



The pain of a heart attack is usually more severe than angina, lasts longer, and does not go away with rest or by taking medication that was previously effective for angina.



Although chest pain can be a warning sign of a heart attack, fortunately, this is not always the case. In fact, there could be a number of causes for this sort of chest-wall discomfort. For example, if chest pain increases when you press your finger on the painful site, or if you can pinpoint the spot that hurts, it is probably from a strained muscle, ligament, or maybe even a fractured rib. An inflammation of the cartilage in the chest wall (called costochondritis) can also be painful. Chest-wall pain usually lasts only a few days, and aspirin or ibuprofen may help relieve it. (Remember, however, never give aspirin to anyone younger than 20.)

A shooting pain that lasts a few seconds or a quick pain at the end of a deep breath is usually not a cause for concern, either. Hyperventilation can also cause chest pain.

Other causes of chest pain include pleurisy (inflammation of the membrane surrounding the lungs) and pneumonia. Both of these conditions will get worse with a deep breath or cough. Shingles may cause a sharp, burning, or tingling pain that feels like a tight band around one side of the chest.

Digestive system problems can also cause chest pain. A sore in the lining of the stomach or small intestine (ulcer) usually causes pain below the breastbone that is worse on an empty stomach. Heartburn (stomach acid moving upward into the esophagus) or indigestion can cause chest pain, too. Gallstones may cause pain in the right side of the chest or around the shoulder blade that is worse after a meal or in the middle of the night.

## Angina

Angina is the term used to describe pain, pressure, heaviness, or numbness that occurs behind the breastbone or across the chest. It is caused when there is not enough oxygen reaching the heart muscle. The pain caused by angina may radiate to the upper back, neck, jaws, shoulders, or arms. It may be brought on by stress or exertion and is relieved by rest and the use of prescribed medications. For additional information on angina, refer to the “How to Manage your Angina” tip sheet at your local Health Education Department.

## Heart attack

A heart attack (myocardial infarction) is caused by blocked blood flow to the heart muscle. The pain of a heart attack is usually more severe than angina, lasts longer, and does not go away with rest or by taking medication that was previously effective for angina. Other symptoms that may be present include sweating, nausea, shortness of breath, weakness, or indigestion.

Some lifestyle factors may increase your risk of a heart attack. These factors include:

- Previous heart disease
- Current tobacco use
- Family history of heart disease
- Lack of physical activity
- Diabetes
- High blood pressure
- High stress levels
- High total cholesterol and high LDL (bad) cholesterol
- Low HDL (good) cholesterol with or without high triglycerides

## Heart attack symptoms

**Call 911 or seek other emergency services immediately if symptoms of a heart attack are present.\***

You may be having a heart attack if you feel *any* of the following symptoms.

- Chest discomfort or pain that lasts longer than 20 minutes *and* is not relieved by rest or nitroglycerin *and* feels like:
  - Pressure
  - Tightness
  - Squeezing
  - Crushing
  - Intense burning
  - Aching

In addition to the symptoms above, you may also have:

- Pain radiating to your:
  - Back
  - Shoulder
  - Neck
  - Jaw/teeth
  - Arm
  - Wrist
- Sweating
- Vomiting
- Shortness of breath
- Unusual weakness
- Dizziness
- Rapid and/or irregular heartbeat
- Fainting
- Sense of doom
- Nausea

The more boxes you check, the more likely it is that you are having a heart attack. There may be other explanations for chest pain, but it is important to get medical help immediately.

## Home treatment

For chest pain caused by strained muscles, ligaments or a fractured rib:

- Use pain relievers such as aspirin, ibuprofen, or acetaminophen. (Do not give aspirin to anyone younger than 20.)
- Rest and protect an injured or sore area. Stop, change, or take a break from any activity that may be causing your pain or soreness.
- Cold will reduce pain and swelling. Apply an ice or cold pack immediately to prevent or minimize swelling. Apply the ice or cold pack for 10 to 20 minutes, three or more times a day. After 48 to 72 hours, if swelling is gone, apply warmth to the area that hurts.
- Mentholated creams such as Ben-Gay or IcyHot may soothe sore muscles.
- Avoid any activity that strains the chest area. As your pain gets better, slowly return to your normal activities.

## When to call Kaiser Permanente

- If a physician has diagnosed the cause of your chest pain and has prescribed a home treatment plan, follow it. Call 911 or seek other emergency services immediately if the pain worsens or if any of the heart attack symptoms listed on this page develop.
- If you suspect angina and your symptoms have not been diagnosed, call your doctor immediately.

- If symptoms of angina do not respond to your prescribed treatment or if the pattern of your angina changes, call your doctor or go to the Emergency Department.
- If minor chest pain occurs without the symptoms of a heart attack and any of the following apply:
  - If the person has a history of heart disease or blood clots in the lungs
  - If chest pain is constant, nagging, and not relieved by rest
  - If chest pain occurs with symptoms of pneumonia
  - If any chest pain lasts longer than two days without improvement

## Other resources

- Connect to our Web site at [kp.org](http://kp.org). “Health topics A to Z” offers information on “Chest pain,” “Heart attack and unstable angina,” and “Coronary artery disease.”
- Check your *Kaiser Permanente Healthwise Handbook*.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.

\* If you have an emergency medical condition, call 911 or go to the nearest hospital. When you have an emergency medical condition, we cover emergency care from Plan providers and non-Plan providers anywhere in the world. 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 serious impairment or dysfunction of your bodily functions or organs; or, (2) when you are in active labor and there isn't enough time for safe transfer to a Plan hospital before delivery, or if transfer poses a threat to you or your unborn child's health and safety.

This information is not intended to diagnose 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. Kaiser Permanente does not endorse the medications or products mentioned. Any trade names listed are for easy identification only.