









If you have heart disease, or think you do, it's vital to take action to protect your heart health. Fortunately, there's a lot you can do. This fact sheet gives you the key steps, including how to survive a heart attack and prevent serious damage to heart muscle. Caring for your heart is worth the effort. Use the information here to start today to take charge of your heart health.

WHAT IS HEART DISEASE?

Coronary heart disease is the most common form of heart disease. Usually referred to as simply "heart disease," it is a disorder of the blood vessels of the heart that can lead to a heart attack. A heart attack happens when an artery becomes blocked, preventing oxygen and nutrients from getting to the heart.

Some women with heart disease aren't too concerned about their disorder because they think it can be cured by surgery. This is a myth. Heart disease is a lifelong condition—once you get it, you'll always have it. But there is much you can do to control heart disease, prevent a heart attack, and increase your chances for a long and vital life.

SCREENING TESTS

In most cases, the first step is to get tested to find out for sure if you have heart disease, and, if so, how severe your condition is. Most tests are done outside the body and are painless. Ask your doctor which of the following tests are right for you.

Electrocardiogram (ECG or EKG) makes a graph of the heart's electrical activity. This test can show abnormal heartbeats, heart muscle damage, blood flow problems in the arteries, and heart enlargement.

Stress test (or treadmill test or exercise ECG)

records the heart's electrical activity during exercise. If you are unable to exercise, you can take a medicine instead that shows any problems in the blood flow to the heart.

Nuclear scan (or thallium stress test) shows the working of the heart muscle. A small amount of radioactive material is injected into a vein, and a camera records how much is taken up by the heart muscle.

Echocardiography changes sound waves into pictures that show the heart's size, shape, and movement. The sound waves also can be used to see how much blood is pumped out by the heart when it contracts.

Coronary angiography (or angiogram or **arteriography**) shows an x ray of blood flow problems and blockages in the coronary arteries. A thin tube, or catheter, is threaded into the heart. A fluid is then injected into the tube, allowing the heart and blood vessels to be filmed.





Ventriculogram is a picture of the left ventricle, which is the heart's main pumping chamber. The picture is taken following a procedure similar to the one for coronary angiography (see previous page).

Intracoronary ultrasound uses a catheter that measures blood flow. It makes a picture that shows the condition of the artery wall.

RISK FACTORS

Because you already have heart disease, you'll need to work especially hard to control your risk factors. Risk factors are health conditions or habits that increase the chances of developing a disease, or having it worsen.

There are two types of heart disease risk factors—those that are beyond your control and those that can be changed. Those that can't be changed are a family history of early heart disease and age. For women, age becomes a risk factor at 55. Middle age also is important because it's when women tend to develop the controllable heart disease risk factors.

Those risk factors that can be controlled are smoking, high blood pressure, high blood cholesterol, overweight/obesity, physical inactivity, and diabetes. While having even one risk factor is dangerous, having multiple risk factors is especially serious, because risk factors tend to "gang up" and worsen each other's effects.

TREATMENT

Heart disease and its risk factors can be treated in three ways: by making heart healthy changes in your daily habits, by taking medication, and in some cases, by having a medical procedure.

Making Lifestyle Changes. This involves adopting new habits, such as not smoking, following a heart healthy eating plan, maintaining a healthy weight, and becoming more physically active. You may need to manage certain risk factors especially vigorously. For example, if you have high levels of a type of cholesterol called "low-density lipoprotein" (LDL), you will need to lower it more than you would if you did not have heart disease. LDL is the "bad" cholesterol that clogs arteries. (Your goal should be to bring your LDL to below 100 mg/dL.) With your doctor, go over your heart disease risk factors and discuss how to reduce, or eliminate, each one.

Taking Medication. Sometimes, lifestyle changes alone aren't enough to control heart disease and its risk factors. Medications are often used to treat high blood cholesterol, high blood pressure, or heart disease itself. For instance, medicine may be used to relieve angina, the chest pain that often accompanies heart disease.

If you do take medications, it is vital to also keep up your heart healthy lifestyle, because it can help to keep doses of some medicines as low as possible. Be sure to take your medication exactly as your doctor advises. (This includes aspirin and other over-the-counter medicines.) If you have uncomfortable side effects, let your doctor know. You may be able to change the dosage or switch to another medication.

Special Procedures. Advanced heart disease may require procedures to open an artery and improve blood flow. These procedures are usually done to ease severe chest pain or to clear blockages in blood vessels. Two common procedures are coronary angioplasty (or balloon angioplasty) and coronary artery bypass graft.

MENOPAUSAL HORMONE THERAPY

Until recently, it was thought that menopausal hormone therapy could lower the risks of heart attack and stroke for women with heart disease. But research now shows that women should not take this medication to prevent heart disease. Menopausal hormone therapy can involve the use of estrogen-plus-progestin medicine or an estrogen-alone medicine. Studies on each type of medicine show that:

- Estrogen-plus-progestin medication increases the risk of heart attack during the first few years of use, and also increases the risks of stroke, blood clots, and breast cancer.
- Estrogen-only medication does not prevent heart attacks and increases the risks of stroke and venous thrombosis (a blood clot that usually occurs in one of the deep veins of the legs). Estrogen-only medicine does not increase the risk of breast cancer.

If you have heart disease and are currently taking or considering taking menopausal hormone therapy, talk with your doctor about safer medicines for controlling heart disease, for preventing osteoporosis, and/or for relieving menopausal symptoms.

ASPIRIN: TAKE WITH CAUTION

If you've had a heart attack or stroke, aspirin can help lower the risk of a second one. It can also help keep arteries open in individuals who have had a heart bypass or angioplasty. A recent, large study has found that among healthy women, taking low-dose aspirin every other day may help to prevent a first stroke, and among women over the age of 65, it may also help prevent a first heart attack.

But should you take it to prevent a heart attack? For most people, the answer is no. Aspirin is not approved by the U.S. Food and Drug Administration for the prevention of heart attacks and stroke for people who have never had one. Aspirin can cause serious side effects and mix dangerously with other medicines.

If you are thinking about using aspirin for heart problems, talk with your doctor first. If your doctor thinks aspirin is a good choice for you, be sure to take the recommended dosage.

GETTING HELP FOR A HEART ATTACK

If you have heart disease, you are at a high risk for having a heart attack. But planning ahead so you know what to do if one occurs will help you get treatment fast—when it can save heart muscle and maybe even your life. Here are some steps to follow:

Know the Warning Signs

The main warning signs for women and men are:

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts for more than a few minutes. It may feel like pressure, squeezing, fullness, or pain. The discomfort may be mild or severe, and it may come and go.
- Discomfort in other areas of the upper body, including one or both arms, the back, neck, jaw, or stomach.
- Shortness of breath. This may occur with or without chest discomfort.
- Other signs include nausea, light-headedness, or breaking out in a cold sweat.

Get Help Quickly

- If you think you, or someone else, may be having a heart attack, act quickly to prevent disability or death. Wait no more than a few minutes—five at most—before calling 9-1-1.
- It is important to call 9-1-1 because emergency medical personnel can begin treatment even before you get to the hospital. They also have the equipment and training to start your heart beating again if it stops. Calling 9-1-1 quickly can save your life.
- Time is crucial because the clot-busting medicines and other treatments that can stop a heart attack work best when given within the first hour after a heart attack starts. Even if you're not sure you're having a heart attack, call 9-1-1. Patient delay is the primary reason those having a heart attack do not get care soon enough. If your symptoms stop completely in less than five minutes, you should still call your doctor.
- Many women delay getting help for a possible heart attack because they don't want to bother others, especially if their symptoms turn out to be a "false alarm." But when you're facing something as serious as a possible heart attack, it is much better to be safe than sorry.
- Also, talk with your friends and family members to be sure they know the warning signs and the need to call 9-1-1 quickly.
- When you get to the hospital, speak up for what you need, or try to have someone with you who can speak up for you. Ask for tests that can show whether you are having a heart attack. Don't let anyone tell you that you're "overreacting." You have the right to be thoroughly examined for a possible heart attack. If you are having a heart attack, you have the right to immediate treatment to help stop it.

Prepare a Heart Attack Survival Plan

Fill in the form on the next page and keep copies in handy places. Be sure your family, friends, and coworkers know where you've put the copies.

As part of your plan, arrange now to have any children or other dependents taken care of in case you have a heart attack.

In summary:

- Learn the heart attack warning signs "by heart."
- Call 9-1-1 within five minutes of the start of symptoms.
 Talk with family and friends about the warning signs and the need to call 9-1-1 quickly.
- Write out a heart attack survival plan and keep copies handy. Be sure to tell those close to you where to find a copy. If necessary, arrange in advance to have someone care for your children or other dependents in an emergency.

HEART ATTACK SURVIVAL PLAN

Fill out the form below and make several copies. Keep one copy near your home phone, another at work, and a third copy in your purse.

Information for Emergency Medical Personnel and Hospital Staff

Medicines you are taking:

Medicines you are allergic to:

How To Contact Your Health Care Provider

Health care provider's name:

Phone number during office hours:

Phone number after office hours:

Person To Contact If You Go to the Hospital

Name:

Home phone number:

Work phone number:

TO LEARN MORE

Contact the National Heart, Lung, and Blood Institute (NHLBI) for information and publications on heart disease and heart health.

NHLBI Health Information Center

P.O. Box 30105

Bethesda, MD 20824-0105

Phone: (301) 592-8573 TTY: (240) 629-3255

Fax: (301) 592-8563

Heart Health Web Sites

National Heart, Lung, and Blood Institute: www.nhlbi.nih.gov

The Heart Truth: A National Awareness Campaign for Women about Heart Disease: www.hearttruth.gov

The Healthy Heart Handbook For Women: www.nhlbi.nih.gov/health/hearttruth/material/material.htm

Act in Time to Heart Attack Signs: www.nhlbi.nih.gov/actintime

American Heart Association: www.americanheart.org

National Women's Health Information Center, Office on Women's Health, U.S. Department of Health and Human Services: www.womenshealth.gov

WomenHeart: the National Coalition for Women with

Heart Disease: www.womenheart.org







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