



Public Health – Seattle and King County Emergency Medical Services Division

CPR in the Schools

Lesson # 2- Performing Adult and Child CPR

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Review



1. Explain how to respond to someone in cardiac arrest.
2. Describe the importance of CPR in a cardiac emergency.
3. Describe how bystanders can overcome barriers when responding to emergencies.
4. Identify when it is appropriate to call 911.

Key Words



- » **Chest Recoil:** allowing the chest to return to its normal position after a compression.
- » **Agonal Breathing or Respiration:** irregular, gasping breaths often seen during cardiac arrest. In most cases, victims take gasping breaths no more than 10 to 12 times per minute; that's one every five to six seconds.

Scenario: Cardiac Emergency

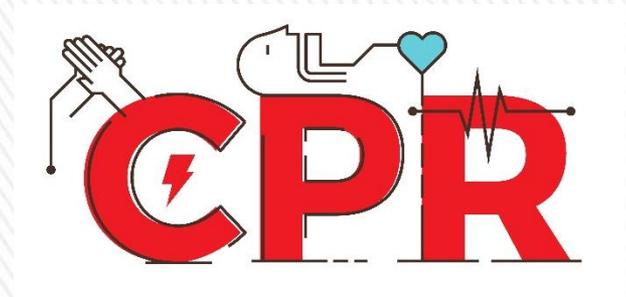
You are staying late for a basketball practice at school and are one of the last ones to leave. You go into the locker room to get your stuff and see your coach lying on the ground next to his office. **No one else is in the locker room.**



How confident are you that you could respond appropriately?

Lesson #2: Adult & Child CPR

Lesson Objectives:



After this lesson you will be able to

- » demonstrate how to respond to an adult cardiac emergency
- » demonstrate how to perform CPR on a child patient
- » explain factors that can increase a patient's survival rate

Performing Hands-Only CPR

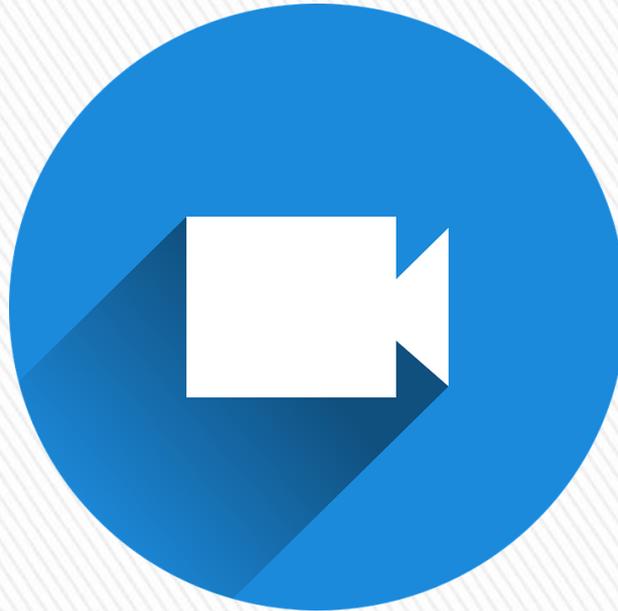


- » Hands-only CPR is recommended for adult patients since the most important part of CPR is doing high quality chest compressions
- » CPR also has roughly the same survival rate with or without breaths.

CPR provides a **Window of Opportunity** for someone in cardiac arrest.

- » How long can the brain go without oxygen before brain damage occurs?
- » What is the average response time for King County EMTs?
- » Why shouldn't you be afraid to make a mistake when performing CPR?

Adult CPR Demonstration



View Adult CPR video at:

https://www.youtube.com/watch?v=yI93ddvXX7Y&feature=emb_logo

Adult CPR Steps



Step 1: Check if the scene is safe

Step 2: Tap and shout, “Are you okay?”
Yell for help if no response

Step 3: If someone is there: tell them to call 911 and get an AED
If you are alone, call 911, leave on speaker, and get an AED if it is nearby

Step 4: Compressions: Begin compressions within 10 seconds
Complete at a rate of 100-120 compressions per minute.

Step 5: If an AED is available, turn it on and follow directions (will learn in next lesson)

Step 6: Continue with the compressions until EMS arrives. If another responder is available, take turns giving compressions, every 2 minutes (5 cycles), spending no more than 10 seconds switching roles

Increasing a Patient's Survival Rate

Factors that can increase a patient's survival rate:

- » Starting compressions within 10 seconds of collapse
- » Early defibrillation- getting an AED or EMS there as soon as possible
- » Performing high quality compressions
- » No more than 10 seconds of interruption between compressions



The bystander's quick reactions make a difference!

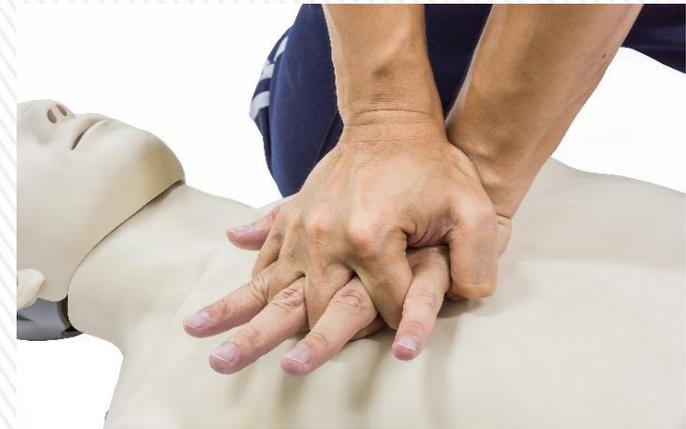
High Quality Compressions

- » Rate of at least 100 per minute, but not faster than 120 compressions per minute
- » Depth of *at least* 2 inches for adults and children
- » Allow the chest to completely recoil between compressions
- » Remember, don't interrupt compressions for more than 10 seconds



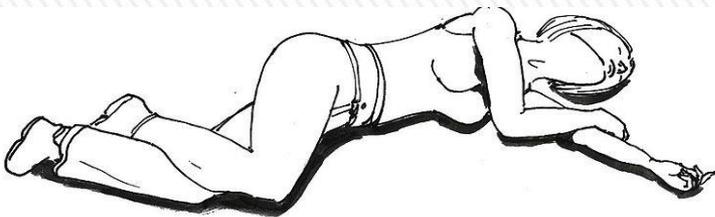
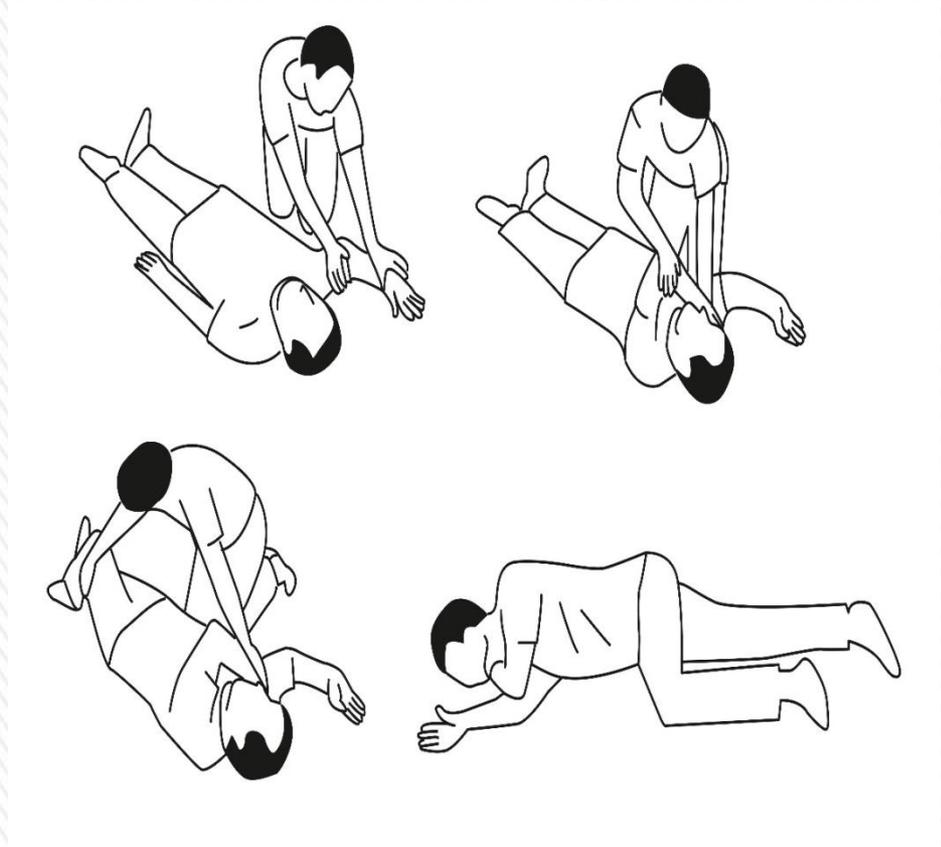
Describe the Steps of Adult CPR

- » Partner A: Without looking at the skills sheet, tell your partner what steps you would take to perform adult CPR.
- » Partner B: Look at the Adult Skills Checklist, provide feedback to your partner. Did (s)he miss a step? If so, tell them which step.
- » Switch roles and have Partner B describe all of the steps.

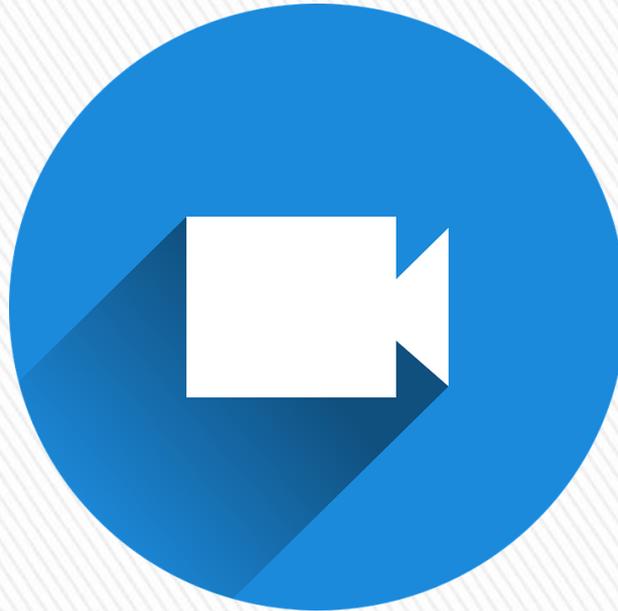


Recovery Position

- » 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



Child CPR Demonstration



View Child CPR video at:

https://www.youtube.com/watch?time_continue=3&v=T8vI2HQO4fs&feature=emb_logo

Child CPR Differences

A child is generally between 1 year old and puberty

- » You may use 1 or 2 hands to give compressions (*compress about 2 inches*)
- » Give 2 breaths over 10 seconds
- » If you are alone and not near a phone, do about two minutes (5 cycles) of CPR before calling 911.



Child CPR Steps

Step 1: Check if the scene is safe.

Step 2: Tap and shout, “Are you okay?” Yell for help if no response.

Step 3: If someone is there: tell them to call 911 and get an AED
If you are by yourself and not near a phone: do 5 cycles of CPR before stopping to call 911.

Step 4: Compressions- Begin 30 compressions within 10 seconds.

Step 5: Airway- Head tilt, chin lift

Step 6: Breathing- Give 2 breaths so the chest rises.
If chest does not rise, adjust and give a 2nd breath.

Step 7: If an AED is available, turn it on and follow directions (will learn in next lesson).

Step 8: Continue with the **CAB Cycle** until EMS arrives. If another responder is available, take turns giving compressions and breaths, every 2 minutes (5 cycles), spending no more than 10 seconds switching roles

Practice: Adult & Child CPR

Directions:

In groups of 3, pick a number.

#1= Rescuer

#2= Peer Assessor (write on the skills sheet).

Underline any skills that they did not perform.

#3= Person to call 911. Follow the 911 Script.

Rotate #1, #2, #3 until everyone has been assessed. Perform adult CPR first and child CPR second.



[Staying Alive Song](#)

[100 bpm Metronome](#)

Adult & Child Lesson Reflection

Partner A:

- » What is agonal breathing?
- » Describe 4 factors that will increase a patient's survival rate



Partner B:

- » Describe 4 components of high quality compressions
- » Explain how CPR is different for a child than an adult

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*