



# Patient Information



## Steering Clear of Heart Attack

**A** heart attack—or myocardial infarction (mahy-uh-karh-dee-uhl in-fahrk-shuhn)—occurs when the flow of blood to the heart is severely reduced or shut off completely for long enough to damage or kill the muscle. The heart muscle requires a continuous supply of oxygen-rich blood to be nourished. The blood supply is delivered through your coronary arteries, and when the arteries become narrow or blocked, the blood cannot flow correctly.

A build-up of fatty matter, calcium, proteins, and inflammatory cells within the inner lining of the arteries is referred to as plaque. If this plaque breaks, platelets (disc-shaped particles that aid in clotting) gather at the site to form a blood clot. If the clot blocks the artery completely, the heart does not receive oxygen, which leads to the death of heart muscle cells and permanent damage. This is called a heart attack.

A heart attack can be fatal; however, thanks to better awareness of signs, symptoms, and treatments, most people who experience the complication will survive. Your lifestyle plays a large part in your recovery. Eating healthy, exercising, and learning how to cope with stress are all factors you can control to prevent or recover from a heart attack.

### How do I know if I'm at risk?

Men aged 45 years or older and women aged 55 years or older are more likely to experience a heart attack; though it can still occur in individuals who are younger. If you have diabetes, you are at a high risk of having a heart attack. People with high blood

pressure also have a high risk. High blood pressure can be the result of a high-salt diet, obesity, or a genetic predisposition.

An inactive lifestyle can contribute to a high blood cholesterol level and obesity. Individuals who exercise regularly have better cardiovascular fitness, which provides numerous benefits, including good health, lower blood pressure, and even a decrease in stress.

### What are the warning signs?

The most common symptom of a heart attack is chest pain. You may experience pain in only 1 part of your body, or it may move to other areas, such as your arms, shoulders, neck, teeth, jaw, abdomen, or back. The pain can range in severity and has been described as feeling similar to having a tight band placed around your chest, bad indigestion, or something heavy on your chest.

The pain tends to last longer than 20 minutes, but has been known to go away and come back. The sooner you can get to a medical facility, the sooner a doctor can administer medication to relieve the pain and prevent more damage to the heart muscle. Do not try to drive yourself, rather, call for an ambulance or have a friend or family member drive you.

The elderly, individuals with diabetes, and women are among the most common individuals to experience little or no chest pain during a heart attack. Other symptoms to be aware of are anxiety, coughing, fainting, dizziness, nausea, vomiting, palpitations, shortness of breath, or excessive sweating.

It is important to remember that a heart



This page may be reproduced noncommercially by federal practitioners for their patients.

attack is a medical emergency. Delaying medical treatment will put you at greater risk of sudden death.

### What tests do I need?

Upon arrival at the emergency room, you will be hooked up to a heart monitor to allow the health care team to see the condition of your heart and how it is beating. You also may be given oxygen and an intravenous line to relieve the heart from working too hard and to administer medicine and fluids.

A doctor or nurse will use a stethoscope to listen to your heart and to identify any abnormal sounds or a heart murmur—a hole in your heart that affects the blood flow. During a physical examination, the doctor or nurse also will check your pulse and blood pressure.

### How can I avoid the problem?

To prevent the onset of a heart attack, it is important to maintain a healthy blood pressure, blood sugar level, and cholesterol level. Focus on a heart-healthy diet that is rich in fruits, vegetables, and whole grains; keeping animal fat consumption low. Exercising a minimum of 30 minutes a day, 5 days a week also will help keep your body healthy and functioning properly.

Stay away from harmful stimulants, such as cigarette smoke, and limit your alcohol consumption to no more than 1 drink a day for women and 2 drinks a day for men.

### How is it treated?

You may need to have an angioplasty (an-jee-uh-plas-tee) in order to correct narrowed or blocked arteries that supply blood to the heart. During this procedure, a catheter with a balloon on its tip is inserted into the artery and positioned on the blockage. The balloon then is inflated.

This procedure often is the first choice of treatment and should be done within 90 minutes upon arrival at the hospital. At the same time, a stent—a small mesh tube—is placed inside the artery. When the balloon is inflated, the stent expands and attaches to the artery wall to prevent the artery from closing again.

In more severe cases, you may need to have a procedure called open heart surgery. During this surgery, doctors manually open the narrowed or blocked blood vessels.

After your heart attack has been corrected, medications may be prescribed in order to prevent another heart attack. Some individuals may need these medications for only a short time, whereas others will be required to take them for the rest of their life. It is important to consult your doctor before changing or stopping your medication.

Some medications you may be prescribed include blood thinners (aspirin, clopidogrel, dabigatran, or warfarin) to prevent your blood from clotting, beta-blockers or angiotensin converting enzyme (ACE) inhibitors to treat high blood pressure, and statins or other drugs to improve your cholesterol level.

For more information about heart disease, call the American Heart Association at (800) 242-8721, or visit the Web site at <http://www.heart.org/HEARTORG>.

# FEDERAL PRACTITIONER

A PEER-REVIEWED JOURNAL FOR HEALTH CARE PROFESSIONALS OF THE VA, DoD, AND PHS

7 Century Drive, Suite 302  
Parsippany, NJ 07054-4609

