# High Blood Pressure (Do you know this) 

Dr. Abhay Nigam, M.B.B.S., M.D.(Medicine), Specialist 'A' - Internal Medicine, Visiting Physician, R.A.K. Hospital, Ras Al Khaimah, UAE

## Source: American Heart Association Website: http://www.americanheart.org

According to recent estimates, about one in three U.S. adults has high blood pressure, but because there are no symptoms, nearly one-third of these people don't know they have it. In fact, many people have high blood pressure for years without knowing it. Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure, kidney failure or severe damage to eyes. This is why high blood pressure is often called the "silent killer." The only way to tell if you have high blood pressure is to have your blood pressure checked.

Get the facts on high blood pressure and how to live a heart-healthier life. Find out how you can reduce your risks for heart attack and stroke with proper monitoring by a healthcare provider and simple lifestyle changes, even if you have high blood pressure.

## Why Should I Care?

High blood pressure can hurt your body in many ways. It adds to the workload of your heart and arteries. Because your heart works harder than normal for a long time, it tends to get bigger. A slightly bigger heart may work well, but if it's enlarged very much, it may have a hard time meeting your body's demands.

High blood pressure is the No. 1 modifiable risk factor for stroke. It also contributes to heart attacks, heart failure, kidney failure and atherosclerosis (fatty buildups in arteries). In some cases, it can cause blindness. The relationship of blood pressure levels to the risk of cardiovascular disease is continuous, consistent and independent of other risk factors. That means the higher your blood pressure, the greater your risk of heart attack, heart failure, stroke and kidney disease.

## For example*:

A 50 year-old man of normal body mass with blood pressure of $146 / 86$ (high) has:

- Almost 3 times the risk of dying from a heart attack
- Almost 4 times the risk of dying from a stroke
- About twice the risk of developing heart failure
- About 3 times the risk of developing kidney disease
than if he had normal blood pressure (less than 120/80).
A 40-year-old woman of normal body mass with blood pressure 146/86 (high) has:
- More than 3 times the risk of dying from a heart attack
- Almost 4 times the risk of dying from a stroke
- About 3 times the risk of developing heart failure
- About 3 times the risk of developing kidney disease
than if she had normal blood pressure (less than 120/80).

According to studies conducted between 1999 and 2004, about 40 percent of Americans over 18 with high blood pressure were not currently under treatment and almost 65 percent did not have their blood pressure under control. The estimated direct and indirect cost of high blood pressure in the United States for 2008 is $\$ 69.4$ billion.

The good news is, blood pressure is easily controllable through lifestyle changes - eating heart-healthy diet, limiting alcohol, avoiding tobacco smoke, controlling your weight and getting regular physical activity - and medication, if your doctor recommends. Learn more about how to control your blood pressure. If you have high blood pressure, follow your doctor's advice. Most of the time, high blood pressure can't be cured, but it usually can be controlled. And its effects can be prevented or reduced - if it's treated and controlled early, and kept under control.

## What Can I Do?

High blood pressure is a lifelong disease. It can usually be controlled but not cured. Once you begin to manage it and start a treatment program, maintaining a lower blood pressure is easier. By controlling your high blood pressure, you'll lower your risk of diseases like stroke, heart attack, heart failure and kidney disease. You can do it!

The first thing to do is to have your blood pressure checked. If you have high blood pressure, you can do a lot to reduce it. Work with your doctor to determine the best treatment for you.

1. It may include reducing the fat (particularly saturated fat) in your diet, eating less salt and changing your lifestyle by losing weight and getting regular physical activity.
2. Quitting smoking is also important to reduce your overall risk for heart attack and stroke.
3. Your doctor may recommend reducing how much alcohol you drink.
4. Many medicines also can help reduce and control high blood pressure. Your doctor will decide whether you need medicine in addition to dietary and lifestyle changes.

## 10 Ways to Control Your High Blood Pressure

1. Know your blood pressure. Have it checked regularly.
2. Know what your weight should be. Keep it at or below that level.
3. Don't use too much salt in cooking or at meals. Avoid salty foods.
4. Eat a diet rich in fruits, vegetables and whole-grain high-fiber foods according to American Heart Association recommendations.
5. Control alcohol intake. Don't have more than one drink a day if you're a woman or two a day if you're a man.
6. Take your medicine exactly as prescribed. Don't run out of pills even for a single day.
7. Keep appointments with the doctor.
8. Follow your doctor's advice about physical activity.
9. Make certain your parents, brothers, sisters and children have their blood pressure checked regularly.
10. Live a normal life in every other way.

Following the recommendations of your healthcare professionals is essential to lowering your high blood pressure. Find facts, tips and tools if you need help with making lifestyle changes or taking your medications properly

## Joint National Commission -7 (or JNC-7) Guidelines for blood pressure control

Table 1. Classification and management of blood pressure for adults*

| $B P$ <br> Classification | SBP* <br> maHg | DBP* <br> maHg | Lifestyle Modification | Initial drug therapy |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Without Compeling Indication | With Compelling indications (See Table 8) |
| Normal | $<120$ | and $<80$ | Encourage |  |  |
| Prehypertension | 120-139 | or 80-89 | Yes | No antihy pertensive drug indicated. | Drug(s) for compelling indications. ${ }^{\text {. }}$ |
| Stage 1 Hypertension | 140-159 | or 90-99 | Yes | Thiazide-type diuretics for most. May consider ACEI, ARB, BB, CCB, or combination. | Drug(s) for the compelling indications. ${ }^{\ddagger}$ Other antihypertensive drugs (diuretics, ACEI, |
| Stage 2 <br> Hypertension | $\geq 160$ | Or $\geq 100$ | Yes | Two-drug combination for most ${ }^{f}$ (usually thiazide-type diuretic and ACEI or ARB or BB or (CB). | as needed. |

DBP, diastolic blood pressure; SBP, systolic blood pressure.
Drug abbreviations: ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; BB, beta-blocker; CCB, calcium channel blocker.

* Treatment determined by highest BP category.
$t$ Initial combined therapy should be used cautiously in those at risk for orthostatic hy potension.
$\ddagger$ Treat patients with chronic kidney disease or diabetes to BP goal of $<130 / 80 \mathrm{mmHg}$.

