Although chest pain can be a warning sign of a heart attack, this is not always the case. The pain of a heart attack is usually stronger than angina, lasts longer, and does not go away with rest or by taking medication that relieves angina.

What causes chest pain?
There are many different causes of chest pain.

- **Angina or heart attack.** These are the most serious causes. Either one can feel like chest pressure, chest tightness or burning along with nausea, shortness of breath or sweating. The discomfort can radiate to the jaw, neck, arms or back.

- **A strained muscle, ligament, or even a fractured rib.** If chest pain increases when you press your finger on the painful area, or if you can pinpoint the exact spot that hurts, this is probably the cause.

- **Costochondritis** (swelling of the cartilage in the chest wall). Chest-wall pain can be caused by costochondritis and will usually last only a few days. Taking aspirin or ibuprofen may help relieve it.

- **Hyperventilation** (deep or very fast breathing) can strain your chest wall.

- **Pleural effusion** (swelling of the membrane around the lungs) and **pneumonia.** Both of these conditions will feel more painful with a deep breath or cough.

- **Shingles** (a virus in the nerve roots related to chickenpox). Shingles may cause a sharp, burning, or tingling pain that feels like a tight band around one side of the chest.

- **Stomach Ulcer** (a sore in the lining of the stomach or small intestine). Ulcers usually cause pain below the breastbone that is worse on an empty stomach.

- **Heartburn** (stomach acid moving upward into the esophagus) or indigestion (bloating, nausea or stomach pain due to difficulty digesting food).

- **Gallstones.** This condition may cause pain in the right side of the chest or around the shoulder blade. Pain from gallstones is worse after a meal or in the middle of the night.

Chest pain can also sometimes occur for no apparent reason. A shooting pain that lasts a few seconds or a quick pain at the end of a deep breath is not usually a cause for concern.

What is 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 spread to the upper back, neck, jaws, shoulders, or arms. It may be brought on by stress or intense activity. Angina is relieved by rest and the use of certain prescribed medications.

If you’ve been diagnosed with angina, your doctor will give you a treatment plan to follow. It may include medications such as nitrates, beta blockers, calcium blockers, and aspirin.

If symptoms of angina do not respond to your prescribed treatment or if the pattern of your angina changes, contact your doctor or go to the nearest Emergency Department.

If you think you have angina and your symptoms have not been diagnosed, contact your doctor immediately.

What is a 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 stronger than angina, lasts longer, and does not go away with rest or by taking medication that relieves angina. Other symptoms may include sweating, nausea, shortness of breath, weakness, or indigestion.
Heart attack symptoms
You may be having a heart attack if you feel any of the following symptoms. The more boxes you check in the list below, the more likely it is that you are having a heart attack.

- Chest discomfort or pain that lasts longer than 5 minutes and is not relieved by rest or nitroglycerin and feels like any of these:
  - Pressure
  - Tightness
  - Squeezing

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

- Pain radiating to your:
  - Back
  - Shoulder
  - Neck
  - Jaw/teeth

- Sweating
- Shortness of breath
- Dizziness
- Fainting
- Nausea
- Vomiting
- Unusual tiredness or weakness
- Rapid and/or irregular heartbeat
- Sense of impending (coming) doom

Your symptoms may come on slowly. They may be vague (unclear) or intermittent (start and stop). Chest pain is the most common heart attack symptom for both men and women. But women have a greater chance than men of experiencing some uncommon symptoms, especially shortness of breath, unusual fatigue, nausea, and abdominal, back, or jaw pain. There may be other explanations for chest pain, but it is important to get medical help immediately.

If you are having a heart attack, getting medical attention right away can save your life! Getting medical care within one hour of your heart attack can lower the amount of heart muscle damaged.

There are a variety of factors that increase your risk of a heart attack. Some you can change; some you cannot. Factors you can change to decrease your risk include:
- Quitting tobacco use
- Being more physically active
- Avoiding or controlling diabetes
- Avoiding or controlling high blood pressure
- Reducing stress levels
- Reducing high total cholesterol and high LDL (bad) cholesterol
- Increasing low HDL (good) cholesterol and reducing high triglycerides

Factors that increase your risk and that you cannot change include:
- Previous heart attack
- Family history of heart disease

How can I treat my chest pain?
The best way to treat chest pain is to manage the condition or problem that is the underlying cause. If your doctor diagnoses you with one of the conditions listed above like pleurisy, costochondritis, gallstones, or a digestive condition, follow your treatment plan and take your medicine exactly as prescribed.

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 years old.)
- Rest and protect the injured or sore area. Stop, change, or take a break from any activity that may be causing your pain or soreness.
- Apply an ice or cold pack immediately to prevent or minimize pain and 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.
- Try a mentholated cream like BenGay or IcyHot to soothe sore muscles.
- Avoid any activity that strains the chest area. As your pain gets better, slowly return to your normal activities.

When should I get help?
Call 911 or seek other emergency services immediately if you feel pain that worsens or if you feel any of the heart attack symptoms listed on this page.

Other resources
- Connect to our Web site at kp.org.
- Visit your doctor’s home page at kp.org/my doctor
- 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. 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.

© 2003, The Permanente Medical Group, Inc. All rights reserved. Regional Health Education. Adapted from copyrighted material of Healthwise, Incorporated.