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COURSE HOURS: 4

**COURSE PURPOSE:** To refresh students' skills, application and knowledge of First Aid, CPR

and the operation of the AED as First Responders.

**AUDIENCE:** Sworn Peace Officers, including Level I and Level II Reserve Officers,

Custody Staff and Non-Sworn civilian staff that have contact with the

general public.

#### **COURSE OBJECTIVES**

Under the supervision of a qualified instructor each student will:

- 1. Demonstrate the ability to assess the need for and apply new basic First Aid skills that are required as a first responder.
- 2. Demonstrate the ability to assess the need for and properly apply Cardiopulmonary Resuscitation techniques.
- 3. Demonstrate the ability to assess the need for and apply an Automatic Electronic Defibrillator (AED) when warranted.
- 4. Pass a written exam with a score of 70% or higher.

### I. Role of the Public Safety First Responder within the EMS system

- A. Peace Officer responsibilities
  - 1. Integration with EMS personnel to include active shooter events
  - 2. Scene safety and security
  - 3. Address the threat, then render aid
  - 4. Activate EMS as needed or render appropriate aid
  - 5. Identification of local EMS and trauma systems
- B. Minimum equipment and first aid kits
  - 1. Department/UASI issued IFAK
    - a. Tourniquets/bandages/shears
    - b. Chest seals/gloves

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- c. Inspection and restocking
- 2. Field deployed or station assigned AEDs
- 3. Personal protective equipment
  - a. Gloves
  - b. CPR masks/bags
- 4. Mass casualty kits in supervisor's units

#### II. Patient Assessment

- A. Primary patient assessment
  - 1. Scene safety/PPE
  - 2. Check responsiveness/tap and shout
  - 3. Unresponsive
  - 4. Activate EMS
  - 5. Check breathing/pulse (no more than 10 second assessment)
  - 6. Responsive
  - 7. Ensure ABCs adequate/check Levels of Consciousness (LOC)
  - 8. Determine chief complaint
  - 9. Move to secondary survey/treatment as needed
- B. Secondary patient assessment (conscious victim/safe scene)
  - 1. Vital signs/general appearance/skin color, temperature, moisture
  - 2. Level of Consciousness AVPU acronym
    - a. Alert
    - b. Verbal
    - c. Painful
    - d. Unresponsive
  - 3. Head to toe "hands-on" assessment
  - 4. Recognition and Identification of adult v/s pediatric patients for medical and traumatic emergencies
  - 5. Patient history **SAMPLE** acronym
    - a. Signs/symptoms
    - b. Allergies
    - c. Medications
    - d. Past medical history
    - e. Last oral intake
    - f. Event leading up to illness/injury

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- C. Multiple-Victim Assessment Tactical Casualty care
  - 1. Discuss Mass Casualty Incidents (MCI)
  - 2. Declaration by first responders as MCI
  - 3. Needed when number of victims overwhelms resources
  - 4. Determine treatment priorities (AKA Triage)
  - 5. Determine what resources should be given to which patient
  - 6. **RPM** acronym
    - a. Check **Respiration** >30<8 = immediate care
    - b. Check **Pulse**, capillary refill >2 seconds = immediate care
    - c. Check **Mentation**, doesn't follow simple commands = immediate care
  - 7. Determine which patients are in most immediate danger and seem salvageable

### III. AED use for Heart Attack/Sudden Cardiac Arrest

- A. Follow current American Heart Association (AHA) Guidelines
  - 1. Early defibrillation survival chances
  - 2. Maintenance checking issued equipment to include troubleshooting and other considerations
- B. Rescue breathing
  - 1. Mouth-to-mouth
  - 2. Mouth-to-mask
  - 3. Bag Valve Mask (BVM)
- C. AED
  - 1. Basic AED operation
  - 2. Using the AED
  - 3. Troubleshooting or other considerations
- D. Care for heart attack
  - 1. Activate EMS
  - 2. Obtain AED for early defibrillation
  - 3. Position of comfort/assist with nitro as prescribed
  - 4. Treat for shock
- E. Sudden Cardiac Arrest
  - 1. Signs/symptoms
  - 2. Activate EMS
  - 3. Obtain AED for early defibrillation

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- 4. Begin CPR
- 5. Support chain of survival
  - a. Immediate recognition of cardiac arrest and activation of the emergency response system
  - b. Early CPR with an emphasis on chest compressions
  - c. Rapid defibrillation with an AED
  - d. Effective advanced life support
  - e. Multidisciplinary post-cardiac arrest care
- F. Cardiopulmonary Resuscitation (CPR) coordinated with AED
  - 1. Adult Rescue Breathing/CPR
    - a. Rescue breathing, 1 breath each 5 seconds (w/ CPR mask)
    - b. CPR 30 compressions, 2 breaths (one or two rescuers)
    - c. Depth 2-2.4 inches (with heel of two hands)
    - d. Rate 100-120 compression/minutes
  - 2. Child Rescue Breathing/CPR
    - a. Rescue breathing, 1 breath each 3 seconds (w/ CPR mask)
    - b. CPR 30 compressions, 2 breaths (one rescuer)
    - c. CPR 15 compressions, 2 breaths (two rescuers)
    - d. Depth approximately 2 inches (heel of one or two hands)
    - e. Rate 100-120 compression/minute
  - 3. Infant Rescue Breathing/CPR
    - a. Rescue breathing 1 "puff" each 3 seconds (w/ CPR mask)
    - b. CPR 30 compressions, 2 "puffs" or air (one rescuer)
    - c. CPR 15 compressions, 2 "puffs" of air (two rescuer)
    - d. Tips of two fingers width below nipple line
    - e. Depth ½ to 1 inch
- G. Recovery position
  - 1. Position of Recovery refers to a prone position of the body, in to which an unconscious but breathing casualty can be placed as part of first aid treatment
    - a. Continue to monitor patient
    - b. Relay all treatment given to EMS personnel

### IV. Medical Emergencies

A. Respiratory Emergencies

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- 1. Breathing Patients
- 2. COPD Patients
  - a. Asthma, acute loss of airway
  - b. Assist with prescribed inhaler
  - c. Monitor ABCs and treat for shock
- B. Allergic Reaction (Anaphylaxis)
  - 1. Assist with prescribed auto-inject epinephrine
  - 2. Monitor ABCs and treat for shock
- C. Diabetic emergencies
  - 1. Insulin vs. Diabetic Coma
  - 2. Signs and symptoms
  - 3. Give victim oral glucose substances
  - 4. Monitor ABCs and treat for shock
- D. Alcohol and drug emergencies
  - 1. Assisted Naloxone/Narcan
  - 2. Administration vs. assisted
    - a. Administration only authorized by LEMSA
    - b. See additional information in Section XII
  - 3. Accessing EMS
  - 4. LEMSA authority and directions
- E. Facial Injuries
  - 1. Objects in the eye
    - a. Identification
    - b. Initial considerations
    - c. Treatment
  - 2. Impaled objects
    - a. Immobilize with bulky dressing
    - b. Cover both eyes
  - 3. Lacerations/abrasions of the eye
    - a. Cover eye
    - b. Minimize eyes movement
  - 4. Chemical in eye(s)
    - a. Flush with water for 15-20 minutes
    - b. Seek medical evaluation
  - 5. Nosebleeds

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- a. Pressure to bridge of nose
- b. Lean patient forward and manage airway
- 6. Dental emergencies
  - a. Avulsed or displaced tooth
  - b. Place in sterile water, milk or victim's saliva and transport with them
- F. Burns
  - 1. Identification
  - 2. Treatment
- G. Management of foreign body airway obstruction
  - 1. Adults
  - 2. Children
  - 3. Infants
  - 4. Conscious vs Unconscious patients

#### V. Altered Mental Status -

- A. Identify signs and symptoms of psychological emergencies
  - 1. Crying/extreme withdrawal from outside contact
  - 2. Agitated or aggressive behavior
  - 3. Unusual outbursts or disorientation
  - 4. Abnormal behavior or demeanor
  - 5. Paranoia
  - 6. Delusions/hallucinations
- B. Causes
  - 1. Trauma, Shock
  - 2. Medical
  - 3. Psychological
  - 4. Drugs, alcohol

### VI. Environmental Emergencies

- A. Drowning
  - 1. Move victim safely onto land or stable platform (boat)
  - 2. Assess victim
  - 3. Treat with rescue breathing/CPR as needed

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- B. Animal or human bites
  - 1. Control bleeding
  - 2. Cleanse wound
  - 3. Clean dressing
- C. Venomous snake bites
  - 1. Calm victim
  - 2. Immobilize injury site
  - 3. Keep bite area lower than heart
  - 4. Seek medical/EMS care
- D. Insect bites and stings
  - 1. Concern for anaphylaxis
  - 2. Loss of airway
  - 3. Assist with prescribed auto-inject epinephrine
- E. Poisoning Ingested or Inhaled
  - 1. Recognition of exposure to CBRN agents
  - 2. Scene safety assess patient
  - 3. Determine source of poison/agent
  - 4. Poison control system notification and advice

#### VII. Patient Movement

- A. Emergency movement
  - 1. Move only when there is imminent danger
  - 2. Active shooter
  - 3. Fire or other hazard to victim or rescuers
- B. Move to safe zone
  - 1. Triage/treatment area/Casualty Collection Point (CCP)
  - 2. Cold Zone vs. Warm Zone
- C. Spinal Immobilization Techniques
  - 1. C-Collar is now contraindicated in 2015 guidelines
- D. General Guidelines
  - 1. Plan ahead
  - 2. Reassure victim
  - 3. Victim stability
- E. Lifts and carries, including:
  - 1. Shoulder drag

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- 2. Soft litters
- 3. Manual extractions
- 4. Fore/aft carry AKA trunk-leg carry
- 5. Side by side carries AKA two-handed seat
- 6. Shoulder belt

### VIII. Tactical and Rescue First Aid Principles Applied to Violent Circumstances

- A. Principles of Tactical Emergency Casualty Care: Integration of EMS personnel (AB 1598). Immediate notification to the EMS system for deployment and assistance
  - 1. Identification of life threatening emergencies
  - 2. Treatment of life threatening emergencies
- B. Determining Treatment Priorities
  - 1. Assessing injuries for order of severity
  - 2. Management of first aid resources/devices on hand
  - 3. URASI Protocols for active shooter incident
  - 4. Plan for movement of victims to safe triage area or:
  - 5. Force protection of EMS resources to CCP

### IX. Trauma Emergencies

- A. Soft tissue injuries
  - 1. Classification
    - a. Acute injuries
    - b. Overuse
  - 2. Signs and symptoms
    - a. Sprains
    - b. Strains
    - c. Contusions
  - 3. Management and treatment
- B. Amputations
  - 1. Identification, initial considerations and treatment
    - a. Control bleeding (tourniquet)
    - b. Pack amputated part in clean dressing and keep cool
    - c. Transport amputated part with victim

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- C. Impaled objects
  - 1. Stabilize object, do not remove
  - 2. Notify EMS, transport
- D. Chest injuries closed chest injury
  - 1. Assessment
    - a. May have fractures
    - b. Flail segment
    - c. Compromised breathing
  - 2. Treatment
    - a. Place victim on injured side or provide support to flail segment
    - b. Monitor ABCs
    - c. Treat for shock
- E. Chest Trauma Open or penetrating chest injury
  - 1. Assessment
    - a. Open or penetrating chest injury
    - b. "Sucking chest wound" or Tension Pneumothorax
  - 2. Treatment
    - a. Application of chest seal(s) over penetration/puncture
      - 1) Visualize wound site
      - 2) Clean area
      - 3) Apply seal (IFAK)
      - 4) Check respiration
  - 3. Place on injured side
  - 4. Monitor ABCs
  - 5. Treat for shock
- F. Abdominal Injuries
  - 1. Closed signs/symptoms, internal bleeding concerns, organ damage
  - 2. Open control bleeding with pressure
  - 3. Eviscerations
    - a. Exposed abdominal contents/organs
    - b. Apply moist sterile dressing
    - c. Cover with airtight bandage
  - 4. Monitor ABCs
  - 5. Treat for shock
- G. Bleeding Control

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- 1. Direct pressure over injury to soft tissue (use PPE)
- 2. Pressure and dressing bandage
- 3. Tourniquet device
  - a. Issued with Department IFAK
  - b. Improvised devices
- 4. Hemostatic dressings (wound packing)
  - a. Use only EMSA approved dressing
    - 1) QuikClot Combat Gauze
    - 2) HemCon ChitoFlex PRO Dressing
    - 3) Celox Gauze
  - b. Demonstrate the proper application of the hemostatic dressings
- 5. Types of chest seals and dressings issued
  - a. OLAES bandages (6 inch and 4 inch)
  - b. HyFin Vent chest seals (twin pack) or equivalent
  - c. These are the only items in IFAK with an expiration date
- H. CPR (Refer to Section V)
  - 1. BLS CPR Continues to provide effective rescue breathing and compressions
  - 2. EMSA 2015 added application of AED
  - 3. Goal to deliver high-quality CPR

### X. Legal Issues

- A. Authorized Skills
- B. Liability Limitations

### XI. Local Emergency Medical Service Authority

- A. California EMSA (Cal-EMSA) vs. Local EMSA (Orange County)
  - 1. Cal-EMSA covers California
  - 2. Orange County EMSA one of 33 local EMSA agencies in State
- B. Authority of State to set minimum standards
  - 1. Title 22, Section 100023
  - 2. POST Standards include changes effective April 1, 2015
- C. Authority of Local EMSA (LEMSA)
  - 1. Authorized to set local standards and optional skill sets

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- 2. Authorize peace officers to use skills
- D. Medical Director of Local EMSA
  - 1. Sets training standards
  - 2. Approves applications
- E. Optional Skills may include:
  - 1. Administration of epinephrine by auto-injector
  - 2. Supplemental oxygen therapy
  - 3. Administration of atropine and pralidoxime chloride
  - 4. Administration of Naloxone/Narcan
  - 5. Use of oropharyngeal and nasopharyngeal airway
  - 6. These MUST be requested by the agency head and authorized by LEMSA approved for training and deployment

### XII. Exercises, Tests and Learning Activities

- A. Students will demonstrate competency, as directed by the instructors, in the following Skills Expertise Test Form, which minimally meets current American Heart Association (AHA) standards:
  - 1. Assesses the victim
  - 2. Activates emergency response system (EMS)
  - 3. Checks for pulse
  - 4. Delivery of high quality CPR
  - 5. Provides effective rescue breaths
  - 6. AED deployment and operation
- B. Students will participate in learning activities, as directed by the instructors, which minimally include:
  - 1. Primary victim assessment
  - 2. Techniques for controlling bleeding to include, direct pressure, pressure bandages, tourniquets, hemostatic dressings approved by EMSA
    - a. Students must demonstrate competency with tourniquets and approved hemostatic dressings; (QuikClot Combat Gauze, HemCon ChitoFlex PRO Dressing and Celox Gauze)
  - 3. Use of PPE
  - 4. Emergency movement of victim

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#### XIII. Course Conclusion

- A. Students will take a multiple choice written course test and have to pass a hands on skills demonstration test
  - 1. Students must pass the written test with a score of 70% or higher
  - 2. Students must complete and show competency in all of the skills taught
  - 3. Students who do not pass will be provided an opportunity for remediation
- B. Course closing
  - 1. Students will complete course evaluations
  - 2. Students passing all skills and written testing will be provided POST Certificate and 4 hours CPT credit.