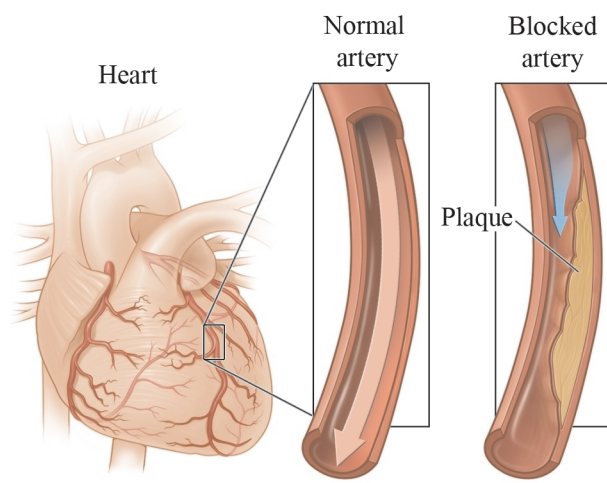


Heart Disease: Chest Pain (Angina)



Chest pain caused by your heart is called angina. It happens when your heart does not get enough blood. Angina is caused by coronary artery disease (CAD), which occurs when the major blood vessels to the heart become narrow or blocked. CAD increases your risk for a heart attack.

The different types of angina include:

- **Stable angina:** This type of chest pain can be predicted. People who have it know when it may happen, such as when they exercise or do activities. It goes away when they rest or stop the activity.
- **Unstable angina:** This is a change in the usual pattern of stable angina. Or it may be a new chest discomfort that means blood flow to the heart has decreased. In unstable angina, chest pain happens when you are resting or with little activity. It may be more painful and last longer.
- **Angina caused by coronary artery spasms:** This type of angina happens when a coronary artery suddenly contracts (or spasms). The spasm reduces blood flow to the heart. If

severe, a spasm can block blood flow and cause a heart attack.

- **Variant angina (Prinzmetal's angina):** This type of angina is also caused by coronary artery spasm. It usually occurs when you are at rest and lasts 2 to 5 minutes. It happens more often at night, in the early morning, or at the same time of the day.

What is the difference between angina and a heart attack?

With both a heart attack and angina, part of your heart muscle is not getting enough oxygen because of reduced or blocked blood flow in your coronary arteries. With angina, the lack of oxygen is temporary. Permanent heart damage doesn't occur. But during a heart attack, the lack of oxygen lasts longer and damages the heart.

With stable angina, you may notice the problem only when your heart is working harder and needs more oxygen, such as during exercise. The pain goes away when you rest, because your heart no longer needs as much oxygen.

With unstable angina, a clot may be partially blocking your coronary artery, or it completely blocks it for a short time. But the clot breaks up either by itself or after treatment with medicines, so permanent heart damage does not occur.

Use the following information to help reduce your risk of heart attack.

What should you do at home?

Lifestyle changes

- If you smoke, quit. Avoid secondhand smoke. People with heart disease who keep smoking are much more likely to die from a heart attack than those who quit. Ask your doctor about stop-smoking programs and medicines. They can raise your chances of quitting.

- Eat a heart-healthy diet that is low in cholesterol, saturated fat, and salt and is high in fiber. Eat 2 servings of fish a week (but no more than that). Ask your doctor or registered dietitian for more details.
- You can have sex, but do not take Viagra, Levitra, or Cialis if you are taking nitroglycerin or other drugs for angina that contain nitrates. These drugs include isosorbide dinitrate and isosorbide mononitrate.

Medicines

- If your doctor has given you nitroglycerin, keep it with you at all times, and make sure it has not expired. If you have chest pain, sit down and rest, and take a dose of nitroglycerin as directed. If chest pain gets worse or is not getting better within 5 minutes, **call 911** right away.
- If your doctor advises it, take 1 low-dose (81 mg) aspirin a day to prevent heart attack. Talk to your doctor if you have other health problems that might keep you from taking aspirin.
- Take your medicines as directed. Call your doctor if you think you are having a problem with your medicine.

Activity

- Talk to your doctor about starting an exercise program. Regular exercise will lower your risk of heart attack.
- If an activity causes angina, slow down, and talk to your doctor before you exercise again. Ease into activities in the morning. After meals, rest, or do only light exercise.
- If your doctor has not set you up with a cardiac rehab program, ask whether it is right for you. Cardiac rehab includes supervised

exercise, help with diet and lifestyle changes, and emotional support. It may reduce your risk of future heart problems.

When should you call for help?

Call 911 anytime you think you may need emergency care. For example, call if:

- You fainted.
- You have been diagnosed with angina, and you have chest pain that does not go away with rest or is not getting better within 5 minutes after you take a dose of nitroglycerin.
- You have symptoms of a heart attack. These may include:
 - Chest pain or pressure, or a strange feeling in the chest.
 - Sweating.
 - Shortness of breath.
 - Nausea or vomiting.
 - Pain, pressure, or a strange feeling in the back, neck, jaw, or upper belly or in one or both shoulders or arms.
 - Lightheadedness or sudden weakness.
 - A fast or irregular heartbeat.

After you call 911, the operator may tell you to chew 1 adult-strength or 2 to 4 low-dose aspirin. Wait for an ambulance. Do not try to drive yourself.

Call your doctor now or seek immediate medical care if:

- You are having chest pain more often than usual, even if it goes away when you rest or take nitroglycerin.
- You feel dizzy or lightheaded, or you feel like you may faint.