



what you need to **Know**

A special educational series

Atherosclerosis & Coronary Heart Disease

Quick Facts:

- » Atherosclerosis is the primary cause of coronary heart disease and stroke. Together they kill more Americans every year than all cancers combined.
- » Atherosclerosis is a slow and progressive condition that is often the single underlying cause of coronary heart disease – the leading cause of death in the United States.
- » Approximately 1.2 million Americans had heart attacks in 2007. One American will suffer a coronary event about once every 26 seconds, and every 60 seconds someone will die from one.
- » Before turning 35, two out of three Americans will have plaque build-up in their arteries.
- » High LDL cholesterol is the leading risk factor for the development of atherosclerosis.
- » The total estimated direct and indirect cost of treating coronary heart disease in 2008 is \$156.4 billion.

www.athero.com

What is Atherosclerosis?

Atherosclerosis [pronounced *ath-uh-roh-skluh-roh-sis*], or athero for short, is the gradual deposit of plaque – fatty substances and other cells – in the walls of your arteries. Its name comes from the Greek words athero (meaning gruel or paste) and sclerosis (hardness). It is commonly known as hardening of the arteries.

For many people, the disease may start early in life. As we get older, arterial plaque can build up and restrict blood flow. The pressure from these deposits causes the artery walls to thicken and stiffen until eventually the arteries become blocked and closed. These blockages can lead to **heart attack, heart failure, kidney failure, stroke, and aneurysms.**



For many, Atherosclerosis is a silent disease, with no visible signs or symptoms. Most people don't realize they suffer from Athero until they have a heart attack or stroke.

That's because, often, there are no symptoms until the artery becomes completely blocked or severely narrowed. That's why it is important to work with your doctor to identify the controllable and uncontrollable risk factors for Atherosclerosis.

Risk Factors and Treatment Options

Atherosclerosis often starts early, with two of every three of us already suffering from plaque build-up in our arteries by the age of 35.

The risk factors are many, with smoking, elevated cholesterol, high blood pressure, unhealthy eating habits, and family history joining aging as the primary culprits.

Because plaque tends to build up slowly in the arteries, Athero usually has no symptoms until the artery

becomes severely narrowed or completely blocked.

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There are two types of plaque that can form in the artery walls:

- » **Stable** plaque has a thick fibrous cap made of smooth muscle cells. As plaque grows, it can reduce blood flow to the brain, heart, or other parts of the body
- » **Unstable** plaque is much more dangerous because it has a thin cap. As a result, it may rupture, causing an acute, life-threatening heart attack

Whether the plaque in your arteries grows as stable or unstable, all plaque contains a lipid core — fatty deposits made of cholesterol and other cells.

Cholesterol is a fatty substance in your blood (lipid) that is naturally produced by your body. Whether it comes from the foods you eat or from your body, healthy amounts of cholesterol in your blood are okay. The problem is that when there's too much cholesterol in your blood, it can build up in the walls of your arteries and form plaque.

Over time, plaque can clog and narrow your arteries, which may slow blood flow and reduce the supply of oxygen to your vital organs. This process of plaque development is made worse when the lining of your arteries, known as the endothelium, is damaged by other risk factors like high blood pressure, stress, cigarette smoking, or diabetes.

Medication May Help

If your doctor thinks you are at risk for atherosclerosis he will most likely recommend lifestyle changes like diet and exercise. If these aren't enough, he might recommend medication. Various medicines can slow, or sometimes even reverse, the effects of atherosclerosis. Some common choices your doctor might recommend are:

- » Cholesterol medications – some statins have been shown to slow the progression of atherosclerosis.
- » Anti-platelet medications – these can reduce the likelihood that platelets will clump and form blood clots in arteries.
- » Anticoagulants – these help thin your blood and prevent clots from forming.
- » Blood pressure medications – medications to control blood pressure and help slow the progression of atherosclerosis

Cost to the U.S. Health Care System

The direct and indirect costs of treating Atherosclerosis victims are huge. Treating coronary heart disease costs \$156.4 billion annually, and for stroke the estimated annual treatment cost is \$65.5 billion. Those numbers are set to grow, parallel to our aging population, millions of whom are at risk due to Atherosclerosis.

Women and Heart Disease:

The deadly results of Athero have a huge impact on women in the U.S.

Heart Disease is the leading cause of death of American women and kills *32 percent* of them.

8 million American women are currently living with heart disease: 10 percent of women ages 45 to 64, and 25 percent of women age 65 and over.

Nearly *13 percent* of women age 45 and over have had a heart attack.

www.womenheart.org

Men and Athero:

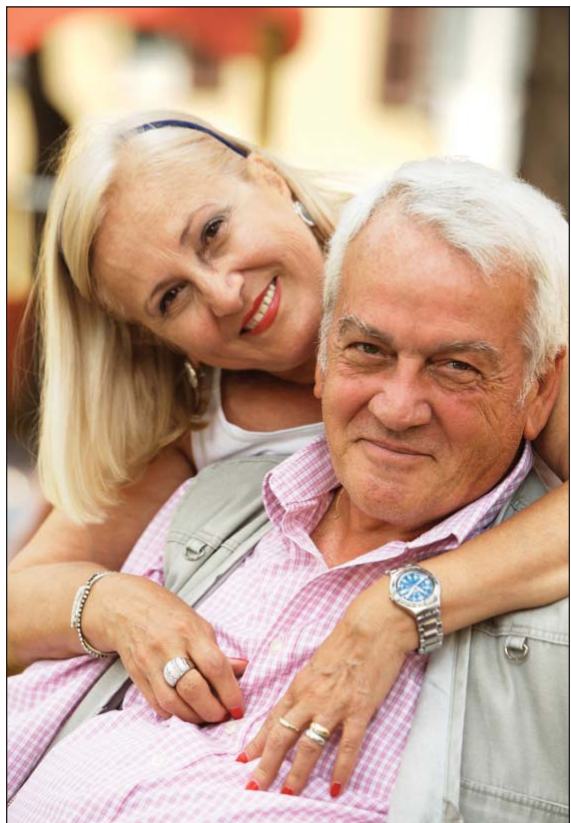
About one in three adult men have some form of cardiovascular disease.

In 2005, cardiovascular disease was the first listed diagnosis of 3,136,000 males discharged from short-stay hospitals.

Cardiovascular disease, diseases of the heart, and stroke combine to be the leading causes of death for White Males, Black Males, Hispanic or Latino Males, Asian/Pacific Islander Males, and American Indian Males.

www.americanheart.org

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Take Action Now. Educate Yourself About the Risks of Athero

Coronary heart disease and stroke kill more Americans every year than all cancers *combined*. Atherosclerosis is, more often than not, the underlying cause. Each year, atherosclerosis is linked to nearly 1 in 4 deaths in the United States, and yet most people may not know if they're at risk.

A recent Harris survey found that despite its threat, only about half of Americans understand the deadly danger of Athero. While aware of risk factors and consequences of atherosclerosis, Americans are uninformed about the condition itself.

The first thing you can do about atherosclerosis is to educate yourself. Understand the risk factors that contribute to the progression of Athero and learn what can happen if the buildup of plaque in your arteries is allowed to progress. Next, do what you can to reduce your risks for the consequences of the disease.

Most doctors agree that eating a healthy, low-fat, low-cholesterol diet and getting regular exercise are two of the most important things you can do. Last but not least, every plan should start by talking with your doctor.

Following are some questions to ask your doctor at your next visit:

- » Do my risk factors contribute to the development of atherosclerosis?
- » What can I do to lower my risk?
- » Can you recommend specific lifestyle changes that will reduce my risk?
- » How do my cholesterol levels affect the progression of atherosclerosis?
- » What do I need to do to maintain or lower my cholesterol levels?
- » Are there any medications that can help slow the progression of atherosclerosis?
- » How does smoking contribute to the progression of atherosclerosis?

By visiting SeniorsForCures.org, you can take an important step in educating yourself by watching a video that takes you through an artery affected by atherosclerosis. The video takes a journey deep inside your body to see how risk factors like high levels of bad cholesterol, smoking, and high blood pressure help contribute to the development and progression of atherosclerosis.

Making healthy lifestyle choices and talking to your doctor are good first steps in the fight against atherosclerosis.

About The Senior Center for Health & Security

Through the power of education, The Senior Center for Health and Security seeks to enhance the lives of older Americans. It works to promote the promise and potential of innovative medical research and development and to highlight its critical importance in ensuring seniors live longer, healthier lives.

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