

Hands - Only CPR



Course Objectives

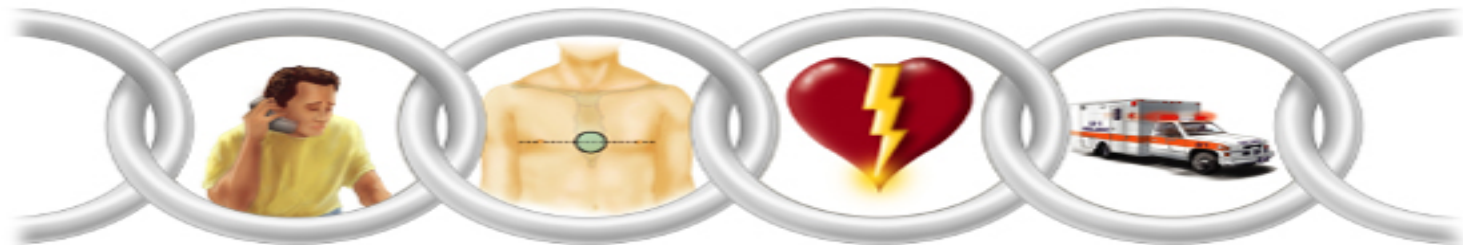
To provide a guide for Hands-Only CPR
as sanctioned by the American Heart Association

This course does not take the place of CPR Recertification

Upon completion of this course, the participant will be able to:

1. Describe the critical steps involved in Hands-Only CPR
2. Be able to identify the differences between Hands-Only and Traditional CPR
3. Be able to initiate Hands-Only CPR in an emergency

Cardiac Chain of Survival



Cardiac Chain of Survival

Early access - **Call 911**



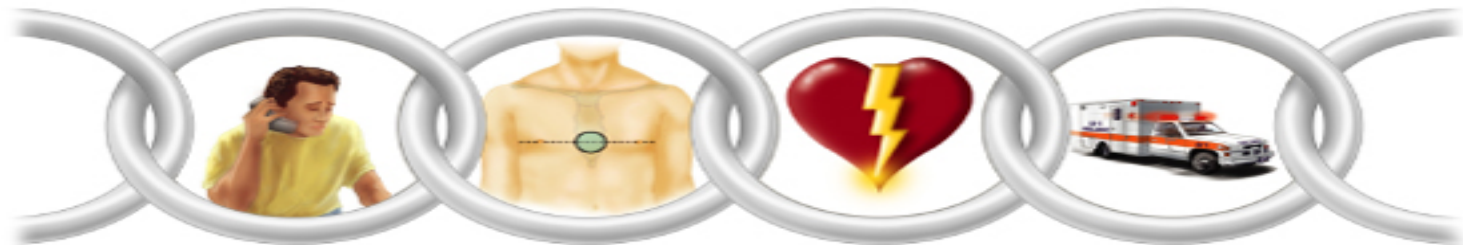
Early bystander CPR - **Get an AED & start CPR**



Early defibrillation - **AED as soon as available**



Early advanced care - **Professionals**



What is CPR?

- CPR - Cardio-Pulmonary Resuscitation
- Life-saving first aid technique used for treating a cardiac arrest emergency
- Traditional CPR - combines chest compressions & breathing
- Hands-Only CPR – CPR without breaths

Heart Attack vs Sudden Cardiac Arrest

Heart Attack

Victim is breathing

Heart is pumping, but insufficient for circulation

If untreated, will result in cardiac arrest

Sudden Cardiac Arrest – CPR NEEDED!

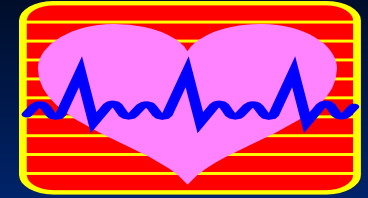
Breathing has stopped

Heart has stopped pumping

Heart Attack

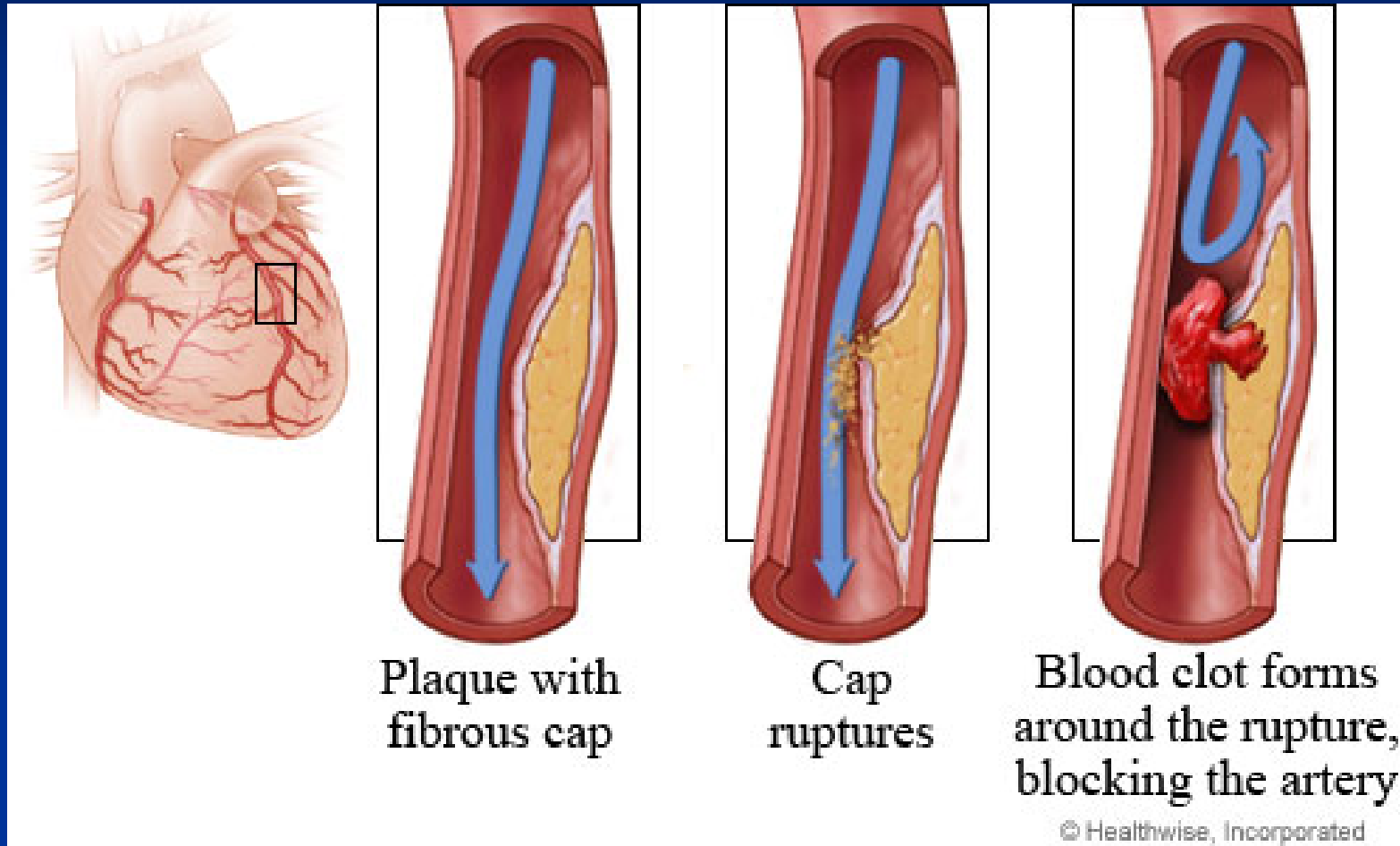
- More likely to occur with a family history
- 1/5 heart attack victims do not have chest pain but often have other symptoms
- Victims typically deny they are having a heart attack

HEART ATTACK SYMPTOMS

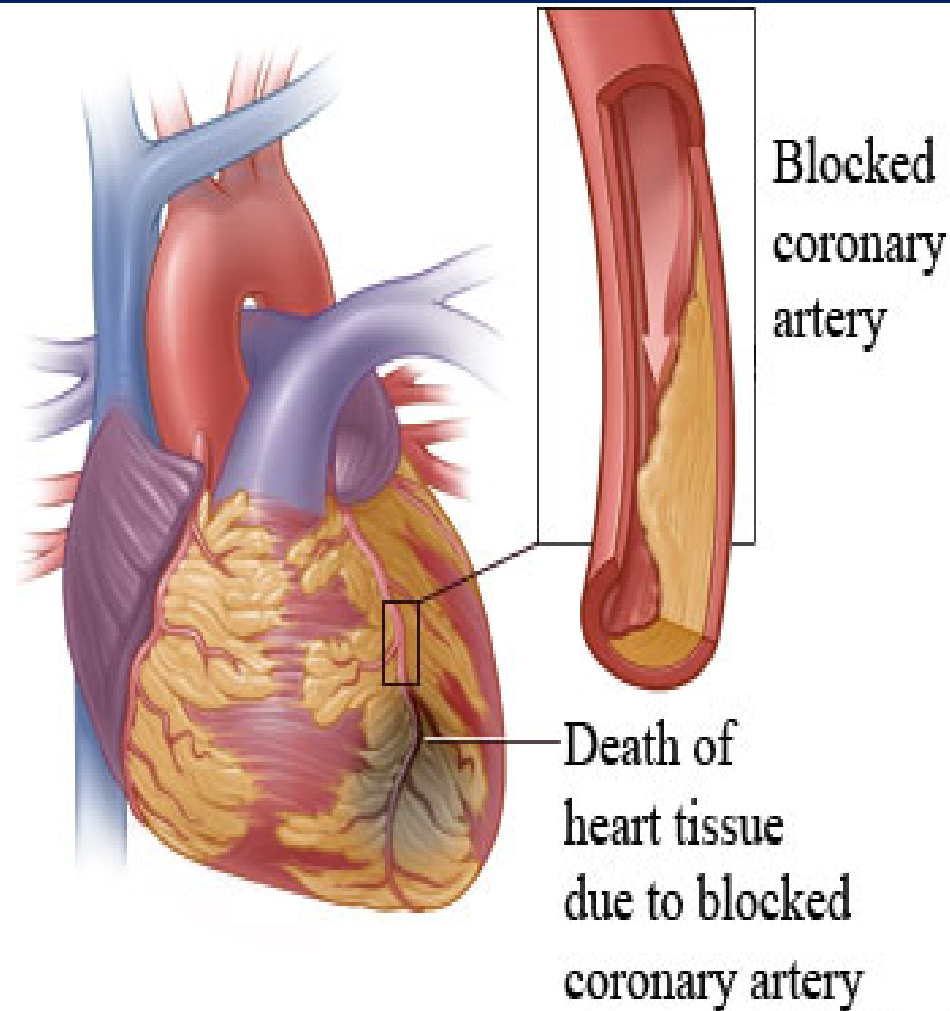


- Chest pain
- Pain in one or both shoulders
- Sore/numbness in arm, neck, back
- Sweating or nausea
- Shortness of breath

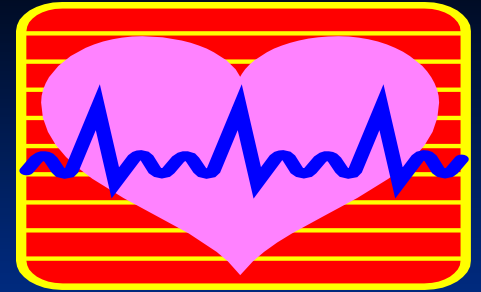
How a Heart Attack Happens



How a Heart Attack Happens



Sudden Cardiac Arrest Symptoms



- Person may faint
- May fall or slump over
- Loss of consciousness
- Unresponsive, no signs of breathing
- Heart stops beating, skin color changes

Sudden Cardiac Arrest Facts:

- Sudden Cardiac arrest is the leading cause of US deaths
- Over 70 percent of cardiac arrests happen at home
- Annually, 350,000+ cardiac arrests occur outside of hospitals



During Sudden Cardiac Arrest:

- Chest compressions are more important than giving breaths

Start Chest Compressions Immediately!

- You can double a person's chance of survival by giving Chest Compressions



Chest Compressions

Pump oxygenated blood
to vital organs

Tips for Chest Compressions

- 100 Compressions per minute
- At least 2-inch chest depth - Allow full chest recoil
- Pause compressions **ONLY** to check heart rhythm and deliver a shock
- Keep all pauses to less than 10 seconds



Why Hands-Only?

Hands-Only vs Traditional CPR

Both types of CPR start the same way...

1. Scene is safe
2. Check for response – “Are you OK?”
3. Get Help - “You, call 911! You, get an AED!”
4. Begin CPR - Deliver Chest Compressions

Hands-Only vs Traditional CPR

The difference between the two types is...

After 3 sets of 30 Compressions and checking for a response, in Hands-Only CPR, REPEAT the process

There are NO breaths given for Hands-Only CPR

Continue with Compressions until AED or professional help arrives

Safety First!



Hand Placement for Effective Chest Compressions

Proper Techniques for Chest Compressions.



Position for Effective Chest Compressions



Hands-Only CPR in Action



Time Is Important



AED



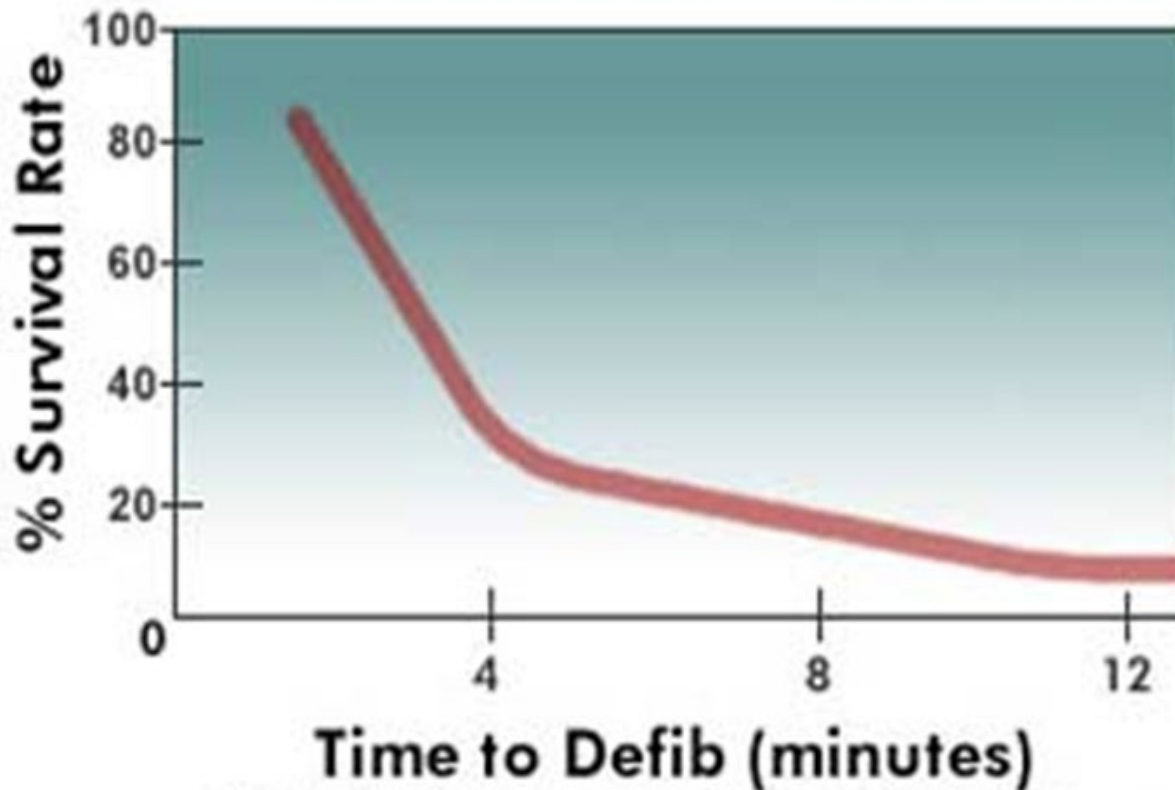
- Automated External Defibrillator
- Checks for life-threatening cardiac arrhythmias or lack of pulse and provides guidance

Immediate Use of AED's

- 56% survive to leave the hospital
- 74% survive when an AED is used within 3 minutes
- Only 49% survive when the use of an AED is delayed for more than 3 minutes
- It is better to have an AED and not need it than to need it and not have it

Statistics on AED Use

Early Defibrillation Impacts Survival



Each minute that passes without defib may reduce the patients's chance for survival by up to 10%

Using an AED



Legal Liability

"Good Samaritan" protection



Quiz



When Should You Call 911?

- a) Only if you cannot drive the victim to the emergency department
- b) Only if you cannot reach a doctor by telephone
- c) Only if the victim refuses your help
- d) For any life-threatening condition

When Should You Call 911?

d) For ANY life-threatening condition

The Depth of Adult CPR Chest Compressions?

- a) $\frac{1}{2}$ to 1 inch
- b) 1 to $1\frac{1}{2}$ inches
- c) At least 2 inches
- d) As deep as you can press

The Depth of Adult CPR Chest Compressions?

c) At least 2 inches

During CPR, Give Chest Compressions at a Rate of at Least?

- a) 60 compressions per minute
- b) 80 compressions per minute
- c) 100 compressions per minute
- d) 120 compressions per minute

During CPR, Give Chest Compressions at a Rate of at Least?

c) 100 compressions per minute

An AED Should be Used on a Non-breathing Victim seen to Collapse Suddenly?

- a) Only if CPR does not work
- b) As soon as possible
- c) After calling 911 & waiting for EMS dispatcher to tell you to use it
- d) After giving abdominal thrust for choking

**An AED Should be Used on a
Non-breathing Victim seen to
Collapse Suddenly?**

b) As soon as possible

When Connected Properly to the Victim, the AED will Advise You When?

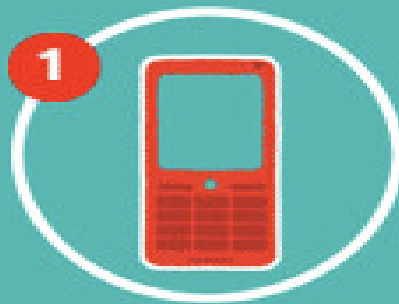
- a) You should administer a shock
- b) The victim is breathing
- c) The victim's airway is clear
- d) The victim is about to vomit

When Connected Properly to the Victim, the AED will Advise You When?

- a) You should administer a shock

Hands - Only CPR

Two steps to save a life:



Call 911



Push hard and fast in
the center of the chest.

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Questions?



Thank you for Attending!

**This presentation and Participant
Feedback forms are available at:**

www.cityofnovi.org/CERT