# Adult Hands-Only CPR

#### **Participant Learning Objectives:**

- 1. Recognize signs of heart attack and sudden cardiac arrest
- 2. Understand how to call 911
- 3. Assess for normal breathing and consciousness
- 4. Perform hands only CPR

### AGENDA

- Explain the difference between Sudden Cardiac Arrest (SCA) and Heart Attack
- Describe how to call 911
- Describe and demonstrate how to perform CPR
- Demonstrate Pulse Point app

## MATERIALS NEEDED

- Adult Manikin
- Written materials
- Cell phone loaded with Pulse Point
- Metronome or music at 100 bpm
- Pulse Point brochures
- CPR Completion cards

## ACTIVITY

- 1. PROVIDE A BRIEF OVERVIEW OF HEART DISEASE AND CARDIAC ARREST
  - 1. Heart disease and cardiac arrests are a major public health problem in our country and around the world. Heart disease is the **#1** killer in the U.S. Every year in the US, about **350,000** persons suffer cardiac arrests outside of the hospital. Out-of-hospital sudden cardiac arrest is the third leading cause of death in King County.
  - 2. Four out of five cardiac arrests happen at home. You are most likely to do CPR on someone you know.
  - 3. King County has one of the highest survival rates of witnessed shockable SCA in the country. Approximately 54% (2016) (vs. 25% nationally) There are many reasons for this high survival in King County, but one is the high number of CPR-trained lay-responders and the public's willingness to do CPR.
  - 4. You can save a life! Your response means that someone could survive. If you perform CPR within the first few minutes of a cardiac arrest—you **double** or **triple** that person's chances of survival.
  - 5. You don't need an extensive certification class to learn how to do CPR or use an AED. The steps are very simple.



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#### 2. EXPLAIN THE DIFFERENCES BETWEEN SUDDEN CARDIAC ARREST (SCA) AND A HEART ATTACK

- 1. Ask: Who knows the difference between SCA and a Heart Attack?
- 2. SCA occurs suddenly and without warning- death can occur within minutes if the victim does not receive treatment. Signs for SCA are:
  - Sudden collapse
  - Abnormal or no breathing- The person is not breathing at all, or is only gasping (agonal breathing)
  - Loss of responsiveness (no response to shake and shout), If the person doesn't move, speak, blink, or otherwise react, then he or she is not responding.
- 3. Heart attack symptoms may vary from person to person. Heart attack patients do not lose consciousness or stop breathing. Heart attacks can happen suddenly but more often symptoms start slowly and persist for hours, or even days. Signs for a heart attack (which may last a few minutes or goes away and comes back) are:
  - Chest pain or discomfort –tightness of chest
  - Center of chest or left side of chest
  - Pain spreading to shoulders, neck, arm, or jaw
  - Shortness of breath
  - Dizziness, clammy skin cold sweating
- 4. Heart attack symptoms for women can be different, such as:
  - Indigestion or gas-like pain
  - Dizziness or nausea
  - Unexplained weakness or fatigue
  - Discomfort or pain between the shoulder blades
  - Recurring chest discomfort

#### 3. DESCRIBE HOW TO CALL 911

- 1. Ask, "When should someone call 911?"
  - When a situation could or does pose a danger to life, property, or both
  - Ask, "What are some examples?" (Expect answers such as heart attack, fall, fire, burglar, violence)
- 2. Emphasize that it's important to know your location and be ready to provide the address. Depending on the type of phone you are calling from, the dispatcher may or may not be able to know your location.
- 3. Emphasize that "seconds count," so it is important to be as calm as possible and let the dispatcher/firefighter ask the questions
- 4. Describe what helps the dispatcher when you call 911
  - If you speak a language other than English first say your language to the dispatcher and they will connect in the language line to assist. (Ex: "Somali.... Medical Emergency")
  - Let them lead the conversation and answer their questions
  - The questions may seem unrelated or repetitive, but this is to help clarify the information
  - Do your best to listen carefully and follow their instruction
  - The dispatcher will ask for the location, whether the patient is conscious/awake and breathing normally. Based on the answers to questions about consciousness and breathing, the dispatcher may have a high suspicion of cardiac arrest.



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- 5. Explain what will happen during the call to 911:
  - The dispatcher will tell you that help is on the way. They may continue to ask questions or give you directions, even though help has already been sent
  - Depending on your emergency, the dispatcher may ask you to check certain things on the patient and/or begin CPR
  - If you haven't started CPR and need to, the dispatcher will remind you where and how to compress or push on the chest
  - They will stay on the line with you until firefighters and/or medics arrive (if it is another type of medical emergency, they will not)
  - How help responds will vary, depending on whether you are located in a city or the county. One or more vehicles and crew may arrive- such as a fire truck, medic unit, and/or aid unit. Don't worry- Dispatch WILL send the appropriate care and responders to you

\*\*(Text-to-911 service is not yet available in King County- If you are having emergency please place a voice call to 9-1-1.)

#### 4. DESCRIBE AND DEMONSTRATE CPR SKILLS

- After 911 is called:
- Make sure the scene is safe for you
- Look at the chest and stomach area for "normal" breathing. Any gasping, snorting, or snoring sounds are not normal and should be considered as inadequate breathing. Do this assessment for no more than 10 seconds
- If not breathing or not breathing normally, move patient to a hard, flat surface
- Place hands in the center of the chest, right between the nipples
- Get up directly over the persons chest locking your arms straight and shoulders aligned over the chest
- Lace your fingers together and use only the heel of your hand to push on the center of the chest
- Push DOWN hard (at least 2"- which is about the height of your driver's license or ID card, or the width of a soda can)
- Then let all your weight off the chest so the chest goes all the way back UP to its neutral position
- Repeat this nonstop until help arrives or the person wakes up
- Push FAST: about 100-120 times a minute. You can go to the rhythm of a song that will help you push 100 to 120 times a minute. (ex: Staying Alive, Baby Shark) or the dispatcher may set the pace
- You may hear or feel changes in the chest wall (crackling, like crackling your knuckles). This is normal and is encouraging that you are pushing hard enough. You are not hurting the person
- Reminder: Breathing for the patient is not necessary. Do not attempt to provide breaths if you have not practiced how to do them. Survival rates are better for patients if you stick to chest compressions.
- Reminder: Providing ventilation to children and infants is recommended. This course will not teach how to provide ventilations during CPR. People interested in learning how to do child/infant CPR should take a class that specifically teaches those skills.



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#### 5. OBSERVE CLASS PARTICIPANTS' CPR SKILLS USING MANIKINS AND PROVIDE FEEDBACK

- Play metronome app or music with 100 bpm
- Monitor depth, rate, and recoil of compressions as well as interruptions, especially those longer than 10 seconds
- Answer any questions about technique before continuing lesson

#### 6. INTRODUCE AND DEMONSTRATE PULSE POINT APP

- 1. Pulse Point is an application that can be downloaded on your phone to let you know there is a CPR related incident close to you. It allows for bystanders to help save lives in a cardiac arrest situation. Pulse Point is currently available within the Seattle Fire Department boundaries- not yet King County.
  - A SCA patient is in need
  - 911 System sends Pulse Point alert
  - Signal is received by nearby Pulse Point users
  - Users rush to help patient even before professional help arrives
- 2. Pulse Point Registry can report and locate AEDs in all of King County
- 3. If you would like to register for Pulse Point, you can get the app on your phone

#### 7. QUESTIONS (SEE FAQ FOR ASSISTANCE)

Answer questions from participants

#### 8. DISTRIBUTE COMPLETION CARDS AND WRITTEN MATERIALS

#### Adaptations for limited English/VPSI communities:

- Instructors teach lesson in native language of students
- Use manikins that are similar to skin color of students when possible
- Use Interpreters to assist with lecture portion of lesson plan
- Allow for additional hands-on practice with instructor observation and feedback
- Be aware of cultural norms around touching others while peforming CPR techniques
- Show American Heart Association video prior to practicing CPR skills: <u>http://international.heart.org/en/handsonly</u>
- Supplement with written materials in native language: <u>https://www.kingcounty.gov/depts/health/emergency-medical-services/vulnerable-populations.aspx</u>
- Use International Hands-Only CPR Playlist for examples of music with 100-120 bpm:

https://www.youtube.com/playlist?list=PL7FxfhVvQtdjzYTVj9ozyNPPpqyjN08Bm



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