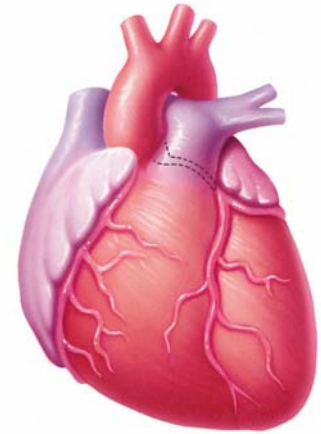


Discharge Instructions

HEART DISEASE EDUCATION

The heart beats 60-100 times a minute, 24 hours a day. It pumps the blood with oxygen and nutrients to the tissues and organs of the body. But the heart is a muscle and needs its own supply of blood. Blood flow to the heart is supplied by the coronary arteries. Coronary Artery Disease (atherosclerosis) is a result of cholesterol, saturated fat and calcium deposits (plaques) that build up inside the walls of the coronary arteries. These plaques narrow the artery and reduce blood flow to the heart muscle.



Coronary arteries of the heart

There are two types of heart pain:

ANGINA is the name for pain in the heart muscle. Angina is a warning sign of serious heart disease. When untreated it can lead to a heart attack. It occurs when there is not enough blood and oxygen flowing to the heart for the amount of work it is doing. This most often appears during physical exertion, when the heart is working hardest. It is relieved by rest or nitroglycerin. Angina may also occur after a large meal when extra blood is sent to the digestive organs and less goes to the heart. In the case of advanced heart disease, angina can occur at rest or awaken you from sleep. Angina usually lasts from a few minutes up to 20 minutes at a time. When treated early, the effects of angina can be completely reversed with no permanent damage to the heart.

HEART ATTACK is usually the result of a blood clot that suddenly forms in a coronary artery that has been narrowed with plaque. When this occurs, all blood flow is cut off to a part of the heart muscle and the cells begin to die. This weakens the pumping action of the heart. This is much more serious than angina. This damage is not reversible. However, early treatment can limit the amount of damage.

The pain from angina and heart attack may be similar in quality, but usually differ in intensity and duration. Here are some typical descriptions of a heart attack:

- It is most often experienced as a squeezing, crushing, pressure-like sensation in the center of the chest.
- It is sometimes described as "an elephant standing on my chest".
- It may feel more like a bad case of indigestion.
- The pain may spread from the chest to the arm, shoulder, throat or jaw.
- Sometimes the pain is not felt in the chest at all, but only in the arm, shoulder, throat or jaw.
- There may also be nausea, vomiting, dizziness or light-headedness, sweating and trouble breathing.

WHAT SHOULD YOU DO

If you or someone near you is having any of these symptoms, go to the nearest Emergency Department -- preferably one that specializes in the care of heart attack (called "Chest Pain Centers").

- If symptoms are SEVERE, CALL 911. This is the fastest and safest way to get to the Emergency Department since paramedics can start treatment on the way to the hospital.
- DO NOT DELAY. Fast diagnosis and treatment can prevent or limit the amount of heart damage during a heart attack.
- DO NOT GO TO YOUR DOCTOR'S OFFICE OR TO A CLINIC since they will not be able to provide all the testing and treatment required for this condition.
- If symptoms are MILD and you decide to take your own car, DO NOT DRIVE YOURSELF. Have someone else drive you.

Discharge Instructions (con't)

WHAT HAPPENS IN THE EMERGENCY DEPARTMENT

Once you are in the Emergency Department, an electrocardiogram (EKG or heart tracing) will be performed. Blood samples may be taken to look for the presence of heart enzymes that leak from damaged heart cells and show if a heart attack is occurring. In the case of severe angina or early heart attack, powerful "clot busting" medicines can be used to dissolve blood clots in the coronary artery. In other cases, tiny balloon-tipped catheters can be placed inside the blood vessels of the heart to stretch them open again, restoring blood flow.

RISK FACTORS FOR HEART DISEASE

By studying large groups of people over time, doctors have recognized certain Risk Factors for developing heart disease. Many of these are *under your control to change*:

PHYSICAL FACTORS:

	[* = greatest physical risk factors]
Cigarette Smoking *	(nicotine constricts blood vessels, damages the lining of blood vessels, causes blood to clot more easily)
High Blood Pressure *	(damages the lining of blood vessels, promotes plaque build-up in arteries. Good blood pressure control with diet and medication will reduce risk.)
High Blood Cholesterol*	(damages the lining of blood vessels, deposits inside the wall of the damaged blood vessel lining and forms plaques that narrow the coronary blood vessels)
Use of Stimulant Drugs*	(cocaine, "crack" and amphetamines causes arteries to contract very strongly and causes blood to clot more easily)
Eating a High Fat, High Cholesterol Meal	(causes arteries to contract and blood to clot more easily)
Obesity	(increases risk for diabetes and high blood pressure)
Inactive Lifestyle	(lack of regular physical activity)
Diabetes	(good glucose control may reduce risk)

PSYCHOLOGICAL FACTORS:

- Chronic high stress levels release stress hormones. These raise blood pressure and cholesterol level and makes blood clot more easily.
- Held-in anger, hostile or cynical attitude
- Social and emotional isolation, lack of intimacy
- Loss of relationship
- Depression

Other factors that increase the risk of heart attack that *you cannot control*:

- Age. The older you get beyond 40, the greater is your risk of significant coronary artery disease.
- Gender. More men than women get heart disease; but once past menopause, women who are not taking estrogen replacement have the same risk as men for a heart attack.
- Family History. If your mother, father, brother or sister has coronary artery disease, your risk of having the same condition is higher than a person your age without this family history.

For More Information

If you have any of the above risk factors, talk to your doctor to evaluate your risk profile and learn what you can do to lower your risk.

For more information: www.americanheart.org.