

Risks of Smoking?

The chemicals in tobacco smoke harm your heart and blood vessels in many ways. For example, they:

- Thicken your blood and make it harder for your blood to carry oxygen.
- Increase your blood pressure and heart rate, which makes your heart work harder than normal.
- Lower your HDL cholesterol (sometimes called "good" cholesterol) and raise your LDL cholesterol (sometimes called "bad" cholesterol). Smoking also increases your triglyceride level. Triglycerides are a type of fat found in the blood.
- Disturb normal heart rhythms.
- Damage blood vessel walls, making them stiff and less elastic. This narrows the blood vessels and adds to the damage caused by unhealthy cholesterol levels.
- Contribute to inflammation, which may trigger plaque buildup.

Smoking and Heart Disease Risk

Smoking is a major risk factor for [coronary heart disease](#) (CHD). CHD is a condition in which plaque builds up inside the coronary arteries. These arteries supply your heart muscle with oxygen-rich blood.

Plaque is made up of fat, cholesterol, calcium, and other substances found in the blood. When plaque builds up in the arteries, the condition is called [atherosclerosis](#).

Plaque narrows the arteries and reduces blood flow to your heart muscle. The buildup of plaque also makes it more likely that blood clots will form in your arteries. Blood clots can partly or completely block blood flow.

Over time, smoking contributes to atherosclerosis and significantly increases your risk of having and dying from heart disease, [heart failure](#), or a [heart attack](#).

Compared with people who don't smoke, people who smoke can be up to two to three times more likely to have heart disease and twice as likely to have a heart attack. The risk of having or dying from a heart attack is even higher among people who smoke and already have heart disease.

For some people, such as women who use oral contraceptives and people who have diabetes, smoking poses an even greater risk to the heart and blood vessels.

Smoking by itself is a major risk factor for heart disease. When combined with other risk factors—such as [unhealthy blood cholesterol levels](#), [high blood pressure](#), and [overweight or obesity](#)—smoking further raises the risk of heart disease.

Any amount of smoking, even light or occasional smoking, harms your body. Research suggests that smoking can even cancel out the benefits of other efforts to reduce heart disease risk, such as taking aspirin or medicines to lower cholesterol.

Smoking and Peripheral Arterial Disease Risk

[Peripheral arterial disease](#) (P.A.D.) is a disease in which plaque builds up in the arteries that carry blood to your head, organs, and limbs. P.A.D. usually affects the arteries that carry blood to your legs.

Blocked blood flow in the leg arteries can cause cramping, pain, weakness, and/or numbness in your hips, thighs, and calf muscles. Blocked blood flow also can raise your risk of getting an infection in the affected limb. It may be hard for your body to fight the infection.

If severe enough, blocked blood flow can cause gangrene (tissue death). In very serious cases, this can lead to leg amputation.

If you have P.A.D., your risk of heart disease and heart attack is six to seven times greater than the risk for people who don't have P.A.D. Smoking is a major risk factor for P.A.D. Your risk of P.A.D. increases four times if you smoke or have a history of smoking.

Smoking even one or two cigarettes a day can interfere with P.A.D. treatments. People who smoke and people who have diabetes are at highest risk for P.A.D. complications, including gangrene in the leg from decreased blood flow.

What Are the Risks of Secondhand Smoke?

Secondhand smoke is the smoke that comes from the burning end of a cigarette, cigar, or pipe. Secondhand smoke also refers to smoke that's breathed out by a person who is smoking.

Secondhand smoke contains many of the same harmful chemicals that people inhale when they smoke. It damages the heart and blood vessels in the same ways that active smoking does. Secondhand smoke greatly increases the risk of heart attack and death.

What Are the Risks of Cigar and Pipe Smoke?

Researchers know less about how cigar and pipe smoke affects the heart and blood vessels than they do about cigarette smoke. However, the smoke from cigars and pipes contains the same harmful chemicals as the smoke from cigarettes. Also, studies have shown that people who smoke cigars are at increased risk of heart disease.

How Does Smoking Affect the Heart and Blood Vessels?

Cigarette smoking causes about 1 in every 5 deaths in the United States each year. It's the main preventable cause of death and illness in the United States.

Smoking harms nearly every organ in the body, including the heart, blood vessels, lungs, eyes, mouth, reproductive organs, bones, and digestive organs. This article focuses on how smoking affects the heart and blood vessels.

Other Diseases and Conditions Index articles, such as [COPD](#) (chronic obstructive pulmonary disease), [Bronchitis](#), and [Cough](#), discuss how smoking affects the lungs.

Overview

Smoking and Your Heart and Blood Vessels

The chemicals in tobacco smoke harm blood cells and can damage the function of the heart and the structure and function of blood vessels. This damage increases your risk of [atherosclerosis](#) (ath-er-o-skler-O-sis).

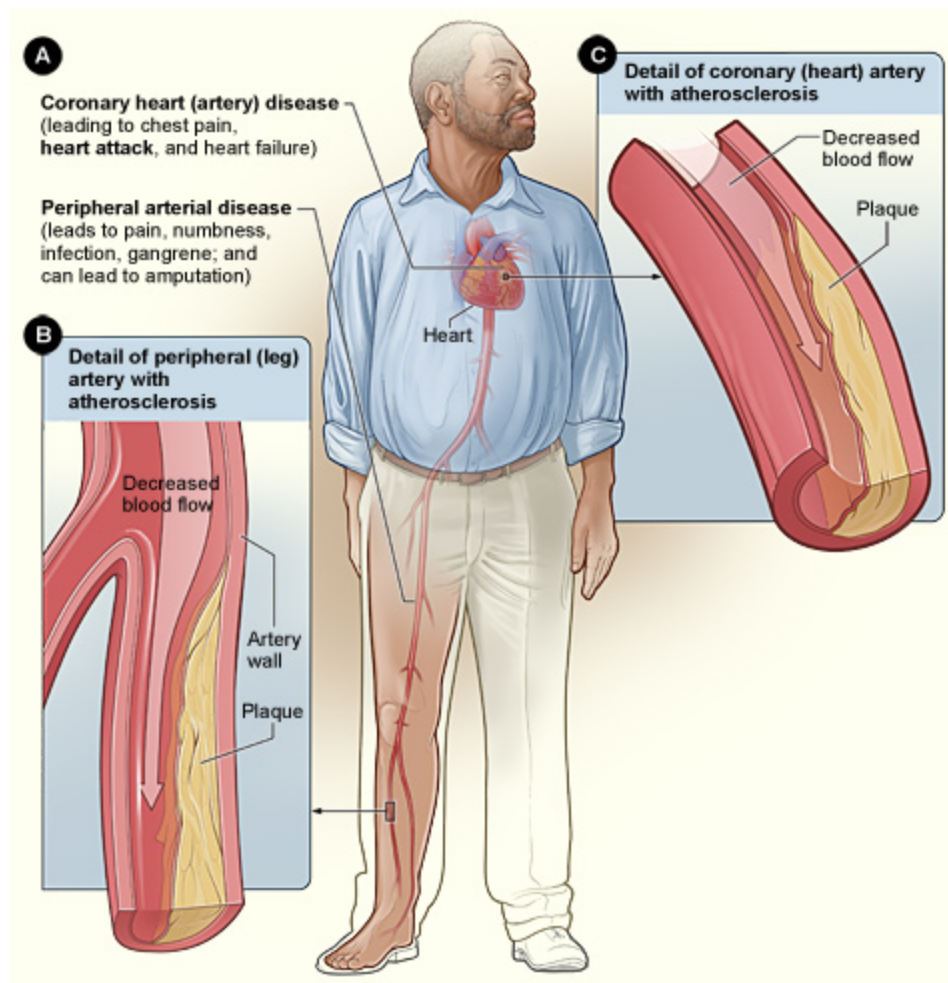
Atherosclerosis is a disease in which a fatty substance called plaque (plak) builds up in the arteries. Over time, plaque hardens and narrows your arteries. This limits the flow of oxygen-rich blood to your organs and other parts of your body.

[Coronary heart disease](#) (CHD), also called coronary artery disease, occurs if plaque builds up in the coronary (heart) arteries. Over time, CHD can lead to [chest pain](#), [heart attack](#), [heart failure](#), [arrhythmias](#) (ah-RITH-me-ahs), or even death.

Smoking by itself is a major risk factor for heart disease. When combined with other risk factors—such as [unhealthy blood cholesterol levels](#), [high blood pressure](#), and [overweight or obesity](#)—smoking further raises the risk of heart disease.

Smoking also is a major risk factor for [peripheral arterial disease](#) (P.A.D.). P.A.D. is a condition in which plaque builds up in the arteries that carry blood to the head, organs, and limbs. People who have P.A.D. are at increased risk of heart disease, heart attack, and stroke.

Smoking and Atherosclerosis



The illustration shows how smoking can affect arteries in the heart and legs. Figure A shows the location of coronary heart (artery) disease and peripheral arterial disease. Figure B shows a detailed view of a leg artery with atherosclerosis—plaque buildup that's partly blocking blood flow. Figure C shows a detailed view of a coronary (heart) artery with atherosclerosis.

Any amount of smoking, even light smoking or occasional smoking, damages the heart and blood vessels. For some people, such as women who use oral contraceptives and people who have diabetes, smoking poses an even greater risk to the heart and blood vessels.

Secondhand smoke also can harm the heart and blood vessels. Secondhand smoke is the smoke that comes from the burning end of a cigarette, cigar, or pipe. Secondhand smoke also refers to smoke that's breathed out by a person who is smoking.

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Benefits of Quitting Smoking and Avoiding Secondhand Smoke

One of the most important things you can do to reduce your risk of heart disease is to avoid tobacco smoke. Don't ever start smoking. If you already smoke, quit. No matter how much or how long you've smoked, quitting will benefit you.

Also, avoid secondhand smoke. Don't go to places where smoking is allowed, and ask friends and family members who smoke not to do it in the house and car.

Quitting smoking will reduce your risk of developing and dying from heart disease. Over time, quitting also will decrease your risk of atherosclerosis and blood clots.

If you smoke and already have heart disease, quitting smoking will reduce your risk of [sudden cardiac death](#), a second heart attack, and death from other chronic diseases.

Researchers have studied communities that have banned smoking at worksites and in public places. The number of heart attacks in these communities dropped significantly. Researchers think these results are due to a decrease in active smoking and reduced exposure to secondhand smoke.

Outlook

Smoking or being exposed to secondhand smoke damages the heart and blood vessels in many ways. It also is a major risk factor for developing heart disease or dying from it.

Quitting smoking and avoiding secondhand smoke can begin to reverse heart and blood vessel damage and reduce heart disease risk right away.

Quitting smoking is possible, but it can be hard. Millions of people have successfully quit smoking and remained nonsmokers. A variety of strategies, programs, and medicines are available to help you quit smoking.

Not smoking is an important part of a heart healthy lifestyle. A heart healthy lifestyle also includes following a healthy diet, maintaining a healthy weight, and doing [physical activity](#) regularly.