

San Luis Obispo County Sheriff's Office – Presenter 2440
First Aid/CPR/AED Practical Refresher- Course # 21797
Expanded Course Outline
8- hour training

STATEMENT OF PURPOSE:

Instructor led training that meets Title 22, Section 1.5 requirements for EMSA Regulations as it relates to First Aid and CPR Standards and Training for Public Safety Personnel. This course provides refresher training for sworn law enforcement personnel in first aid, cardiopulmonary resuscitation, and automated external defibrillator.

FIRST AID/CPR/AED REFRESHER

Minimum Topics/Exercises:

- a. Introduction and Safety Policy
- b. Orientation of the EMS System
- c. Role of officer
- d. CPR (cardiopulmonary resuscitation)/AED (automated external defibrillator)
- e. Airway Obstructions
- f. Recognition/Identification of Medical and Traumatic Emergencies
- g. Medical Emergencies
- h. Burns
- i. Facial Injuries
- j. Environmental Emergencies
- k. Poisoning
- l. Bites and Stings
- m. Patient Movement
- n. Tactical First Aid in violent circumstances
- o. Trauma Emergencies
- p. Legal issues
- q. Written and Hands-on practical exams covering each topic area.

COURSE OBJECTIVES

The trainee will:

1. Demonstrate the ability to plan a response to a medical incident.
2. Demonstrate knowledge of and appropriate application of first aid supplies and equipment.
3. Demonstrate the ability to recognize and identify medical emergencies.
4. Demonstrate competency of appropriate use, proper technique, and application of CPR and AED.

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5. Demonstrate knowledge of when appropriate to move/carry subjects in medical distress utilizing proper techniques and tactical awareness.
6. Complete documentation for specific medical incidents.

I. INTRODUCTION AND SAFETY POLICY

A. Introduction

1. Course purpose and objectives
2. Instructor introductions
3. Student introductions
4. Sign-in sheet

B. Safety Policy

1. Review of course safety policy with students and role players
2. Stop action command
3. Expectations to notify instructors of pre-existing conditions that prevent participation in the presentations.
4. Notification of injuries to instructors

II. ORIENTATION OF THE EMS SYSTEM

A. Local EMS System Orientation

1. EMS Department
 - a. Organization
 - b. Roles
 - c. Responsibilities
2. EMS Providers

B. EMS Response to Medical Aids

1. EMD and medical dispatch policies and procedures
2. Fire department joint powers agreement

C. EMS/Ambulance Dispatch

1. Control 20
2. San Luis Ambulance and Cambria Ambulance
3. Air Ambulances
 - a. Cal fire
 - b. Auto launch zones

D. Trauma System

1. Role of a trauma center/trauma system
 - a. Local trauma hospitals

E. Additional Specialty Care

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1. Burn Care
2. Cardiac and stroke centers
3. Pediatric care

III. ROLE OF THE PUBLIC SAFETY FIRST-RESPONDER PROVIDER

- A. Personal safety
 1. Scene size-up
 - a. Hazards
 - b. Threats
- B. Body substance isolation, including removing gloves
 1. Routes of transmission
 - a. Inhalation, injection, ingestion, absorption
 - b. Common communicable diseases
 2. Safe glove removal process
 - a. Change gloves between patients and suspects
- B. Integration with EMS personnel to include active shooter incidents
 1. Incident command structure
 - a. Commanders of individual sections
 2. Differences in radio communication
 - a. 10-codes vs. plain talk
 3. Emergency Channel for MASCAL and active shooter
 - a. Hot zone
 - b. Warm zone
 - c. Cold zone
 4. Staging area until threat neutralized
 - a. EMS to stage outside of hot zone
 5. Transport locations and levels of care for trauma hospitals
 - a. Levels 1-4
- C. Mass casualty responsibilities
 1. Triage
 - a. Green tag
 - b. Yellow tag
 - c. Red tag
 - d. Black tag
- D. Personal protective equipment and first aid kits
 1. Gloves, goggles, gown, mask
 - a. What each protects against

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- b. What they don't protect against

IV. CPR AND AED FOR ADULTS, CHILDREN, AND INFANTS, FOLLOWING CURRENT AHA GUIDELINES

A. Chain of survival

1. Early activation of EMS
 - a. Code 2 vs Code 3
2. High quality CPR
 - a. Proper ratio and quality
 - b. Proper depth and full chest recoil
 - c. Good ventilation
3. Defibrillation
4. Advanced life support
 - a. Paramedic evacuation to the hospital
5. Post cardiac arrest care
6. Recovery

B. Basic airway management

C. Rescue Breathing

1. Mouth to mouth
 - a. Not preferred
2. Mouth to mask
 - a. Less dangerous
3. Bag-valve mask (BVM)
 - a. Safest

D. Chest compressions and CPR/AED

1. Basic AED Operation
2. Using the AED
 - a. Anatomical attachment locations
3. Troubleshooting and other considerations

E. Single rescuer CPR/AED on adult, child, and infant

1. Ratio 30:2
 - a. Depth of compressions

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- b. Proper hand placement and technique
- c. Allow full chest recoil
- d. Proper airway management techniques
- E. Two rescuer CPR/AED on adult, child, and infant
 - 1. Ratio 30:2 for adults and children
 - 2. Ratio 15:2 for infants
 - a. Depth of compressions
 - b. Proper hand placement and technique
 - c. Allow full chest recoil
 - d. Proper airway management technique
- F. Recovery Position

V. MANAGEMENT OF FOREIGN BODY AIRWAY OBSTRUCTIONS ON ADULTS, CHILDREN, AND INFANTS

- A. Conscious patients
 - 1. Encourage coughing
 - 2. Back blows
 - 3. Abdominal thrusts
 - 4. Special circumstances requiring chest thrusts
 - a. Obese patients
 - b. Pregnant patients
- B. Unconscious patients
 - 1. Chest thrusts
 - 2. Breathing support
 - 3. Monitor need for CPR

VI. RECOGNITION AND IDENTIFICATION OF MEDICAL AND TRAUMATIC EMERGENCIES (Adult and Pediatric)

- A. Performing a primary assessment
 - 1. Level of awareness
 - a. Alert
 - b. Verbal
 - c. Pain
 - d. Unresponsive
- B. Performing a secondary assessment
 - 1. Head to toe examination
 - a. After initial stabilization is complete
 - 2. Identify all potentially significant injuries

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3. Patient evaluation and management

C. Obtaining a patient history

1. Family members
2. Witnesses

VII. MEDICAL EMERGENCIES

A. Pain, severe pressure, or discomfort in the chest

1. Cardiac issues
 - a. Heart attack
 - b. Congestive heart failure
 - c. Treat ABC's and shock

B. Breathing difficulties

1. Asthma
 - a. Common medications prescribed
 - b. Treat for ABC's shock
2. COPD
 - a. Emphysema
 - b. Chronic bronchitis
 - c. Common medications prescribed
 - d. Treat for ABC's and shock

C. Allergic reactions

1. Pathophysiology of anaphylaxis
2. Identification of life threatening reactions
3. Assisted administration of Epinephrin
 - a. Treat ABC's and shock

D. Altered mental status

1. Scene safety and patient safety
2. Possible causes
 - a. May become combative

E. Stroke

1. Types of stroke
 - a. Hemorrhagic
 - b. Ischemic
 - c. Mini-stroke (TIA)

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2. Signs
 - a. Facial droop
 - b. Weakness
 - c. Slurred speech
3. Time frames
 - a. Last seen normal
4. Last seen normal

F. Diabetic emergencies

1. Hyper vs. hypoglycemia
 - a. Symptoms
 - b. Treatment- oral glucose administration or insulin in ambulance or hospital

G. Seizures

1. Epileptic
 - a. Petite mal
 - b. Grand mal
2. Other causes of seizures
 - a. Head injury
 - b. Medication reaction
 - c. Alcohol induced
 - d. Febrile
 - e. Stroke aka cerebral vascular accident
3. Treat for ABC's and shock

G. Alcohol and drug emergencies

1. Scene safety
 - a. Needles
 - b. Weapons
 - c. Routes of exposure
2. Recognition of opiate overdose
 - a. Assisted naloxone
 - b. Rescue breathing rate
 - c. Vomiting considerations
 - d. Recovery position

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- e. Treat ABC's and shock
- 3. Recognition of alcohol poisoning
 - a. Treat ABC's and shock
- H. Severe abdominal pain
 - 1. Ruptured organs
 - 2. Internal bleeding
 - 3. Treat ABC's and shock
- I. Obstetric emergencies
 - 1. Immanent delivery
 - a. Signs
 - b. Birth assistance
 - 2. Complications of delivery
 - a. Breech birth
 - b. Limb presentation
 - c. Prolapsed umbilical cord
 - d. Multiple births
 - e. Premature births
 - f. Still born
 - g. Excessive bleeding
- J. Psychological Emergencies
 - 1. Causes
 - a. Mental illness
 - b. Medication
 - c. Trauma
 - 2. Signs and symptoms
 - a. Anxiety/agitation
 - b. Tunnel vision
 - c. Extreme aggression or passivity
 - d. Unresponsiveness

VIII. BURNS

- A. Chemical burn vs radiant burn
 - 1. Chemical burn
 - a. Tissue damage caused by toxic substances
 - b. Treatment

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2. Radiant burn
 - a. Caused by heat
 - b. 1st-4th degree
 - c. Treatment

IX. FACIAL INJURIES

- A. Eye injuries
 1. Objects in the eye
 2. Impaled object
 3. Chemical in the eye
 4. Globe injury
- B. Nose bleeds
 1. Cause of concern
 2. Treatment
- C. Dental emergencies
- D. Swelling of the airway
 - a. Position to facilitate breathing
 - b. Treat ABC's and shock

X. ENVIRONMENTAL EMERGENCIES

- A. Drowning
 1. Rescue considerations
 2. Responsiveness and breathing
 3. Recovery, bleeding, and stabilization/immobilization
 4. Treat ABC's and shock
- B. Temperature related emergencies
 1. Heat emergencies
 - a. Heat exhaustion
 - b. Heat stroke
 2. Cold emergencies
 - a. Frostnip
 - b. Frostbite
 - c. Hypothermia

XI. POISONING

- A. Ingested poison

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1. Signs/symptoms
2. Poison control

B. Inhaled Poison

1. Signs symptoms

C. Exposure to chemical, biological, radiological, or nuclear substances

1. Recognition of exposure
2. Scene safety

XII. BITES AND STINGS

A. Animal and human bites

1. Clean with soap and large amount of warm water
2. Bleeding control
3. Access EMS

B. Insect stings

1. Brush the stinger away from the skin if still embedded
2. Anaphylaxis
 - a. Signs and symptoms
 - b. Access EMS
 - c. Assisted epinephrine auto-injector

C. Snake bites

1. Type of snake
2. Keep bite area lower than the heart
3. Access EMS
4. Monitor breathing and heart rate

XIII. PATIENT MOVEMENT

A. Emergency movement of patients

1. Requirements
 - a. Life threats
 - b. Dangerous environment and scene safety

B. Lifts and carries

1. Soft litters
 - a. 4 person carry

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2. Improvised litter
 - a. Folded blanket
 - b. Drag carry
3. Manual carries
 - a. Fore-aft carry
 - b. Side by side carry
 - c. Shoulder-belt carry

XIV. TACTICAL AND RESCUE FIRST AID PRINCIPLES APPLIED TO VIOLENT CIRCUMSTANCES

- A. Principle of tactical casualty care
 1. Care under fire
 - a. Rapid blood sweep
 - b. Control bleeding
 - c. Extricate from point of injury
 2. Field care
 - a. Area with cover away from point of injury
 - b. Treatment of life threatening injuries
 3. Extraction
 - a. Patient staging for hospital transport
- B. Determining treatment priorities
 1. Hemorrhage
 - a. Direct pressure
 - b. Bandaging
 - c. Gauze
 2. Airway
 - a. Damage to throat/mouth
 - b. Recovery position
 - c. Airway opening techniques
 3. Breathing
 - a. Chest wall injuries
 - b. Ventilation for inadequate breathing
 4. Circulation
 - a. Bandaging accessory wounds

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- b. Preventing shock
- c. Evacuation to higher level of care

XV. TRAUMA EMERGENCIES

- A. Soft tissue injuries and wounds
 - 1. Common types
 - a. Deformities
 - b. Contusions
 - c. Lacerations
 - 2. Bandaging and splinting
- B. Amputations and impaled objects
 - 1. Stabilize impaled object in place
 - a. Only remove if necessary for CPR
 - 2. Tourniquet
 - a. Use on amputated extremities
 - b. Only way to stop bleeding
 - c. How and where to apply
 - d. Time stamp
- C. Chest and abdominal injuries
 - 1. Review of basic treatment for chest wall injuries
 - a. Penetrating trauma
 - b. Flail chest
 - c. Sucking chest wounds
 - d. Tension pneumothorax
 - 2. Application of chest seals
 - a. Seal on exhale
 - b. Check for exit wounds
 - c. Burping
 - d. Re-assess frequently
- D. Head, neck, or back injury
 - 1. Vertebrae and their nerves
 - a. Cervical and respiratory system
 - b. Exit wounds
- E. Spinal immobilization

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1. Manual stabilization of the cervical spine
 - a. Maintain until secured on backboard
 - b. Emergent circumstances dictate release
2. Assisting EMS with cervical collar
3. Spine-boards and Kendrick extrication devices
 - a. How to assist EMS

F. Musculoskeletal trauma and splinting

1. Long bone injury
 - a. Anatomy of arm and leg bones
 - b. EMS and traction devices
 - c. How to hold traction devices
2. Splints, bandages, and cravats
 - a. Do not attempt to re-align the injury
 - b. Circulation checks
 - c. Basic splinting and immobilization
 - d. Creating a sling for arm injuries
 - e. Secondary circulation checks

G. Recognition of signs and symptoms of shock

1. Treatment of shock
2. The lethal triad of shock
 - a. Acidosis
 - b. Hypothermia
 - c. Coagulopathy
3. Skin signs
 - a. Pale, cold, sweaty
4. Altered level of consciousness
 - a. Alert to who, what, when, where

H. Internal bleeding

1. Signs and symptoms
 - a. Tenderness
 - b. Guarding
 - c. Pulsating masses

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- I. Control of external bleeding
 - 1. Identify the bleeding source
 - a. Where is it located
 - 2. Type of bleeding
 - a. Arterial
 - b. Venous
 - c. Capillary
 - 3. Direct pressure
 - a. Simple bleeding
 - b. Pressure points
 - 4. Tourniquets
 - a. Control extremity bleeding
 - b. Control arterial or uncontrolled venous bleeding
 - 5. Bandages and pressure dressings
 - a. Hold pressure
 - b. Cover accessory wounds and open wounds
- J. Hemostatic Dressings
 - 1. What is a hemostatic dressing
 - a. Dressing treated with an agent or chemical that assists with the formation of blood clots
 - 2. Used with direct pressure
 - 3. What to do if bleeding is still uncontrolled
 - a. Remove, re-apply a new dressing
 - 4. SLO EMSA approved hemostatic dressing
 - 5. Wound packing
 - 6. How to apply

XVI. LEGAL ISSUES

- A. Authorized skills and liability limitations
 - 1. Scope of practice
 - a. Set forth by POST and local EMSA
 - 2. Abandonment

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a. Leaving scene without transfer to higher level of care

3. Negligence

a. Treating patient out of scope

b. Failing to provide adequate/appropriate treatment

4. Good Samaritan act

a. Protections

**XVII. WRITTEN AND HANDS-ON DEMONSTRATION ASSESSMENT
COVERING EACH TOPIC AREA**