



About Coronary Artery Disease

Coronary artery disease (CAD) occurs when the arteries that supply blood and oxygen to the heart become damaged and narrowed. This can happen when plaque—made up of substances found in your blood including fat, cholesterol, and calcium—builds up inside these arteries. When too much plaque builds up, it causes a condition called atherosclerosis, in which blood flow to the heart is reduced.

► Causes

There are a number of factors that increase your risk for developing CAD. Some you cannot control, such as being over the age of 65 and having a family history of heart disease. But many risk factors for CAD can be controlled with lifestyle changes, the proper medication, and medical procedures. These include:

- Unhealthy blood cholesterol levels
- High blood pressure
- Diabetes
- Smoking
- Obesity
- Physical inactivity
- Stress

► Symptoms

Some people with CAD have no symptoms, which is why it's sometimes called a "silent" disease. A person may not know they have this condition until they develop complications. For others, symptoms may include:

- Angina or chest pain
- Steady pain in the shoulder, arm, neck, jaw, or back
- Rapid or irregular heartbeat
- Sweating
- Nausea or vomiting
- Shortness of breath
- Dizziness

Women may have different symptoms than men. Women are less likely to present with symptoms of chest discomfort as compared to men. To learn more about symptoms, go to [MindYourHeartFacts.com](https://www.mindyourheartfacts.com).

CAD and the Heart Disease Continuum

It's important to protect your heart, including getting tested if you have risk factors for CAD and following your treatment plan if you have been diagnosed with this condition. Heart disease can progress over time, a process that is sometimes called the heart disease continuum.

This may start with risk factors for CAD, such as high blood pressure, diabetes, obesity, and smoking. These risk factors can lead to atherosclerosis, which can progress to CAD. If left untreated, CAD can lead to more serious health conditions, including stroke, heart attack, and congestive heart failure, in which the heart is not able to pump blood to the rest of the body as well as it should.



Detecting and Monitoring Coronary Artery Disease

If you have coronary artery disease (CAD) or risk factors for this condition, there are a number of tests your doctor may recommend to help detect and monitor it. These include the following:

► **Electrocardiogram (EKG)**

An EKG measures the electrical activity of your heart. This can tell your doctor if you have a regular heartbeat and how fast it is.

► **Echocardiogram**

This test uses ultrasound to create a picture of the size and shape of your heart and review how well it's working.

► **Stress Tests**

Stress tests can help your doctor determine how well your heart is functioning under conditions of stress when the heart is working harder and beating faster, thus requiring more blood and oxygen. There are several types of stress tests:

Exercise Stress Test

In this test, your heart rate is measured by an EKG while you walk or run on the treadmill or ride a stationary bike. The test starts slowly and builds up in pace. Your heart rate will increase just like it does when you exercise normally. If you have any unusual reactions, such as being out of breath, feeling faint, or having chest palpitations, tell the attending technician or your doctor immediately. Generally, exercise test time is 15 minutes or less.

Nuclear Stress Test

This test can provide information on parts of the heart that don't function normally. Using a radioactive tracing material that is injected into your bloodstream, this test is performed by comparing pictures of your heart when it is stressed and when it is at rest. This procedure can be used with a pharmacologic stress medication if you are unable to exercise to the level necessary to complete the test. The medication simulates the effects of physical activity by increasing blood flow to your heart.

How CAD Is Treated

Treatments for CAD include over-the-counter and prescription medications and medical procedures. Your doctor may also recommend lifestyle changes, such as a heart-healthy diet, regular physical activity, and stress reduction.

Help Save a Life: Learn CPR

Four out of five cardiac arrests happen at home. That's why it's important to learn CPR — you may save the life of someone you love. CPR is a simple tool that anyone can learn. To find a training class in your area, go to the American Heart Association website, Heart.org.

Learn More About CAD

To learn more about how CAD is diagnosed, treated, and monitored, visit MindYourHeartFacts.com



Heart-healthy Lifestyle Tips

You can help protect your heart health with the following lifestyle changes:

► Eat a Heart-healthy Diet

- Choose a diet rich in vegetables and fruits, fat-free dairy products, and low-fat sources of protein such as white meat chicken, fish, and soy products
- Avoid trans fats, found in fast foods, fried foods, and packaged snacks
- Try to eat foods high in omega-3 fatty acids at least twice a week. These include salmon, tuna, mackerel, or other oily fish

► Get Regular Exercise

If your doctor approves it, regular physical activity can help your heart health. Aim for 30 minutes of exercise on most days. If you haven't been physically active for a while, be sure to start slowly and build up gradually. You may want to try the following types of exercise:

- Walking, running, bicycling, swimming, or dancing
- Yard work, such as mowing the lawn; housework, including vacuuming and washing windows
- Water aerobics classes at a YMCA or local health club

Quiz: Detecting, Monitoring, and Treating CAD

Test your knowledge of how CAD is detected, monitored, and treated.

- CAD can be detected and monitored with which of the following tests?**
 - a. Stress test
 - b. EKG
 - c. Echocardiogram
 - d. All of the above
- A stress test can be done either with exercise or using a pharmacologic agent.**
 - a. True
 - b. False
- If CAD isn't treated, it can lead to which serious condition?**
 - a. Stroke
 - b. Heart attack
 - c. Heart failure
 - d. All of the above
- How is CAD treated?**
 - a. Over-the-counter medications
 - b. Prescription medications
 - c. Medical procedures
 - d. Lifestyle changes
 - e. All of the above

Learn More About a Heart-healthy Lifestyle

For more information about heart-healthy lifestyle changes that can help prevent and manage CAD, go to MindYourHeartFacts.com

Answers on next page.



Keep Working With Your Doctor

If you have CAD or risk factors for this condition, it's important that you and your doctor communicate often and work closely together. Your role in your care is central to your own well-being, but your doctor is your closest adviser and ally in the proper management of your health.

The following tips can help you work closely with your doctor:

► *Join Mind Your Heart and Get a Doctor Discussion Guide*

Tips in the guide can help you make the most of your doctor visits, and the suggested questions may help you get the information you need. To join, go to MindYourHeartFacts.com/join.

► *Stay Informed*

Keep learning about CAD—it may help you feel more confident about partnering with your doctor to get an accurate diagnosis. Your doctor should be your primary source of information about your health, but you can also find reliable information about CAD from the following sources:

American Heart Association

The AHA provides information and education about cardiac care in an effort to reduce heart disease and stroke. Visit Heart.org to learn more.

WomenHeart

WomenHeart works at providing education, support, and hope to millions of women while ensuring that every woman with heart disease has access to prevention, early detection, an accurate diagnosis, and the proper treatment. For more information, visit WomenHeart.org.

► *Questions for Your Doctor*

Here are some questions that can help you get the conversation started with your doctor:

- How do I know if a symptom is due to CAD?
- How are women's CAD symptoms different from men's?
- Based on my risk factors and symptoms, do you think I may have CAD?
- Are there tests that you recommend to help diagnose CAD?
- Do you recommend lifestyle changes based on my risk factors for CAD?

Visit Mind Your Heart

Get the information you need about CAD and lifestyle tips, and join the *Mind Your Heart* program to receive periodic updates that can help you. It's easy and free—just go to MindYourHeartFacts.com

Answers: 1. d, 2. a, 3. d, 4. e