

## Heart Disease

Heart disease is a broad term used to designate a number of heart health conditions, including valve and rhythm problems; however, in the United States heart disease commonly refers to atherosclerosis or the tendency to form plaque in the arteries. Atherosclerosis can lead to coronary disease and coronary disease is a leading cause of heart attacks.

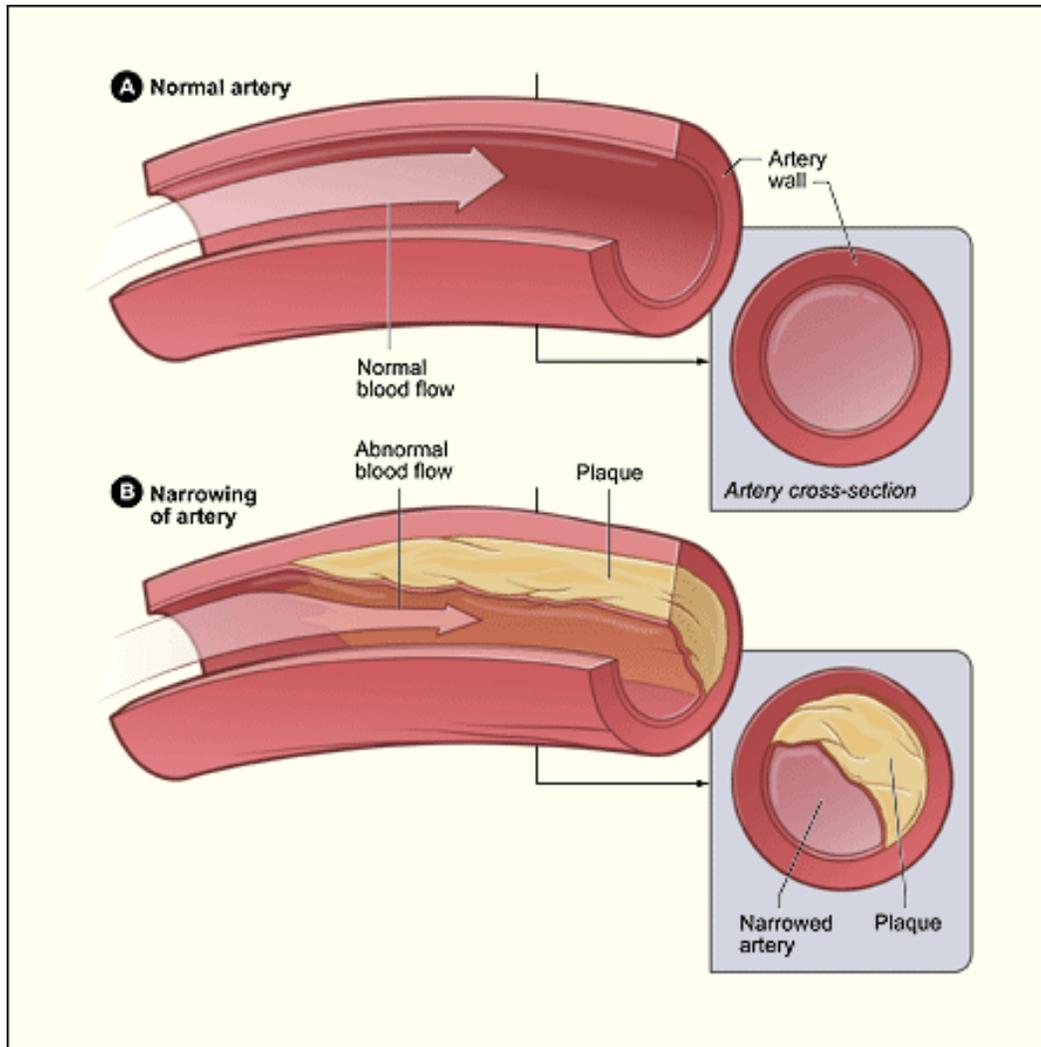
Heart disease affects both men and women. In men the disease tends to develop earlier than in women due to the natural protection from the hormone estrogen, which is abundant during childbearing years, but declines after menopause.



### What Causes Heart Disease?

Heart disease is caused mainly by inflammatory processes as a result of several factors. By far the greatest causes of heart disease are: cholesterol, nicotine from cigarette smoking, and high glucose levels. The molecules from these products act as irritants and induce inflammation in the delicate lining of the arteries (endothelium). Once an inflammatory response takes place, the arteries start to form plaque around the inflamed areas of the arteries as a way to protect the endothelium, and a narrowing of the blood vessels occurs.

A heart attack occurs when the area surrounding the plaque becomes so inflamed that it ruptures, breaks off, and forms blood clots that block the artery and cut off the blood flow to the heart. In about 50% of all cases the blockage leads to heart rhythm problems and sudden death. The cases that required hospitalization will undergo drug therapy to dissolve the clot, angioplasty to open up that artery, or surgery.



## Symptoms

The symptoms vary depending on the class of disease you have. In general the symptoms for heart disease includes, but are not limited to, the following:

- ◆ Chest pain (angina)
- ◆ Shortness of breath
- ◆ Pain, numbness, weakness or coldness in your arms or legs (when the blood vessels in those parts of your body are narrowed)
- ◆ Dizziness
- ◆ Lightheadedness
- ◆ Fainting (syncope) or near fainting

In many cases the diagnosis of heart disease may not be done until conditions worsen to the point that you have a heart attack, angina, stroke, or heart failure. Heart disease or cardiovascular disease can often be found early with regular visits to your doctor.

## **Risk Factors**

Heart disease risk factors include:

- ◆ **Age.** Older people have greater risks of damaged, narrowed arteries
- ◆ **Gender.** Men, in general, are at higher risk. Women's risks equals that of men after menopause.
- ◆ **Family history.** Genetics play an important role in heart health.
- ◆ **Smoking.** Nicotine constricts your blood vessels and carbon monoxide can damage their inner lining. Heart problems are more common in smokers than non-smokers.
- ◆ **Poor diet.** Diets high in fats, salt, cholesterol can lead to heart disease.
- ◆ **High blood pressure.** Uncontrolled high blood pressure can result in hardening and thickening of the arteries.
- ◆ **High blood cholesterol levels.** They increase the formation of plaque and atherosclerosis. Plaque can be caused by LDL (low density lipoproteins).
- ◆ **Diabetes.** Diabetes increases your risk of heart disease.
- ◆ **Obesity.** Excess weight typically worsen other risk factors.
- ◆ **Sedentary lifestyle.** Lack of exercise also is associated with many forms of heart disease and some other risk factors.
- ◆ **High stress.** Unrelieved stress in your life may damage your arteries as well as worsen other risk factors

## **Prevention**

Certain types of heart disease, such as heart defects, can't be prevented. However, you can help prevent many other types of heart disease by making the same lifestyle changes that can improve your heart disease, such as:

- ◆ Quit smoking
- ◆ Control other health conditions, such as high blood pressure, high cholesterol and diabetes
- ◆ Exercise at least 30 minutes a day on most days of the week
- ◆ Eat a diet that's low in salt and saturated fat
- ◆ Maintain a healthy weight
- ◆ Reduce and manage stress

For additional information on heart health visit:

[American Heart Association](http://www.heart.org/HEARTORG/) at <http://www.heart.org/HEARTORG/>

American Lung, Heart, and Blood Association at <http://www.nhlbi.nih.gov/>

Centers for Disease Control and Prevention at <http://www.cdc.gov/>