



SOUTH CAROLINA FAMILY AND COMMUNITY LEADERS

Affiliated with National Volunteer Outreach Network, Country Women's Council, U.S.A., Associated Country Women of the World and in partnership with Clemson University Cooperative Extension Service
SCFCL website: <http://www.scfcl.com>

Leader Training Guide

Recognizing a Heart Attack and Using an AED

Objectives:

The participants will be able to:

1. Recognize potential signs and symptoms of a heart attack
2. Identify risk factors for heart attacks
3. Understand the importance of an AED

Lesson Overview/Introduction:

If you think you are having a heart attack contact Emergency Medical Services at 9-1-1 immediately.

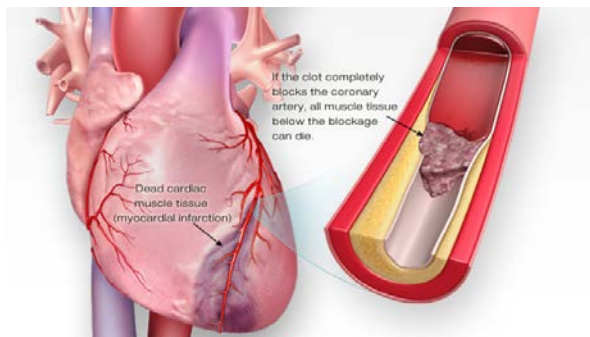
What is a heart attack? A heart attack, or myocardial infarction (MI), occurs when one of the arteries supplying oxygenated blood to the muscle tissue of the heart itself is blocked, either partially or completely. This blockage can eventually cause cardiac arrest, in which the heart stops completely, or any number of arrhythmias, in which the electrical signals that control the heartbeat become disorganized and ineffective. Early detection of a heart attack or cardiac arrest is key to survival.

What is an AED? An AED, or automated external defibrillator, is a device that can aid in restoring regular heart rhythms to a cardiac arrest victim during cardiopulmonary resuscitation (CPR) attempts. AEDs are a great tool for a rescuer and many are designed to be used by a layperson in emergency situations, but professional training is still best to ensure safety and best outcomes for both the victim and rescuer.

Lesson:

The key to surviving a heart attack is early detection and fast activation of emergency services. If you think you or a loved one is experiencing a heart attack, contact 911 as soon as possible. Understanding the signs, symptoms,

and causes of a heart attack are also beneficial in the ultimate goal of prevention and early detection of this illness.



Causes: While a heart attack is universally known as a blockage of a coronary artery, the causes and risk factors for this blockage vary widely. The condition leading up to a heart attack is often atherosclerosis, or a buildup of plaque on the artery walls, causing them to become more narrow. Plaque is composed of many substances, including

cholesterol. Heart attack risk increases with age, becoming more severe at age 45 for men and age 55 for women. Other general health risk factors, such as smoking, obesity, high blood pressure, diabetes, and lack of physical activity can increase one's risk for a heart attack. Genetic factors also play a role in determining one's risk for a heart attack: if someone in your family has had a heart attack, you are at an increased risk as well.

Signs and Symptoms: Heart attack symptoms can vary widely. The most commonly known symptom of a heart attack is chest pain, tightness, or numbness in the left arm, neck, or jaw. Other symptoms can include nausea, fatigue, dizziness, or cold sweats. Both men and women are likely to experience chest pain, but levels vary from very mild discomfort to severe pain. Women, however, are more likely to experience the other lesser known symptoms of a heart attack. Certain heart conditions, such as angina (chest pain caused by exertion and relieved by rest) may be the precursor to a heart attack, or symptoms may begin with no prior warning.

Prevention: Ultimately, the biggest preventative factor is to maintain a healthy, active lifestyle. This includes eating a balanced, colorful diet rich in fruits and vegetables. Activity is also important as it can strengthen heart muscle. Be sure to contact your doctor before starting an exercise regimen. Not smoking, maintaining healthy blood



pressure and sugar levels, and minimizing stress also help to keep your heart healthier. If you are already at an elevated risk for a heart attack, your doctor may prescribe medication to minimize risk. Some of these medications may seek to reduce cholesterol levels while others reduce blood clotting to reduce risk of blockage. If you spend time around individuals at an increased risk for heart attacks, consider receiving CPR and AED training.

If you encounter a heart attack, the first step is going to be to contact 911 and emergency medical services as quickly as possible. If you are trained in CPR, compressions and emergency breaths may be used should the victim become unconscious with no breathing or pulse. If you discover and unconscious victim without a pulse and are not trained in CPR, the American Heart Association recommends pushing hard and fast in the center of the victim's chest. A rate of 100-120 beats per minute is optimal. If an AED is available and you have the proper training, have someone retrieve it. AED usage by someone without training is sometimes covered under Good Samaritan laws, but AED training is generally recommended as laws vary state to state, and good AED practices increase survival rates.

Suggested Materials:

Practice with AED trainer during structured, certified course

Suggested Activities:

American Heart Association Basic Life Support or Heartsaver First Aid course
American Red Cross CPR/AED training

Lesson Summary:

A heart attack or cardiac arrest is a serious medical emergency that can cause permanent damage or death. The best response to a heart attack is to contact 911 immediately and begin bystander support if properly trained. Heart attacks are usually the result of a blockage and risk factors can be lessened by leading a healthy and active lifestyle. This article is not intended, expressed, or implied as formal CPR/AED training and should not be used as such.

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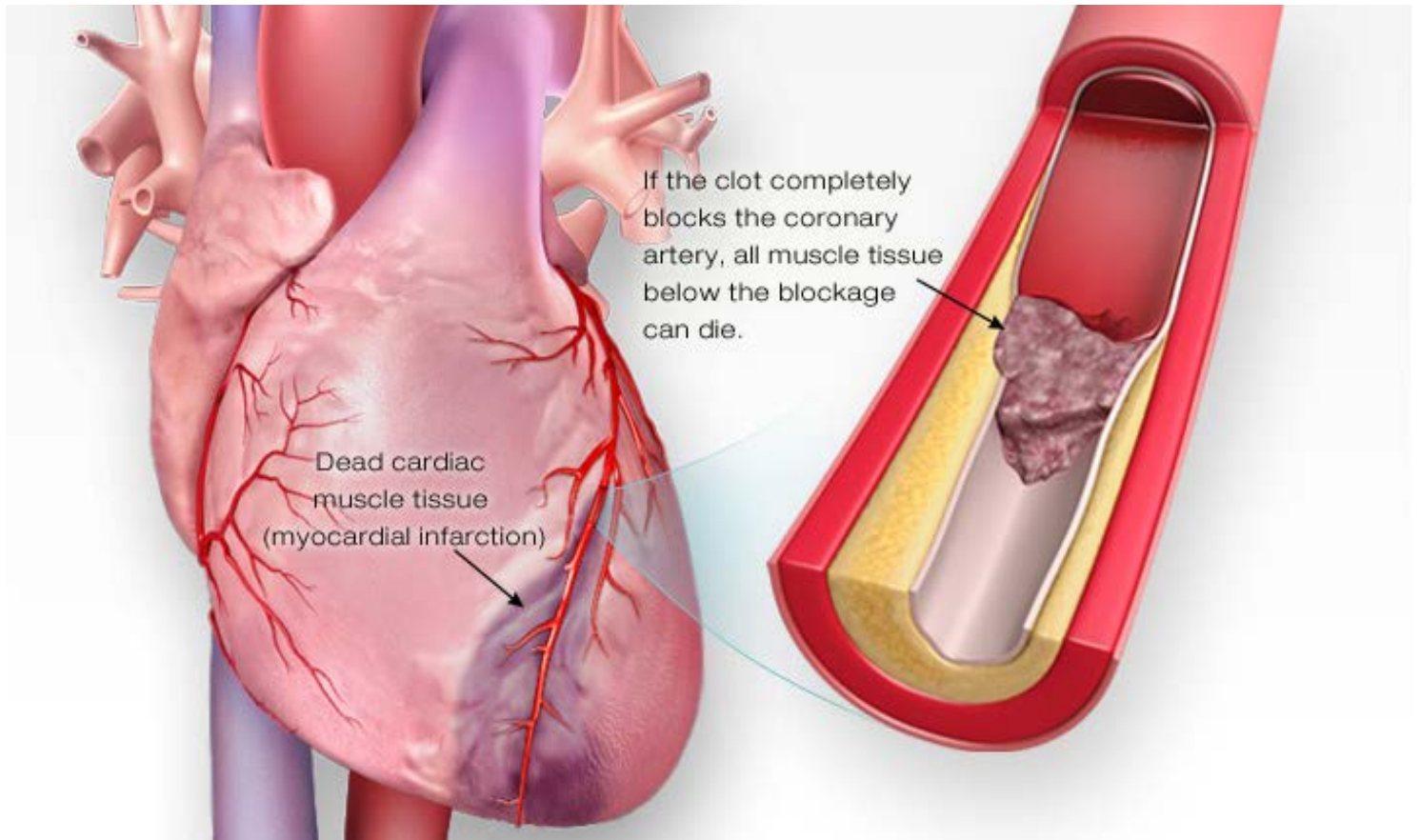
Sources:

Mayo Clinic: <https://www.mayoclinic.org/diseases-conditions/heart-attack/symptoms-causes/syc-20373106>

American Heart Association:

http://www.heart.org/HEARTORG/Conditions/HeartAttack/WarningSignsofaHeartAttack/Warning-Signs-of-a-Heart-Attack_UCM_002039_Article.jsp#.W0joWtJKi70

Causes of Heart Attacks





American
Heart
Association®

life is why™

Common Heart Attack Warning Signs



Pain or discomfort
in chest



Lightheadedness,
nausea, or vomiting



Jaw, neck or
back pain



Discomfort or pain in
arm or shoulder



Shortness of breath

