



KAISER PERMANENTE®

Heart Attack

A heart attack—or myocardial infarction—occurs when the heart muscle does not receive enough blood and oxygen to keep it working properly. Usually, this happens as a result of a long, slow buildup of cholesterol and other fat deposits within the coronary arteries. Over time, these fatty substances turn to plaque and thus block the arteries from delivering the precious blood and oxygen to the heart. Once deprived of blood, the heart becomes damaged. After a heart attack, the damaged part of the heart muscle is replaced by scar tissue causing the heart to lose some of its strength.

Heart attacks occur suddenly and at any time—during active periods, while at rest, or even during sleep. The most common symptom is severe pain under the breastbone that feels like a squeezing, pressing, or crushing sensation. This feeling does not change by taking a deep breath or changing positions. The pain may also radiate or extend toward the neck, jaws, shoulders, or arms. Difficulty in breathing is also common, with or without chest pain. Other symptoms may include nausea, vomiting, dizziness, indigestion, weakness, sweating, and cool, moist skin. In addition, there may be an irregular or rapid heart beat or pulse. Unlike angina, which has some of the symptoms of heart attack, the symptoms of heart attack last longer than 20 minutes and are not relieved by rest or nitroglycerin.

Of course, it's much better to prevent a heart attack than treat one. Although some of the risk factors for a heart attack can't be changed—such as growing older, being male, and having a family history of heart disease—you can control other important risk factors. These include smoking cigarettes, not exercising, having high blood pressure or high cholesterol, or having consistently high levels of stress. So if you smoke, stop. And if you don't exercise, start slowly and work up to a healthy fitness program. You can also lower your blood pressure and cholesterol with a combination of diet and exercise. Finally, you can control your stress through exercise and by practicing a relaxation technique. Sometimes medication is needed, as well. If you are over 40 and have never had a complete medical examination, call for a routine appointment.

If you suspect a heart attack, call 911 immediately. The first 12 hours after having a heart attack are the most dangerous. Without treatment, about one out of three heart attacks is fatal. With proper treatment, the death rate can be reduced to one in ten. So, if you experience any symptoms of heart attack, act quickly; do not take a wait and see attitude.

After having a heart attack, people are generally admitted to an Intensive Care or Coronary Care Unit where monitoring is continuous. When the patient's condition becomes stable, he or she is typically transferred to another hospital room, where healing and recovery progress. Patients usually remain in the hospital for a few days. Afterwards, they return home. It usually takes

several weeks to complete a full recovery before returning to work or other normal activities. Patients work out a specific plan for recovering along with their health care professional. This individualized recovery program should be diligently followed in order to prevent further heart trouble.



For additional health information you can trust:

- Log on to our members-only Web site at www.kaiserpermanente.org/california, then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

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REGIONAL HEALTH EDUCATION