Arizona Peace Officer Standards and Training
Basic Curriculum Lesson Plan

LESSON TITLE: FIRST AID - CPR

SUBJECT:	CPR
AGENCY DESIGNATION:	8.1.23
HOURS:	2
COURSE CONTENT:	This course is designed to acquaint the student with a basic understanding and knowledge of basic first responders use of CPR and an AED.
PERFORMANCE OBJECTIVES:	At the completion of this 2 hour block of instruction, using information presented by the instructor, PowerPoint and provided training materials, the student will:
8.1.23.1	Properly demonstrate all steps involved in administering CPR/AED/Abdominal thrusts.
8.1.23.2	Completely participate in practical demonstrations of patient movements, tactical field care and tactical combat casualty care.

DATE FIRST PREPARED:	June 2022	
PREPARED BY:	Ed Bissonnette AZDPS Air Rescue	DATE: June 2022
REVIEWED BY - REVISED:	SME Committee	DATE:
REVIEWED BY - REVISED:		DATE:
REVIEWED BY - REVISED:		DATE:
AZPOST APPROVAL:	Lori Wait	DATE: June 2022

INSTRUCTOR REFERENCES:

CLASS LEVEL: Student

TRAINING AIDS:

INSTRUCTIONAL STRATEGY:

SUCCESS CRITERIA: 70% or greater on a multiple choice written test, successful classroom demonstrations.

DATE RELEASED TO THE SHARE FILE: August 2023

I. INTRODUCTION

A. Instructor introductions and qualifications.

B. Review Performance Objectives.

C. Purpose/Motivator.

1. This course is designed to acquaint the student with a basic understanding and knowledge of basic first responders use of CPR and an AED.

II. HANDS ONLY (CCR) AND CONVENTIONAL (CPR)

A. CPR. This version of CPR is taught in the basic curriculum. If your host agency supports or teaches another version of this, follow your agency orders upon graduation.

1. No CPR card will be issued.

2. These are the CPR instructions being issued by many 911 call centers.

3. No certification needed to perform the procedure.

4. Easier for the public to understand and remember than traditional CPR.

a. No need for “mouth to mouth” ventilations.

b. No need to remember the ratio of compressions to ventilations.

B. Hands Only CPR is recommended for use in “cardiac” related arrests.

1. The problem is with the heart itself. **P. O. 8.1.23.1**

2. Not due to additional factors such as respiratory issues, drownings, overdose, trauma, etc.

3. Recommended for teens and adults, but not for children.

4. Hands only CPR has been shown to be as effective as conventional CPR for cardiac arrests at home, work, or in the public. – American Heart Association.

5. There is enough blood in the body to be circulated from chest compressions during CPR.

6. The overall majority of cardiac arrests are within scope of this procedure.

C. Recommended for use in cardiac arrest related to:

1. Respiratory causes:

a. Drowning.

b. Choking.

c. Overdose.

d. Breathing Problems.

2. Trauma.

3. Pediatrics; which are most respiratory related.

D. The Three C's to save a life in CPR.

1. Check for responsiveness.

a. Shake the person and shout, "are you okay?"

b. Rub their sternum with your knuckles.

c. If you have no response, assume the subject has experienced cardiac arrest.

d. It is not recommended to check for a pulse.

i. Lay rescuers cannot reliably detect the absence of a pulse in a timely fashion.

ii. Often detect their own pulse.

2. Call for Emergency Responders/EMTs.

a. Call 911 or use the radio to call for assistance.

b. Direct someone else to call.

c. Survivability without good CPR decreases 10% every minute.

3. Compress.

a. Position the subject on their back on a flat surface.

b. Place the heel of one hand on top of the other hand. Place the heel of the bottom hand on the center of the subject's chest.

c. Lock your elbows and compress the chest forcefully; make sure you lift up enough to let the chest recoil.

d. Compress at a rate of 100 compressions per minute.

E. Conventional CPR steps.

1. Same as Hands Only, Except you add rescue breaths to compressions at a ratio of 30 compressions to 2 rescue breaths.

2. Use head tilt/chin lift or jaw thrust maneuvers to open the airway.

3. High chance the victim WILL VOMIT during rescue breathing. Air will go into the stomach instead of the lungs. Compressions will push that out. You must clean out the mouth and continue compressions.

a. Rate: Push hard and fast at a rate of 100 compressions per minute.

b. Depth:

i. Adult - 2 hands and compression depth of 2-2.5 inches.

ii. Child - 1 or 2 hands and compression depth of 1/3 chest depth.

iii. Infant - fingers or thumbs with hands encircling torso. Compression depth of 1/3 chest depth.

F. Rate and Depth are the same for Hands Only CPR and Conventional CPR.

G. Use Hands Only CPR:

1. If indicated.

2. If you are unsure which type of CPR to use.

3. If no pocket mask/CPR Microshield is available to perform Conventional CPR even if recommended.

4. Hands Only CPR has been shown to be as effective as Conventional CPR until additional help arrives. –American Heart Association.

H. Remember:

1. You can stop if the scene becomes unsafe.

2. You become too exhausted to continue.

3. Other help arrives.

4. Or the patient shows signs of life.

5. Check victim during CPR.

6. Remember where your gun is and where people are.

7. Doing Hands Only CPR 100% better than no CPR.

III. AEDs

A. Automated External Defibrillator (AED)

1. Description of common AEDs.

   a. It's a sophisticated, yet easy-to-use, medical device that can analyze the heart's rhythm.

   b. If necessary, deliver an electrical shock, or defibrillation, to help the heart re-establish an effective rhythm.

2. Features of modern AEDs.

   a. Power button.

   b. AED pads with connectors.

   c. Analyze button.

   d. Shock button.

3. If an Automated External Defibrillator (AED) is available, turn it on and follow the voice prompts.

4. Integrate AED into CPR as soon as it becomes available.

5. If no AED is available, perform continuous chest compressions until EMS personnel arrive.

6. Continue chest compressions until directed by EMS personnel to stop, you are too exhausted to continue, or the subject shows signs of life.

7. When in doubt, use it! Not going to cause any additional harm to the patient.

III. ABDOMINAL THRUST (FORMALLY KNOWN AS THE HEIMLICH MANEUVER)

A. Abdominal Thrust. **P. O. 8.1.23.1**

1. Choking occurs when a foreign object becomes lodged in the throat or windpipe, blocking the flow of air.

2. In adults, a piece of food often is the culprit. Young children often swallow small objects.

3. Because choking cuts off oxygen to the brain, administer first aid as quickly as possible.

B. The universal sign for choking is hands clutched to the throat. If the person doesn't give the signal, look for these indications:

1. Inability to talk.

2. Difficulty breathing or noisy breathing.

3. Inability to cough forcefully.

4. Skin, lips and nails turning blue or dusky.

5. Loss of consciousness.

C. If choking is occurring, begin to perform the abdominal thrust.

1. If you're the only rescuer, perform the abdominal thrust before calling.

2. If another person is available, have that person call for help while you perform the abdominal thrust.

D. To perform the abdominal thrust on someone else:

1. Stand behind the person. Wrap your arms around the waist. Tip the person forward slightly.

2. Make a fist with one hand. Position it slightly above the person's navel.

3. Grasp the fist with the other hand. Press hard into the abdomen with a quick, upward thrust — as if trying to lift the person up.

4. Repeat until the blockage is dislodged.

E. To perform the abdominal thrust on yourself:

1. Place a fist slightly above your navel.

2. Grasp your fist with the other hand and bend over a hard surface — a countertop or chair will do.

3. Shove your fist inward and upward.

F. Clearing the airway of a pregnant woman or obese person:

1. Position your hands a little bit higher than with a normal abdominal thrust, at the base of the breastbone, just above the joining of the lowest ribs.

2. Proceed as with the abdominal thrust, pressing hard into the chest, with a quick thrust.

3. Repeat until the food or other blockage is dislodged or the person becomes unconscious.

G. Clearing the airway of an unconscious person:

1. Lower the person on his or her back onto the floor.

2. Clear the airway. If there is a visible blockage at the back of the throat or high in the throat, reach a finger into the mouth and sweep out the cause of the blockage. Be careful not to push the food or object deeper into the airway, which can happen easily in young children.

3. If the object remains lodged and the person doesn't respond after you take the above measures, begin cardiopulmonary resuscitation (CPR). The chest compressions used in CPR may dislodge the object. Remember to recheck the mouth periodically.

H. Clearing the airway of a choking infant younger than age 1:

1. Assume a seated position and hold the infant face down on your forearm, which is resting on your thigh.

2. Thump the infant gently but firmly five times on the middle of the back using the heel of your hand. The combination of gravity and the back blows should release the blocking object.

3. If this doesn't work, hold the infant face up on your forearm with the head lower than the trunk. Using two fingers placed at the center of the infant's breastbone, give five quick chest compressions.

4. If breathing doesn't resume, repeat the back blows and chest thrusts. Call for emergency medical help.

5. If one of these techniques opens the airway but the infant doesn't resume breathing, begin infant CPR.

6. If the child is older than age 1, give abdominal thrusts only.

7. Drop down to their level to perform abdominal thrust.

IV. PRACTICAL DEMONSTRATIONS CONDUCTED DURING CLASS P. O. 8.1.23.2

A. Patient Movement Demonstrations.

1. Walking wounded can self remove when appropriate.

2. If a patient is alert but unable to self evacuate, a plan should be devised.

   a. If possible, communicate with the patient. Let them know what you are doing

3. One-person drag, (This is for short distances only)

   a. Secure any weapons.

   a. Grab by equipment/vest or under arms. with 1 or 2 hands.

   b. Can be high or low profile depending on if under fire.

4. Two person drag.

   a. Can be high or low profile depending on if under fire.

   b. Communicate plan with team members before attempting drag.

   c. Secure weapons and equipment.

   d. Each member grabs the patient with one hand and drags.

5. One person drag with line. Can be low or high.

   a. Determine the appropriate tactical situation, estimate drag distance and the number of rescuers. Drag can be high or low profile.

   b. Communicate the plan to the patient.

c. Secure any weapons or equipment.

d. Attach the drag line to the patient's vest drag handle on their vest or other part(s) as appropriate.

e. Extend the drag line 5 -6 feet, drag with your legs.

6. Two person drag line.

a. Determine the appropriate tactical situation, estimate drag distance and number of rescuers. Drag can be high or low profile.

b. Communicate plans to patient and fellow rescuers.

c. Attach dragline(s) to a drag length of 5 -6 feet.

7. Seal Team 3 Carry

a. Determine appropriate carry for tactical situation, estimated distance and number of rescuers.

b. Communicate the plan with team member(s) before attempting the lift.

c. Secure weapons and other equipment as feasible.

d. If the patient is face down, roll them to their back.

e. Rescuers place patient’s arms over resucer’s necks and outside hand grasping patient’s wrists.

f. Rescuers use the inside hands to secure the patient by the belt, pants, or body armor.

g. Simultaneously raise the patient.

h. Step forward with the patient's feet dragging behind.

i. Begin the carry.

B. CCR Demonstrations.

C. AED Demonstrations.

V. CONCLUSION

A. Review ofPerformance Objectives:

B. Final Questions and Answers.

C. Instructor closing Comment (s).