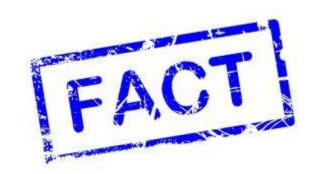
# CPR/AED – Assisting A Person in Cardiac Arrest

### Lessons Provided by the Office of Healthy Schools – March 2015





# Lesson #1 – Learn the Facts – Cardiac Arrest and CPR



- Lesson Objective:
  - Students to identify, assess, and learn to respond to a cardiac arrest emergency situation using cardiopulmonary resuscitation (CPR).



# Anyone can learn CPR and everyone should!





http://handsonlycpr.org/

 http://www.YouTube.com/watch?v=GMjXrF ig7M4



#### Risk Factors for Heart Disease

- Factors that you cannot change:
  - Heredity
  - Gender
  - Age

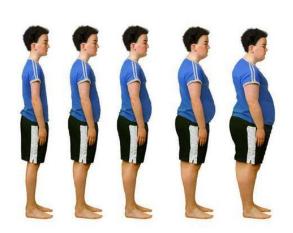




- Factors that you can change:
  - Tobacco smoking
  - High blood pressure
  - High cholesterol
  - Diabetes
  - Overweight and obesity









## Cardiac Arrest or Heart Attack ???

Not the same thing.

- Sudden cardiac arrest occurs when electrical impulses in the heart become rapid or chaotic, which causes the heart to suddenly stop beating.
- A heart attack occurs when the blood supply to part of the heart muscle is blocked. A heart attack may cause cardiac arrest.



# A Rapid Sequence of Events Need to Occur....

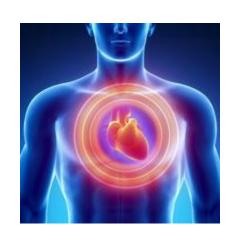
- 1. Recognition and Action
- 2. Cardiopulmonary Resuscitation (CPR)
- 3. Defibrillation
- 4. Advanced Care
- 5. Post-Arrest Care





### Signs of Sudden Cardiac Arrest

- Sudden loss of responsiveness
- Not breathing
- Breathing abnormally
- No response to tapping on shoulders
- Does nothing when you ask if he's OK





### Steps to follow when signs of Cardiac Arrest are Present:

#### 1. Yell for help

Tell someone to call 9-1-1 and get an AED (if one is available)

#### 2. Check Breathing

If the person is not breathing – give CPR

#### 3. Push hard and push fast

Use an AED as soon as it arrives

4. **Keep pushing** until the person starts to breathe or move or until someone with more Advanced training takes over.



### Who Can you Save with CPR?



- The life you save with CPR is most likely to be a loved one.
  - 4 out of 5 cardiac arrests happen at home.
  - The life that you save is likely to be someone at home: child, parent or friend.
  - African-Americans are almost twice as likely to experience cardiac arrest.



#### Hands-Only™ CPR instructional video.



#### Don't be Afraid!



- Your actions can only help.
- If you see an unresponsive adult who is not breathing or not breathing normally, call 9-1-1 and push hard and fast on the center of the chest.



# Lesson #2 – Practicing CPR Skills & Learning about an AED

#### Lesson Objective:

Students will learn how an automated external defibrillator (AED works. They will practice hands-only CPR skills.





#### Hands-Only™ CPR instructional video.



# Review of Hands-Only CPR Procedure

# If you see an unresponsive person who is not breathing of not breathing normally:

1. Call 9-1-1 or have someone call 9-1-1 and get an AED.

#### 2. Do chest Compressions

- a. Position your hands over the center of the person's chest.
- b. Press down hard at a rate of 100 times per minute.



#### **Practice CPR Skills**

Let's practice the CPR Skills that you have

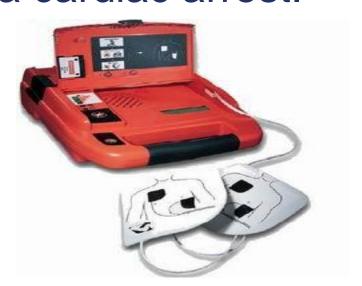
learned.





### The Automated External Defibrillator - AED

 A rescue device that delivers a controlled, precise shock to the heart. An AED can restore the heart's electrical rhythm and heart beat in the event of a cardiac arrest.





#### Steps in Using an AED

**Step 1**: Before using an AED, check for the presence of water near the unconscious person. Move him or her away from wetness when delivering shocks.

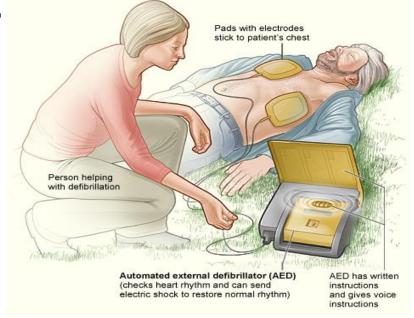
**Step 2:** Turn on the AED's power. The device will give you step by step instructions. You will hear voice prompts and see prompts on a screen.



**Step 3:** Expose the person's chest. If the person's chest is wet, dry it.

Step 4: Place the pads on the person's

chest as illustrated:





**Step 5:** Check that the wires from the electrodes are connected to the AED. Make sure that no one is touching the person, and then press the "analyze" button. Stay clear while the machine checks the person's heart rhythm.



**Step 6:** If shock is needed, the AED will let you know when to deliver it. Stand clear of the person and make sure others are clear before you push the AED's "shock" button.

**Step 7:** Start or resume CPR until emergency medical help arrives. Report all information that you have to the emergency crew.





#### Where is an AED found?

- An AED may be located on the school campus or close by at a community facility.
- It will be helpful for students to know the location of these devices and who to contact if an AED is needed.



#### Closing



 The goal of these CPR/AED lessons has been to properly train students to provide assistance to a person who is experiencing cardiac arrest. Through these lessons they have learned to identify, assess and respond to an emergency situation using CPR and have learned about an AED.