

## PATIENT INFORMATION

# HIGH BLOOD PRESSURE

### ***WHAT IS HIGH BLOOD PRESSURE?***

The heart pumps blood into the arteries and through the circulatory system. **Blood pressure** is the force of blood pushing against blood vessel walls. It's measured in the arteries and is recorded as two numbers (eg. 122/78). **Systolic pressure** is the top, larger number. It's generated by the contraction of the heart. **Diastolic pressure** is the bottom, smaller number. It's the pressure in the arteries while the heart is filling and resting between heartbeats.

Medical scientists have determined a normal range for blood pressure after studying the blood pressure of many people. Individuals whose blood pressure is consistently higher than these norms are said to have high blood pressure or "hypertension."

**High blood pressure in adults is a consistently elevated blood pressure of 140mm Hg (millimeters of mercury) systolic or higher (TOP NUMBER) and/or 90mm Hg diastolic or higher (BOTTOM NUMBER).**

### ***WHY IS HIGH BLOOD PRESSURE A CONCERN?***

High blood pressure indicates the heart is straining to pump blood through the arteries. It's unhealthy because:

- The heart can become enlarged (congestive heart failure).
- The arteries can become scarred and less elastic (arthrosclerosis). Hardened, narrowed arteries may be unable to carry the amount of blood the body's organs and tissues need.
- It is a major risk factor in the development of heart disease and stroke.
- It can lead to chronic organ damage, like chronic kidney disease and dementia.

*1.5 million Americans suffer a heart attack every year, and about 490,000 of them die of heart attacks annually.*

*500,000 Americans suffer a stroke every year, and nearly 145,000 of them die of stroke annually.*

**In about 90% of cases, the cause of high blood pressure is unknown.** But certain factors increase the likelihood that someone will develop high blood pressure:

- **Age:** The older a person gets, the more likely he or she is to develop high blood pressure.
- **Race:** African-Americans have high blood pressure more often than whites. The disease also tends to occur earlier and be more severe in African-Americans.
- **Heredity:** A tendency toward high blood pressure seems to run in families.

- **Sex:** In general, men are more likely to develop high blood pressure than women are, although this varies by age and among ethnic groups.

### ***WHAT CAN I DO TO LOWER MY BLOOD PRESSURE?***

**The following non-pharmacologic factors are important modifiable risk factors for high blood pressure:**

- **Obesity:** This is defined as being significantly overweight, usually 30% or more over ideal body weight. Obesity and blood pressure are clearly related. That's why all obese hypertensive adults should participate in weight reduction programs with the goal of getting to within 15% of their desirable body weight.
- **Sodium sensitivity:** Reducing sodium (salt) consumption can lower blood pressure in some people.
- **Alcohol consumption:** Drinking more than one ounce of alcohol a day may increase blood pressure in some people.
- **Oral contraceptives:** Women who take oral contraceptives may develop high blood pressure.
- **Physical inactivity:** A sedentary lifestyle contributes to obesity.
- **Anti-inflammatories:** Regular use of non-steroidal anti-inflammatories can elevate blood pressure.
- **Smoking**

High blood pressure usually has no symptoms. Many people have high blood pressure for years without knowing it. Uncontrolled high blood pressure can lead to stroke, heart attack, congestive heart failure, kidney failure, etc. The only way to tell whether someone has high blood pressure is to check it with a blood pressure machine.

### ***HOW DO YOU TREAT HIGH BLOOD PRESSURE?***

The most common treatments for high blood pressure are:

- **Losing weight** (in the case of overweight people)
- **Reducing intake of salt (sodium)**
- **Avoiding excess alcohol (more than one drink a day)**
- **Exercise**
- **Stop smoking**
- **Medication**

**Medication is usually prescribed if the average blood pressure exceeds 140/90. The goal blood pressure is 130/80.** A trial period is often required before the best medication or combination of medications is discovered. It's extremely important to follow instructions exactly whenever medication has been prescribed. Your doctor will help you choose the right agent for you.