



Volunteer Leader Training Guide

Heart Disease: Are You at Risk?

Lisa Washburn, DrPH, Assistant Professor – Health

Introduction

Many women do not understand their personal risk for heart disease. Almost eight times more women die each year from heart disease than from breast cancer. Heart disease kills more women than all forms of cancer combined. Some risk factors you cannot control, but others can be prevented or managed. Learn about your heart disease risk factors and how to take action to lower your risk.

Target Audience

- EHC leaders and members
- Adult audiences

Objectives

- Participants will increase knowledge of risk factors for heart disease.
- Participants will assess their personal risk factors for heart disease.

Handouts

- Activity 1: What's Your Risk?
- Handout 1: Questions to Ask Your Doctor
- Handout 2: Body Mass Index
- Handout 3: Heart Disease Risk Factors You Can Do Something About

Suggestions for Teaching

- Review the lesson guide and handouts.
- Make copies of handouts and activity.

A PowerPoint presentation is available for presenting this lesson. Information from the slides and slide notes is included in this guide.

Additional References

- American Heart Association web site: www.heart.org
- National Heart, Lung and Blood Institute web site: <http://www.nhlbi.nih.gov/>
- *The Heart Truth* web site: www.hearttruth.gov

Discuss the following:

Heart disease is often thought to be a “man’s problem.” If you are a woman and have a heart, heart disease could be your problem.

Heart disease is the No. 1 killer of American women. Almost eight times more women die of heart disease than breast cancer. Heart disease kills more women than all forms of cancer combined. Heart disease can also damage your heart and interfere with your activities. It can affect your ability to do everyday things, like climbing steps. If it is not treated, heart disease can lead to serious complications. These complications include angina, which is chest pain; heart failure, when your heart loses its ability to function well; and heart attack. About two-thirds of the women who have heart attacks do not make full recoveries.

Many women do not know that heart disease is their leading health threat, and too few know they can take action to help prevent heart disease. Many women are more concerned about breast cancer than heart disease. The steps that protect you against heart disease will also help protect against many cancers. Heart disease can affect your life in a big way. It is important for women to take action now to prevent heart disease. As one women doctor put it: “Heart disease is a ‘now’ problem. Later may be too late.”

What Is Heart Disease?

Most people do not really understand what heart disease is and how it develops.

Your heart is about the size of a fist. [*Have participants make a fist.*] Your heart is a hard-working muscle. It contracts and releases 24 hours a day every day. To work effectively, your heart needs a steady supply of blood, which feeds the heart oxygen and nutrients. Without nourishment, heart cells die. This loss is permanent. There are many forms of heart disease. Coronary heart disease is the main form of heart disease. Heart disease develops over many years. It develops over time and can start at a young age.

Atherosclerosis is what some people call “hardening of the arteries.” Plaque, which is cholesterol, calcium and other substances, builds up in the walls of blood vessels. This can happen anywhere in the body. Coronary heart disease occurs if plaque builds up in the coronary arteries of the heart. The plaque buildup narrows the arteries and reduces blood flow to your heart muscle. The plaque can rupture and cause a blood clot to form. This further narrows the artery and the process repeats itself. Over time, the artery gets narrower and narrower, reducing blood flow even more.

When blood flow to your heart muscle is reduced or blocked, it can lead to angina, which is chest pain. Eventually, an area of plaque can rupture, causing a blood clot to form on the surface of the plaque. If the clot becomes large enough, it can mostly or completely block the flow of

oxygen-rich blood to part of the heart muscle. If this happens, a heart attack occurs. If the blockage is not treated quickly, the heart muscle will begin to die and will be replaced by scar tissue.

Preventing Heart Disease

Heart disease can be prevented or controlled by making lifestyle changes and, if prescribed by a doctor, by taking medication. Risk factors for heart disease develop gradually and can start at a young age. Taking action is particularly important if you are age 40 to 60, when your risk of heart disease starts to go up. There are various reasons for this. Estrogen does seem to play a role in preventing heart disease in younger women, although it is not understood how. When women go through menopause, the amount of estrogen in their bodies drops. Another reason is that, during the middle-age years, many women develop one or more risk factors for heart disease. It is also important for older women to take action to lower their risks for heart disease.

Risk Factors

Risk factors are behaviors or conditions that increase your chance of developing a disease. The heart disease risk factors will probably sound familiar to you.

There are risk factors you can control:

- Smoking
- High blood pressure
- High blood cholesterol, which is a fat-like substance found in all body cells, and high triglycerides, which is another form of fat in your blood
- Overweight and obesity
- Physical inactivity
- Diabetes and prediabetes
- Metabolic syndrome, which is a name for a group of risk factors linked to overweight and obesity

There are risk factors you can't control:

- Family history of early heart disease. Your risk increases if your father or brother was diagnosed with heart disease before age 55, or if your mother or sister was diagnosed with the disease before age 65.
- Age of 55 or older for women
- History of preeclampsia during pregnancy

Other risk factors can contribute to coronary heart disease, including:

- Sleep apnea
- Stress or depression
- Too much alcohol
- Birth control pills, particularly for women who are over age 35 and smoke
- Anemia
- Unhealthy diet

When you have more than one heart disease risk factor, your risk is multiplied. The risk factors do not add up individually, like 1 + 1. The combination of risk factors increases risk more than if they were present individually. For example, being overweight increases your chance of developing heart disease and your chance of developing high blood pressure. And high blood pressure increases heart disease risk. Your risk skyrockets with each added risk factor.

Most risk factors can be prevented or controlled. Family history, age and a history of preeclampsia are beyond your control, but you can take steps to prevent or control other risk factors. For example, following a healthy eating plan and losing excess weight will help prevent high blood pressure. It will also help prevent high blood cholesterol, overweight and diabetes.

Activity 1: What's Your Risk?

[*Pass out Activity 1: What's Your Risk?*]

This short quiz will help you assess your risk for heart disease. You may not be able to answer each of the questions. That's one of the issues. We often don't know our complete "risk profile," which is based on how many risk factors we have. For example, you may know if you are overweight but not if you have high blood cholesterol.

Give participants a few minutes to complete.

It only takes one "yes" to be at increased risk. This activity gave you a quick look at your overall risk for heart disease. To get your risk assessed properly, see your doctor. Your doctor may not bring up the topic of heart disease, so you may have to start the conversation.

Distribute Handout 1: Questions to Ask Your Doctor.

This handout has questions to ask your doctor. It can help you talk with your doctor. You may have other questions, so make a list to take to your appointment.

Blood Pressure – High blood pressure is a heart disease risk factor. Most healthy people should have blood pressure checked at least once every two years. Normal blood pressure is less than 120 over less than 80. If you have certain conditions, like diabetes, blood pressure should be under control and 130 over 80 or lower.

Cholesterol – High cholesterol is a heart disease risk factor. Most healthy people should have cholesterol checked at least once every five years. A fasting blood test will give information on your total cholesterol; low-density lipoprotein (LDL) or "bad" cholesterol; high-density lipoprotein (HDL) or "good" cholesterol; and triglycerides, another form of fat in your blood.

Overweight and Obesity – Do you know your body mass index, or BMI? BMI is a ratio of your weight to your height. A BMI of 25 or greater increases your heart disease risk. A BMI score of 25 to 29.9 indicates overweight; 30 or more indicates obesity.

Refer participants to **Handout 2: Body Mass Index**.

Waist circumference can also show heart disease risk. Waist circumference is an indicator of abdominal fat. A waist circumference of more than 35 inches for women increases heart disease risk.

Other Medical Tests for Heart Disease – Sometimes an EKG or ECG, both acronyms for the electrocardiogram, will be done. This test shows a record of your heart's electrical activity as it contracts and relaxes. It can detect various problems, such as abnormal heartbeats, muscle damage and poor blood flow.

A stress test records the heart's electrical activity while you exercise, usually on a treadmill or exercise bike. The heart works harder when you exercise. The stress test can check if the heart is getting enough blood.

Changing Your Risk Factors

No matter what your age and no matter how many risk factors you have, it is never too late to improve your heart health. By making only two healthy changes – eating healthier foods and increasing activity – you can reduce five heart disease risk factors.

Pass out **Handout 3: Heart Disease Risk Factors You Can Do Something About**.

Steps to a Heart Healthy Lifestyle

1. If you smoke, work hard to quit. Start by writing down all of the reasons you want to quit. Then set a target date to quit. Talk to your doctor about using aids for quitting, like nicotine gum, the patch, nasal spray or medications. Reward yourself (with something besides food) for your progress.
2. Be physically active. Aim for 150 minutes of moderate-intensity aerobic activity (or 75 minutes of vigorous-intensity activity) each week. You can also try a combination of moderate and vigorous activity. Aerobic activity moves your large muscles and makes your heart beat faster than usual. Examples of aerobic activities include walking, jogging, swimming laps, bicycling, ballroom dancing and tennis. Strength train two to three times each week.
3. Follow a healthy eating plan that is low in saturated fat, trans fat and cholesterol and moderate in total fat. Include lots of fruits, vegetables, whole grains and fat-free or low-fat dairy products. Lean meats, poultry, fish, beans and nuts should also be in your diet. If you have high blood pressure, cut down on salt and sodium. If you drink alcoholic beverages, have no more than one a day (two a day for men).
4. Lose weight if you need to, and keep a healthy weight. To maintain a healthy weight, balance the calories you take in with those you use up in physical activity.
5. If your doctor prescribes medication for diabetes, high blood pressure or high cholesterol, be sure to take it as directed.

Heart Attacks

If you have a heart attack, the most important factor in surviving is to get help fast. If you have any heart attack symptoms or think you might be having a heart attack, call 9-1-1 immediately for emergency medical care.

Women often do not know the symptoms of a heart attack. In real life, heart attacks rarely happen as they appear in movies – a dramatic event where a man suddenly clutches his chest in agony and falls over. Not all people who have heart attacks experience the same symptoms or

experience them to the same degree. Some heart attacks are sudden and intense. Many people are not sure what's wrong when they're having heart attack symptoms. Heart attacks do not always cause common symptoms like chest pain or discomfort. They can start slowly, with mild pain or discomfort and/or with other symptoms, which may come and go over several hours. People who have already had a heart attack may not recognize if they are having another one. A next heart attack may cause different symptoms than an earlier heart attack.

Heart Attack Symptoms in Women – As with men, the most common heart attack symptom in women is chest pain or discomfort. Women are somewhat more likely to have other heart attack symptoms, including shortness of breath, nausea and vomiting, unusual fatigue and pain in the back, shoulders and jaw.

Some of the Most Common Symptoms of a Heart Attack in Both Men and Women

Chest Discomfort. Most heart attacks involve discomfort in the center of the left side of the chest. It usually lasts for more than a few minutes or goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain. It may even feel like heartburn or indigestion.

Upper-Body Discomfort. This symptom can include pain or discomfort in one or both arms, the back, shoulders, neck, jaw or upper part of the stomach (not below the belly button).

Shortness of Breath. This symptom may occur before or with chest pain or discomfort. It can be the only symptom of a heart attack and can occur while at rest or with minimal physical activity.

Other symptoms to pay attention to:

- Breaking out in a cold sweat
- Unusual or unexplained tiredness, particularly in women
- Nausea and/or vomiting
- Lightheadedness or sudden dizziness

If you cannot call 9-1-1, have someone else drive you to the hospital. Do not drive yourself to the hospital unless you have no other choice.

Women often delay seeking help, afraid of being embarrassed over a false alarm or bothering their families. Even if it does turn out to be a false alarm, symptoms should be checked. Increase your chances of surviving a heart attack by planning ahead. Learn the heart attack warning signs and talk to your family and friends. Be sure they know the warning signs and what to do if a heart attack happens.

Information for this guide adapted from The Heart Truth for Women Speakers Guide, U.S. Department of Health and Human Services (HHS), National Institutes of Health (NIH), National Heart, Lung and Blood Institute (NHLBI), Revised October 2010.