

Coronary Artery Disease (CAD)

Coronary artery disease (CAD) is the most common type of heart disease in the United States. For some people, the first sign of CAD is a heart attack.

You and your health care team may be able to help you reduce your risk for CAD.

Causes of CAD

CAD is caused by plaque buildup in the walls of the arteries that supply blood to the heart (called coronary arteries) and other parts of the body. Plaque is made up of deposits of cholesterol and other substances in the artery. Plaque buildup causes the inside of the arteries to narrow over time, which could partially or totally block the blood flow. This process is called atherosclerosis.

Too much plaque buildup and narrowed artery walls can make it harder for blood to flow through your body. When your heart muscle doesn't get enough blood, you may have chest pain or discomfort, called angina. Angina is the most common symptom of CAD.



Over time, CAD can weaken the heart muscle. This may lead to heart failure, a serious condition where the heart can't pump blood the way that it should. An irregular heartbeat, or arrhythmia, also can develop.

Diagnosing CAD

To find out your risk for CAD, your health care team may measure your blood pressure, cholesterol, and sugar levels. Being overweight, physical inactivity, unhealthy eating, and smoking tobacco are risk factors for CAD. A family history of heart disease also increases your risk for CAD. If you're at high risk for heart disease or already have symptoms, your doctor can use several tests to diagnose CAD. Other symptoms of a heart attack could include unusual or unexplained tiredness and nausea or vomiting.

Test	What it Does
ECD or EKG (electrocardiogram)	Measures the electrical activity, rate, and regularity of your heartbeat.
Echocardiogram	Uses ultrasound (special sound wave) to create a picture of the heart.
Exercise stress test	Measures your heart rate while you walk on a treadmill. This helps to determine how well your heart is working when it has to pump more blood.
Chest X-ray	Uses x-rays to create a picture of the heart, lungs, and other organs in the chest.
Cardiac catheterization	Checks the inside of your arteries for blockage by inserting a thin, flexible tube through an artery in the groin, arm, or neck to reach the heart. Health care professionals can measure blood pressure within the heart and the strength of blood flow through the

Test	What it Does
	heart's chambers as well as collect blood samples from the heart or inject dye into the arteries of the heart (coronary arteries).
Coronary angiogram	Monitors blockage and flow of blood through the coronary arteries. Uses X-rays to detect dye injected via cardiac catheterization.

Reducing Your Risk for CAD

If you have CAD, your health care team may suggest the following steps to help lower your risk for heart attack or worsening heart disease:



- ✓ Lifestyle changes, such as eating a healthier (lower sodium, lower fat) diet, increasing physical activity, and quitting smoking.
- ✓ Medications to treat the risk factors for CAD, such as high cholesterol, high blood pressure, an irregular heartbeat, and low blood flow.
- ✓ Surgical procedures to help restore blood flow to the heart.

Look forward to Better Heart's next issue: "Heart Disease Risk Factors, and How To Address Them"