

# EARLY HEART ATTACK CARE

*Heart Attacks Have Beginnings*



**Carla Schmidt, BSH, CVT, STEMI Coordinator**  
**Edited by Betty Jax, MSN, ARNP, RN-BC**

**December 2012**

**UF&Shands**  
The University of Florida Academic Health Center

# HEART ATTACK:

**A COMMUNITY PROBLEM  
WITH A  
COMMUNITY SOLUTION**



# **OBJECTIVES**

- 1. Describe what happens in a heart attack.**
- 2. Recognize early signs and symptoms of heart attack.**
- 3. Know appropriate actions to take when you or others have signs or symptoms of a heart attack.**

# DID YOU KNOW?

## The Human Heart



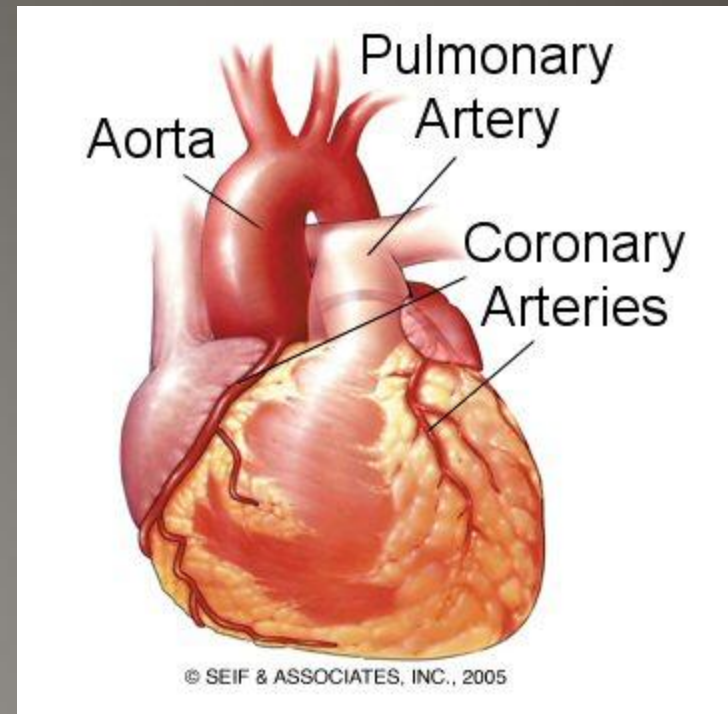
- Is located in the middle of the chest
- Is the size of a fist and weighs 7 – 12 ounces
- Pumps blood throughout the body
- Pumps 1,800 gallons of blood & beats over 100,000 times daily

# DID YOU KNOW?

- Heart Attack is the #1 Killer of Men and Women
- There are 4,100 Heart Attacks every day
- And 600,000 Heart Attack deaths each year
- Hundreds of thousands survive a heart attack but are left with a damaged heart

# WHAT IS A HEART ATTACK?

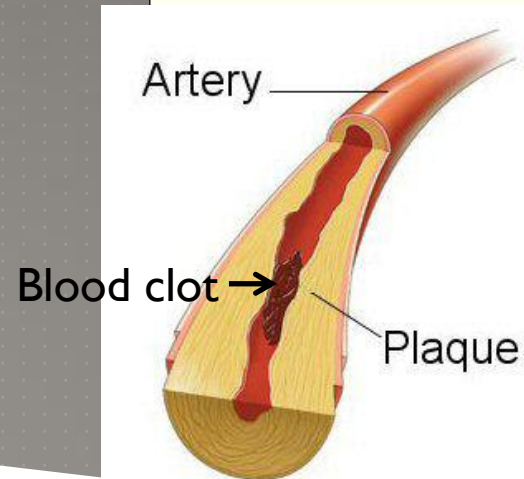
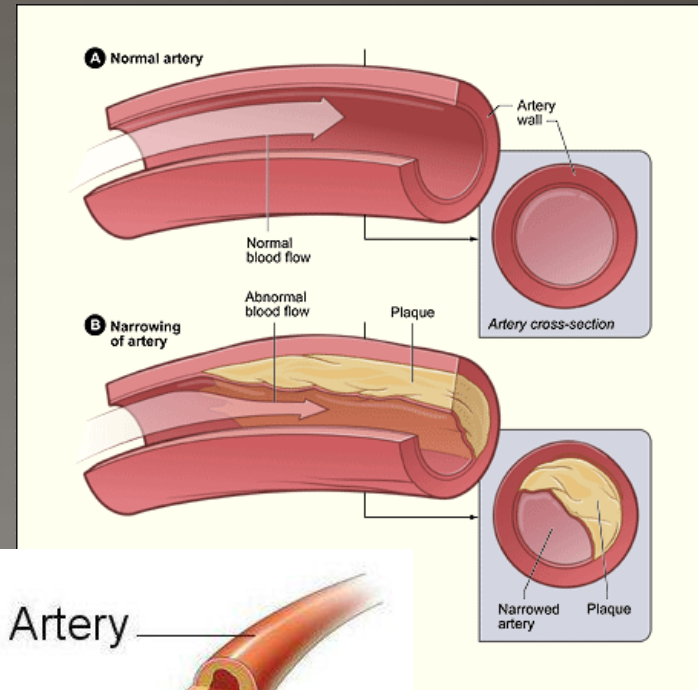
- The medical name for a heart attack is myocardial infarction or MI.
- A myocardial infarction (MI) is damage to the heart that is not reversible.
- An MI usually occurs when a heart (*coronary*) artery becomes blocked or narrowed. This cuts off the blood supply to the heart muscle.
- When one or more of the heart (*coronary*) arteries becomes blocked, that area of the heart begins to die. This causes pain felt during an MI.



# WHAT CAUSES A HEART ATTACK?

A heart attack (MI) can occur from:

- ▶ A gradual buildup of a fatty substance called plaque. This condition is called atherosclerosis. This buildup can block or reduce the blood supply to the heart artery/arteries.
- ▶ A sudden plaque rupture within a heart artery that causes a blood clot (*thrombus*). A blood clot can block the heart artery which does not allow blood flow to the heart.
- ▶ A severe tightening (*spasm*) of the heart artery. This is a less common cause of a heart attack.





# WHAT IS ANGINA?

- ▶ Angina is discomfort caused by inadequate oxygen delivery to the heart muscle. This is called ischemia. Ischemia is not permanent damage to the heart muscle.
- ▶ Angina is a response to blockage or narrowing of the coronary arteries (atherosclerosis) and is called coronary artery disease.
- ▶ Angina may alert the person to a blood flow problem in the heart.
- ▶ Angina may be the first warning sign of a heart attack.



# WHAT ARE THE RISK FACTORS FOR CORONARY ARTERY DISEASE?

## ▶ Risk Factors You Cannot Change:

- ▶ Gender. Men have a higher heart attack risk.
- ▶ Age. Most heart attacks happen to people over the age of 65.
- ▶ Family history
- ▶ Race. African Americans and other ethnic groups have a higher risk.

## ▶ Risk Factors You Can Change:

- ▶ High blood pressure
- ▶ High cholesterol
- ▶ Smoking
- ▶ Overweight/obesity
- ▶ Lack of exercise
- ▶ Diabetes
- ▶ Stress
- ▶ Excessive alcohol use
- ▶ Street drug use (cocaine and methamphetamines)

# HOW CAN CORONARY ARTERY DISEASE BE PREVENTED?

- ▶ Maintain a healthy weight.
- ▶ Exercise or do physical activity.
- ▶ Eat a heart-healthy diet low in fat and salt and high in fiber.
- ▶ Control your blood pressure to keep it below 120 over 80.
- ▶ Keep your cholesterol at a level that lowers your risk.
- ▶ Manage diabetes if you have it.
- ▶ Stop smoking.
- ▶ Learn how to manage stress.

# QUESTION – TRUE OR FALSE

- ▶ Heart Attack is the #1 Killer of Men and Women.

# ANSWER

TRUE - There are 4,100 Heart Attacks every day

# QUESTION – TRUE OR FALSE

- ▶ A heart attack happens when the blood supply to the heart muscle is cut off.

# ANSWER

- ▶ **TRUE** – A heart attack usually occurs when a heart (*coronary*) artery becomes blocked or narrowed from atherosclerosis, a blood clot or both.

# QUESTION

- ▶ Which of the following risk factors for coronary artery disease and heart attack can be controlled by the person?
  - A. High cholesterol
  - B. Weight
  - C. Lack of exercise
  - D. Smoking
  - E. All except A
  - F. All of the above



# ANSWER

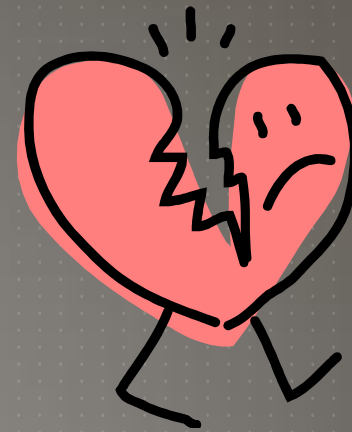
**Answer F – All of these risk factors can be controlled by the person through diet, exercise, medications, and stopping smoking**

# ARE ALL HEART ATTACKS CREATED EQUAL?

- NO, heart attacks come in different sizes and shapes.
  - Some people have mild symptoms over hours or days.
  - Some have gradually increasing pain with damage occurring over a period of hours.
  - Some have sudden, severe pain that stops them in their tracks.
  - And some have no pain at all.
- In most cases, there is some warning sign that tells the person something is wrong.
- It is important that everyone know these early warning signs.
- Early Heart Attack Care (EHAC) can save lives!

# EARLY SIGNS OF A HEART ATTACK ....

- Are present in up to half of people who experience a heart attack.
- Usually appear within 24 hours before the acute attack but may begin two to three weeks before.
- May last from only a few minutes to several hours
- Usually accelerate right before the heart attack



# WHAT ARE THE SIGNS AND SYMPTOMS OF A HEART ATTACK (MI)?



- ▶ In both men and women, symptoms can include the following:
  - ▶ **Chest pain**
    - ▶ The chest pain may feel like a crushing, squeezing, or "pressure" type feeling.
    - ▶ Heart attack (MI) pain can be "referred," meaning pain can be caused in one part of the body but felt in another part of the body. Referred MI pain may occur in the left arm, neck, or jaw. Pain may even be felt in the right arm.
  - ▶ **Shortness of breath** (*dyspnea*)
  - ▶ **Heartburn or indigestion** with or without vomiting,
  - ▶ **Sweating** (*diaphoresis*) or sudden, cold sweats
  - ▶ **Sudden lightheadedness**
  - ▶ **Upper back pain**
  - ▶ **Feeling of doom**

# SIGNS AND SYMPTOMS OF A HEART ATTACK (CONT.)

- ▶ **Women** can have unique MI symptoms, such as:
  - ▶ Unexplained feelings of nervousness or anxiety
  - ▶ Discomfort between the shoulder blades (*scapula*) or upper back
  - ▶ Tingling in the hands and arms
- ▶ In **elderly people** (regardless of gender), MI symptoms can be subtle, such as:
  - ▶ Sweating (*diaphoresis*)
  - ▶ Shortness of breath (*dyspnea*)
  - ▶ General tiredness (*fatigue*) or not feeling well (*malaise*)

# QUESTION – TRUE OR FALSE

- ▶ All patients who are having a heart attack will have chest pain in the middle of the chest.

# ANSWER

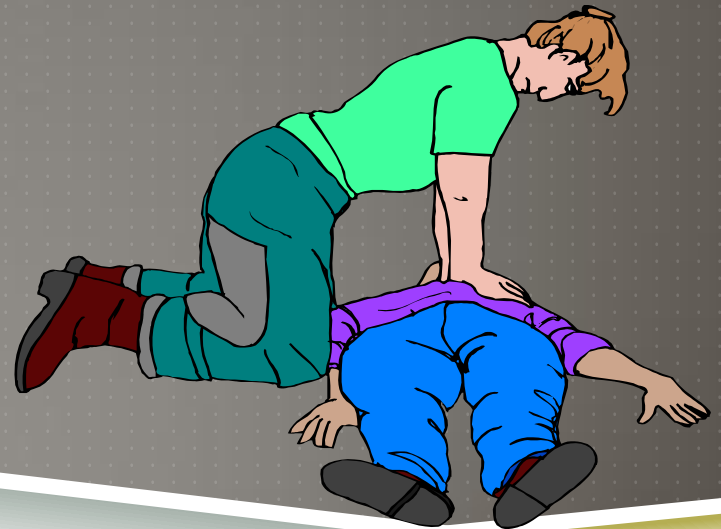
- ▶ **False – heart attack (MI) pain can be "referred," meaning pain can be caused in one part of the body but felt in another part of the body.**
- ▶ **Referred MI pain may occur in the left arm, neck, or jaw. Pain may even be felt in the right arm. Women may feel the pain between the shoulder blades.**



# WHY DO SOME PEOPLE DELAY GETTING HELP?

Denial and Procrastination =

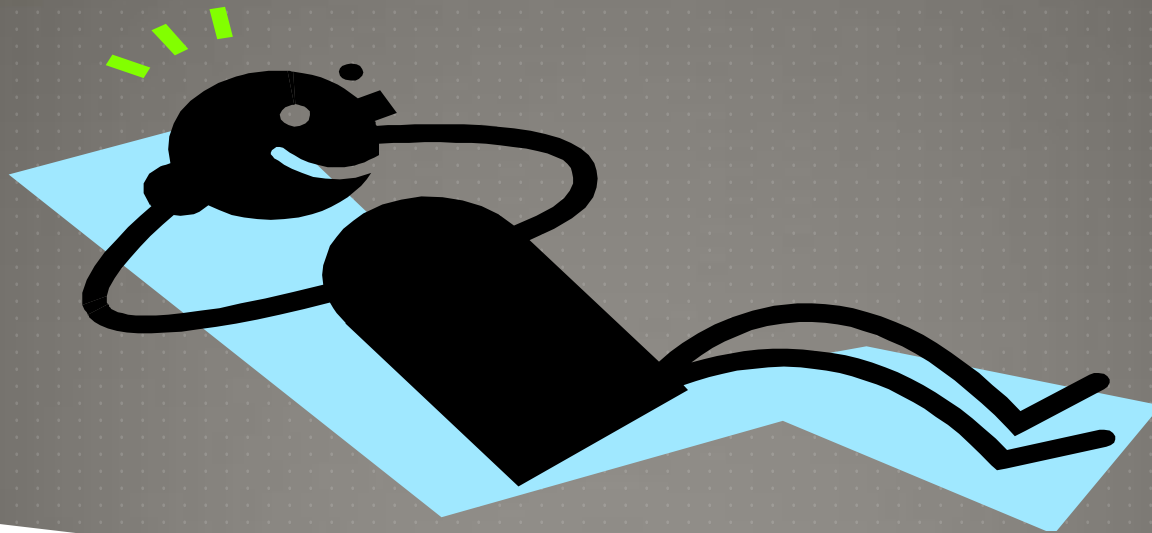
Our Heart's Enemy!



**EXCUSE #1**

**“IT’S NOTHING REALLY SERIOUS”**

**I’LL JUST REST A BIT...**



# EXCUSE #2

## “I’M TOO BUSY RIGHT NOW”

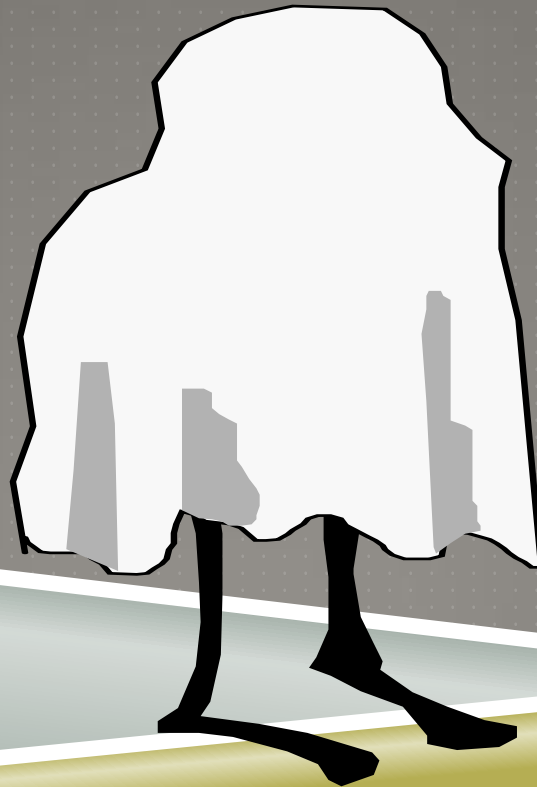
I DON’T HAVE TIME TO BE SICK



## EXCUSE #3

**“I DON’T WANT TO BE A PROBLEM.”**

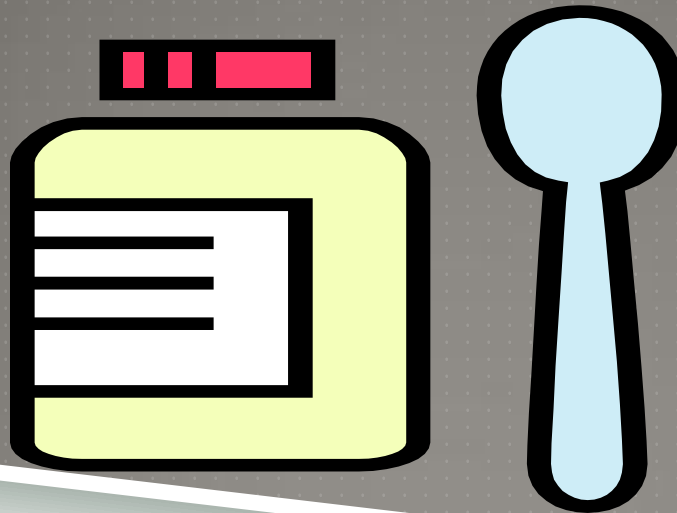
“IF IT TURNS OUT TO BE NOTHING, I’LL BE EMBARRASSED BY THE FUSS I MADE.”



## EXCUSE # 4

**“IT’S PROBABLY HEARTBURN  
OR INDIGESTION.”**

I’LL TAKE SOMETHING FOR IT.



# EXCUSE #5

**“I’M STRONG.”**

**“I WILL JUST WALK IT OFF, GRIN AND  
BEAR IT.”**



# EXCUSE #6

**“I’M HEALTHY.”**

**“I HAVE NO SERIOUS MEDICAL  
PROBLEMS...I EXERCISE AND EAT  
HEALTHY.”**

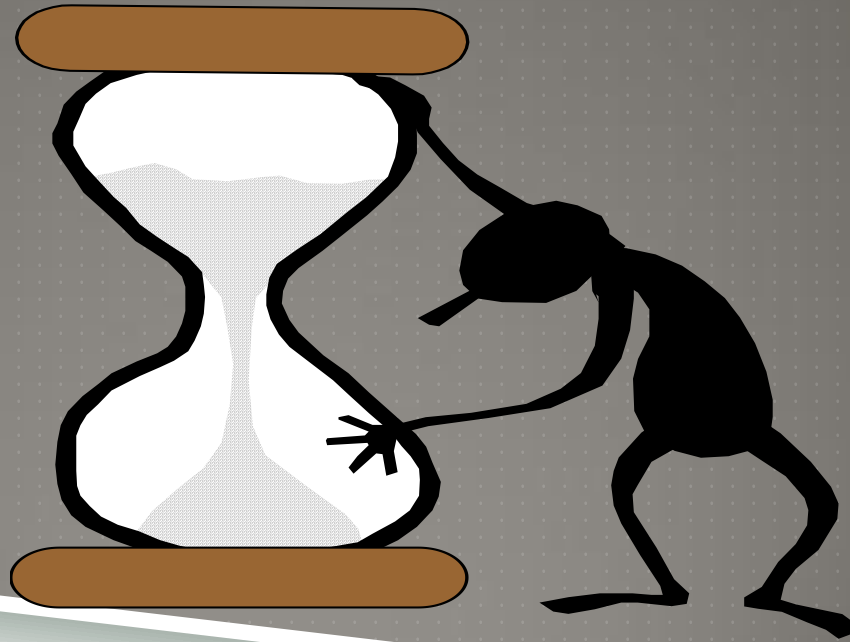




# EXCUSE # 7

**“I’LL JUST WAIT IT OUT.”**

**“EVERYTHING WILL BE OK.”**

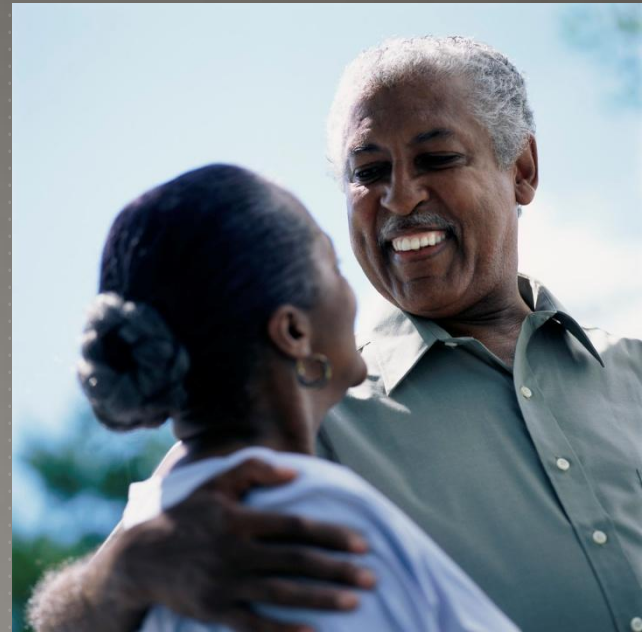


# WHY IS IT SO IMPORTANT TO GET EARLY CARE?

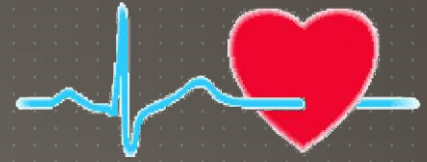
- ▶ **85% of the heart *damage* takes place within the *first two hours*.**
- ▶ **Most heart attack patients do not benefit from an acute intervention.**
  - ▶ For a heart attack, the national standard in the United States is to have an acute intervention in under 90 minutes from the time you get to the hospital.
  - ▶ An acute intervention is a clot busting drug, a special procedure to open up the heart arteries (angioplasty), or surgery.
- ▶ **Only 25% of heart attack victims receive thrombolytic (clot busting) therapy.**
- ▶ **Only 10% receive therapy within the first critical hour.**

# WHO IS THE EARLY HEART ATTACK CARE GIVER?

- ▶ Spouse
- ▶ Children
- ▶ Friend
- ▶ Co-worker
- ▶ Exercise partner
- ▶ **All of us!**



# WHAT SHOULD I ASK?



- Do you have any chest discomfort?
- Is it tightness, pressure, pain in the center of your chest?
- Is the discomfort also in your arms or jaw or neck or throat or back?
- Are you sick to your stomach?
- What were you doing when the symptoms started?
- Do the symptoms go away with rest?
- Are you having any shortness of breath?

Also look:

- Is the person sweaty or clammy?
- Is the person anxious?

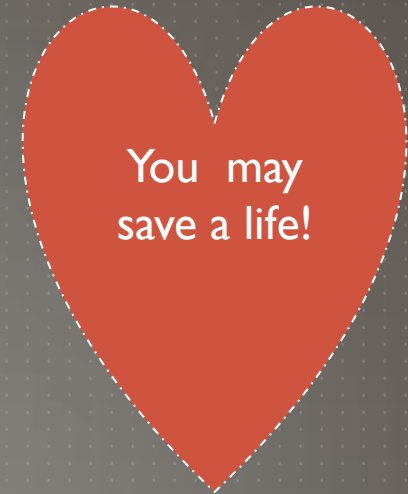
# WHAT CAN I DO TO OVERCOME RESISTANCE TO SEEK CARE?

- ▶ Suggest that person go to the ED or call their physician if symptoms are early and not severe.
- ▶ Enlist family and friends to convince person to seek care.
- ▶ Offer to call family or friends if person is anxious.
- ▶ Be personal and persistent. Sit with person, talk, and try to relieve tension. Don't leave the person.
- ▶ **If all else fails and/or the symptoms are severe or increasing, take charge and call 911.**



# REMEMBER ACT WISELY

- A** Acknowledge the problem
- C** Be **C**alm
- T** Be **T**enacious and do not give in
- W** Be **W**illing to spend the time
- I** Be **I**nfluential
- S** Keep it **S**imple
- E** Be **E**mpathetic
- L** **L**ink patient w/early symptoms to medical care
- Y** Say **Y**es - I'll pay attention



# QUESTION – TRUE OR FALSE

- ▶ Early heart attack care is important as 85% of the damage to the heart happens in the first two hours.



# ANSWER

- ▶ **TRUE** – it is very important to get the person help as quickly as possible.
- ▶ **85%** of the damage to the heart happens in the first two hours.

# QUESTION – TRUE OR FALSE

- ▶ If a person is having severe chest pain, shortness of breath, and refuses to go to the Emergency Room, I should call 9-1-1.

# ANSWER

- ▶ **TRUE** - often people will make excuses and not want to go for help when having chest pain. In these cases, call 9-1-1.

## IN SUMMARY.....

- ▶ It is important that we all know:
  - ▶ how to prevent heart disease in ourselves and others,
  - ▶ how to recognize warning signs of a heart attack,
  - ▶ how to take action and get the person immediate medical help.