

Unstable Angina

Angina is a feeling of pain, tightness, pressure, or discomfort in and around your chest. It can occur if your heart muscle isn't getting enough oxygen-rich blood. There are 2 kinds of angina. They are stable and unstable.

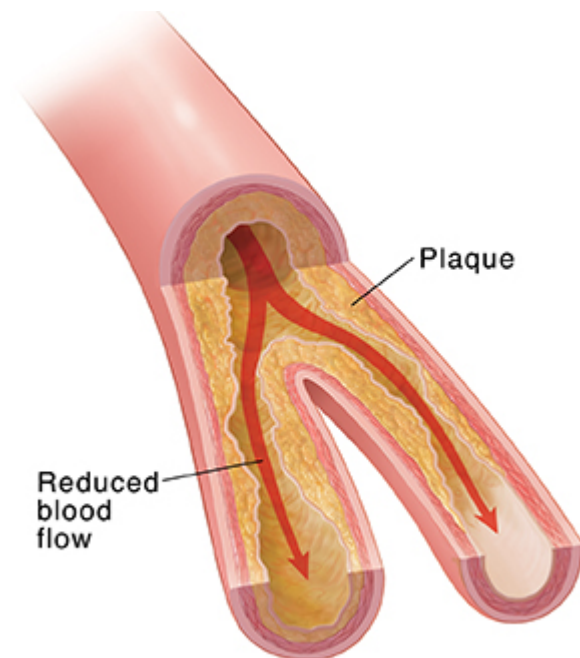
Stable angina occurs at times you can predict. It is constant in how long it lasts and how intense it is. This might be during or after exercise or when exerting yourself. This type of angina can often be managed with medicine or rest.

Unstable angina does not occur at predictable times. It can be more intense and last longer. And it may not respond to the usual forms of treatment. It's a warning that a heart attack (acute myocardial infarction) is possible in the near future. For this reason, it should be treated right away.

If you have questions, be sure to ask your healthcare provider.

Coronary disease causes angina

Your heart is a muscle. It gets oxygen from the blood sent through the coronary arteries. Coronary artery disease (CAD) occurs when fatty material (plaque) builds up within your artery walls. Plaque irritates and inflames the artery wall. The buildup of plaque can reduce blood flow to your heart. This reduces the amount of oxygen your heart gets. The lower amount of oxygen can cause the chest pain of angina. Other symptoms of angina include lightheadedness, shortness of breath, nausea, abdominal (belly) pain, or unexplained sweating.



The difference between stable and unstable angina

- **Stable angina.** This type of angina occurs most often during exercise or times of stress. Stable means that this type of angina is consistent and predictable. Stable angina goes away when you rest or take nitroglycerin. This is a medicine that allows the heart muscle to relax. It helps increase blood flow through your arteries.

- **Unstable angina.** This type of angina is caused when a piece of plaque breaks off (ruptures). A blood clot can form at the site of the rupture. The clot reduces blood flow even more. It can also occur if the artery gets narrower over time. Unstable angina is described as chest pain that occurs unpredictably even at rest. You may also be diagnosed with unstable angina if you have stable angina that becomes more severe, lasts longer, or that is not relieved by rest or medicine.

How unstable angina feels

Unstable and stable angina have the same symptoms. With unstable angina, the symptoms are more severe and last longer. Symptoms include:

- Discomfort, aching, heaviness, tightness, squeezing, or pressure. You may feel this in your chest or back. You may also feel it in your arm, shoulder, neck, jaw, or upper abdomen.
- Feeling more tired than usual for no clear reason
- Nausea
- Unexplained sweating
- Shortness of breath

Not everyone who has a heart attack has the typical symptom of chest pain. You may be having a "silent" (unrecognized) heart attack if you lose consciousness (syncope), or have confusion, weakness, or changes in thinking (delirium). Get medical help right away to find out if you are having a heart attack or another serious condition.

Your evaluation

Because unstable angina can lead to a heart attack, it is viewed as an emergency. If you are having symptoms of unstable angina, you should **call 911** right away. Your healthcare provider will ask about your symptoms and examine you. Tests will be done quickly. Common tests include:

- **Blood tests.** These can help tell if there is damage to your heart. They may be repeated often, usually every 6 to 8 hours until you have 3 sets. They can also check for cholesterol in the blood, which leads to plaque buildup. They can check for other health problems that affect the heart, such as diabetes.
- **Electrocardiogram (ECG).** This test records your heart's electrical patterns. A resting ECG can show if you have damage to your heart muscle or a change in the way your heart beats. It's the quickest way to diagnose an acute heart attack, however not every heart attack is found on ECG. A stress ECG (stress test) can show how well the blood flows to your heart while you exercise or when a medicine is given once your symptoms are more stable.
- **Angiography.** This test can show where your arteries are narrowed. The healthcare provider puts a long tube (catheter) in an artery in your arm, neck, or leg (groin). They slowly guide it to your heart. Dye is sent through the tube and into the coronary arteries. This makes the arteries show up clearly on X-rays. This helps show any blockages or areas where plaques have narrowed the artery.

Treating unstable angina

Your treatment will depend on the results of your tests. Possible treatments include:

- **Observation.** If your symptoms are severe, you may need to stay in the hospital to be watched. If your chest pain gets better and tests show no sign of damage to your heart, and your stress test shows you are at low risk for a future heart attack, you may be able to go home.
- **Medicines.** Your healthcare provider will likely give you nitroglycerin. They also may give you medicines that help prevent blood clots, such as aspirin. They may also give you medicines to help reduce your blood pressure or slow your heart rate.
- **Procedures to improve blood flow.** If your chest pain doesn't get better, your healthcare provider may suggest procedures to improve blood flow to your heart muscle. These can include angioplasty with stenting or bypass surgery. Your provider will tell you more about these treatments if you need them.
- **Lifestyle changes.** Lifestyle changes usually include not smoking, eating healthy foods, losing weight, and getting regular exercise. These changes will take time to reduce your risk of having a heart attack. For them to work, you will need to do them for the long term. The sooner you start, the better it will be for your overall health. If you have other health problems, such as high blood pressure, diabetes, or high cholesterol, these need to be treated as well. They can increase your risk for a heart attack. Lifestyle changes can make unstable angina attacks less frequent and less severe. Staying away from alcohol and stimulants can reduce the stress on your heart as well. They also help you manage CAD and reduce your risk for a heart attack.

When taking nitroglycerin

If your healthcare provider prescribes nitroglycerin, be sure to follow their instructions on how to use it. Also be sure to tell your provider if you're taking any other medicines. This includes other prescription and over-the-counter medicines, as well as herbs and other supplements. Don't take nitroglycerin if you take medicines to treat erectile dysfunction or pulmonary hypertension. These can include sildenafil, tadalafil, or vardenafil. The combination of these medicines can cause a dangerous drop in blood pressure.

When to call 911

Call 911 or go to the emergency room (ER) right away if your chest pain:

- Occurs when you're not active
- Wakes you up from sleep
- Comes back and is not relieved by your usual dose of nitroglycerin
- Occurs with weakness, dizziness, fainting, heavy sweating, nausea, or vomiting
- Lasts longer than 5 minutes
- Feels like it's getting worse