



Public Health – Seattle and King County Emergency Medical Services Division

CPR in the Schools

Lesson # 3- Using an AED

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Review



1. Describe four components of high quality compressions.
2. If a patient has agonal breathing, do you start CPR? Explain.
3. What are some of the differences in performing CPR for a child compared to an adult?

Key Words



- » **Automated external defibrillator (AED):** is a portable device that checks the heart rhythm and can send an electric shock to the heart to try to restore a normal rhythm.
- » **Emergency Medical Services (EMS):** emergency services that provide out-of-hospital medical care and transport patients with life-threatening emergencies to hospitals or urgent care facilities.

Scenario: Using an AED



You go into the locker room to get your stuff and see your coach lying on the ground next to his office.

You call for help and a **teammate brings the AED** from the gym and gives it to you.

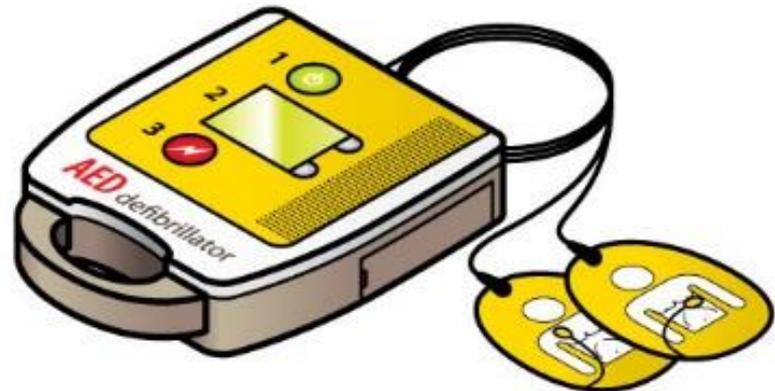
Are you confident you can use it correctly?

Lesson #3: Using an AED

Lesson Objectives:

After this lesson you will be able to

- » demonstrate how to use an AED in a cardiac emergency
- » explain why an AED is safe and easy to use

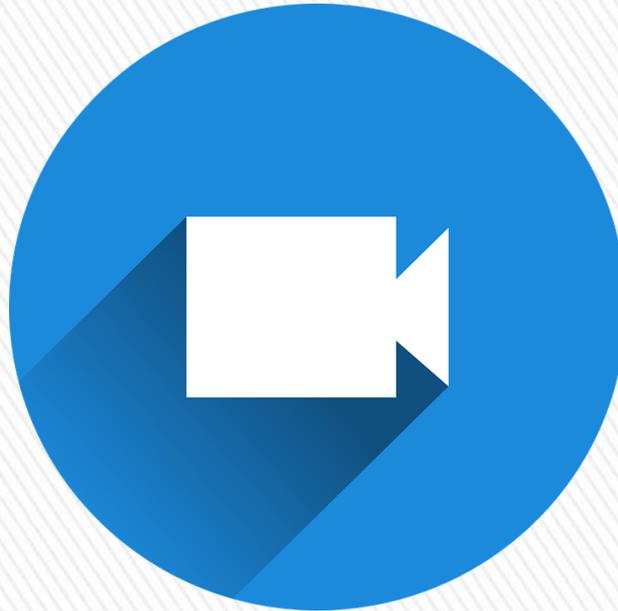


What is an AED?

- » An automated external defibrillator (AED) analyzes a heart's rhythm
- » An AED will only shock a person if he/she actually needs a shock
- » Delivers a shock to the heart if necessary
- » The shock may cause the heart to start beating again



Using an AED



View One Person AED video at:

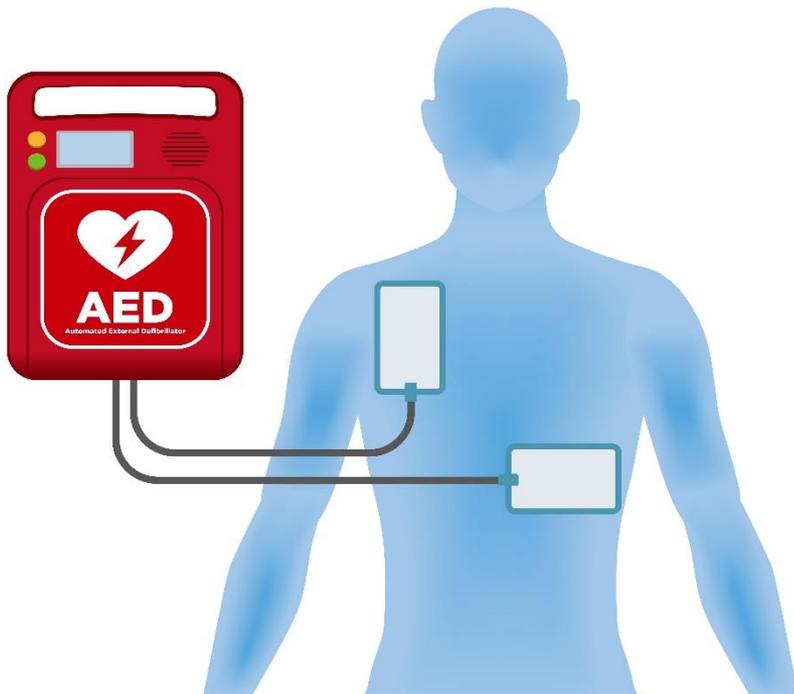
https://www.youtube.com/watch?time_continue=3&v=uaSgoiF38Fc&feature=emb_logo

Parts of an AED



1. May be in a case
2. Power Button
3. Pads Envelope
4. Connection Cord
(Connect pads to device)
5. Shock button

AED Pad Placement for Adults



Preparing to Use an AED



» Water

- > Don't use an AED if a person is lying in water; move the patient to a dry area

» Expose the person's chest

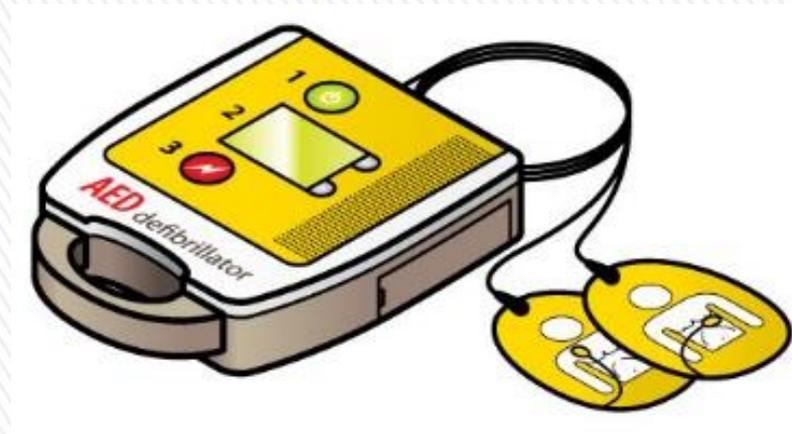
- > No clothing can be under the AED patches
- > Dry off a person's chest if it is wet
- > For large amounts of chest hair you may have to shave it off (this is very rare)

» Jewelry

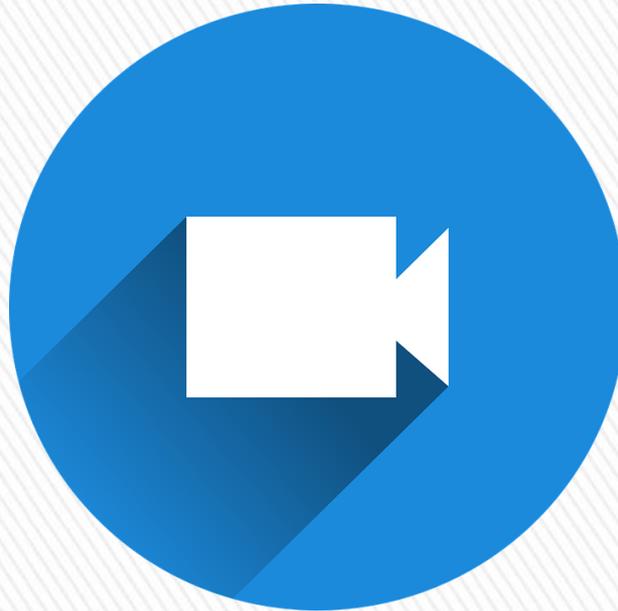
- > Remove any jewelry from the chest

An AED is Safe & Easy to Use

- » An AED is safe because it will **NOT** deliver a shock unless a person needs a shock, so you can't "accidentally" shock someone
- » An AED is easy to use because it has voice prompts that tell you what to do once you turn it on
- » The AED pads have pictures on the pads so you know where to place them



Two Person AED

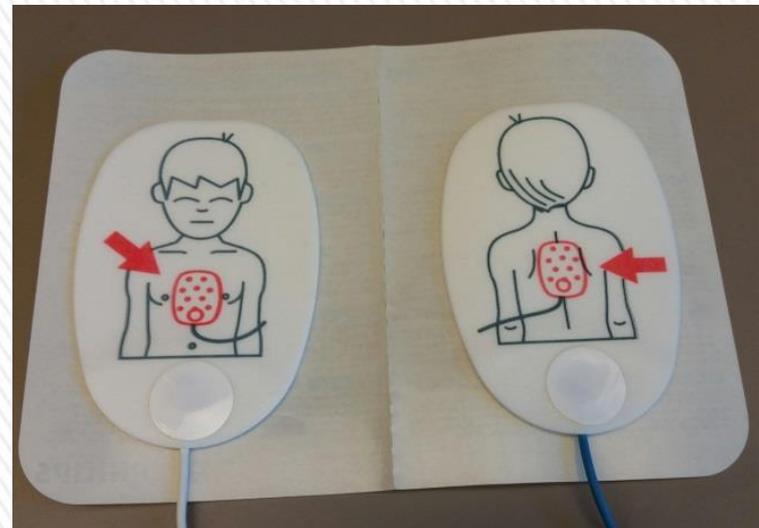


View Two Person AED video at:

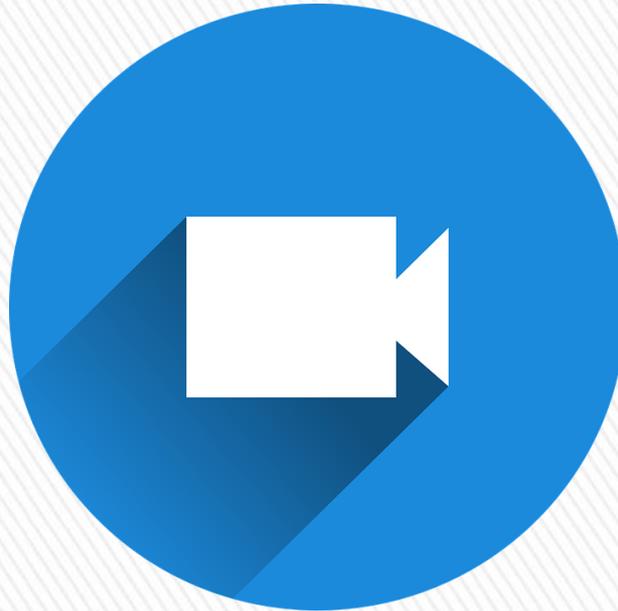
https://www.youtube.com/watch?time_continue=3&v=x982IVaJKrA&feature=emb_logo

Using an AED on a Child

- » Many AEDs have two sets of pads; one set will be for an adult and one set will be for a child
- » The child pads will have a child drawing on it. Some of the newer AEDs have the child's pads so that they are on the **front** and **back** of the child. **These pads are to be used on children 0-8 years old or less than 55 lbs.**
- » For older children > age 8, use the adult pads. Also, you can use adult pads on children if no child pads are available



Child AED

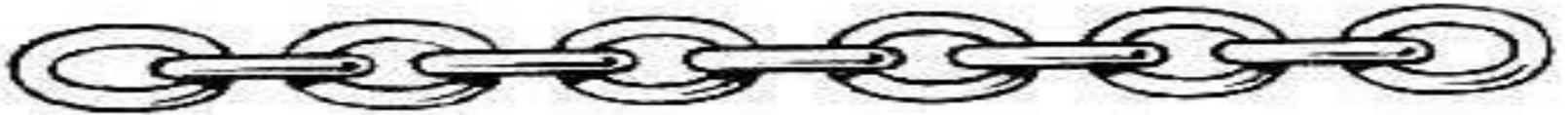


View Child AED video at:

https://www.youtube.com/watch?v=YrFK4BWieng&feature=emb_logo

Review

1. List in order the 4 links in the Chain of Survival.



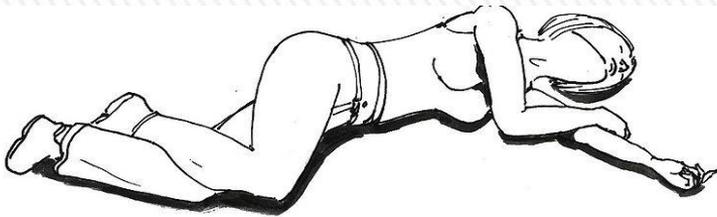
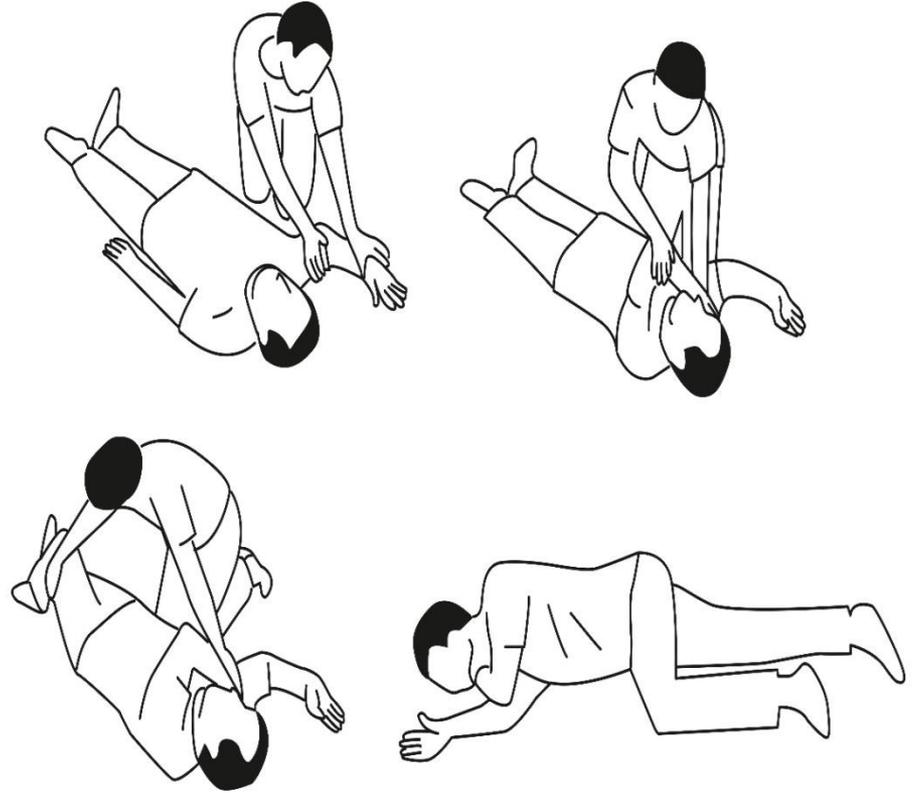
2. If a patient is unconscious, but breathing, how would you respond?

Cardiac Arrest: The Chain of Survival



Recovery Position

» If the patient is not responding, but is breathing, roll him/her to the recovery position if you don't suspect a head or neck injury; then call 911 and monitor breathing



Practice: Using an AED

Directions:

In groups of 4, pick a number.

#1= Start with Adult CPR

- » Direct a person to call 911
- » Whoever is told to call 911—talk through the practice script.



Perform about 30 compressions then rotate to #2.

After each person has practiced the adult,
then go through the child CPR steps.

Be ready to use the AED when it arrives!!

Demonstration Scenarios

1. Scenario #1: Two basketball players responding to the coach who is in cardiac arrest. Walk into locker room and respond. There is an AED in the gym.
2. Scenario #2: Two students walking past a playground see a child on the ground. One student role plays the 911 call while the other student performs Child CPR.

Lesson Reflection

1. Why is an AED safe and easy to use?
2. Describe how you would prepare a patient before using an AED.



Credits

King County Emergency Medical Services

- > *Anne Curtis, CPR/PAD Program Manager, KC EMS Division*
- > *Bosaiya, KC Emergency Medical Services, Videographer*

Gonzaga University

- > *Nichole Calkins, Ed.D., Assistant Professor of Physical Education Pedagogy: designed/created curriculum components: lessons, PPTs, handouts*

Highline School District

- > *Claudia House, Middle School Health teacher: reviewed lessons*

Shoreline Fire Department

- > *Gabriel DeBay; Shoreline Fire Department; Firefighter Paramedic, MICP, BLS Instructor*

Eastside Fire & Rescue

- > *Michele Overholt, Eastside Fire & Rescue, FF/EMT, BLS Instructor*

The Voice Guy

- > *Jim Cissell, Video Voiceover*