## Stand Alone 6 - First Aid

Session 6 – AED/CPR Practice LD 34 – First Aid

**Date Revised:** 11/19/19

**Course Goal:** To teach recruit officers how to provide first aid and CPR. Utilize CAPRA

**Session Goal:** To teach recruit officers the knowledge and skills necessary to provide high quality CPR.

## **Learning Objectives:**

- Demonstrate Cardiopulmonary Resuscitation (CPR) for adults and children, following American Heart Association (AHA) Guidelines for CPR and Emergency Cardiovascular Care (ECC) at the Healthcare provider level including: [34.III.B]
  - Ventilation duration [34.III.B.1]
  - o Pulse location [34.III.B.2]
  - o Compression depth [34.III.B.3]
  - o Compression rate [34.III.B.4]
  - o Compression-to-ventilation ratio (one-person CPR) [34.III.B.5]
  - o Compression-to-ventilation ratio (two-person CPR) [34.III.B.6]
  - Automated External Defibrillator (AED) [34.III.B.7]
- Discuss Basic Automated External Defibrillator (AED) operation to include [34.III.C]
  - Special considerations [34.III.C.1]
  - o Troubleshooting [34.III.C.2]

**Required Learning Activity:** [34.VIII.C.2.a-b][34.VIII.C.3.a-b]

Session Time: 1 hour

## **Resources:**

- Classroom with tables
- White board
- Dry-erase markers
- Video case study "Bondi lifeguards"
- Adult mannequins (6)
- Pocket masks (1 per student, if available)
- Training AED (2)

**Session Summary:** The recruits will watch the "Bondi lifeguards video" and discuss the incident, focusing on the use of the AED. Next, the students will participate in a learning activity in which they will demonstrate high quality CPR in a variety of different scenarios.

Outline	Instructor Notes
	[1] Ask – What does an Automated

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- I. Automated External Defibrillators (AED) [1] [34.III.C] [34.III.B.7]
  - A. Introduction
    - Best treatment for most cases of sudden cardiac arrest
    - 2. Device that shocks the heart out of fatal rhythm
  - B. AED protocol [2]
    - 1. Check for responsiveness and breathing
    - 2. Activate EMS if unresponsive
    - 3. Get the AED if readily available
    - 4. Check for pulse
      - a. A second rescuer should continue CPR
      - b. Continue CPR until AED is attached
    - 5. Attach the AED electrode pads
    - 6. Allow the AED to analyze the heart rhythm
    - 7. If a shock is indicated
      - a. Verbalize "all clear" prior to pressing the "shock" button
      - b. Follow the voice prompts from the AED
    - 8. Use as soon as it is available
  - C. AED special considerations [34.III.C.1]
    - 1. Safe to use in all weather conditions (on dry skin)
    - Never place AED electrode pads on top of medication patches
      - a. Remove patches first
      - b. Wipe the skin dry
    - 3. If the victim has a pacemaker or internal defibrillator with a battery pack, avoid placing pads directly on top of the implant
    - 4. If the victim is lying on a metal surface avoid contact of the electrodes with the metal surface
    - 5. Remove any jewelry from the patient's chest
    - Persons with excessive chest hair may need to be shaved prior to application of the AED electrodes
  - D. AED troubleshooting [34.III.C.2]
    - 1. Inadequate electrode connection
      - a. Improper connection to AED device
      - b. Dry or damaged electrodes
    - 2. Electrodes do not adhere to skin
      - a. Wet/contaminated/excessive hair on chest surface
    - 3. AED fails to perform analysis
      - a. Excessive movement of patient
      - b. Ventilating during analysis
      - c. Radio frequency interference

External Defibrillator (AED) do?

# [2] Show video case study – "Bondi lifeguards"

- What are some things to consider when using an AED?
- How will feel during an incident like this one?
- What did you notice about the way the lifeguards handled the situation?
- Why is the AED a valuable tool for first responders?

Facilitated discussion (10 minutes): (Focusing on the affective, lead students to think about the effects of providing high quality CPR in different situations.)

Ask – How would you feel if you had to provide CPR your partner who was wounded in the field?

- How would feel if you forgot how to give high quality CPR?
- How would you feel if you save your partner's life with high quality CPR?
- How would you feel if a suspect that just killed your partner needed CPR?
- What are the ethical dilemmas with a suspect that needs CPR?
- Would you change the way you feel if the suspect was a relative of yours?

**Demonstrate** – Training AED

Run learning activity [34.VIII.C.2.a-b][34.VIII.C.3.a-b] (1 hour) – CPR/AED

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d.	Vehicle motion	

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## Required Learning Activity – Basic Life Support – CPR/AED

**Purpose:** Peace officers may be required to provide basic life support for a victim, fellow officer, or themselves until additional medical service become available. This may include the use of an AED. This learning activity will reinforce the students' knowledge and give them an opportunity to physically practice using an AED to resuscitate a victim. [34.VIII.C.2.a-b][34.VIII.C.3.a-b]

**Description:** The instructor will begin the activity by explaining the purpose and expectations. Next, the instructor will demonstrate the proper execution of treatment for the scenario that the students will practice. The instructor should demonstrate it at least once in full speed, and once slowly, explaining each step, including the use of a training AED. The instructor will then break the class into the smallest groups possible based on the number of training AED's available. Each group should be given one training AED. One or two at a time, the students will play the role of police officers treating a victim who is not breathing and does not have a pulse. The victim will be a CPR mannequin. The officers should provide care as they have been taught, demonstrating high quality CPR and the use of the AED on the mannequins.

Scenario: Cardiopulmonary resuscitation (CPR) and AED.

The responding officer conducts a primary assessment on an adult or child and finds that the victim has no pulse and is not breathing. As the officer proceeds, another student in the group will simulate arriving with an AED. The first student will begin using the AED to resuscitate the victim.

#### **Resources needed:**

- Classroom with tables
- Adult/child manneguins (6 of each)
- Pocket masks (1 per student, if available)
- Training AED (6)

# **Key learning points:**

- Check the carotid pulse
- Give compressions hard and fast
- 30:2 ratio for 1 or 2-person adult CPR
- 30:2 ratio for 1 person child CPR, 15:2 for 2-person child CPR
- Rate of compressions is 100 per minute
- Cardiopulmonary resuscitation (CPR) is: providing external chest compressions to circulate the victim's blood, maintaining an open airway and providing rescue breaths.
- Automated External Defibrillator (AED) operation

Time required: 1 hour