease. It can go without being found until it has caused some damage to the body. This is why all adults should have their blood pressure checked every year. Over the years, high blood pressure usually damages the arteries and puts a strain on the heart. Injured arteries become clogged with cholesterol and other substances. In general, the higher your blood pressure is above normal, the greater your health risks.

**So, high blood pressure is a 'risk factor'** for developing these diseases sometime in the future: heart disease (angina, heart attack, heart failure), stroke (brain attack), peripheral vascular disease, eye diseases including blindness, and kidney damage.

Other risk factors, which also increase the risk of developing these conditions, are:

- smoking
- lack of exercise
- an unhealthy diet
- excess alcohol
- obesity
- high cholesterol level
- a strong family history of heart disease or stroke
- being male
- ethnic group (For example, Blacks in the US and south Asians in the UK have an increased risk)
- diabetes
- in some women, use of contraceptives
- some over-the-counter medications can increase blood pressure

Note: Risk factors can interact. So, if you have two or more risk factors, your health risk is much more increased than if you just had one. For example, a male smoker who does not exercise and has high blood pressure has quite a high risk of developing heart disease before the age of 60.

## What are the Symptoms?

Usual none, but very high blood pressure may cause the following symptoms, although they also frequently occur for other reasons. These symptoms include:

- Feeling tired
- Blurred vision
- Feeling dizzy
- Nosebleed
- Morning headache at the back of the head

## How is it Treated?

Treatment for high blood pressure includes:

- **Taking your blood pressure at home:** Sphygmomanometers (devices to measure blood pressure) are now an option for home use.
- **Office visits** are needed so that your health care practitioner can measure your blood pressure, adjust your treatment as needed,



and check for side effects from your blood pressure pills.

**The best blood pressure control:** Although high blood pressure cannot be cured, it can be controlled. The goals of treatment are first to lower your blood pressure to a level as near normal as possible. To do this and to reduce the risk of getting other health problems, you will be advised by your health care practitioner to make some positive changes in your lifestyle. If necessary, blood pressure pills will be prescribed.

## ***How Can I Take Care of Myself?***

Some things you can do for yourself to prevent and reduce high blood pressure include these lifestyle changes:

- **Stop smoking:** Smoking damages and constricts your blood vessels and is, by itself, a risk factor for stroke and heart disease. Get help from a group or professional.
- **Reduce salt (sodium) intake** to < 2.3 grams per day (equivalent to 1 teaspoon of table salt). People vary in their response to salt intake.
- **Weight loss:** Losing weight, even just 10 pounds, often can decrease blood pressure.



- **Maintain a healthy diet:** Consume a diet that is rich in fruits and vegetables with adequate intake of potassium and calcium. Limit caffeine, fats, and sweets.
- **Activity:** Exercise is a good way to control weight and lower stress levels. Sixty minutes of brisk walking three to six times a week will help to lower your blood pressure.

- **Reduce alcohol consumption:** Drinking more than one ounce of alcohol (24 ounces of beer) a day may increase blood pressure.
- **Stress control:** Constant, severe stress causes your heart to work harder and constricts your blood vessels. Doing things that are restful and calming may help you control stress. Allow yourself time to relax and enjoy life! Get adequate sleep.

## ***When Should I Seek Help?***

Make an appointment with your health practitioner if your blood pressure stays in the pre-hypertension range or higher.

Seek immediate medical help if you have any of the symptoms listed below:

- Numbness and tingling in hands and feet
- Coughing up blood or severe nosebleeds
- Shortness of breath – difficulty breathing
- New symptoms after starting new medication
- Chest pain
- Sudden, severe, headache without a certain cause
- Feeling tired and confused
- Sudden weakness or numbness of the face, arm and / or leg on one side of the body
- Sudden dimness or loss of vision
- Trouble speaking or understanding speech
- Feeling shaky or having a sudden fall

## ***Where Can I Find More About High Blood Pressure?***

Here are a few good Web sites:

- [www.familydoctor.org](http://www.familydoctor.org) (American Academy of Family Physicians patient education web site)
- [www.americanheart.org](http://www.americanheart.org) (American Heart Association web site, which contains information on all types of heart health, including recipes)
- [www.nhlbi.nih.gov/hbp/index.html](http://www.nhlbi.nih.gov/hbp/index.html) (National Heart, Lung, and Blood Institute's hypertension information site)
- [www.lifeclinic.com](http://www.lifeclinic.com) (A good source of information on exercise and dietary changes that can help people with high blood pressure)

