

Patient Education Sheet

What Is a Heart Attack or Myocardial Infarction?

What is a heart attack?

A heart attack occurs when blood flow to your heart is blocked. Oxygen cannot get to the heart muscles causing heart damage or death. Your doctor calls this a myocardial infarction.

What causes a heart attack?

Most heart attacks are caused by a blood clot that blocks one of the coronary arteries. These arteries bring blood and oxygen to the heart. If the blood flow is blocked the heart cannot get oxygen and heart cells die.

Coronary arteries become narrowed and blocked by buildup of fatty plaque, a hard substance that can lead to the creation of blood clots.

The cause of a heart attack is not always known. It may occur:

- When you are sleeping.
- After a sudden increase in physical activity.
- When you are active outside in cold weather.
- After sudden, severe emotional or physical stress including illness.

What are the symptoms of a heart attack?

The most common symptom is chest pain. You may feel pain in only one part of your body, or it may move from your chest to your arm, jaw, belly, shoulder, teeth or back.

The pain can be very bad or mild. It can feel like:

- A tight band around the chest.
- Bad indigestion.
- Something heavy on your chest.
- Squeezing or heavy pressure.

Other symptoms may include:

- Anxiety.
- Shortness of breath.
- Coughing.
- Nausea or vomiting.
- Palpitations (feeling like your heart is beating too fast).
- Sweating.

A heart attack is a medical emergency.

If you have symptoms of a heart attack; call 911 immediately.

DO NOT try to drive yourself to the hospital

DO NOT DELAY. You are at greatest risk in the first hours of a heart attack

Some people, especially the elderly, those with diabetes, and women, may have little or no chest pain or they may have unusual symptoms such as shortness of breath, tiredness or weakness. A **silent heart attack** is a heart attack with no symptoms.

What are the risks factors leading to a heart attack?

The following factors can increase your risk of having a heart attack.

- Obesity (a great deal overweight).
- Smoking.
- High blood cholesterol.
- Diabetes.
- Stress.
- High blood pressure.
- Heart disease in the family.
- Non-active or sedentary lifestyle.
- Increased age.

What tests will I have at the hospital?

Once at the hospital your health care team will conduct a number of tests.

- A blood test can show if you have heart tissue damage. This test can confirm if you are having a heart attack

- An Electrocardiogram which records the heart's activity.

Other tests to look at your heart that may be done while you are in hospital include:

- Echocardiogram - examines the size, shape, and function of your heart.

- Stress test - records the heart's electrical activity under physical stress and may be done days or weeks after your heart attack.

- Nuclear scanning - uses radioactive materials to show areas of the heart where there may be decreased blood flow.

- Coronary angiogram - uses dye and X-rays to see how blood flows through your heart.

What kind of treatment will I have for my heart attack?

You may be given oxygen so that your heart does not have to work so hard. You may be hooked up to a heart monitor so your health care team can see how your heart is beating. An intravenous line (IV) will be placed in one of your veins and you will be given medicine and fluids through the IV. You may get morphine to help reduce chest pain.

Abnormal heartbeats (arrhythmias) are the leading cause of death in the first few hours of a heart attack. These arrhythmias may be treated with medication.

Emergency treatments:

Angioplasty: If you need emergency treatment at the hospital you may be given an angioplasty. This is a procedure to open narrowed or blocked blood vessels that supply blood to the heart. A small metal mesh tube called a stent may be placed in the artery to prevent it from closing up again. You may also be given drugs to break up the clot.

Heart Bypass Surgery: Some patients may need heart bypass surgery or open heart surgery to open narrowed or blocked blood vessels that supply blood to the heart.

What happens after my heart attack?

You may be given drugs to prevent another heart attack. You should ask your health care team about these drugs.

They may include:

- Antiplatelet drugs or blood thinners such as aspirin, clopidogrel (Plavix) or warfarin (Coumadin) to help keep your blood from clotting.
- Beta-Blockers and ACE inhibitors to protect your heart.
- Statins or other drugs to improve your cholesterol levels.

After a heart attack you may feel sad or anxious and worry more than you used to. This is perfectly normal and these feelings usually go away in a few weeks. You may also feel tired when you leave the hospital.

Most people who have had a heart attack take part in a cardiac rehab program. While under the care of your health care team you will slowly increase your exercise level and learn how to live a healthy lifestyle.

How can I prevent another heart attack?

After a heart attack your chances of having another are higher.

To prevent another heart attack:

- ♥ Keep your blood pressure, your blood sugar and your cholesterol under control.
- ♥ Do not smoke.
- ♥ Eat a heart- healthy diet. Your nutritionist will help you do this as part of your cardiac rehabilitation.
- ♥ Get plenty of exercise, 30 minutes each day for 5 days a week.
- ♥ Control your weight.
- ♥ Limit alcohol to one drink a day for women and 2 drinks a day for men.

Sources: Patient Education Reference Center.
PubMed Health www.ncbi.nlm.nih.gov