

Act in Time to Heart Attack Signs

Small Group Session
Lesson Plan



National Heart Attack Alert Program

The National Heart Attack Alert Program (NHAAP) was launched in June 1991 by the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH). The NHAAP has the overall goals of, first, reducing morbidity and mortality from heart attacks through rapid identification and treatment and, second, heightening the potential for an improved quality of life for patients and those around them. The Program goals also include early recognition and response to individuals with sudden cardiac arrest.

A major component of the NHAAP is its Coordinating Committee, composed of representatives from about 40 health professional, voluntary, and Federal organizations. This group provides input and feedback to the NHAAP about priority educational needs and activities and disseminates the Program's educational messages and materials. For more information about the NHAAP, visit the NHLBI Web site at www.nhlbi.nih.gov.



Act in Time to **Heart Attack Signs**

Small Group Session Lesson Plan

In partnership with:



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Introduction

About This Session

Congratulations for bringing this group session to your community! The “Act in Time to Heart Attack Signs” Small Group Session allows you to share life-saving information about heart attack symptom recognition and action with potential heart attack patients and their spouses, families, and friends.

This hour-long group session is designed for lay presenters. It includes all the information needed to conduct the session: a complete script, a videotape, a set of reproducible overheads, frequently asked questions and answers, and information about additional resources.

All you need to conduct a session is this kit, a few supplies, and the desire to share this important information with the group of your choice.

Purpose

Heart disease is the leading cause of death for all Americans. Coronary heart disease (CHD) accounts for the largest proportion of heart disease. About 12 million Americans have CHD. Some risk factors associated with CHD are preventable, but many people are not aware of this important fact. And when a heart attack (a sudden sign of heart disease) does happen, delay in treatment can be deadly. Recognizing the symptoms of a heart attack and taking quick action can save a life. The “Act in Time

to Heart Attack Signs” Small Group Session will help you prepare participants to recognize the early warning signs of a heart attack and to take quick action if a heart attack occurs. In addition, this session helps participants learn more about the risk factors for a heart attack and how to prevent and control them.

This lesson plan is accompanied by the videotape, “Act in Time to Heart Attack Signs,” which includes personal testimonials from heart attack survivors and their loved ones. You can use the videotape to emphasize the important message points of the session.

The session is designed to be adaptable to a variety of audiences and time periods. Use your judgment to adapt the session to your audience members based on their knowledge and experience.

Audience and Setting

This session is designed for use with a small group (typically 8-12 participants) in health care facilities, worksites, community groups, churches, senior centers and housing units, health fairs, and similar settings. It is especially designed for people who are at risk for CHD and their families. But it will be of interest to anyone who wants to learn about how to help save the life of someone experiencing the warning signs of a heart attack.

Course Outline

Suggested Time	Lesson and Topic	Page
5 Minutes	Welcome and Introductions	7
15 Minutes	Extent of the Problem	8
3 Minutes	What Is a Heart Attack?	9
2 Minutes	Importance of Rapid Treatment for Heart Attack	11
8 Minutes	What Are the Heart Attack Warning Signs?	12
6 Minutes	Delay Can Be Deadly	15
3 Minutes	The Role of Emergency Medical Services	18
7 Minutes	Steps to Survival	19
8 Minutes	What Factors Increase a Person's Risk of Having a Heart Attack?	20
3 Minutes	Assess What You've Learned and Adjournment	23
Total 60 Minutes		

Learning Objectives

After completing this session, participants should be able to—

1. Explain the extent of the heart attack problem in the United States.
2. Review how the heart functions.
3. Describe how a heart attack occurs.
4. Cite the importance of rapid treatment for a heart attack.
5. Identify the common heart attack warning signs.
6. Explain the problem of patient delay in seeking help for heart attacks.
7. Discuss the role of emergency medical services in early heart attack care.
8. List the “Steps to Survival” in response to heart attack warning signs.
9. Review factors that increase a person's risk of heart disease and steps that will help reduce the risk.



How To Use This Lesson Plan

Session Length

This session is about 1 hour in length. The length of the course may be affected by—

- The number of participants;
- The knowledge and experience of participants;
- Your experience as an instructor; and
- The amount of discussion.

Keep in mind that this program is designed to be flexible to accommodate all of these factors. As long as you get the main messages across, you can make any adjustments necessary for the session to meet your group's needs.

Organizing a Session

Use these suggested steps to conduct a session in your community:

- Find a place to hold your session. Choose one that people can reach easily.
 - Call clinics, hospitals, schools, churches and other houses of worship, senior centers and clubs, and community centers.
 - Ask about ongoing patient education classes and group meetings at these facilities.
 - Work with the coordinator of these classes or groups to see how an “Act in Time to Heart Attack Signs” session could best be incorporated into current activities. For example, a session could be offered as one class in an existing series, as part of a scheduled class, or as a new program.
- Set the time of the session and allow several weeks of lead time to handle logistics such as publicity, reserving equipment, and arranging for refreshments.
- Consider a way to assess the number of interested participants ahead of time. This will allow you to prepare a suitable number of handouts. You can give people a phone number to call if they plan to attend, or you can check with a program coordinator at the host site about usual attendance patterns.
- Publicize the session at least 2 weeks in advance by posting flyers in community sites such as grocery stores, places of worship, and libraries, or use the newsletter or other publicity channels of your host site. Include all necessary information—topic, location, date, and time. You may wish to use the sample publicity flyer in Appendix A.
- Copy Appendix B to make overheads for your presentation.
- Copy the handouts in Appendices C, D, E, F, G. Make one set for each participant.
- Consider augmenting the handouts with additional information about heart attack warning signs and action steps from the “Act in Time to Heart Attack Signs” campaign. (See page 5 for a description of campaign materials.) You may want to display one set of sample materials or offer copies of selected items for participants to take home. You can do this in several ways:
 - Order materials using the form in Appendix H.
 - Download materials from the “Act in Time to Heart Attack Signs” Web site (www.nhlbi.nih.gov) and duplicate copies for your group.
 - Duplicate the order form and give copies to participants so they can order any items for themselves or their family members.

Teaching Tips—The Basics of Group Discussion

It may be difficult to get a group of strangers to relax enough to freely share their thoughts with one another. It is even more difficult when the subject is something as serious as America's #1 killer, heart disease.

Here are some tips to help people open up:

- Start each session by having the participants introduce themselves, beginning with yourself. Ask what brings each participant to the session.
- Break the ice when discussion is called for by offering an example from your own life.
- Make an effort to bring everyone into the conversation, and avoid letting one person dominate the discussions. Still, leaders must respect some participants' wish to be silent.
- Thank participants when they contribute to the discussion. For example, say, "Thanks for sharing that" or "I'm glad you brought that up." Remember, it is not always easy to talk about personal health issues in a group.
- Do not feel you must have all the answers. If you are uncertain about an answer to a specific question, say so and attempt to find out the answer. Some questions can be directed to the participants. You might ask, "Does anyone know the answer to that question?" Most importantly, never be afraid to say, "I don't know." See page 27 for answers to some frequently asked questions about heart attack.

Getting Ready

Before you start, be sure to look over the materials closely. They are meant to be a guide, a script you can follow as much or as little as you choose, as long as you deliver the main messages. And remember, be yourself!

Resources and Materials Needed

- "Act in Time to Heart Attack Signs" lesson plan
- "Act in Time to Heart Attack Signs" videotape
- VHS videocassette player and television
- Blackboard, whiteboard, or newsprint/easel and chalk or markers
- Overhead projector
- Transparencies of overheads in Appendix B
- Copies of the handouts in the back of the lesson plan (Appendices C, D, E, F, G)

Optional Items

- Pencils or pens
- Nametags or tent cards

Using the Lesson Plan

The lesson plan is designed with two columns. The left column is the "Instructor's Cues and Notes." This will let you, the instructor, know what to do and display, such as overheads. The right column is "Instructions and Content." The instructor's script appears in quotes. Transitions, which allow for bridging from one section to the next, are provided between sections in italics. Bulleted lists are used to get the main points across to participants. These also appear as overheads in Appendix B. Please note that the overheads are an abbreviated (shortened) form of the script in the lesson plan.



About The “Act in Time to Heart Attack Signs” Campaign

The Rapid Early Action for Coronary Treatment (REACT) was a 4-year research program funded by the National Heart, Lung, and Blood Institute (NHLBI), of the National Institutes of Health (NIH). The study tested community education strategies to help reduce patient delay time in seeking care for heart attack symptoms. At the completion of the study, advisors to NHLBI’s National Heart Attack Alert Program (NHAAP) recommended that the REACT messages and materials be made available to the American public, especially to individuals who are more likely to delay seeking treatment or who are at higher risk for a heart attack. The “Act in Time to Heart Attack Signs” campaign was developed to update REACT’s educational materials and to spread the key messages to patients, the public, and health professionals.

Campaign Materials

The “Act in Time to Heart Attack Signs” campaign offers other materials in addition to this *Small Group Session Lesson Plan*. The campaign materials can be used to augment a small group session or can be used independently in a variety of settings. The following materials are available from the NHLBI Health Information Center. They can be obtained using the order form in Appendix H.

Act in Time to Heart Attack Signs—Brochure

This easy-to-read brochure covers the actions that help in surviving a heart attack. It lists heart attack warning signs and common reasons for delay in seeking care; dispels a common misunderstanding about the “movie heart attack”; outlines the steps in making a heart attack survival plan; and describes who is at risk for a heart attack. As a handy reference, the back panel features a tear-off card with space to record essential medical information. English and Spanish versions are available. 14 pages.

Act in Time to Heart Attack Signs—Wallet Card

This card gives brief reminders of heart attack warning signs, steps to take if symptoms occur, and the importance of acting quickly. It offers space to write current medications and key phone numbers as an easy reference for both the patient and emergency care providers. It folds to the size of a credit card.

Act in Time to Heart Attack Signs—Video

The dramatic, moving stories of three heart attack survivors and their families illustrate the importance of heeding heart attack warning signs and seeking medical care quickly. This 13-minute video is used with the *Small Group Session Lesson Plan*. It is also useful for doctors’ offices, community groups, health fairs, worksites, and home viewing. The video is closed-captioned.

Act in Time to Heart Attack Signs—Poster

This attractive, colorful poster gives the key concepts and action steps in surviving a heart attack. 11 x 17 inches.

Act in Time to Heart Attack Signs—Provider Quick Reference Card

This handy card gives physicians and other health care providers talking points for discussing heart attack warning signs and survival steps with patients. It outlines the T.I.M.E. method for helping patients understand and feel comfortable with the advice being given. It also includes suggested responses to common patient concerns. 8 ½ x 11 inches.

Act in Time to Heart Attack Signs—Patient Action Plan Tablet

This 50-sheet tablet gives health care providers an easy way to reinforce the key points of a patient discussion about heart attack warning signs and survival steps. It provides a list of warning signs,

About The “Act in Time to Heart Attack Signs” Campaign

steps in developing a heart attack action plan, and space for writing current medications and key phone numbers. Space is also provided to check off personalized heart disease risk factors and risk reduction steps. 8 1/2 x 11 inches.

Act in Time to Heart Attack Signs—Web Page

The “Act in Time to Heart Attack Signs” Web page at www.nhlbi.nih.gov provides an interactive way to learn about heart attack signs and action steps. It will feature new materials as they become available.



“Act in Time to Heart Attack Signs” Lesson Plan

Act in Time to Heart Attack Signs Welcome and Introductions

(5 Minutes)

Instructor’s Cues and Notes

Welcome participants.

Introduction.

Display Overhead 1.

Act in Time to
Heart Attack Signs

Objectives

By the end of this session you will be better informed about:

- How the heart functions
- What a heart attack is
- Heart attack warning signs
- The importance of rapid treatment for a heart attack
- What to do if warning signs happen
- How to reduce your risk of heart disease



(All overheads can be found in Appendix B)

Instructions and Content

Welcome each participant individually and, if desired, provide a nametag or name tent card for identification and introduction purposes.

Introduce yourself to participants and thank them for coming.

“We are here today to help take the fear out of a frightening topic—heart attack. Knowing what to do in case of a heart attack can help save a life—maybe your own.”

“By the end of the session today, you will be better informed about:

- How the heart functions.
- What a heart attack is.
- The heart attack warning signs.
- The importance of rapid treatment for heart attack.
- What to do if warning signs happen.
- How to reduce your risk of heart disease.”

Have participants introduce themselves with an interesting fact about themselves, the reason for attending today’s session, and/or interest in the topic of heart attack.

Review any facility policies and procedures including smoking policies, emergency procedures, location of restrooms, telephones, and water fountains.

Act in Time to Heart Attack Signs

Extent of the Problem

(15 Minutes)

Instructor's Cues and Notes

Explain the extent of the heart attack problem in the United States.

Display Overhead 2.



Act in Time to
Heart Attack Signs

Heart Disease: Major Problem in the United States

- Heart disease #1 killer
- Coronary heart disease
 - Major form
 - Affects about 12 million Americans
- Heart attack
 - 1.1 million affected each year
 - 460,000 deaths
 - Half occur before reaching hospital

Instructions and Content

“Let me give you a few facts to show just how serious a problem heart attacks are in the United States.

- Heart disease is the #1 killer in the United States.
- Coronary heart disease, the major form of heart disease, affects an estimated 12 million Americans.
- Each year, about 1.1 million Americans will have a heart attack and about 460,000 will die.
- About half of these people will die of a heart attack before they reach the hospital.”

Show the entire video.

(Running time: 13 minutes)

“To start our session today, I would like to show a brief video about the importance of paying attention to heart attack warning signs. The video shows the dramatic stories of three heart attack survivors and their families. It also introduces you to an emergency department doctor who will tell you about steps you can take to survive a heart attack.”

Video discussion.

Ask participants the following questions:

“Now that we have viewed the video, let’s talk about what we saw.

- What did you think about the video?
- Was anything new to you?
- What do you think are the most important points to remember?”

Act in Time to Heart Attack Signs

What Is a Heart Attack?

(3 Minutes)

Instructor's Cues and Notes

Describe how a heart attack occurs.

Display Overhead 3.

Act in Time to
Heart Attack Signs

How Your Heart Functions

- The heart pumps blood throughout the body.
- Blood carries oxygen and nutrients.
- Coronary arteries carry oxygenated blood to the heart muscle.



Instructions and Content

“In the video, you heard a few facts about heart attacks. Now let’s talk about what a heart attack is and how one takes place. Some of you may already know this, but a quick review will be helpful for our discussion today.”

- “The heart is an organ made of muscle that is responsible for pumping blood throughout the body.
- Blood transports oxygen and nutrients through the arteries to every part of the body.
- Coronary arteries are the arteries that carry oxygenated blood to the heart muscle.
- Under normal circumstances, the coronary arteries supply all of the blood that our heart needs to do its work, even when we are very active and the demands on our heart are great.”

Display Overhead 4.

Act in Time to
Heart Attack Signs

What Is a Heart Attack?

- Blood flow through one of the coronary arteries becomes blocked.
- Heart disease, which can lead to a heart attack, develops over time as fatty deposits narrow coronary arteries, restricting blood flow to the heart.

- “A heart attack, or acute myocardial infarction, occurs when the blood supply going to a portion of the heart through one of the coronary arteries is blocked. Here’s how this happens.
- Heart disease, which can lead to a heart attack, develops over time as fatty deposits build up on the inside of the coronary arteries, narrowing them so that not enough blood gets through to meet the needs of the heart.”

Display Overhead 5.

Act in Time to
Heart Attack Signs

How Does a Heart Attack Happen?

- Coronary artery becomes blocked—usually by a clot.
- Blood flow is closed off and a heart attack begins.
- If blockage continues, parts of the heart muscle start to die.
- Heart may stop beating.

- “When the coronary artery becomes nearly or completely blocked, usually by a clot forming at the narrowed part of the artery, blood flow is closed off and a heart attack begins.
- If the blockage continues, parts of the heart muscle will start to die. In fact, the term ‘myocardial infarction’ means, ‘death of heart muscle.’
- The heart may stop beating altogether. This is called a sudden cardiac arrest.”

Instructor's Cues and Notes

Display Overhead 6.

Act in Time to
Heart Attack Signs

What Stops a Heart Attack?

- Quick action and medical treatment restore blood flow and save heart muscle.
- Dead heart muscle cannot be restored.



Instructions and Content

- “When a heart attack occurs, quick action and medical treatment can restore the blood flow to the heart and save parts of the heart muscle from dying. But this can happen only if the person receives medical help right away.
- In general, if the blocked coronary artery can be opened quickly, and the blood flow restored, the extent of the damage will be lessened. Treatments work best if given within 1 hour of when symptoms begin.
- Once a part of the heart muscle has died, nothing can be done to restore it.”

Allow questions and comments.

Invite participants to ask questions or make comments about what happens with a heart attack. Answer appropriately.

Act in Time to Heart Attack Signs

Importance of Rapid Treatment for Heart Attack

(2 Minutes)

Instructor's Cues and Notes

Display Overhead 7.



Importance of Rapid Treatment

- “Clot-busting” drugs break up clots, restoring blood flow.
- Angioplasty opens artery, restoring blood flow.
 - Balloon
 - Stent

Instructions and Content

- “The treatment for heart attack has changed a lot over the years.
- Two decades ago, there was not much doctors could do to stop a heart attack.
- Today there are medications and procedures that can open up the heart’s artery while a heart attack is happening, and restore blood flow.
- There are ‘clot-busting’ drugs (called ‘thrombolytics’) that can break up the clots narrowing an artery and quickly restore blood flow to the heart.
- There is also angioplasty, a procedure in which a balloon is inserted into the artery and inflated to open the artery and restore the blood flow.
- Sometimes with angioplasty, doctors will insert a stent. A stent is a wire mesh tube that is used to prop open the artery that has been cleared using angioplasty.
- The stent stays in the artery permanently and holds it open to improve blood flow to the heart muscle.
- The sooner these treatments are given, the more heart muscle can be saved.”

Display Overhead 8.



Importance of Rapid Treatment

- Ideally, treatments should be given within 1 hour after symptoms start.
- The more heart muscle that is saved, the better the chance of survival.



- “Ideally, these treatments should be given within 1 hour after symptoms start.
- The more heart muscle that is saved, the better chance a heart attack victim has of surviving and resuming a normal life.”

Act in Time to Heart Attack Signs

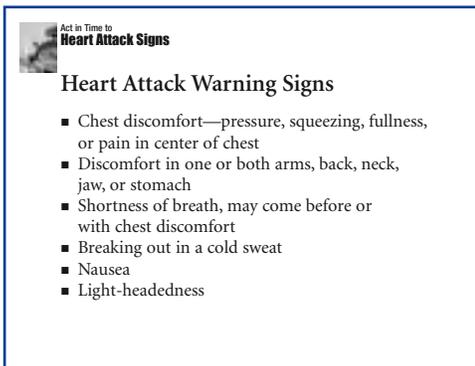
What Are the Heart Attack Warning Signs?

(8 Minutes)

Instructor's Cues and Notes

Discuss heart attack warning signs.

Display Overhead 9.



Act in Time to Heart Attack Signs

Heart Attack Warning Signs

- Chest discomfort—pressure, squeezing, fullness, or pain in center of chest
- Discomfort in one or both arms, back, neck, jaw, or stomach
- Shortness of breath, may come before or with chest discomfort
- Breaking out in a cold sweat
- Nausea
- Light-headedness

Describe the warning signs of a heart attack.

Instructions and Content

“It is important to know how to recognize a heart attack for yourself and others you may be with. This activity should help you recognize the warning signs of a heart attack.

What warning signs do you associate with a heart attack?”

List participants' responses on a blackboard, whiteboard, newsprint, or blank overhead.

Then go over the following warning signs using Overhead 9:

“These are the warning signs most commonly reported by heart attack patients, both women and men:

- **Chest discomfort or pressure.** Most heart attacks involve some type of discomfort in the center of the chest that lasts more than a few minutes. It can feel like uncomfortable pressure, squeezing, fullness, or pain. Such chest discomfort can range from mild to severe.
- **Discomfort in one or both arms, the back, neck, jaw, or stomach.**
- **Shortness of breath.** Along with pressure in the chest may come a feeling of having trouble breathing or catching your breath. You can also have shortness of breath before the chest discomfort.
- **Breaking out in a cold sweat.** People having a heart attack can also break out in a cold sweat.
- **Nausea.** Some heart attack patients feel or get sick to their stomach.
- **Light-headedness.** People having a heart attack may also experience light-headedness.

You do not need to have all these symptoms to be having a heart attack. These symptoms are the most common ones, and most people experience more than one of them. Some signs tend to occur with certain others. For example, chest discomfort often occurs along with shortness of breath. Also, arm pain, sweating, and nausea often occur together.”

Instructor's Cues and Notes

Instructions and Content

Note to Instructor:

Chest pain can be a symptom of other serious conditions besides a heart attack. Regardless of the cause, participants should be encouraged to seek prompt medical care for chest discomfort or pain.

Discuss uncertainty about heart attacks.

“Uncertainty is normal. People are often not sure they are having a heart attack for various reasons. We will discuss why people often think this way.”

Display Overhead 10.



What People *Expect* a Heart Attack to be Like

- Crushing chest pain
- Sudden, intense, falls to the floor—like in the movies



- “One reason most people are not sure they are having a heart attack is that they expect crushing chest pain.
- Some people may experience a heart attack like the ones you see in the movies, where symptoms are obvious and intense or the person falls to the floor suddenly.”

Display Overhead 11.



What Is a Heart Attack Really Like?

- Heart attacks often begin with vague symptoms that slowly intensify.
- Pain or discomfort can be relatively mild.
- Symptoms may come and go.
- Variety of symptoms may signal danger.

- “But many heart attacks begin slowly, with vague symptoms that gradually increase in intensity.
- Sometimes the pain or discomfort is relatively mild, and symptoms may come and go.
- A heart attack is often not a sudden, deadly event, and a variety of symptoms may signal that someone is in danger.
- A person may not even consider that the symptoms could mean a heart attack.”

Instructor's Cues and Notes

Instructions and Content

Display Overhead 12.

Act in Time to
Heart Attack Signs

Reaction to a Heart Attack

- May not be sure it is a heart attack
- May confuse with symptoms of other diseases or conditions
- May not want to believe risk
- May ignore symptoms or take a wait-and-see approach

- “Another reason that people are not sure they are having a heart attack is that they may attribute the symptoms of a heart attack to the symptoms of other medical conditions, such as heart failure, arthritis, asthma, or cancer.
- People may also confuse heart attack warning signs with symptoms of other conditions like muscle spasm, pulled muscle, indigestion, or flu.
- Also, some people do not believe (or do not WANT to believe) they are at risk for having a heart attack.
- So when they experience symptoms, they tend to ignore them or wait to see if the symptoms get worse before they act.”

Allow questions and comments.

Invite participants to ask questions or make comments about heart attack warning signs and the difficulty in recognizing them. Answer appropriately.

Act in Time to Heart Attack Signs Delay Can Be Deadly

(6 Minutes)

Instructor's Cues and Notes

Display Overhead 13.



Delay Can Be Deadly

- Patient delay is the biggest cause of not getting care fast.
- Do not wait more than a few minutes—5 at the most—to call 9-1-1.

9-1-1

Instructions and Content

- “Uncertainty is one reason people delay seeking help for a heart attack. There are other reasons.
- In fact, people often wait too long before they seek medical care for symptoms of a possible heart attack. Some people wait 2 to 4 hours, or even a day or more, before getting help.
- Patient delay—rather than transport delay or hospital delay—is the biggest cause of not getting rapid care for a heart attack.
- It is important not to wait more than a few minutes—5 minutes at the most—to call 9-1-1.

Think about yourself and your family members. What might prevent you from seeking rapid care for heart attack warning signs?”

Invite participants to call out reasons for delay and list them on the blackboard, whiteboard, newsprint/easel, or overhead.

Discuss reasons for delay.

“These are some of the reasons heart attack survivors have given for why they delayed seeking care for heart attack symptoms:

Display Overhead 14.



Why People Delay

- Think symptoms are due to something else
- Afraid or unwilling to admit symptoms are serious
- Embarrassed about:
 - “Causing a scene”
 - Having a false alarm
- Do not understand need for getting to hospital fast

- They did not understand the symptoms of a heart attack and thought that what they were feeling was due to something else.
- They were afraid or unwilling to admit that their symptoms could be serious.
- They were embarrassed about ‘causing a scene,’ or going to the hospital and finding out it was a false alarm.
- They did not understand the importance of getting to the hospital right away.”

Instructor's Cues and Notes

Describe the problem of not calling 9-1-1.

Display Overhead 15.

Act in Time to Heart Attack Signs

Why People Do Not Call 9-1-1

- Think symptoms are not bad enough
- Unaware of benefits of using 9-1-1
- Think transporting self is faster
- Concern about embarrassment



Instructions and Content

“When people having heart attacks do decide to seek care, they often do not call 9-1-1. Fewer than half of all heart attack patients arrive at the hospital by ambulance.”

“Here are some reasons heart attack patients have given for not calling 9-1-1 when they experience symptoms:

- They did not think their symptoms were severe enough.
- They were unaware of the benefits of using 9-1-1.
- They thought that transporting themselves to the hospital would be faster.
- They were concerned about embarrassment (for example, emergency vehicle with flashing lights and sirens showing up at their door, or fear of having a false alarm).

If you are having heart attack symptoms and for some reason cannot call 9-1-1, have someone else drive you at once to the hospital. Never drive yourself, unless there is absolutely no other choice.”

Discuss the problem of heart attacks and delay in women.

Display Overhead 16.

Act in Time to Heart Attack Signs

Heart Attacks in Women

- Women are as vulnerable as men.
- Half of all heart attack deaths are in women.
- Tend to delay longer than men in seeking help.



- “Many women do not believe they are as vulnerable to heart attacks as men.
- Yet nearly half of all heart attack deaths occur in women.
- Studies have found that women with a heart attack often delay longer than men in seeking medical care.
- Keep in mind that women are typically about 10 years older than men when they experience a heart attack.
- Often, they have other diseases, such as high blood pressure, heart failure, and diabetes that complicate symptoms.”

Instructor's Cues and Notes

Display Overhead 17.



Heart Attacks in Women

- Like men, may feel pain or discomfort
- Somewhat more likely to experience:
 - Shortness of breath
 - Nausea/vomiting
 - Back or jaw pain
- Tend to delay telling others about symptoms to avoid causing bother or worry

Instructions and Content

- “As with men, women’s most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other warning signs, particularly shortness of breath, nausea/vomiting, and back or jaw pain.
- Women tend to delay telling others about symptoms to avoid bothering or worrying them. Women should know that their concern for others adds to delay and is harmful in this case. They benefit their families by seeking fast treatment.”

Allow questions and comments.

Invite participants to ask questions or make comments about the importance of acting fast to get help and special issues concerning women.

“Next, we will discuss the important role of emergency medical services (EMS) in assisting with the treatment of a heart attack.”

Act in Time to Heart Attack Signs

The Role of Emergency Medical Services

(3 Minutes)

Instructor's Cues and Notes

Discuss the advantages of using 9-1-1.

Display Overhead 18.



Advantages of Calling 9-1-1

- Brings emergency personnel who can—
- Arrive fast and start medical care
 - Send information to hospital emergency department before the patient's arrival
 - Restart or shock the heart if patient goes into cardiac arrest

9-1-1

Instructions and Content

“Remember if a heart attack happens, the best way to get help is to call 9-1-1 right away. There are many advantages to calling 9-1-1 instead of transporting yourself to the hospital. Calling 9-1-1 is like bringing the emergency department to your door. For instance:

- Emergency medical personnel can take vital signs, determine a person's medical condition, and if needed begin medical care.
- In many places, emergency medical personnel are linked to hospitals and physicians, so they can relay a heart attack patient's vital signs and electrocardiogram (ECG) to the emergency department before the patient arrives. This way the patient receives immediate, continued treatment by emergency department personnel once he or she arrives at the hospital.
- Emergency medical personnel can give a variety of treatments and medications at the scene. Emergency medical personnel may carry oxygen, heart medications (such as nitroglycerin), pain relief treatments (like morphine), or other medications (such as aspirin) that can help a patient's medical condition.
- Heart attack patients who arrive by ambulance tend to receive faster treatment when they get to the hospital.
- Emergency medical personnel also carry defibrillators (equipment to restart the heart if it stops beating). Sometimes during a heart attack, the heart may suddenly stop beating normally. This is called sudden cardiac arrest. If emergency medical personnel are with the heart attack patient when this happens, they can shock or 'defibrillate' the heart to make the beat normal again.”

Note to Instructor:

Depending on the emergency medical system in your community, you might say the following:

“Let's discuss the emergency medical number in our community.

- The fastest way to get the care you need is to call 9-1-1 or the local emergency number. In this community that number is (_____).”

“Ideally, you should plan ahead for who will take care of your dependents in an emergency. Emergency medical personnel will generally contact a friend or relative (or the police department if necessary) to make emergency arrangements for your dependents.”

Act in Time to Heart Attack Signs Steps to Survival

(7 Minutes)

Instructor's Cues and Notes

Discuss seven steps that participants can take now to ensure their (or their loved one's) survival if a heart attack happens.

Display Overhead 19.



Act in Time to Heart Attack Signs

Seven Steps to Survival

1. Learn heart attack warning signs.
2. Think through your steps if warning signs occur.
3. Talk with family and friends about warning signs and calling 9-1-1.
4. Talk to your doctor about heart attack risk.

Instructions and Content

“Let’s get personal about this subject and talk about seven steps you can take now to prepare for a possible heart attack. It may not be something you like to think about, but planning ahead can benefit you and your loved ones by helping to ensure that you get early treatment, the best kind. The Seven Steps to Survival include:

1. **Learn the heart attack warning signs** that we discussed a few minutes ago.
2. **Think through what you would do if you have heart attack warning signs** at home, at work, in the middle of the night, or in any other place or situation that might require advance planning.
3. **Talk with your family and friends about the heart attack warning signs and the importance of calling 9-1-1** after a few minutes—5 at the most—if symptoms persist. Explain the benefits of calling 9-1-1 versus getting to the hospital by car.
4. **Talk to your doctor about your risk of a heart attack.** Ask your doctor to review risk factors you may have and discuss how to reduce your risk.

Display Overhead 20.



Act in Time to Heart Attack Signs

Seven Steps to Survival

5. Talk to doctor about what to do if warning signs occur.
6. Gather important information to take to hospital.
7. Call insurance plan to check on coverage.

5. **Talk to your doctor about what you should do if you experience any of the heart attack warning signs.**
6. **Gather important information to take along with you to the hospital.** Fill out the information on this sheet that health care professionals need to know about you—person to contact in case of an emergency, your doctor’s name and phone numbers, your medications, and any medication allergies.
7. **If you are concerned about your insurance coverage, call your insurance company and check on your plan.** Insurance companies generally cover emergency care for a possible heart attack.”

Hand out “Quick Reference Sheet” (Appendix C)

Allow questions and comments.

Invite participants to ask questions or make comments about developing a heart attack survival plan. Answer appropriately.

Instructor’s Cues and Notes

Instructions and Content

Optional Activity
“What Are My Chances of Having a Heart Attack?” Handout (Appendix D)

Hand out “What Are My Chances of Having a Heart Attack?”

Explain to participants that, “Answering ‘yes’ to even one of these questions increases the chance of having a heart attack. For each additional ‘yes,’ the risk goes higher.”

Heart disease risk factors that you can control

Hand out the “Heart Disease Risk Factors You Can Do Something About” sheet and explain that this can be used for future reference to help to reduce the risk of having a heart attack.

“Heart Disease Risk Factors You Can Do Something About” Handout (Appendix E)

“There are several factors that increase one’s risk for developing CHD (which can lead to a heart attack). Some of these risk factors can be controlled or managed, and some of them cannot. Risk factors that you can control include:

Display Overhead 21.



Controllable Risk Factors

- Cigarette smoking
- Diabetes
- High blood cholesterol
- High blood pressure
- Overweight/obesity
- Physical inactivity

- **Cigarette Smoking.** Smoking puts an added strain on the heart muscle because it causes the blood vessels to clamp down or constrict. If some of the blood vessels have been narrowed and damaged by heart disease, smoking makes the problem worse. Smoking may make the heart beat faster, raise your blood pressure, and/or reduce blood flow. It also increases the level of carbon monoxide in your blood, which robs your heart and other tissues of the oxygen they need.
- **Diabetes.** Diabetes occurs when the body is not able to use sugar as it should for growth and energy. The body gets sugar when it changes food into glucose to be taken up and used by the body. A hormone called insulin is needed for the glucose to be taken up and used by the body. Diabetes damages blood vessels, including the coronary arteries of the heart. Up to 75 percent of people with diabetes develop heart and blood vessel diseases. Diabetes can also lead to stroke, kidney failure, and other problems. Because of the link with heart disease, it is important for people with diabetes to prevent or control heart disease risk factors.

- **High blood cholesterol.** Cholesterol is a soft, waxy substance found in human and animal tissue. Your body needs cholesterol to make certain hormones and other substances. However, when there is too much cholesterol in your blood, the extra cholesterol starts building up on the walls of your arteries. The higher your blood cholesterol level, the more likely fats and cholesterol will build up in your arteries. Ideally, total blood cholesterol levels should be less than 200 (200 mg/dL, or 200 milligrams of cholesterol per deciliter of blood).
- **High blood pressure** is a major risk factor for CHD and the most important risk factor for stroke. High blood pressure makes the heart work harder. Blood pressure that is 140/90 (mm Hg or millimeters of mercury) or above is considered high. Also, be aware that you have high blood pressure if either number is high. If high blood pressure is not controlled, it increases your risk of heart attack, stroke, and kidney problems.
- **Overweight/Obesity.** Obesity increases the risk of a heart attack and of developing high blood cholesterol, high blood pressure, and diabetes. Losing excess weight is critical for good health. Assessment of overweight involves determining body mass index and waist circumference. Talk with your health care provider to get a complete assessment.
- **Physical inactivity.** Physical inactivity contributes directly to heart-related problems and increases the chances of developing other risk factors, such as high blood pressure and diabetes. Physical activity contributes to better heart health. All adults should try to have at least 30 minutes of moderately intense physical activity on most—and preferably all—days of the week. Studies show that regular physical activity improves the levels of blood cholesterol, blood pressure, and blood sugar.”

Instructor's Cues and Notes

List the heart attack risk factors that you cannot control.

Display Overhead 22.



Act in Time to Heart Attack Signs

Non-Controllable Risk Factors

- Age
- Family history of early heart disease
- Previous heart attack or other signs of heart disease

Instructions and Content

“Factors that you cannot control include:

- **Age.** Risk for heart disease increases steeply with advancing age in men and women. Men over 45 years and women over 55 years are at increased risk.
- **Family history of early heart disease.** If you have a father or brother who had a heart attack before age 55 or a mother or sister who had a heart attack before age 65, your risk for heart disease increases.
- **One or more previous heart attacks, angina, bypass surgery, stroke, or blockages in neck or leg arteries.”**

Allow questions and comments.

Invite participants to ask questions or make comments about heart disease risk factors. Answer appropriately.

Act in Time to Heart Attack Signs

Assess What You've Learned and Adjourment

(3 Minutes)

Instructor's Cues and Notes

Instructions and Content

Optional Activity Assess What You've Learned Handout (Appendix F)

Ask participants to complete the “Assess What You’ve Learned” handout. Let them know that the handout will not be turned in or graded. Allow time for participants to complete the handout. After all the participants have completed the handout, discuss and review the answers as time allows.

The correct answers are—

1. T/F: Discomfort or a heavy feeling in the chest can signal a heart attack.

True. Chest pain is the most commonly reported heart attack symptom. But the pain may not feel severe or “stabbing.” It may feel more like a discomfort. Chest discomfort may be accompanied by or follow shortness of breath. Or discomfort or pain may be felt in other areas of the upper body, such as one or both arms, the back, neck, jaw, or stomach. Also, other symptoms that can occur include breaking out in a cold sweat, nausea, or light-headedness.

2. T/F: Women do not frequently experience heart attacks.

False. Heart disease is the #1 killer of American women, and nearly half of all heart attack deaths each year happen to women. Furthermore, women are less likely to survive a heart attack than are men.

3. T/F: African American women die of heart attacks at the same rate as white women.

False. We didn’t cover this in our discussion, but it’s an important point. African American women’s death rates from heart attacks are a third higher than the rates for white women. In general, women and minorities delay longer before calling for help. African American women are also at greater risk for hypertension and diabetes, which are both risk factors for heart disease.

Instructor's Cues and Notes

Instructions and Content

4. T/F: Some people who are experiencing the symptoms of a heart attack may wait hours or even days before seeking needed medical care.

True. Many people do not recognize their symptoms as life-threatening. That's why it is important to know the warning signs and take action quickly.

5. T/F: Being treated within about an hour of the first symptoms can make a significant difference.

True. Heart attack deaths and heart damage can often be avoided when treatment begins within an hour of when the symptoms started. Most studies show a large reduction in death rates and in heart damage in patients treated within 1 hour of the start of symptoms.

6. T/F: Most heart attack victims say their heart attack wasn't what they'd expected.

True. Most people expect a heart attack to be a sudden intense pain, but often heart attacks start slowly as a mild pain. Patients whose experience did not match their expectations delayed longer before seeking treatment. And delay costs lives.

7. T/F: A family member, such as a spouse, can persuade a loved one having a heart attack to seek help immediately.

True. But studies tell us that family members should expect lack of awareness or denial of the seriousness of the symptoms, and resistance to calling for help. Many heart attack sufferers will reject calling 9-1-1, thus delaying the arrival of help. That's why it's best to enlist family, friends, and coworkers now. Discuss the symptoms. Talk to your doctors about risk for a heart attack. Make a survival plan, before you need one. Whenever a heart attack is suspected, everyone should know to call 9-1-1 immediately—wait no longer than 5 minutes, if symptoms persist. Don't wait for the person having symptoms to agree. Take charge to make sure the person gets checked out sooner rather than later.

8. T/F: Calling 9-1-1 for chest pain alone would probably turn out to be a waste of the emergency medical personnel's time.

False. It's better to be safe than sorry, and sometimes chest pain—even mild chest pain—is the only indicator of a heart attack beginning. Emergency medical personnel, or mobile EMS teams, can diagnose a heart attack and begin treatments on the spot. They can even revive a heart that has stopped or is beating erratically. Call right away—do not wait longer than 5 minutes from when symptoms start. It's okay to be wrong. Emergency medical personnel want you to call to get a possible heart attack checked out. And even if the call turns out to be a false alarm, running the risk of feeling a little embarrassed is better than running the risk of dying or having a permanently damaged heart.

9. T/F: Most heart attacks occur in people over 65.

True. However, 45 percent, or nearly half, of all heart attacks occur in people under age 65. Five percent occur in people under age 40.

10. T/F: The major issue in delay is how long it takes for emergency medical personnel to find the address and deliver the patient to the hospital.

False. The most significant portion of delay time is due to patient delay, the time it takes for an individual to decide to ask for help. Sometimes a patient does not want to believe anything bad is happening and dismisses the seriousness of the symptoms. Sometimes people do not know the symptoms of heart attack.

Instructor's Cues and Notes

Instructions and Content

**Hand out “For Further Information”
(Appendix G)**

“You may obtain more information on this subject and other heart disease subjects from the NHLBI Health Information Center, a service of the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health.”

NHLBI Health Information Center
P.O. Box 30105
Bethesda, MD 20824-0105
Telephone: (301) 592-8573
Fax: (301) 592-8563
E-Mail: nhlbiinfo@rover.nhlbi.nih.gov

“The NHLBI also maintains a World Wide Web site at www.nhlbi.nih.gov. Be sure to see the “Act in Time to Heart Attack Signs” page within the site.

Further information also can be obtained from the American Heart Association.”

American Heart Association
National Center
7272 Greenville Avenue
Dallas, TX 75231
Telephone: (800) AHA-USA1 (800-242-8721)
Web site: www.americanheart.org

“For additional health and safety information, contact your local American Red Cross chapter or visit www.redcross.org.

Also see the Centers for Disease Control and Prevention’s Cardiovascular Health Page at www.cdc.gov/nccdphp/cvd.”

Adjourn program.

Answer any final question participants have. Thank participants for attending the program and adjourn.



Frequently Asked Questions and Answers

The following is a list of frequently asked questions and answers that participants may raise during the session.

Heart Attack Warning Signs

How would I know if I were having a heart attack?

Often, it is not easy to tell. But there are symptoms people may have. These are an uncomfortable pressure, squeezing, fullness, or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back; discomfort in other areas of the upper body, which may be felt in one or both arms, the back, neck, jaw, or stomach; shortness of breath, which often occurs with or before chest discomfort; and other symptoms such as breaking out in a cold sweat, nausea, or light-headedness. When in doubt, check it out! Call 9-1-1. Don't wait more than a few minutes—5 at most. Call right away!

What is angina and how is it different from a heart attack?

An episode of angina is NOT a heart attack. However, people with angina report having a hard time telling the difference between angina symptoms and heart attack symptoms. Angina is a recurring pain or discomfort in the chest that happens when some part of the heart does not receive enough blood temporarily. A person may notice it during exertion (such as in climbing stairs). It is usually relieved within a few minutes by resting or by taking prescribed angina medicine. People who have been diagnosed with angina have a greater risk of a heart attack than do other people.

Do I have to have all of the heart attack signs before I call? How many heart attack warning signs should I have before I call 9-1-1?

Not every heart attack patient will have all of the warning signs. The heart attack warning signs we've discussed are the most common ones—any one of which you should pay attention to. However, most people experience more than one sign. Further, some signs tend to occur with certain others. For example, chest discomfort often occurs along with shortness of breath. Also, arm pain, sweating, and nausea often occur together. But do not try to make your own diagnosis. The important thing to remember is that, if you have any of the warning signs and any lasts for up to 5 minutes, you should call 9-1-1 at once. Let the professionals decide if your symptoms are a heart attack or not. Those professionals want you to have your symptoms checked at the hospital.

Prehospital Delay Time

I'd rather wait until I'm sure something's really wrong. What's the rush anyway?

Clot-busting drugs and other artery-opening treatments work best when given within the first hour after a heart attack starts. The first hour also is the most risky time during a heart attack—it's when your heart might stop suddenly. Responding fast to your symptoms really increases your chance of surviving.

So how quickly should I act?

If you have any heart attack symptoms, call 9-1-1 immediately. Don't wait for more than a few minutes—5 at most—to call 9-1-1.

Why should I bother? If I'm going to die, there's not much I can do about it anyway, is there?

That's not true. There is something that can be done about a heart attack. Doctors have clot-busting drugs and other artery-opening procedures that can stop or reverse a heart attack, if given quickly. These drugs can limit the damage to the heart muscle by removing the blockage and restoring blood flow. Less heart damage means a better quality of life after a heart attack.

Given that these new therapies are available, it's very sad to know that so many people cannot receive these treatments because they delay too long before seeking care. The greatest benefits of these therapies are gained when patients come in early (preferably within the first hour of the start of their symptoms).

Role of Emergency Medical Personnel

Emergency medical personnel cause such a commotion. Can't I just have my wife/husband/friend/coworker take me to the hospital?

Emergency medical personnel—also called EMS, for emergency medical services—bring medical care to you. For example, they bring oxygen and medications. And they can actually restart someone's heart if it stops after they arrive. Your wife/husband/friend/coworker can't do that, or help you at all if they are driving. In the ambulance, there are enough people to give you the help you need and get you to the hospital right away.

Steps to Survival

I'm not sure I can remember all this. What can I do to make it easier for me?

You can make a plan and discuss it in advance with your family, your friends, your coworkers and, of course, your doctor. Then you can rehearse this plan, just like a fire drill. Keep it simple. Know the warning signs. Keep information—such as what medications you're taking—in one place. If you have any symptoms of a heart attack for a few minutes (no more than 5), call the EMS by dialing 9-1-1 right away.

I carry nitroglycerin pills all the time for my heart condition. If I have heart attack symptoms, shouldn't I try them first?

Yes, if your doctor has prescribed nitroglycerin pills, you should follow your doctor's orders. If you are not sure about how to take your nitroglycerin when you get chest pain, check with your doctor.

What about taking an aspirin like we see on television?

You should not delay calling 9-1-1 to take an aspirin. Studies have shown that people sometimes delay seeking help if they take an aspirin (or other medicine). Emergency personnel will give people experiencing a heart attack an aspirin as soon as they arrive. So, the best thing to do is to call 9-1-1 immediately and let the professionals give the aspirin.



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix A
Publicity Flyer



Act in Time to
**Heart Attack
Signs**

Did You Know...

About 1.1 million Americans will have a heart attack this year.

Learn How to Survive a Heart Attack!

Come to a **FREE** 1-hour session and video presentation to learn:

- How you can save your life or someone else's
- How to recognize heart attack warning signs

Date:.....

Time:.....

Location:.....

If you plan to attend or want more information, call:

.....



This presentation is sponsored by the National Heart, Lung, and Blood Institute of the
National Institutes of Health in partnership with

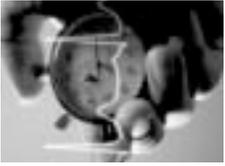
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(Add your organization here)



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix B
Overheads



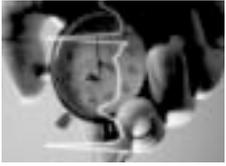
Act in Time to **Heart Attack Signs**

Objectives

By the end of this session you will be better informed about:

- How the heart functions
- What a heart attack is
- Heart attack warning signs
- The importance of rapid treatment for a heart attack
- What to do if warning signs happen
- How to reduce your risk of heart disease





Act in Time to
Heart Attack Signs

Heart Disease: Major Problem in the United States

- Heart disease #1 killer
- Coronary heart disease
 - Major form
 - Affects about 12 million Americans
- Heart attack
 - 1.1 million affected each year
 - 460,000 deaths
 - Half occur before reaching hospital



Act in Time to
Heart Attack Signs

How Your Heart Functions

- The heart pumps blood throughout the body.
- Blood carries oxygen and nutrients.
- Coronary arteries carry oxygenated blood to the heart muscle.





Act in Time to
Heart Attack Signs

What Is a Heart Attack?

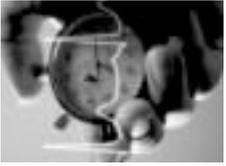
- Blood flow through one of the coronary arteries becomes blocked.
- Heart disease, which can lead to a heart attack, develops over time as fatty deposits narrow coronary arteries, restricting blood flow to the heart.



Act in Time to **Heart Attack Signs**

How Does a Heart Attack Happen?

- Coronary artery becomes blocked—usually by a clot.
- Blood flow is closed off and a heart attack begins.
- If blockage continues, parts of the heart muscle start to die.
- Heart may stop beating.

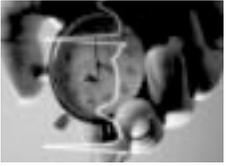


Act in Time to
Heart Attack Signs

What Stops a Heart Attack?

- Quick action and medical treatment restore blood flow and save heart muscle.
- Dead heart muscle cannot be restored.

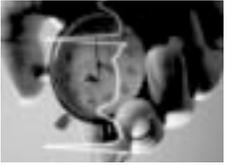




Act in Time to
Heart Attack Signs

Importance of Rapid Treatment

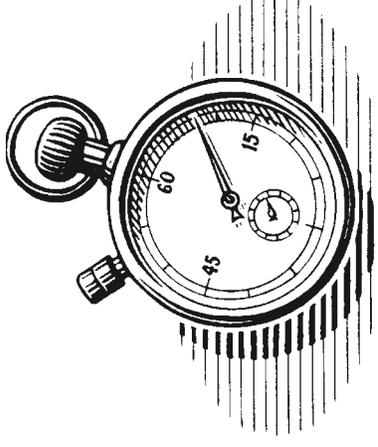
- “Clot-busting” drugs break up clots, restoring blood flow.
- Angioplasty opens artery, restoring blood flow.
 - Balloon
 - Stent

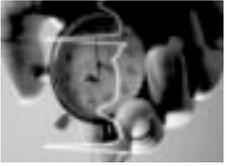


Act in Time to
Heart Attack Signs

Importance of Rapid Treatment

- Ideally, treatments should be given within 1 hour after symptoms start.
- The more heart muscle that is saved, the better the chance of survival.





Act in Time to
Heart Attack Signs

Heart Attack Warning Signs

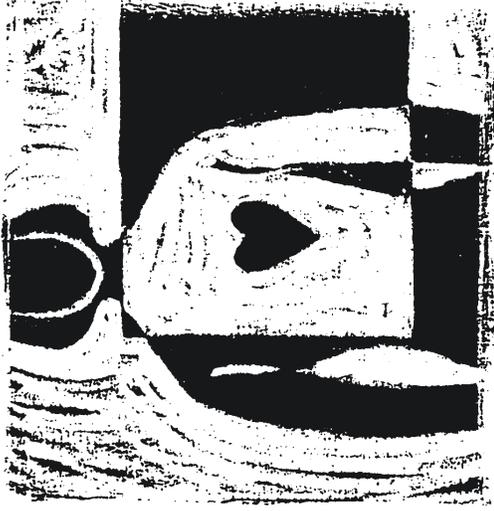
- Chest discomfort—pressure, squeezing, fullness, or pain in center of chest
- Discomfort in one or both arms, back, neck, jaw, or stomach
- Shortness of breath, may come before or with chest discomfort
- Breaking out in a cold sweat
- Nausea
- Light-headedness



Act in Time to
Heart Attack Signs

What People *Expect* a Heart Attack to be Like

- Crushing chest pain
- Sudden, intense, falls to the floor—like in the movies

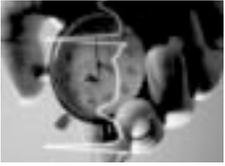




Act in Time to **Heart Attack Signs**

What Is a Heart Attack Really Like?

- Heart attacks often begin with vague symptoms that slowly intensify.
- Pain or discomfort can be relatively mild.
- Symptoms may come and go.
- Variety of symptoms may signal danger.



Act in Time to
Heart Attack Signs

Reaction to a Heart Attack

- May not be sure it is a heart attack
- May confuse with symptoms of other diseases or conditions
- May not want to believe risk
- May ignore symptoms or take a wait-and-see approach

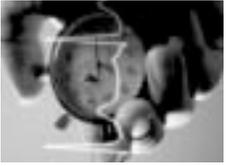


Act in Time to
Heart Attack Signs

Delay Can Be Deadly

- Patient delay is the biggest cause of not getting care fast.
- Do not wait more than a few minutes—5 at the most—to call 9-1-1.

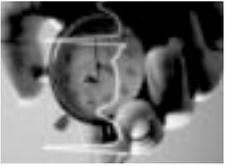
9-1-1



Act in Time to
Heart Attack Signs

Why People Delay

- Think symptoms are due to something else
- Afraid or unwilling to admit symptoms are serious
- Embarrassed about:
 - “Causing a scene”
 - Having a false alarm
- Do not understand need for getting to hospital fast

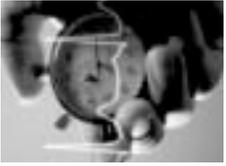


Act in Time to
Heart Attack Signs

Why People Do Not Call 9-1-1

- Think symptoms are not bad enough
- Unaware of benefits of using 9-1-1
- Think transporting self is faster
- Concern about embarrassment

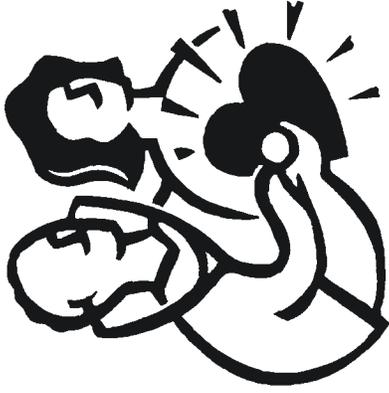


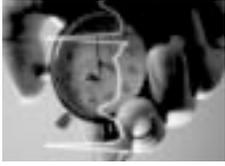


Act in Time to
Heart Attack Signs

Heart Attacks in Women

- Women are as vulnerable as men.
- Half of all heart attack deaths are in women.
- Tend to delay longer than men in seeking help.





Act in Time to
Heart Attack Signs

Heart Attacks in Women

- Like men, may feel pain or discomfort
- Somewhat more likely to experience:
 - Shortness of breath
 - Nausea/vomiting
 - Back or jaw pain
- Tend to delay telling others about symptoms to avoid causing bother or worry

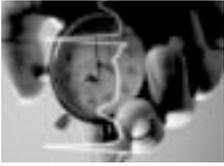


Act in Time to
Heart Attack Signs

Advantages of Calling 9-1-1

- Brings emergency personnel who can—
- Arrive fast and start medical care
 - Send information to hospital emergency department before the patient's arrival
 - Restart or shock the heart if patient goes into cardiac arrest

9-1-1

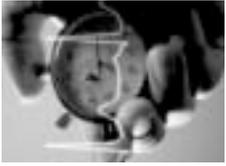


Act in Time to
Heart Attack Signs

Seven Steps to Survival

1. Learn heart attack warning signs.
2. Think through your steps if warning signs occur.
3. Talk with family and friends about warning signs and calling 9-1-1.
4. Talk to your doctor about heart attack risk.



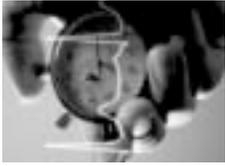


Act in Time to
Heart Attack Signs

Seven Steps to Survival

5. Talk to doctor about what to do if warning signs occur.
6. Gather important information to take to hospital.
7. Call insurance plan to check on coverage.

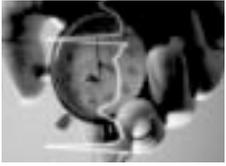




Act in Time to
Heart Attack Signs

Controllable Risk Factors

- Cigarette smoking
- Diabetes
- High blood cholesterol
- High blood pressure
- Overweight/obesity
- Physical inactivity



Act in Time to
Heart Attack Signs

Non-Controllable Risk Factors

- Age
- Family history of early heart disease
- Previous heart attack or other signs of heart disease



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix C

**Quick Reference Sheet
Handout**



Act in Time to
**Heart Attack
Signs**

Quick Reference Sheet

**Heart Attack
Warning Signs**

▲ **Chest Discomfort**

Uncomfortable pressure, squeezing, fullness, or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back.

▲ **Discomfort in Other Areas of the
Upper Body**

This may be felt in one or both arms, the back, neck, jaw, or stomach.

▲ **Shortness of Breath**

May often occur with or before chest discomfort.

▲ **Other Signs**

May include breaking out in a cold sweat, nausea, or light-headedness.

9-1-1

**Fast Action
Saves Lives**

If you or someone you are with begins to have chest discomfort, especially with one or more of the other symptoms of a heart attack, call 9-1-1 right away. Don't wait more than a few minutes—5 minutes at most—to call 9-1-1.

If you are having symptoms and cannot call 9-1-1, have someone else drive you to the hospital right away. Never drive yourself, unless you have absolutely no other choice.

Keep this Card Handy

Tear out and complete this card. Keep the information handy. It can help you save a life—maybe your own!



Act in Time to
**Heart Attack
Signs**

Heart Attack Survival Plan

Information To Share With Emergency Personnel/Hospital Staff

Medicines you are taking:

.....
.....
.....
.....

Medicines you are allergic to:

.....
.....
.....
.....

If symptoms stop completely in less than 5 minutes, you should still call your health care provider.

Phone number during office hours:

.....

Phone number after office hours:

.....

Person You Would Like Contacted If You Go to the Hospital

Name:

.....

Home phone number:

.....

Work phone number:

.....



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix D

**What Are My Chances of
Having a Heart Attack ?
Handout**



Act in Time to
**Heart Attack
Signs**

What Are My Chances of Having a Heart Attack?

	Yes	No	Don't Know
Do you smoke?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is your blood pressure 140/90 mm Hg or higher, OR have you been told by your doctor that your blood pressure is too high?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has your doctor told you that your total cholesterol level is 200 mg/dL or higher or your HDL (good cholesterol) is less than 40mg/dL?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has your father or brother had a heart attack before age 55 OR your mother or sister had one before age 65?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have diabetes OR a fasting blood sugar of 126 mg/dL or higher, OR do you need medicine to control your blood sugar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you a man 45 years of age or older, OR a woman 55 years of age or older?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a body mass index (BMI) score of 25 or more?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you get less than a total of 30 minutes of physical activity on most days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a doctor told you that you have angina (chest pains), or have you had a heart attack?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Saying “yes” to even one of these questions increases your chance of having a heart attack. If you don’t know your blood pressure, cholesterol, or body mass index you should check with your health care provider.



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix E

**Heart Disease Risk Factors
You Can Do Something About
Handout**



Heart Disease Risk Factors You Can Do Something About

Risk Factors	Facts You Need To Know	Take These Steps To Prevent Heart Disease
<p>High blood pressure High blood pressure is called the silent killer.</p>	<p>When your blood pressure is high, your heart works harder than it should to move blood to all parts of the body. If not treated, high blood pressure can lead to stroke, heart attack, eye and kidney problems, and death.</p> <p>Check your number: Desirable is 120/80 mm Hg. High blood pressure is 140/90 mm Hg or more (based on readings at two different visits).</p>	<ul style="list-style-type: none"> ■ Have your doctor check your blood pressure. ■ Aim for a healthy weight. ■ Become physically active. ■ Follow a healthy eating plan, including food lower in salt and sodium. ■ Limit alcohol beverages. ■ Take medication, if prescribed.
<p>High blood cholesterol Cholesterol in your arteries is like rust in a pipe. When there is too much cholesterol in the blood, the arteries become clogged, which leads to heart disease.</p>	<p>Total cholesterol: Desirable less than 200 mg/dL Borderline-high 200-239 mg/dL High 240 mg/dL or more</p> <p>If you are age 20 or older, have your blood cholesterol checked by a blood test called a “lipoprotein profile” every 5 years, or more often if it is high. If it is high, ask your doctor how to lower it.</p>	<ul style="list-style-type: none"> ■ Get your blood cholesterol level checked. ■ Learn what your numbers mean. ■ Follow a low saturated fat and low cholesterol eating plan. ■ Become physically active. ■ Aim for a healthy weight. ■ Take medication, if prescribed.
<p>Smoking You put your health and your family’s health at risk when you smoke.</p>	<p>Cigarette smoking is addictive. It harms your heart and lungs and can greatly increase your risk of a heart attack.</p>	<ul style="list-style-type: none"> ■ Stop smoking now or cut back gradually. ■ If you can’t quit the first time, keep trying. ■ If you don’t smoke, don’t start.
<p>Overweight Overweight occurs when extra fat is stored in your body.</p>	<p>Excess weight increases your risk of a heart attack and of developing high blood pressure, high blood cholesterol, and diabetes.</p>	<ul style="list-style-type: none"> ■ Maintain a healthy weight. Try not to gain extra weight. ■ If you are overweight, try to lose weight slowly. Lose 1/2 to 1 pound a week.
<p>Diabetes When the sugar in the blood is high, your body cannot use the food you eat for energy.</p>	<p>Diabetes is serious; you may have it and not know you have it. It can lead to heart attacks, blindness, amputations, and kidney disease.</p>	<ul style="list-style-type: none"> ■ Find out if you have diabetes. Get your blood sugar level checked by your doctor.
<p>Physical inactivity Living a sedentary lifestyle can increase chances of heart disease and take away years from your life.</p>	<p>Physical inactivity increases your risk of high blood pressure, high blood cholesterol and diabetes.</p> <p>Children and adults should do 30 minutes or more of moderate physical activity each day.</p>	<ul style="list-style-type: none"> ■ Become active. You can build up to 30 minutes each day by walking, dancing, or exercising for 10 minutes each time.



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix F

**Assess What You've Learned
Handout**



Act in Time to
**Heart Attack
Signs**

Assess What You've Learned

	True	False
1. Discomfort or a heavy feeling in the chest can signal a heart attack.	<input type="checkbox"/>	<input type="checkbox"/>
2. Women do not frequently experience heart attacks.	<input type="checkbox"/>	<input type="checkbox"/>
3. African American women die of heart attacks at the same rate as white women.	<input type="checkbox"/>	<input type="checkbox"/>
4. Some people who are experiencing the symptoms of a heart attack may wait hours or even days before seeking needed medical care.	<input type="checkbox"/>	<input type="checkbox"/>
5. Being treated within about an hour of the first symptoms can make a significant difference.	<input type="checkbox"/>	<input type="checkbox"/>
6. Many heart attack victims say their heart attack wasn't what they'd expected.	<input type="checkbox"/>	<input type="checkbox"/>
7. A family member, such as a spouse, can persuade a loved one having a heart attack to seek help immediately.	<input type="checkbox"/>	<input type="checkbox"/>
8. Calling 9-1-1 for chest pain alone would probably turn out to be a waste of the emergency medical personnel's time.	<input type="checkbox"/>	<input type="checkbox"/>
9. Most heart attacks occur in people over 65.	<input type="checkbox"/>	<input type="checkbox"/>
10. The major issue in delay is how long it takes for emergency medical personnel to find the address and deliver the patient to the hospital.	<input type="checkbox"/>	<input type="checkbox"/>

Answers

1. T/F: Discomfort or a heavy feeling in the chest can signal a heart attack.

True. Chest pain is the most commonly reported heart attack symptom. But the pain may not feel severe or “stabbing.” It may feel more like a discomfort. Chest discomfort may be accompanied by or follow shortness of breath. Or discomfort or pain may be felt in other areas of the upper body, such as one or both arms, the back, neck, jaw, or stomach. Also, other symptoms that can occur include breaking out in a cold sweat, nausea, or light-headedness.

2. T/F: Women do not frequently experience heart attacks.

False. Heart disease is the #1 killer of American women, and nearly half of all heart attack deaths each year happen to women. Furthermore, women are less likely to survive a heart attack than are men.

3. T/F: African American women die of heart attacks at the same rate as white women.

False. African American women’s death rates from heart attacks are a third higher than the rates for white women. In general, women and minorities delay longer before calling for help. African American women are also at greater risk for hypertension and diabetes, which are both risk factors for heart disease.

4. T/F: Some people who are experiencing the symptoms of a heart attack may wait hours or even days before seeking needed medical care.

True. Many people do not recognize their symptoms as life-threatening. That’s why it is important to know the warning signs and take action quickly.

5. T/F: Being treated within about an hour of the first symptoms can make a significant difference.

True. Heart attack deaths and heart damage can often be avoided when treatment begins within an hour of when the symptoms started. Most studies show a large reduction in death rates and in heart damage in patients treated within 1 hour of the start of symptoms.

6. T/F: Most heart attack victims say their heart attack wasn’t what they expected.

True. Most people expect a heart attack to be a sudden intense pain, but often heart attacks start slowly as a mild pain. Patients whose experience did not match their expectations delayed longer before seeking treatment. And delay costs lives.

7. T/F: A family member, such as spouse, can persuade a loved one having a heart attack to seek help immediately.

True. But studies tell us that family members should expect lack of awareness or denial of the seriousness of the symptoms, and resistance to calling for help. Many heart attack sufferers will reject calling 9-1-1, thus delaying the arrival of help. That’s why it’s best to enlist family, friends, and coworkers now. Discuss the symptoms. Talk to your doctors about risk for a heart attack. Make a survival plan, before you need one. Whenever a heart attack is suspected, everyone should know to call 9-1-1 immediately—wait no longer than 5 minutes, if symptoms persist. Don’t wait for the person having symptoms to agree. Take charge to make sure the person gets checked out sooner rather than later.

8. T/F: Calling 9-1-1 for chest pain alone would probably turn out to be a waste of the emergency medical personnel's time.

False. It's better to be safe than sorry, and sometimes chest pain—even mild chest pain—is the only indicator of a heart attack beginning. Emergency medical personnel, or mobile EMS teams, can diagnose a heart attack and begin treatments on the spot. They can even revive a heart that has stopped or is beating erratically. Call right away—do not wait longer than 5 minutes from when symptoms start. It's okay to be wrong. Emergency medical personnel want you to call to get a possible heart attack checked out. And even if it turns out to be a false alarm, running the risk of feeling a little embarrassed is better than running the risk of dying or having a permanently damaged heart.

9. T/F: Most heart attacks occur in people over 65.

True. However, 45 percent, or nearly half, of all heart attacks occur in people under 65. Five percent occur in people under the age of 40.

10. T/F: The major issue in delay is how long it takes for emergency medical personnel to find the address and deliver the patient to the hospital.

False. The most significant portion of delay time is due to patient delay, the time it takes for an individual to decide to ask for help. Sometimes a patient does not want to believe anything bad is happening and dismisses the seriousness of the symptoms. Sometimes people do not know the symptoms



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix G

**For Further Information
Handout**



Act in Time to
**Heart Attack
Signs**

For Further Information

National Heart, Lung, and Blood Institute

Contact the NHLBI Health Information Center to learn more about the prevention and treatment of high blood pressure, high cholesterol, obesity, and heart disease, as well as asthma and other lung diseases, sleep disorders, and blood diseases.

NHLBI maintains a Web site at www.nhlbi.nih.gov. The site includes information and publications for health professionals, patients, and the public. Special interactive Web pages offer self-assessment quizzes, medication information, healthy lifestyle tips, and more. Visit “Act in Time to Heart Attack Signs,” “Your Guide to Lowering High Blood Pressure,” “Live Healthier, Live Longer” (cholesterol), and “Aim for a Healthy Weight.”

NHLBI Health Information Center
P.O. Box 30105
Bethesda, MD 20824-0105
Telephone: (301) 592-8573
Fax: (301) 592-8563
E-Mail: nhlbiinfo@rover.nhlbi.nih.gov
Web site: www.nhlbi.nih.gov

American Heart Association

To learn more about the prevention and treatment of heart attacks and heart disease, contact:

American Heart Association
National Center
7272 Greenville Avenue
Dallas, TX 75231
Phone: (800) AHA-USA1 (242-8721)
Web site: www.americanheart.org

American Red Cross

For additional health and safety information, contact your local American Red Cross chapter or visit www.redcross.org

Centers for Disease Control and Prevention

Also see the Centers for Disease Control and Prevention’s Cardiovascular Health Page at www.cdc.gov/nccdphp/cvd.



Act in Time to
Heart Attack Signs
Lesson Plan

Appendix H

**Act in Time to
Heart Attack Signs
Education Materials
Descriptions and
Order Form**



Act in Time to **Heart Attack Signs**

Education Materials Descriptions

Each year, about 1.1 million Americans suffer a heart attack. About 460,000 of those heart attacks are fatal—for nearly half, death occurs within the first hour of the start of symptoms and before the patient reaches the hospital. The main reason for not getting to the hospital fast is patient delay in seeking medical care. That's why the NHLBI is conducting a special campaign, "Act in Time to Heart Attack Signs." Partners in the campaign are the American Heart Association, the American Red Cross, and The National Council on the Aging.

The campaign materials urge people to learn the warning signs and call 9-1-1 at the earliest suggestion of a heart attack. Materials for health professionals and community groups provide tools to motivate and educate people about symptoms and the actions that will help them to survive a heart attack. The following campaign materials can be ordered from the NHLBI Health Information Center. Substantial discounts are offered on bulk orders.

Act In Time To Heart Attack Signs - Brochure

An easy-to-read brochure covering the actions that help in surviving a heart attack. Lists heart attack warning signs and common reasons for delay in seeking care; dispels a common misunderstanding about the "movie heart attack;" outlines the steps in making a heart attack survival plan; describes who is at risk for a heart attack and gives sources of further information. As a handy reference, the back panel features a tear-off card with space to record essential medical information. An important resource for anyone. 4 by 9 inches, 14 pages.

Brochure in English: # 01-3525

Brochure in Spanish # 02-3526

First copy: Free

Each additional copy: \$ 1.50

25 copies for \$ 18.75

100 copies for \$ 60

Act In Time To Heart Attack Signs - Wallet Card

This pocket-sized card for wallet or purse gives brief reminders of heart attack warning signs, steps to take if symptoms occur, and the importance of acting quickly. Offers space to write in current medications and key phone numbers as an easy reference for both the patient and emergency care providers. This colorful, tri-fold card is 2 1/8 by 3 1/4 inches. Great for health fairs, information centers, patients, and health care providers too.

Publication # 01-3667

First copy : Free

Each additional copy \$0.25

25 copies for \$ 3.13

100 copies for \$10

Act In Time To Heart Attack Signs - Video

The dramatic, moving stories of three heart attack survivors and their families illustrate the importance of heeding heart attack warning signs and seeking medical care quickly. They vividly convey how a real heart attack may differ from the stereotypical “movie heart attack” and how getting immediate treatment can save lives. The warm and sympathetic narration by an emergency department physician explains what a heart attack is, the treatments that can save lives if given quickly, why many heart attack victims delay seeking care, and how to make a heart attack survival plan. Useful for health fairs, medical waiting rooms, community groups, and home viewing. 13 minutes.

Publication # 56-042N
\$5.50 each

Act In Time To Heart Attack Signs - Poster

This attractive, colorful poster gives patients and visitors the key concepts and action steps in surviving a heart attack: Understand that treatments can stop a heart attack in its tracks if they are given quickly; know the heart attack warning signs; when in doubt, check it out; call 9-1-1 within 5 minutes; make a survival plan. With large type, the poster is easy to read. Simple, clear language makes key points easy to remember. 11 by 17 inches.

Publication # 01-3646
Single copy: \$ 1.50
25 copies for \$ 18.75
100 copies for \$ 60

Act in Time to Heart Attack Signs - Physician Quick Reference Card

This handy card gives physicians and other health care providers talking points for discussing heart attack warning signs and survival steps with patients. It outlines the T.I.M.E. method for helping patients understand and feel comfortable with the advice being given. The reference card also includes suggested responses to common patient concerns, including questions about heart attack treatments, embarrassment about calling 9-1-1 for a false alarm, and worry about upsetting family members. Printed on glossy card stock, 8 1/2 by 11 inches.

Publication # 01-3313
Single copy \$ 1.50
25 copies for \$ 18.75
100 copies for \$ 60

Act in Time to Heart Attack Signs - Patient Action Plan Tablet

This tablet-sized prescription pad gives physicians and other health care providers an easy way to reinforce the key points of a patient discussion about heart attack warning signs and survival steps. Provides a handy list of warning signs, steps in developing a heart attack action plan, and space for writing in current medications and key phone numbers. Space is also provided to individualize each sheet with the patient’s name and to check off personalized heart disease risk factors and risk reduction steps. Fifty tear-off sheets per tablet, 8 1/2 by 11 inches.

Publication # 01-3669
Single tablet \$ 3.00
25 tablets for \$ 37.50
100 tablets for \$ 120

Act in Time to Heart Attack Signs - Campaign Sampler Collection

This collection of campaign materials contains one each of the Brochure, Wallet Card, Video, Poster, Quick Reference Card, and Action Plan Tablet. An economical way to see the pieces of the campaign and decide which you may wish to purchase in quantity at a later date.

SC-021
\$10.60 each

Act in Time to Heart Attack Signs - Small Group Session Kit

This kit contains a complete lesson plan and video – everything needed to conduct a one-hour education session for a small group. The lesson plan is designed for easy use by a lay instructor, and includes talking points, 6 reproducible handouts, and 22 masters for making overheads. It offers tips on how to organize, publicize, and lead a session. The video, an integral part of the lesson, uses stories of heart attack survivors and their families to dramatize the importance of heeding heart attack warning signs and seeking medical care quickly. Useful for senior centers, hospitals, churches and other houses of worship, adult education classes, work site health and safety meetings, and community groups. Lesson Plan – 50 pages. Video – 13 minutes. Packaged in a sturdy 9 by 12 inch storage box.

Publication # KT- 017
Single kit \$ 12.50
Each additional kit \$ 11.00

Act in Time to Heart Attack Signs - Web Page

This special section of the NHLBI Web site offers an interactive way to learn the warning signs of a heart attack and the steps to survival. Visitors can learn what happens to the heart during a heart attack, how heart attacks are treated in the ambulance and the hospital, what tests are done in the emergency department to assess a heart attack, and how to make a survival plan. Links connect to the “Act in Time to Heart Attack Signs” campaign materials.

Located at www.nhlbi.nih.gov

Notes

Notes

DISCRIMINATION PROHIBITED: Under provisions of applicable public laws enacted by Congress since 1964, no person in the United States shall, on the grounds of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity (or, on the basis of sex, with respect to any education program or activity) receiving Federal financial assistance. In addition, Executive Order 11141 prohibits discrimination on the basis of age by contractors and subcontractors in the performance of Federal contracts, and Executive Order 11246 states that no federally funded contractor may discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Therefore, the National Heart, Lung, and Blood Institute must be operated in compliance with these laws and Executive Orders.



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In partnership with:

