



Angina is a medical term for a feeling of pain, pressure, heaviness, or numbness that occurs behind the breast-bone or across the chest. When the heart muscle does not receive enough oxygen, angina occurs. With angina, you may also feel pain in your upper back, neck, jaws, shoulders, or arms. For some women, angina symptoms in the upper back or shoulders can be related to fatigue.

Angina often occurs during exercise or other physical activity. Or, it may happen after you've stopped exercising, while cooling down from the physical activity. With continued rest, pain usually goes away. A heart attack, on the other hand, occurs when the lack of blood supply to the heart is so severe that the heart doesn't get the oxygen that it vitally needs. If the blood flow and oxygen are reduced long enough, the heart muscle can be damaged. (See the chart for an overview of the differences between angina and heart attack.)

What is an "angina pattern?"

An angina pattern is the specific way an individual experiences angina pain. This pattern may vary from person to person. For example, one person may feel neck pain while exercising, but it may stop whenever he or she stops the activity and rests. For another person, a chest pain may occur whenever the individual climbs the stairs, but won't usually stop until he or she takes medication. Angina pain will vary from person to person based on:

- what seems to cause it
- how often it occurs
- how severe it is
- where it is felt
- what it feels like
- how it can be relieved

It is important for you to be aware of your own usual angina pattern and to tell your doctor or other medical professional (such as your care manager) if the pattern ever changes.

What medication is used to treat angina?

Nitroglycerin is the most common medication used to manage angina symptoms. Nitroglycerin works by relaxing your blood vessels, letting more blood flow to your heart. With more blood flow, your heart receives the oxygen it needs to keep it pumping. If your doctor has prescribed nitroglycerin for you, there are a number of steps you can take to make sure that you use it properly:

- Keep the medication with you at all times.
- Do not carry the container close to your body. Keep it in a cool place, such as a purse, briefcase, or coat pocket.
- Keep your tablets in the original brown container and keep the container tightly closed. You can also keep the tablets in an approved

	ANGINA	vs.	HEART ATTACK
Brought on by:	Activities, events or emotional stress that cause an increase in heart rate		A blockage or spasm in the artery, which may become acute with or without activity
Duration and pain:	Lasts for only a few minutes or up to 20 minutes		Lasts longer than 20 minutes, or longer than 3-5 minutes following rest or nitroglycerin
Symptoms:	Pain, pressure, tightness, heaviness, or numbness behind the breast-bone and/or across the chest. This feeling may travel to the neck, jaw, arms, upper back, shoulders, or shoulder blades.		Same as angina, but can be more severe. Other symptoms may include: <ul style="list-style-type: none"> • sweating (usually a cold sweat) • squeezing • crushing • intense burning • aching • shortness of breath • dizziness • fainting • nausea • vomiting (throwing up) • unusual weakness • rapid or irregular heartbeat • change in heart rate or rhythm • a sense of impending (coming) doom
Treatment:	Relieved by rest or nitroglycerin (in 3-5 minutes)		Not relieved by nitroglycerin (in 3-5 minutes)

nitroglycerin carrying case purchased from a pharmacy.

- Do not store the container in the bathroom where it is damp.
- When you open a new container, write the date on it. If the bottle contains cotton, remove the cotton and throw it away after opening.
- Six months after opening a container, get a fresh supply of tablets and throw away the old.
- If you are planning an activity that has caused angina in the past, talk with your doctor or other medical professional about the possibility of taking your nitroglycerin before starting the activity.
- Do not store tablets in the refrigerator.
- If you are taking Levitra, Viagra, or Cialis for erectile dysfunction, ask your doctor or other medical professional if it is safe for you to take nitroglycerin.

What should I do if I have symptoms?

- Stop what you are doing.
- Sit down or lie down.
- Place one of your nitroglycerin tablets under your tongue. Let it dissolve. Do not chew or swallow the pill. The medication is absorbed directly through the lining of your mouth.
- If your symptoms are not relieved in 3–5 minutes by nitroglycerin and rest, dial 911 emergency services.*
- While waiting for the ambulance, you may place one nitroglycerin tablet under your tongue every 5

minutes until your pain goes away or the ambulance arrives.

- If you decide not to wait for an ambulance, ask someone to drive you to the nearest emergency room. Do not drive yourself.

How can I reduce my risk of heart disease?

With some lifestyle changes, you may be able to ease your angina pain and lower your risk of heart attack and stroke. You may also reduce the risk of peripheral arterial disease (a disease caused by plaque build-up in the arteries that blocks the flow of blood).

Stop smoking. This is the most important step you can take to reduce your risk of heart disease as well as many other health problems. Contact your Kaiser Permanente Health Education Center or Department or visit kp.org/healthyliving for tools and programs to help you quit.

Eat less fat, especially avoiding foods high in saturated fat (such as fatty meats, cheeses, fried food, and whole milk).

Avoid trans fat and hydrogenated fat (such as the fat in many processed and packaged foods, like crackers and cookies).

Eat more foods high in fiber, especially soluble fiber (such as fruits, vegetables, whole grains, beans, peas, oatmeal, and barley).

Enjoy fish (baked or broiled, not fried) more often. Good choices include salmon, tuna, trout, mackerel, herring, sardines, and halibut. These

are high in heart-healthy omega-3 fatty acids.

Exercise regularly. Start with 10 minutes of daily activity and work up to at least 30 minutes of exercise on most days. Try walking, swimming, bicycling, or dancing. Your medical professional may recommend that you gradually add time to your exercise routine until you reach 45 to 60 minutes of exercise on most days.

If you have diabetes or high blood pressure, work with your medical professional to keep these under control.

If you are overweight, consider losing 5 to 10 pounds by changing the way you eat and by being more physically active.

Managing the stress in your life can help you lower your risk of heart attack. Try stress-reducing activities, such as exercise, tai chi, yoga, or meditation. Your local Health Education Center and kp.org/healthyliving offer an array of options to suit a variety of preferences and lifestyles.

Other resources

- Connect to our Web site at kp.org to access health and drug encyclopedias, interactive programs, health classes, and much more.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.
- If you are hit, hurt, or threatened by a partner or spouse, this can seriously affect your health. There is help. Call the National Domestic Violence Hotline at 1-800-799-7233 or connect to ndvh.org.

*If you have an emergency medical condition, call 911 or go to the nearest hospital.

An emergency medical condition is (1) a medical or psychiatric condition that manifests itself by acute symptoms of sufficient severity (including severe pain) such that you could reasonably expect the absence of immediate medical attention to result in serious jeopardy to your health or body functions or organs; or (2) active labor when there isn't enough time for safe transfer to a Plan hospital (or designated hospital) before delivery, or if transfer poses a threat to your (or your unborn child's) health and safety.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. If you have questions or need more information about your medication, please speak to your pharmacist.