

What is heart disease?



Heart disease occurs when a fatty substance called plaque builds up on the walls inside your heart's coronary arteries, which supply blood to the heart. This buildup of plaque, which occurs over time, is called *atherosclerosis*, or hardening of the arteries. This can block the flow of blood to the heart.

Other names your healthcare provider may use for heart disease are:

- Coronary heart disease (CHD)
- Coronary artery disease (CAD)
- Cardiovascular disease (CVD)

What causes heart disease?

Two of the most common causes of heart disease are:

- **High cholesterol level.**
Cholesterol is a fatlike substance in your blood. Your body produces most of it. Some of it comes from the food you eat. There are two major kinds of cholesterol:
 - **“Bad” cholesterol**, called *LDL*. This is the main part of the plaque that can build up and block your arteries.
 - **“Good” cholesterol**, called *HDL*. This can help keep the bad cholesterol from building up in your arteries.
- **High blood pressure**, also called *HBP* or *hypertension*.
When your heart beats, it creates pressure to push blood through your arteries and veins. Arteries narrowed by plaque need more pressure to push blood through. High pressure can stretch out arteries. This can cause:
 - **Weak arteries.** Weakened arteries can burst in the brain and cause a stroke.
 - **Scarred arteries.** Stretched arteries can get tiny tears, which can cause scars. The tears and scars can catch and hold plaque, blood cells, and other substances in the blood.
 - **Blood clots.** Blood cells trapped by scars and tears in the arteries can form clots. Clots can break off and block other blood vessels and cause a heart attack or stroke.

Why is heart disease dangerous?

Heart disease can lead to:

- **Angina**, described as chest pain or squeezing or pressure in the chest. Chest pain occurs when narrowed coronary arteries do not allow enough blood to flow to your heart.
- **Heart attack**, also called *myocardial infarction*.
Heart attack occurs when a coronary artery becomes completely blocked so no blood can flow through it, and part of the heart muscle becomes damaged or dies.
- **Heart failure.**
This occurs when heart disease weakens the heart muscle. The weakened heart cannot pump out as much blood as your body needs.

Talk to your healthcare provider
about any questions
you may have about your heart.

Signs and symptoms of a heart attack

The heart depends on the oxygen-rich blood that is supplied by the arteries. A heart attack happens when the flow of oxygen-rich blood to the heart muscle suddenly gets blocked. If this blood supply does not start flowing to the heart again quickly, that section of heart muscle starts to die.

What causes a heart attack?

Heart attacks are usually caused by plaque that builds up in the arteries.

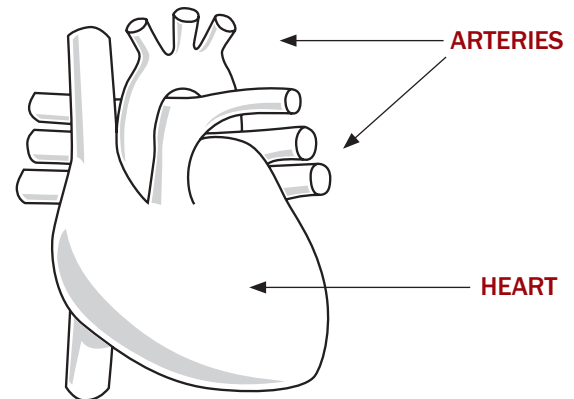
Plaque is made up of fat, cholesterol, and other substances.

Plaque thickens and hardens the arteries. That makes it difficult for blood to get to the heart muscle.

If some plaque breaks apart in an artery, a blood clot forms. If the clot is big enough, it can block the flow of blood to the heart and cause a heart attack.

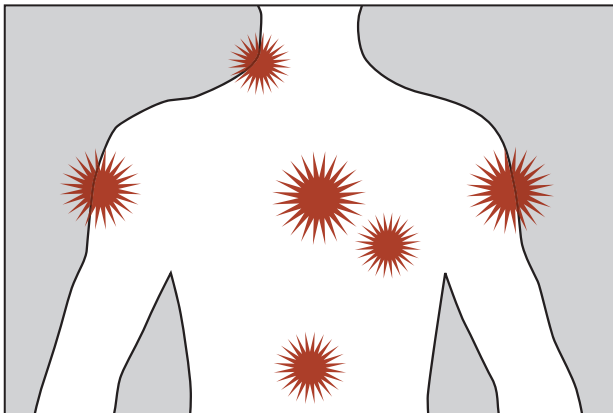
What can you do?

If you have heart attack symptoms, it is important to get emergency medical help right away. Early treatment can save your life and limit damage to your heart.



Watch for these heart attack symptoms:

- Chest pain or pressure in the center or left side of your chest. It may feel like your chest is being squeezed or feels full. The pain or discomfort may come and go or last for minutes
- Discomfort in one or both of your arms, your back, neck, jaw, or the upper part of your stomach
- Shortness of breath. This can happen before or with chest pain or discomfort
- Feeling sick to your stomach, having to throw up, feeling light-headed or dizzy, or breaking out in a cold sweat



Women may not always experience chest pain or pressure symptoms. There are some symptoms that women may be more likely than men to experience:

- Shortness of breath
- Feeling sick to the stomach, having to throw up
- Back pain or jaw pain

If you—or someone else—is having a heart attack, call 911 immediately for medical attention. A life may depend on it.