LOS ANGELES POLICE DEPARTMENT
First Aid/CPR/AED Instructor Course
1850-21796

Purpose: This course provides Law Enforcement personnel with the required skills to instruct certain EMSA First Aid/CPR/AED courses, with curriculum standards set by Emergency Medical Services Authority (EMSA) (Reference California Code of Regulations, Title 22, Division 9, Chapter 1.5, sections 100005-100028.)

Day One

I. Introduction/Administrative 0600-0700 (60 Min)

A. Introductions
   1. Instructor introductions
      a. Name
      b. Expectations for the course
      c. Why you think the course is valuable
   2. Student introductions
      a. Name
      b. Department
      c. Expectations for the course
      d. Why you want to be a first aid/CPR instructor
      e. Background and experience in first aid/CPR

B. Administrative
   1. Safety during training
      a. No live weapons
      b. No ammunition
      c. No knives, OC spray, batons, etc.
   2. Injuries/Medical emergencies
      a. Medical facilities
      b. Contract hospitals
      c. FD or 911 for emergencies
   3. POST Roster
   4. Hourly distribution
      a. Overview of modules
      b. Learning objectives
      c. Teachbacks
      d. Testing expectations
      e. Breaks and lunch
         1) Hourly water/bathroom breaks
         2) Local eating places for lunch

II. Blood borne pathogens 0700-0800 (60 Min)

A. Types of pathogens
   1. Bacteria
   2. Viruses

B. Transfer of pathogens
   1. Airborne
      a. Spread by tiny droplets sprayed during breathing, coughing, or sneezing
      b. Can be absorbed through the eyes or inhalation
   2. Blood borne
      a. Spread through blood or other body fluids
      b. Comes into contact with an open wound or sore

C. Chain of transmission

1. Infectious agent
2. Reservoir
3. Portal of exit
4. Mode of transmission
5. Portal of entry
6. Susceptible host

D. Exposure
   1. Peace officers are at high risk of being exposed
   2. Exposure does not necessarily mean an individual will contract the illness
E. Personal protective equipment (PPE)
   1. Breaks the chain of transmission
   2. Prevents possible exposure and infection
   3. Must be used and care for properly
   4. Types of PPE's
      a. Protective gloves
      b. Eye protection
      c. Masks
      d. Gowns
      e. Ventilation devices
      f. General supplies and equipment
         1) Special cleaning solutions
         2) Leak proof bags
         3) Biohazard disposable bags
         4) Puncture resistant disposable containers
F. PPE removal and disposal
   1. Removal of contaminated gloves
   2. Biohazard bags
   3. Sharps containers
   4. Liquid proof containers
   5. Comply with agency policy and OSHA guidelines
G. Universal precautions and decontamination considerations
   1. Treat all body fluids as if they are contaminated
   2. Wash hands thoroughly
      a. Warm water
      b. Antiseptic soap
      c. Before and after exposure
   3. Use hand sanitizer
   4. Disinfect and decontaminate any exposed equipment
   5. Use caution handling broken glass and sharp objects
   6. Cover any open cuts or sores
H. Personal preventative measures
   1. Remain healthy and support your immune system
   2. Stay in good physical condition
I. Documentation of exposure
   1. Report the exposure verbally and in writing
   2. Comply with agency policy, HIPAA, and OSHA regulations
   3. AB 2737 – New law to protect law enforcement
      a. Effective January 1, 2009
      b. Officers cannot ask source/suspect to consent to testing, only medical staff

c. If an officer sustains a BBP exposure anytime during the course of normal work duties
d. An ex parte court order may be sought to obtain blood from a source person for testing for HIV and Hepatitis C
e. Simplifies and expedites the process by which officers can learn the source person's test results which impacts their own health and treatment

III. Law enforcement and emergency medical services 0800-0900 (60 Min)

A. Components of the EMS system
1. EMS access
a. The public access the EMS system by calling 9-1-1
b. The components of the EMS system include:
1) Dispatcher: Coordinates type and level of EMS response and dispatches the appropriate agencies. An Emergency Medical Dispatcher (EMD) may give medical instructions to the public.
2) First Responder: Entry level medically trained person
3) Emergency Medical Technician (EMT): Provides basic life support (BLS)
4) Paramedic: Provides advanced life support (ALS)
5) Receiving facility: The medical treatment facility that provides emergency care
2. Interaction with other EMS personnel
a. As first responders, peace officers are part of the EMS system and should provide information to other responders.
b. Sharing information, providing assistance, and team work are essential to the EMS system
3. Local EMS and trauma systems
a. Ill or injured individuals may be transported to a receiving facility.
b. Some facilities are designated to specialize in the provision of emergency, stroke, trauma, or cardiac care

B. Peace officer roles and responsibilities
1. Primary responsibilities
a. Ensure peace officer safety as well as the safety of ill or injured individuals and the public
b. Evaluate the emergency situation
c. Take necessary enforcement actions
d. Initiate actions regarding the well-being and care of ill or injured persons
2. Enroute to the scene
a. Quickly
b. Safely
3. Scene size-up
a. Location
1) Exact address
2) Conditions present at the scene
a) Large numbers of bystanders
b) Vehicle traffic
c) Remote location
3) Potential exposure hazards
a) Fire
b) Gas/chemical leak

        c) Chemical, biological, radiological, nuclear (CBRN)
    b. Type of emergency
        1) Vehicle collision
        2) Victim with severe chest pain
        3) Shooting
    c. Nature of ill/injured persons
        1) Number of victims
        2) Apparent age
        3) Conscious or unconscious
        4) Appearance of injury
            a) Heavy bleeding
            b) Exposed bone
            c) Location of wound
    d. Additional resources
        1) Fire department
        2) Additional units
        3) Rescue ambulance
        4) Public utility services
        5) Specialized units
            a) HAZMAT
            b) SWAT
            c) Search and rescue
4. Safety
    a. Exposure to biological hazards
        1) Blood
        2) Saliva
        3) Other body fluids
    b. Armed suspects
    c. Unsafe scene conditions
        1) Unstable buildings
        2) Vehicle traffic
    d. Environmental hazards
        1) Fire
        2) Exposure to dangerous chemicals
        3) Chance of explosion
    e. Animals
        1) Pets
        2) Wild animals
5. Assessment and care of victim
    a. Peace officers may be required to provide basic care
    b. Until relieved of responsibility by other personnel with equal or higher levels of training
6. Law enforcement actions
    a. Document initial observations
    b. Protect evidence
    c. Identify and isolate witnesses and involved parties
    d. Record statements and information
    e. Note whether items were moved to render EMS
        1) Record what was touched

2) By whom
f. Any other investigation actions required

C. Legal protections regarding EMS
1. Responsibility to act
a. Assess emergency situations
b. Initiate appropriate EMS within the scope of the officer's training and agency policy
c. Not required to render care when reasonable danger exists
1) While under fire
2) Exposure to hazardous materials
2. Immunity from liability
a. Emergency rescue personnel qualify for immunity from liability from civil damages
b. To be protected from liability, personnel must:
1) Act within the scope of their employment
2) Act in good faith
3) Provide a standard of care that is within the scope of their training and agency policy
3. Negligence
a. Peace officers can be held liable if they:
1) Provide care beyond the scope of their training
2) Act in a grossly negligent manner
b. Failure to provide care may also lead to liability
4. Expressed consent
a. Peace officers should clearly identify themselves and ask for consent to administer EMS
b. Consent must be obtained before providing care
c. In order to give lawful consent, the ill or injured person must be:
1) Conscious and oriented
2) Mentally competent enough to make rational decisions regarding their well-being
3) 18 years or older, or an emancipated minor
5. Implied consent
a. Legal position that assumes that an unconscious or confused victim would consent to receiving EMS if that person were able to do so
b. Emergency rescue personnel have a responsibility to administer EMS under implied consent whenever a victim is:
1) Unconscious
2) Incapable of giving consent due to a developmental, emotional, mental disability
3) Altered mental state
a) Alcohol
b) Drugs
c) Head injury
4) A juvenile
6. Refusal of care
a. A competent and conscious adult has the right to refuse any EMS
b. The refusal must be honored
c. May be required to sign a release

7. Life-threatening conditions
   a. May be treated regardless of the victim's conscious condition
   b. Do not resuscitate (DNR)
      1) Individuals who are terminally ill
      2) Be aware of and comply with policy regarding DNR
8. Duty to continue
   a. Must remain with the victim
   b. Until the officer is relieved by:
      1) An individual with equal or greater training
      2) The scene becomes unsafe
      3) The officer is unable to physically continue

IV. Victim assessment 0900-1100 (2 hours)

A. Primary assessment
   1. Primary assessment definition
      a. Rapid, systematic process
      b. To identify and immediately treat life threatening conditions
      c. To set priorities for further treatment
   2. Responsiveness - AVPU
      a. Determine if victim is alert by speaking with them directly
         1) "Are you okay?"
         2) "What is your name?"
         3) "Where are you?"
      b. If not alert, determine if the victim is verbal by using tap and shout
      c. If unresponsive to verbal stimuli, check responsiveness to pain stimuli
         1) Tapping or pinching earlobe
         2) Rubbing the collar bone
      d. If victim does not respond to painful stimuli, they are unresponsive
         1) Activate EMS
         2) Check victim's airway, breathing, then circulation as part of primary assessment
   3. Airway
      a. If the victim is alert and able to speak, it can be assumed that they have a clear airway and are able to breath. Complete primary survey for bleeding and shock, then move to secondary survey
      b. Airway assessment for unresponsive victim
         1) Head-tilt/Chin-lift
         2) Jaw thrust
   4. Breathing
      a. Look, listen and feel for normal breathing
      b. Continue with primary survey
   5. Circulation
      a. Alert victim
         1) It can be assumed that the victim has a pulse if they are conscious and breathing
         2) Check for indications of life-threatening conditions
      b. Unresponsive victim
         1) Checking for a pulse to determine circulation
         2) Check pulse for five to ten seconds

3) No pulse
   a) Begin CPR
4) Pulse/No breathing
   a) Begin rescue breathing
5) Victim has a pulse, is breathing, but is unconscious
   a) Check for indications of life-threatening conditions
      (1) Major bleeding
      (2) Shock
   b) Place the victim in the recovery position
      (1) On their side
      (2) Head supported by the lower forearm
      (3) Aids breathing
      (4) Allows fluids or vomit to drain from the mouth

6. Control major bleeding
7. Treat for shock
8. Consider c-spine stabilization

B. Secondary assessment
   a. Check and document vital signs
      1) Skin color
      2) Temperature
      3) Respiratory rate
      4) Pulse rate
   b. Head-to-toe assessment for injuries – DOTS
      1) Deformity
      2) Open injuries
      3) Tenderness
      4) Swelling
   c. Treat specific injuries
   d. Gather patient history
      1) Gather initial information regarding the current incident
      2) Gather information regarding past medical problems that could be related
   e. Be prepared to advise EMS of the results of the assessment

C. Multiple victim assessment
   1. Classification categories
      a. Deceased
         1) No respiration
         2) After opening the airway
      b. Immediate
         1) Receives treatment first
         2) Once all victims are classified
      c. Delayed
         1) Receives treatment
         2) Once all victims classified as immediate have been treated
      d. Minor
         1) Direct to a safe area
         2) Away from other victims and possible scene safety hazards
   2. Assessment criteria
      a. Breathing
         1) Clear airway if necessary

2) Measure respiration rate
   a) No respiration – classify as deceased
   b) Over 30 cycles/minute – classify as immediate
   c) Below 30 cycles/minute
      (1) Continue assessment
      (2) Check the victim's circulation
3) Continue assessment

b. Circulation
   1) Check capillary refill on extremities
      a) More than 2 seconds – classify as immediate
      b) Less than 2 seconds
         (1) Continue assessment
         (2) Check the victim's mental status
   2) Continue assessment

c. Mental status
   1) Give simple commands
      a) Unable to follow commands – classify as immediate
      b) Follows commands – classify as delayed or minor
   2) Begin treatment
      a) After assessment and classification of all victims
      b) Begin with treatment of victims classified as immediate

D. Moving a victim
   1. Conditions for moving a victim
      a. Do not move a victim unless it is absolutely necessary
      b. Unconscious victims should be treated as though they have a spinal injury
      c. Move only when the victim is in a life-threatening situation
         1) Imminent danger
            a) When the danger outweighs the risk of further injury from being moved
            b) Fire or threat of fire or explosion
            c) Toxic gases or radiation
            d) Electrical hazards
            e) Uncontrolled moving traffic
            f) Active shooter (MACTAC)
         2) Unable to assess
            a) When it is not possible to do a primary survey of the victim's condition
            b) When the victim's condition or an officer's ability to provide basic life-saving procedures is not possible due to the victim's position
               (1) Slumped over the steering wheel
               (2) When CPR is required
   2. General guidelines
      a. Plan ahead
         1) Identify a safe location before attempting to move the victim
         2) Move only as far as is absolutely necessary
      b. Reassure victim
         1) Tell the victim what is going on and why they are being moved
         2) Keep the victim as calm as possible
      c. Victim stability
         1) Keep the victim in a straight line during the movement
         2) Keep the victim lying down

3) Move the victim rapidly but also as carefully and gently as possible
4) Be careful not to bump the victim's head during movement
5) If an infant is fastened in a car seat
    a) Do not remove the infant
    b) Move infant and seat together

E. Moving a victim using the shoulder drag technique
1. Purpose
    a. Safely move a victim
    b. To avoid officers straining their back
        1) Bend their knees
        2) Keep their backs straight
        3) Let their leg muscles do most of the work
2. Technique
    a. Use hands and grasp the victim under the armpits
    b. Stabilize the victim's head and neck to reduce the risk of injury
    c. Carefully lift the victim keeping the head and shoulders as close to the ground as possible
    d. Drag the victim so that the head, torso, and legs remain in a straight line
        1) Do not pull sideways
        2) Do not sit them up
    e. Gently place the victim in the new location
    f. Assess the victim's condition

F. Moving a victim using soft litters
1. Purpose
    a. Move a victim more efficiently across larger distances, uneven terrain, or over obstacles.
    b. Can be used for tactical extractions, but involve the risk of set up time
2. Technique
    a. Place litter to side of victim
    b. Carefully roll the victim to their side and hold them there.
    c. Slide the soft litter underneath the victim, then lay them back down on top of the litter.
    d. Using two or more officers, one on each side of the victim, lift the victim using the straps sewn onto the litter, and safe lifting technique.
    e. Gently place the victim in the new location.
    f. Assess the victim's condition.

G. Moving a victim using manual extractions
1. Purpose
    a. Remove a victim or officer from danger as quickly and safely as possible.
    b. Faster than body drag, but with increased risk of spinal movement.
    c. Move a victim across larger distances, uneven terrain, or over obstacles.
    d. Require multiple officers to complete
2. Fore and Aft Carry
    a. This technique is for carrying a victim through narrow or uneven areas
    b. Technique
        1) The rescuers will position themselves, one at the victim's head, the other at the victim's feet
        2) The rescuer at the head will kneel on one knee, place a hand underneath each of the victim's shoulders and raise the victim to a seated position

3) Once in the seated position, the rescuer at the head will then slide forward, using their body to maintain the victim's position, while reaching their hands underneath the victim's armpits
4) With the hands that are under the victim's armpits, the rescuer then grabs the victim's same side wrists and crosses their arms, bringing both of the rescuer's hands to the center of the victim's body
5) After crossing the arms, the rescuer at the head then moves from a kneeling position to a squat position
6) The rescuer at the feet separates the victim's feet, and steps in between the legs, turning around to face towards the victim's feet.
7) The rescuer then squats down and grabs the victim's ankles with a thumb less grip
8) Both rescuers then simultaneously stand from the squat position, lifting the victim with good technique
9) Walk in the direction that the rescuers and victim are all facing

3. Side-by-Side Carry
   a. This technique is for carrying a victim longer distances. This technique can support an unconscious victim.
   b. Technique
      1) Both rescuers squat down on either side of the victim
      2) Reach under the victim's shoulders and under their knees
      3) Grasp the other rescuer's wrists
      4) Stand from the squat position, with good lifting technique
      5) Walk in the direction that the victim is facing
4. Shoulder and Belt Carry
   a. For the conscious victim, this carry allows the victim to swing their leg using the rescuers as a pair of crutches. For the unconscious victim, it is a quick and easy way to move a victim out of immediate danger
   b. Technique
      1) Start with the victim on the ground
      2) Both rescuers stand on either side of the victim's chest
      3) The rescuer's hand nearest the feet grabs the victim's wrist on their side of the victim
      4) The rescuer's other hand grasps the clothing of the shoulder nearest them
      5) Pulling and lifting the victim's arms, the rescuers bring the victim into a sitting position
      6) The rescuers will then squat down, placing the victim's arms over their shoulders, facing the same direction as the victim
      7) The conscious victim will then stand with rescuer assistance and their hands around the victim's waist
      8) For the unconscious victim, the rescuers will grasp the belt or waistband of the victim's clothing
      9) Both rescuers then simultaneously stand from the squat position, with good lifting technique, raising the victim
      10) The rescuers walk facing forward, dragging the victim's legs behind

V. Cardiopulmonary Resuscitation (CPR) 1200-1500 (180 Min)

A. Components of the Chain of Survival

1. Immediate recognition of cardiac arrest and activation of the emergency response system
2. Early cardiopulmonary resuscitation (CPR) with an emphasis on chest compressions
3. Rapid defibrillation
4. Effective advanced life support
5. Integrated post-cardiac arrest care

B. Definition
   1. Method of artificially restoring and maintaining a victim's breathing and circulation.
   2. Key element of basic life support
   3. Clinical death
      a. The moment breathing and circulation stop
      b. May be reversible if basic life support techniques are initiated
   4. Biological death
      a. Breathing and circulation stop
      b. Brain cells die due to lack of oxygen
      c. Irreversible changes take place
      d. Vital organs begin to deteriorate
      e. If any doubt exists as to whether the victim is alive, CPR should be started
   5. Do not resuscitate (DNR)
      a. A valid DNR or no CPR directive is a reason for not beginning CPR
      b. If there is doubt that the order may not be valid, start CPR

C. Adult CPR
   1. One person
      a. Determine responsiveness
         1) Tap and shout
         2) Assess for breathing
         3) Activate EMS
         4) Get AED if available
      b. Pulse check
         1) Check the carotid pulse
            a) Locate the trachea, using 2 or 3 fingers
            b) Slide fingers into the groove between the trachea and the muscles at the side of the neck
         2) Check pulse for 5-10 seconds
         3) If you do not definitely feel a pulse
            a) Begin CPR
            b) Starting with chest compressions
      c. Chest compressions
         1) Position yourself at the victim's side
         2) Make sure the victim is lying supine
            a) Firm, flat surface
            b) If a head/neck injury is suspected, keep the head, neck, and torso in a line when rolling the victim
         3) Put the heel of one hand on the center of the victim's chest on the lower half of the breastbone
         4) Put the heel of your other hand on top of the first hand
         5) Straighten your arms and position your shoulders directly over your hands
         6) Push hard and fast
            a) Press down at least 2 inches with each compression

b) Deliver compressions at a rate of at least 100 per minute
c) At the end of each compression, make sure you allow the chest to recoil completely
7) Minimize interruptions

d. Ventilation
1) Open the airway
a) Head-tilt/chin-lift
b) Jaw thrust
2) Give 2 breaths
a) 1 second
b) Chest should visibly rise
3) If the breaths do not go in
a) Reposition the head
b) Give 2 more breaths

e. Compression cycle
1) 30 compressions
2) 2 breaths
3) Reassess after 5 cycles (approximately 2 minutes)

2. Two person
a. More efficient than one person
1) Chest compressions are interrupted less
2) Rescuers do not tire as easily
b. Determine responsiveness
c. Pulse check
d. Chest compressions
e. Compression cycle
1) 30 compressions to 2 breaths
2) Every 5 cycles (approximately 2 minutes) duties should be switched
3) Switching duties with the second rescuer should take less than 5 seconds
f. All findings, counting, etc. should be announced clearly and out loud to avoid confusion between the assisting

D. Child CPR
1. 1 year to puberty
2. One person
a. Determine responsiveness
1) Assess for breathing
2) Shout for help
3) If someone responds
a) Send them to activate EMS
b) Send them to get an AED
4) If alone and the child collapsed in front of you
a) You may leave the child to activate EMS
b) Obtain an AED
5) If unwitnessed
a) Perform CPR for 5 cycles (approximately 2 minutes)
b) Activate EMS
b. Pulse check
1) Check the carotid pulse
2) Check no longer than 10 seconds

3) If no pulse, or less than 60 beats per minute with poor perfusion, start compressions

c. Chest compressions
1) For small children, you may use either 1 or 2 hands
2) Start compressions within 10 seconds of recognition of cardiac arrest
3) At least 1/3 the depth of the chest (or approximately 2 inches)

d. Ventilation

e. Compressions cycle
1) 30 compressions to 2 breaths
2) After 5 cycles
a) Activate EMS
b) Get an AED
c) Use the AED as soon as it is available
d) You can leave the victim to activate EMS and get an AED

3. Two person
a. Determine responsiveness
b. Pulse check
c. Chest compressions
d. Ventilation
e. Compression cycle
1) 15 compressions to 2 breaths
2) Every 5 cycles (approximately 2 minutes) duties should be switched
3) Switching duties with the second rescuer should take less than 5 seconds

E. Stopping CPR
1. The victim's breathing resumes
2. The officer is relieved by an equally or higher medically trained person
3. The officer is too exhausted to continue
4. Environmental hazards endanger the rescuer

F. Infant CPR
1. One person
a. Determine responsiveness
b. Pulse check
1) Brachial pulse
a) Place 2 or 3 fingers on the inside of the upper arm
b) Between the infant's elbow and shoulder
c) Press the index and middle fingers gently on the inside of the upper arm
d) Check no longer than 10 seconds
e) If no pulse, or less than 60 beats per minute with poor perfusion, start compressions

c. Chest compressions
1) Place the infant on a firm, flat surface
2) Place 2 fingers in the center of the infant's chest just below the nipple line
3) Do not press on the bottom of the breastbone
4) At least 1/3 the depth of the chest (approximately 1 ½ inches)

d. Ventilation

e. Compression cycle
1) 30 compressions to 2 breaths
2) After 5 cycles
a) Activate EMS

b) Get an AED
c) Use the AED as soon as it is available
d) You can leave the victim to activate EMS and get an AED

2. Two person
   a. Determine responsiveness
      1) Assess for breathing
      2) Send second rescuer to activate EMS and get AED
   b. Pulse check
   c. Chest compressions
      1) Place both thumbs side by side in the center of the infant's chest on the lower half of the breastbone
      2) Encircle the infant's chest and support the infant's back with the fingers of both hands
      3) Use both thumbs to depress the breastbone approximately one third the depth of the infant's chest (approximately 1 ½ inches)
      4) After every 15 compressions, pause briefly for the second rescuer to open the airway with a head tilt-chin lift and give 2 breaths
   d. Ventilation
   e. Compression cycle
      1) 15 compressions to 2 breaths
      2) Every 5 cycles (approximately 2 minutes) duties should be switched
3. Switching duties with the second rescuer should take less than 5 seconds

Day Two

VI. Victim assessment and CPR review 0600-0800 (120 Min)

A. Primary assessment
   1. Responsiveness
   2. Breathing
   3. Airway
   4. Circulation
   5. Control major bleeding
   6. Treat for shock
B. Secondary assessment
   1. Check and document vital signs
   2. Head to toe assessment – DOTS
   3. Treat specific injuries
   4. Gather patient history
   5. Be prepared to advise EMS of the results of the assessment
C. Multiple victim assessment
   1. Classification categories
   2. Assessment criteria
D. Adult CPR
   1. Primary assessment
   2. Chest compressions
   3. Ventilation
   4. Compression cycle
E. Child CPR
   1. Primary assessment
   2. Chest compressions

3. Ventilation
4. Compression cycle

F. Infant CPR
1. Primary assessment
2. Chest compressions
3. Ventilation
4. Compression cycle

VII. Automated External Defibrillators (AED) 0800-0900 (60 Min)

A. Introduction
1. Best treatment for most cases of sudden cardiac arrest
2. Device that shocks the heart out of fatal rhythm

B. AED protocol
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 safety precautions
1. Safe to use in all weather conditions (on dry skin)
2. 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
6. Persons with excessive chest hair may need to be shaved prior to application of the AED electrodes

D. AED troubleshooting
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
   d. Vehicle motion

VIII. Airway obstructions 0900-1000 (60 Min)

A. Clearing airway obstructions
   1. Opening an airway
      a. Head tilt/chin-lift
         1) Provides maximum airway opening
         2) Place one hand on the victim's forehead
         3) Technique
            a) Place the fingers of the other hand under the bony area at the center of the victim's lower jaw
            b) Tilt the victim's head back
            c) If necessary, use the thumb of the hand supporting the chin to pull open the victim's mouth
         4) Do not use the head-tilt/chin-lift if there are any indications of possible head, neck, or spinal cord injury
         5) Do not place thumb or finger(s) inside the victim's mouth
      b. Jaw-thrust
         1) Use when a head, neck, or spinal injury is suspected
         2) To open an airway on an unconscious victim
         3) Allows airway to be opened without moving the victim's head or neck
         4) Technique
            a) Place one hand on each side of the victim's head
            b) Place your fingers under the victim's lower jaw and lift with both hands
            c) Place thumbs on the victim's cheeks
            d) Stabilize the victim's head
            e) Gently push the victim's jaw forward
            f) If necessary, use thumb to pull open the victim's lips
         5) Do not tilt or rotate the victim's neck if airway does not open
   2. Special considerations when attempting to open a victim's airway
      a. Infants and Children
         1) Trachea is narrower, softer, and more flexible than adults
         2) Over extension of an infant's/child's neck may occlude the trachea
         3) Tongue takes up more space in the mouth
         4) Airways are smaller and easily obstructed
      b. Facial injuries
         1) Severe swelling
         2) Bleeding
      c. Dental appliances
         1) Full/partial dentures should be left in
         2) Remove only if they have become dislodged and endanger the victim's airway

B. Mild airway obstructions
   1. The victim is able to speak or cough
   2. There is adequate air exchange to prevent respiratory failure
   3. A victim who is conscious with a mild airway obstruction should be encouraged to cough forcefully to dislodge and expel the object
      a. Do not interfere with the victim's attempts to cough
      b. Do not pound on the victim's back
   4. Treat as a severe airway obstruction if

a. The obstruction cannot be removed by coughing and the victim has labored breathing
b. The victim is making unusual breathing sounds, or is turning blue/grey

C. Severe airway obstructions
1. The victim is unconscious and unable to be ventilated after the airway has been opened
2. Conscious but unable speak, cough, or breathe

D. Removing obstructions
1. Finger sweep
a. Only if the object can be seen
1) Do not use a blind finger sweep
2) The object must be seen clearly
b. Open the victim's mouth by grasping the tongue and lower jaw between the thumb and index fingers
c. Insert index finger of the other hand down along the cheek in a hooking motion
d. If the object can be felt, grasp it and remove it
2. Abdominal thrust
a. Conscious adult or child
1) Determine that the victim is choking
2) Inform the victim before taking action
3) Stand or kneel behind the victim and wrap your arms around the victim's waist
4) Make a fist with one hand
5) Place the thumb side of the fist against the victim's abdomen
a) In the midline, slightly above the navel
b) Well below the breastbone
6) Grasp your fist with your other hand and press your fist into the victim's abdomen with a quick, forceful upward thrust
7) Give each new thrust with a separate, distinct movement to relieve the obstruction
8) Do not use on infants, pregnant women, or obese patients
b. Conscious adult or child becomes unconscious
1) Activate the EMS system
2) Place the victim in a supine position
3) Open the victim's airway
4) Look inside the victim's mouth
5) Conduct a finger sweep if you see the object
6) Attempt to ventilate
7) If the breaths do not go in, reposition the head and attempt to ventilate again
8) If airway remains obstructed, give 30 chest compressions
9) Repeat until chest rise is achieved
3. Chest thrust
a. Used when the victim is
1) Pregnant
2) Obese
b. Conscious adult
1) Determine that the victim is choking
2) Inform the victim before taking action
3) Take a position behind the victim

4) Slide arms under the victim's armpits and encircle the victim's chest
5) Form a fist with one hand
6) Place the thumb side of fist on the midline of the victim's sternum, level with the armpits
7) Grasp the fist with the free hand
8) Direct thrusts straight back toward the victim's spine
9) Use care not to direct the thrusts up, down, or to either side
10) Repeat thrusts until the object is expelled or victim loses consciousness

c. Infants
   1) Conscious choking infant
      a) Kneel or sit with the infant in your lap
      b) If it is easy, remove clothing from infant's chest
      c) Deliver up to 5 back slaps
         (1) Forcefully
         (2) Between the infant's shoulder blades
         (3) Using the heel of your hand
         (4) Deliver each slap with sufficient force to attempt to dislodge the foreign body
      d) Place your free hand on the infant's back, supporting the back of the head
      e) Turn the infant as a unit while carefully supporting the head and neck
      f) Hold the infant face up
         (1) Rest your forearm on your thigh
         (2) Keep the infant's head lower than the trunk
      g) Provide up to 5 quick downward chest thrusts
         (1) Middle of the chest
         (2) Over the lower half of the breastbone
         (3) Rate of 1 per second
         (4) Each with the intention of creating enough force to dislodge the foreign body
      h) Repeat the sequence of up to 5 back slaps and up to 5 chest thrusts
         (1) Until the object is removed
         (2) Or the infant becomes unresponsive
   2) Conscious infant becomes unconscious
      a) Activate EMS
      b) Place the infant on a firm, flat surface
      c) Begin CPR
         (1) Starting with compressions
         (2) Every time you open the airway, look for the obstructing object

IX. Rescue breathing — 1100-1200 (60 Min)

A. Definition
   1. The process of using one's own breaths to artificially breathe for a victim
   2. If the victim is not breathing
   3. But has a pulse

B. Rate
   1. Adult
      a. Puberty and above
      b. Give 1 breath every 5-6 seconds
      c. 10-12 breaths per minute

2. Child
    a. Newborn to puberty
    b. Give 1 breath every 3-5 seconds
    c. 12-20 breaths per minute

C. Essential details
1. Each breath is 1 second long
2. Each breath should result in visible chest rise
3. Check the pulse every 2 minutes

D. Technique
1. Open the victim's airway using the head-tilt-/chin-lift or jaw-thrust maneuver (whichever is most appropriate for the situation)
2. Take a position at the top of the victim's head
3. Place portable pocket mask, if available, on the victim so the top of the mask is over the victim's nose while the base of the mask is between the lower lip and chin. When using a barrier device, place the barrier of victim's mouth
4. Take a breath and exhale directly into the victim's mouth, for mouth-to-mouth, or through the one-way valve of the mask or barrier.
5. If using a bag valve mask, squeeze the bag gently instead of exhaling into valve

E. Stopping rescue breathing
1. Victim begins to breathe without assistance
    a. Continue to assess the victim's condition
    b. Place in recovery position
        1) Roll the victim onto their left side toward the rescuer
        2) Keep the victim's body in one unit with the spine straight
        3) Move the victim's lower arm up and bend at the elbow
        4) Move the victim's top leg toward the victim's chest
        5) Continue to monitor the victim's breathing
    c. Provide care for shock
2. Officer is relieved by an equally or higher medically trained person
3. Officer becomes too exhausted to continue
4. Unable to detect a pulse after 2 minutes of rescue breathing
5. Victim is declared dead by an authority

F. Gastric distention
1. When air is forced into the victim's stomach as well as lungs
2. Reposition the airway
3. Give smaller, slower breaths

G. Vomiting
1. Turn the victim on left side
2. Turn the entire body, not just the head
3. Wipe vomit from the victim's mouth
4. Return the victim to the supine position
5. Open the airway
6. Continue rescue breathing
7. This process should take less than 10 seconds

X. Bleeding control 1200-1400 (120 Min)

A. Direct pressure
1. Most common and effective technique
2. Should be used first before other bleeding control options

3. Use a clean dressing or pressure bandage
    a. A dressing is any material applied to a wound to control bleeding and prevent contamination
    b. A bandage is any material used to hold a dressing in place

B. Tourniquet
1. Use a device to close off all blood flow to and from a limb
2. Should only be used for life-threatening conditions when direct pressure has failed
3. Can be made of any material wide enough (2 inches)
4. Apply close to the wound
    a. Between the wound and the victim's heart
    b. Not over a joint
5. Wrap tightly until bleeding is stopped
6. Note the time the tourniquet is placed
7. Self-application is the best option because a second officer is not removed from the tactical situation

C. Hemostatic dressings and wound packing
1. Gauze impregnated with a clotting agent can be used when tourniquets are ineffective or impractical.
2. After locating the source of bleeding and applying direct pressure, maintain pressure gently wipe excess blood from the surrounding area to the wound.
3. While continuing to maintain pressure, tightly pack dressing into the wound.
4. Once the wound is packed, apply full direct pressure to the bandage for three minutes, and then carefully release pressure to check for bleeding. Do not lift bandage to check.
5. If bleeding continues, apply pressure for another three minutes.
6. Tightly wrap bandage with a pressure dressing to secure it to the wound.
7. Attach the packaging from the hemostatic dressing to the bandage, or to the victim's clothing, so that medical personnel will see what was used.

D. Secondary bleeding control techniques
1. Elevation
2. Pressure points
3. Direct pressure and/or tourniquet should be used as the primary bleeding control technique

E. Open wounds
1. Types of open wounds
    a. Abrasion
    b. Incision
    c. Laceration
    d. Puncture
    e. Avulsion
    f. Amputation
2. Care for open wounds
    a. Assessment
        1) Expose the injury site
        2) Assess for possible fractures
    b. Immediate care
        1) Direct pressure
        2) Apply a pressure bandage
        3) Apply a tourniquet

4) Apply bandages snugly but not so tight as to impair circulation
5) Impaled objects
   a) Do not attempt to remove any foreign object
   b) Control bleeding by applying pressure on both sides of the object
   c) Do not put pressure on the object itself
   d) Stabilize object in place by use of absorbent material
6) If initial bandaging does not stop the blood flow
   a) Add additional bandaging
   b) Do not remove initial bandaging
7) Avulsions/amputations
   a) Place partially separated skin or tissue back in proper position before applying dressing and bandage
   b) Attempt to locate any avulsed part or amputated extremity
   c) Keep separated part dry, cool, and protected
   d) Do not immerse, pack in ice, or freeze separated part or extremity
   e) Transport separated part with victim

c. Circulation
   1) Monitor pulse below injury site
   2) Check capillary circulation
      a) Pinch fingertips
      b) Color should return within 2 seconds
   3) If circulation is impaired, loosen bandage
d. Continued care
   1) If necessary, immobilize the injury site
   2) Keep victim lying still
   3) Maintain pressure on the wound
   4) Monitor the victim
   5) Reassure the victim
   6) Treat for shock

XI. Treating for shock — 1400-1500 (60 Min)

A. Shock
   1. Shock is a life-threatening condition
   2. Inadequate perfusion leads to shock
   3. Signs and symptoms
      a. Altered mental status
      b. Pale, cool moist skin
      c. Profuse sweating
      d. Thirst, nausea, vomiting
         1) Do not give anything to drink
         2) Fluids given orally may lead to vomiting
      e. Blue/grey lips, nail beds, tongue, ears (cyanosis)
      f. Dull eyes, dilated pupils
      g. Rapid, weak pulse
      h. Abnormal respiration rate
      i. Shallow, labored breathing
   4. All victims of traumatic or medical emergencies should be treated for shock upon initial contact
   5. Fainting

a. Form of shock characterized by sudden unconsciousness
b. Caused by dilation of blood vessels resulting in reduced flow of oxygenated blood to the brain

6. Treatment
   a. Control all external bleeding and treat other injuries
   b. Be alert for vomiting
   c. Maintain the victim's body temperature
   d. Place the victim in a position to help maintain blood flow
   e. Reassure the victim
   f. Continue to monitor the victim and be prepared to take action if necessary
7. Positioning the victim
   a. Spinal or head injuries
      1) Do not elevate the legs
      2) Consider immobilizing the spine
   b. Stroke
      1) Elevate the victim's head
      2) Elevate the victim's shoulders
   c. Difficulty breathing
      1) Place the victim in a semi-sitting position
      2) A position of comfort
   d. Fracture of lower limb
      1) Do not elevate the legs
      2) A position of comfort
   e. Any other injuries or conditions
      1) Place the victim in a supine position
      2) Elevate the legs approximately 6-12 inches

Day Three

XII. Basic life support review **0600-0700 (60 Min)**

A. AED
   1. AED Protocol
   2. Safety precautions
   3. AED troubleshooting
B. Airway obstructions
   1. Opening an airway
   2. Mild airway obstructions
   3. Severe airway obstructions
   4. Removing obstructions
      a. Abdominal thrust
      b. Chest thrust
      c. Infants
C. Rescue breathing
   1. Definition
   2. Rate
   3. Essential details
   4. Technique
   5. Stopping rescue breathing
   6. Gastric distention
   7. Vomiting

D. Bleeding control
   1. Direct pressure
   2. Tourniquet
   3. Hemostatic dressings and wound packing
   4. Secondary bleeding control techniques
   5. Open wounds
E. Shock
   1. Definition
   2. Symptoms
   3. Treatment
   4. Positioning the victim

XIII. Traumatic Injuries — 0700-0900 (120 Min)

A. Head injuries
   1. Indications of head injury
      a. Mechanism of injury
         1) Striking a vehicle's windshield or dashboard
         2) Blow to the head
         3) Falls
      b. Mental status
         1) Agitated or confused
         2) Combative or appears intoxicated
         3) Decreased level of consciousness
         4) Loss of short-term memory
         5) Loss of consciousness
      c. Vital signs
         1) Abnormal breathing patterns
         2) Decreased pulse
         3) General deterioration of vital signs
      d. Visible injury
         1) Deformity of head/skull
         2) Visible bone fragments
      e. Appearance
         1) Clear or bloody fluid from ears and/or nose
         2) Unequal pupils
         3) Bruises behind ears
         4) Discoloration around eyes
         5) Paralysis
         6) Priapism
      f. Other
         1) Blurred vision
         2) Projectile vomiting
   2. First aid measures
      a. Position
         1) Do not move victim's head or neck
         2) Have the victim remain in the position found
      b. Assessment
         1) Determine level consciousness
         2) Conduct a primary and secondary survey

3) Jaw-thrust to open the airway

c. Treatment
1) Activate EMS
2) Control bleeding
3) Be alert for cerebrospinal fluid
a) Bandage loosely
b) Do not restrict flow
4) Do not apply direct pressure
5) Be prepared for vomiting
6) Treat for shock
7) Do not elevate the victim's legs
8) Reassure the victim
9) Continue to monitor the victim

3. Impaled objects
a. If there is no airway obstruction, do not remove
b. If the airway is obstructed:
1) Carefully pull the object out from the direction it entered
a) If the object resists, stop pulling
b) Place a protective device around it to stabilize the object
c) Secure with a bandage
2) Place dressings to control bleeding

B. Facial injuries
1. Objects in the eye
a. Impaled objects in the eye should not be removed
b. Cover affected eye with a protective device, like a small paper cup
c. Bandage both eyes shut
d. Do not apply direct pressure
e. Do not remove any impaled object
f. Reassure the victim
2. Chemicals in the eye
a. If both eyes are affected, treat victim with their face and eyes pointed down.
b. If only one eye is affected, lay victim on their side, and treat the eye closest to the ground.
c. If a dry chemical, brush away chemical prior to flushing with water, if a liquid begin flushing immediately
d. Flush from the inside of eye out to avoid cross contamination, starting from the bridge of the nose
e. Have victim remove contact lenses
f. Do not rub the eye or allow victim to rub the eye
g. If possible, identify the chemical and contact poison control
3. Dental emergencies
a. Activate EMS
b. Ensure that the airway is clear and unobstructed
c. Visually inspect the oral cavity to ensure that there are no teeth or fragments
d. Control bleeding as necessary
e. Do not attempt to replace the tooth or dental apparatus
f. You may transport the tooth in a variety of solutions (e.g., saline, whole milk, or victim's saliva)
g. Reassure the victim

h. Continue to monitor victim

4. Nose bleed
   a. If conscious and no spinal injury suspected
      1) Assume a seated position
      2) Lean forward slightly
      3) Pinch the nose where bone and cartilage meet
      4) Maintain position until bleeding stops
   b. If unconscious
      1) Place victim in recovery position if appropriate
      2) Maintain an open airway
   c. Do not pack the victim's nostrils. This could cause blood to back up and create an obstructed airway

C. Chest injuries
   1. Types of chest and abdominal injuries
      a. Blunt trauma
      b. Penetrating object
      c. Compression
   2. Closed chest wound
      a. Flail chest
         1) Ribs and/or sternum are fractured
         2) A segment of the chest wall does not move with the rest of the chest during respiration
      b. Paradoxical breathing
         1) Both sides of the chest do not move in a synchronized manner
         2) First aid measures
            a) Activate EMS
            b) Place victim in a recovery position
               (1) On the injured side
               (2) With support for the back
            c) Supine position
         3) Treat for shock
         4) Continue to monitor the victim
   3. Open chest wound
      a. Considered life-threatening
      b. Sucking chest wound
         1) Punctured lung
         2) Breathing and heart function impaired
   4. Occlusive dressing
      a. Definition
         1) Nonporous dressing
         2) Used to cover the wound
         3) Creates and air tight seal
      b. Application
         1) Place a gloved hand over the wound
         2) Wipe excess bleeding/fluids from the wound site.
         3) The dressing should be at least two inches wider than the wound itself
         4) Upon exhalation apply the chest seal directly over the wound
         5) Treat for shock
         6) Continue to monitor the victim

7) If indications of increased respiratory distress are present, peel up one edge of the seal to “burp” the seal and immediately reapply (tension pneumothorax)
8) If the chest has both entrance and exit wounds, occlusive dressings should be placed on both wounds. The physically higher wound should be vented

D. Abdominal injuries
   1. Closed abdominal wound and internal bleeding
      a. Indicators
         1) Victim found in fetal position
         2) Rapid, shallow breathing
         3) Rapid pulse
         4) Rigid or tender abdomen
         5) Pain to touch
      b. First aid measures for internal bleeding
         1) Activate EMS
         2) Place in comfortable position
         3) Treat for shock
         4) Continue to monitor the victim
         5) Be prepare for vomiting
   2. Open abdominal wounds
      a. Assessment
         1) Determine consciousness
         2) Conduct primary and secondary surveys
      b. Treatment
         1) Activate EMS
         2) Place the victim in a supine position with the knees up
         3) Apply a sterile dressing to control bleeding
         4) Treat for shock
         5) Continue to monitor the victim
   3. Protruding organs
      a. Assessment
         1) Determine consciousness
         2) Conduct primary and secondary surveys
      b. Treatment
         1) Activate EMS
         2) Place the victim in a supine position with the knees up
         3) Cover with a moist, sterile dressing
         4) Seal with airtight bandage
         5) Treat for shock
         6) Continue to monitor the victim

E. Bone, joint, and muscle injuries
   1. Musculo-skeletal system
      a. Bone
      b. Joint
      c. Skeletal muscle
      d. Cartilage
      e. Tendon
      f. Ligament
   2. Musculo-skeletal injuries

a. Direct
b. Indirect
c. Twisting

3. Types of injuries
   a. Fractures
   b. Dislocations
   c. Sprains
   d. Strains
4. First aid measures
   a. Assessment
      1) Conduct a primary and secondary survey
      2) Determine if there are any life-threatening injuries
   b. Treatment
      1) Activate EMS
      2) Do not manipulate the injury
      3) Expose the area
      4) Control bleeding
      5) Stabilize above and below the joint
      6) Check capillary refill
      7) Treat for shock
      8) Do not elevate the legs
   c. Treatment considerations for spinal injuries
      1) Spinal immobilization prevents further damage to spinal cord for head, neck and back injuries, by preventing the victim's head and neck from moving
      2) Spinal immobilization technique
         a) Have victim lay down
         b) Use your forearms to act as brace along the sides of the victim's head
         c) Hold onto the victim's trapezius muscles to anchor your arms to their upper body
         d) Do not let the victim's head or neck move independently from their upper body

F. Burns
   1. Assessment
      a. Conduct a primary and secondary survey
      b. Determine if there are any life-threatening injuries
   2. Severity
      a. First degree
         1) Damage to the epidermis only
         2) Skin appears red
         3) Can be very painful
      b. Second degree
         1) Damage to the epidermis and dermis
         2) Skin appears red and mottled
         3) Accompanied by blisters
         4) Causes intense pain
      c. Third degree
         1) Damage to the epidermis, dermis, and into the fatty layer and muscle
         2) Most serious of all burns
         3) Skin appears dry, leathery, and discolored

4) May be painful or may not if nerve endings are destroyed

3. Thermal burns
   a. Description
      1) Caused by direct heat
      2) Hot liquids
      3) Hot objects
   b. First aid measures
      1) Activate EMS
      2) Remove victim from source of heat
      3) Cool the burned area with cool water
      4) Apply a dry sterile dressing and bandage loosely
      5) Treat for shock
      6) Monitor victim
4. Chemical burns
   a. Description
      1) Caused by acids or alkalis
      2) Most frequent in industrial settings
   b. First aid measures
      1) Activate EMS
      2) Wear PPE's
      3) If the chemical is a dry powder:
         a) Brush away as much as possible
         b) Flush with water
      4) Remove excess chemical, exposed clothing, or jewelry prior to flushing
      5) Flush with water for 15-30 minutes
      6) Cover burn with dry sterile dressing
      7) Treat for shock
      8) Monitor victim
5. Electrical burns
   a. Description
      1) The body becomes a conduit for electrical current
      2) May cause extensive internal injuries
   b. First aid measures
      1) Ensure the scene is safe
      2) Do not touch the victim until the source of the current has been turned off
      3) If necessary, begin CPR immediately
      4) Examine the victim for external wounds
      5) Treat all wounds the same as with thermal burns
      6) Treat for shock
      7) Monitor victim
   c. Electrical current and vehicles
      1) Do not touch the lines or any part of the vehicle
      2) Instruct the occupants to remain in the vehicle
      3) Wait for the utility company to turn off the power before taking any action
      4) Occupants should not be told to leave the vehicle unless life-threatening circumstances exist
6. Radiation burns
   a. Description
      1) Occurs when the body is exposed to radiation

2) Either a single large dose or chronically
b. First aid measures
1) Activate EMS
2) Evacuate the area of exposure
3) Remove exposed clothing
4) Wash body and hair thoroughly
5) Dry and wrap affected areas with a towel or blanket
6) Treat for shock
7) Monitor victim

7. Radiation sickness
a. Signs and symptoms
1) Nausea and vomiting
2) Diarrhea
3) Skin burns
4) Weakness
5) Fatigue
6) Loss of appetite
7) Fainting
8) Dehydration
9) Inflammation
10) Bleeding from nose, mouth, gums, and rectum
11) Low red blood cell count
12) Hair loss
b. Acute exposure
1) Large single dose of radiation
2) Can cause rapid development of radiation sickness
c. Chronic exposure
1) Often produces effects that can be observed within weeks after the initial exposure
2) May not show up until years later
d. Only provide medical care if you have appropriate PPE's

XIV. Tactical casualty care 0900-1000 (60 Min)

A. First aid principles when responding to violent circumstances
1. Types of violent circumstances
a. Terrorist Attack
b. Active Shooter
c. Hostage Siege
2. Movement to threat
a. Assault Mission
b. Support Mission
c. Security Mission
d. These missions may require the officers to move past victims they encounter.
e. If possible, direct victims to exit the location, through secured areas, to the staging area or any safe zone

B. Casualty care mission and integration with EMS
1. Rescue Mission
a. The Rescue Team's primary mission is to conduct rescues of wounded personnel

b. Approach and enter the location to locate victims
c. Treat, if necessary, then extract victims to a casualty collection point and notify the incident commander
d. Be prepared to transition into a contact team if contact with a suspect becomes imminent
e. Transport wounded victims to medical personnel for treatment
f. Initiate identification and accountability of victims

2. Rescue Task Force
   a. Minimum of two 2 firefighters/EMS rescuers, with gear
   b. Minimum of two 2 officers to provide force protection for the firefighters/EMS.
   c. Goal of RTF
      1) To treat life threatening injuries
      2) Move shooting victims from the Warm Zone to the Causality Collection Point (CCP) or treatment area
   d. May be comprised of up to 4 officers and 4 Fire Department members.
      1) This is the largest reasonable combination of personnel for an RTF
      2) Larger combinations will make it more difficult to move quickly
   e. When working with the Los Angeles Fire Department (LAFD) it is important to use “Hot,” “Warm” and “Cold” in describing areas.
      1) Hot Zone: Area of most danger. Contact with the suspect is likely. LAFD will not respond into hot zones
      2) Warm Zone: An area of decreased danger. Contact with the suspect is not likely. LAFD will respond into a warm zone with LAPD force protection
      3) Cold Zone: Area of least danger. The location is clear to be turned over to investigative personnel. LAFD will operate freely in a cold zone
   f. If assigned to an RTF, it is essential to operate outside of the Hot Zone and to never leave LAFD unprotected
   g. Primary Concerns
      1) Fire being abandoned by Police if a suspect is located
      2) Establish and notify all agencies on scene of the boundaries of the warm zone
      3) Update ICP if that warm zone changes
      4) Security of fire personnel in the warm zone.
      5) What to do with Fire personnel if officers make contact with a suspect
      6) Establish one set of verbiage for both Police and Fire to use during incidents to make deployment of combined resources more effective and efficient

C. Tactical casualty care
   1. When encountering victims, first establish their treatment category, according to the multiple victim assessment standards
   2. First establish if the victim is alive or dead
   3. Direct victims with minor injuries, or victims in the delayed category who can safely walk, to exit the location, through secured areas, to the staging area or any safe zone
   4. When encountering victims who cannot walk, assess to determine treatment priorities
      a. During tactical casualty care, the first priority is to stop any life-threatening external bleeding, treating the victim’s circulation
         1) Take universal precautions that are tactically feasible, including cover
         2) Use dressing and direct pressure to control bleeding

3) Use a tourniquet to control bleeding from areas where a tourniquet can be reasonably applied
4) For bleeding that cannot be controlled with a tourniquet, apply hemostatic dressing

b. Airway management is generally best deferred until the victim is extracted to the safe zone, or casualty collection point
c. If a victim is not breathing, clear their airway if necessary, reposition the airway one time, if breathing does not resume, classify victim as deceased and continue searching for victims
d. Reassure victim
e. Extract the victim to a casualty collection point

5. Self-care/Buddy-care
   a. Applying lifesaving skills and techniques to oneself, or another injured responder, in the event of a life-threatening injury before the arrival of EMS
   b. Immediate control of bleeding prior arrival of EMS saves crucial minutes for injured responder's survival

XV. Medical Emergencies — 1100-1400 (180 Min)

A. Cardiac emergencies
   1. Definitions
      a. Heart attack
         1) Common term describing minor to severe conditions
         2) Blockage of blood or lack of oxygen to heart tissue
      b. Coronary artery disease
         1) Fatty deposits build up in the walls of the arteries that feed the heart's muscle
         2) If the artery becomes blocked, the heart muscle will be deprived of blood and oxygen
   2. Other causes of cardiac emergencies
      a. Drowning
      b. Electrocution
      c. Suffocation
      d. Choking
      e. Drug overdose
      f. Allergic reaction
      g. Shock
   3. Indicators
      a. Chest pain
      b. Radiating pain
      c. Vital signs
      d. Mental status
      e. Other
         1) Profuse sweating
         2) Cool, moist, pale skin
         3) Nausea or heartburn
   4. First aid measures
      a. First assume that a cardiac emergency exists
      b. Conduct a primary and secondary survey
      c. Place the victim in a comfortable position
      d. Keep the victim calm and still

e. Provide care to prevent shock
f. Maintain victim's body temperature
g. Continue to monitor victim

5. Medications
   a. Peace officers should never administer medications
   b. Allow victims to take their medication
   c. May assist if required
      1) Remove from container
      2) Place in victim's hand

B. Respiratory emergencies
   1. Adequate breathing
      a. Adult – 12-20 breaths per minute
      b. Child (1 year to puberty) – 15 to 30 breaths per minute
      c. Infant (newborn to 1 year) – 25-50 breaths per minute
   2. Causes of respiratory emergencies
      a. Existing illness, such as Asthma and Chronic Obstructive Pulmonary Disease (COPD)
      b. Allergic reaction
      c. Cardiac emergency
      d. Drowning / Obstructed airway
      e. Suffocation
      f. Body positioning that restricts breathing
      g. Drug overdose
      h. Hyperventilation
   3. Indicators
      a. Breathing rate
         1) Abnormally fast
         2) Sporadic or irregular breaths
      b. Labored breathing
         1) Increased effort
         2) Shallow or very deep
         3) Little or no air is felt at the nose and mouth
         4) Uneven or little chest movement
         5) Accessory muscle use
      c. Breathing sounds
         1) Wheezing, gurgling, deep snoring sounds
         2) No breathing sounds
      d. Coloring
         1) Cyanosis
            a) Lips, nail bed, skin
            b) Appear blue-grey in color
         2) Due to lack of oxygen
      e. Mental status
         1) Anxious
         2) Fearful
         3) Panicky
         4) Altered
   4. First aid measures
      a. Conduct primary and secondary surveys

   b. Clear airway if obstructed, as in drowning
   c. Place the victim in a position of comfort
   d. If unconscious, place in recovery position
   e. Keep the victim calm and still
   f. Allow the victim to take prescribed medications related to respiratory emergency
   g. Loosen any restrictive clothing
   h. Provide care to prevent shock
   i. Continue to monitor victim
   j. Be prepared to begin rescue breathing

C. Seizures
   1. Definition
      a. Surge of energy through the brain
      b. Massive involuntary contractions of muscles
      c. Possible unconsciousness
   2. Indicators
      a. Staring spells
      b. Disorientation
      c. Lethargy
      d. Slurred speech
      e. Staggering or impaired gait
      f. Tic-like movements
      g. Rhythmic movements of the head
      h. Purposeless sounds and body movements
      i. Dropping of the head
      j. Lack of response
      k. Eyes rolling upward
      l. Lip smacking, chewing, or swallowing movements
      m. Partial or complete loss of consciousness
      n. Picking at clothing
      o. Bluish skin tone
      p. Urination
   3. First aid measures
      a. Do not restrain the victim
      b. Move objects out of the way which could harm the victim
      c. Cushion the victim's head
      d. Keep uninvolved people away
      e. Never put any object in the mouth
   4. Post seizure assessment
      a. Conduct initial assessment
      b. Consider cervical spine stabilization
      c. Conduct secondary assessment
   5. Medications
      a. Depriving medication could trigger a seizure
      b. Be guided by agency policy regarding the administering of prescribed medications

D. Strokes
   1. Definition
      a. An artery providing blood to the brain is blocked

b. Can also be caused by ruptured blood vessels in the brain creating pressure on brain tissues

2. Indicators
   a. Mental status
      1) Confusion
      2) Delirium
      3) Dizziness
      4) Headache
      5) Unconsciousness
   b. Mobility
      1) Paralysis on one side of the body
      2) Numbness or weakness of a limb
      3) Convulsions
      4) Weak or sagging facial muscles
      5) Unusual or severe neck or facial pain
      6) Poor balance, clumsiness
   c. Vision
      1) Blurred or double vision
      2) Unequal pupil size
      3) Sensitivity to light
   d. Communication
      1) Impaired, slurred speech
      2) Difficulty understanding speech
   e. Other
      1) Difficulty breathing and swallowing
      2) Nausea, vomiting
3. First aid measures
   a. Conduct primary and secondary surveys
   b. Activate EMS
   c. If conscious, elevate head and shoulders slightly
   d. If unconscious, place in recovery position on affected side
   e. Continue to monitor victim
   f. Maintain an open airway
   g. Reassure victim
   h. Take actions to prevent shock
   i. Protect any numb or paralyzed areas from possible injury
   j. Do not give victim anything by mouth

E. Altered mental status
1. Definition
   a. Refers to general deviations from normal brain function
   b. Altered mental status is an indicator for a wide range of emergency medical conditions
2. Indicators of altered mental status
   a. Confusion
      1) Loss of alertness and orientation
         a) Person
         b) Place
         c) Time
         d) Event

b. Anxiety
c. Restlessness
d. Combativeness
e. Sudden unconsciousness

3. First aid measures
   a. Conduct primary and secondary survey
   b. Activate EMS
   c. Attempt to determine cause of Altered mental status
      1) Overdose to alcohol, drugs or poison
      2) Shock
         a) Diabetic emergency
         b) Heat emergency
         c) Bleeding
            (1) External
            (2) Internal
      3) Head trauma or brain injury
         a) Stroke
         b) Seizure
      4) Disease
         a) Alzheimer
         b) Tumor
         c) Psychosis
         d) Stroke
   d. If no spinal injury indicated, keep head elevated
   e. Reassure the victim
   f. Monitor and treat for shock

F. Severe abdominal pain
   1. Definition
      a. Pain concentrated to the abdomen, or lower torso
      b. *Most causes are not serious, but others may be an indication of serious injury, such as:*
         1) *Appendicitis*
         2) *Gall bladder problems*
         3) *Kidney stones*
         4) *internal bleeding*
         5) *Other gastrointestinal conditions, such as a stomach ulcer*
   2. Indicators
      a. Complaint of pain to the abdomen, can be generalized to the whole area, or specific to a localized part of the abdomen
      b. Vomiting blood is an indicator of a bleeding ulcer
      c. High temperature is an indicator of infection or burst appendix
      d. Rigid abdomen may indicate internal bleeding
   3. First aid measures
      a. Conduct primary and secondary survey
      b. Activate EMS
      c. Place victim in recovery position
      d. Obtain medical history from victim
      e. Obtain details from victim regarding bloody or red vomit and stool
      f. Palpate victim’s abdomen for rigidity and temperature

g. Monitor and treat for shock
h. Reassure victim

G. Psychological Emergencies
1. Definition
a. A psychological emergency occurs when someone's behavior is so agitated or erratic, that the person becomes a danger to themselves or others around them.
b. These emergencies must be promptly diagnosed and controlled to avoid injury to the victim or others.
2. Signs and symptoms
a. Extreme agitation
b. Increased heart rate
c. Anxiety
d. Shortness of breath
e. Auditory exclusion (e.g., ignoring commands)
f. Tunnel vision
g. Unresponsiveness
h. Extreme perspiration
i. Extreme aggression or passivity
3. Causes and medical concerns
a. Mental illness is one cause, but not the only cause for these behaviors
b. Other causes
1) Head trauma
2) Reduced blood flow to brain
3) Substance abuse/overdose
4) Low blood sugar related to diabetes, or hypoglycemia

H. Diabetic emergencies
1. Definitions
a. An imbalance of insulin in the body and glucose in the bloodstream can lead to life-threatening conditions
b. Glucose
1) Basic source of energy within the human cell
2) Circulated throughout the body in the bloodstream
c. Insulin
1) A hormone produced by the pancreas
2) Facilitates glucose passing from the bloodstream into the body's cells
d. Diabetes
1) When the body does not produce sufficient amount of insulin
2) Can occur at any age
2. Low blood sugar (hypoglycemia) indicators
a. Can come on suddenly
b. More common
c. Pale, cold, moist, clammy
d. Profuse perspiration
e. Otherwise normal breathing
f. Hostile or aggressive behavior
g. Fainting, seizure
h. May appear intoxicated
i. Rapid pulse
j. Dizziness, headache

k. Excessive hunger
l. Drooling
m. Nausea or vomiting

3. High blood sugar (hyperglycemia) indicators
   a. Usually slow onset
   b. Red, warm, dry
   c. Labored breathing
   d. Breath has sickly sweet (fruity) smell
   e. Decreased level of consciousness
   f. Restlessness
   g. Confusion
   h. May appear intoxicated
   i. Weak, rapid, pulse
   j. Dry mouth, intense thirst
   k. Excessive hunger
   l. Excessive urination
   m. Abdominal pain, vomiting
   n. Sunken eyes
4. Diabetic emergencies vs. alcohol intoxication or substance abuse
   a. Aggressiveness
   b. Combativeness
   c. Uncooperative behavior
   d. Confusion, dazed appearance
   e. Decreased level of consciousness
   f. Impaired motor skills
5. First aid measures
   a. Ask questions to determine if the victim has exhibited any indicators
   b. Look for medical alert jewelry
      1) Wallet identification card
      2) Oral medications
      3) Insulin in refrigerator
   c. Conduct primary and secondary surveys
   d. If unconscious
      1) Place the victim in the recovery position
      2) Do not give the victim anything by mouth
   e. If conscious
      1) Place the victim in a position of comfort
      2) If hypoglycemic, give the victim oral glucose
         a) Table sugar
         b) Orange juice
         c) Honey
         d) Hard candy placed under the tongue
      3) Provide reassurance to the victim
      4) Continue to monitor the victim
      5) Take appropriate measures to prevent shock

I. Poisoning and substance abuse
   1. Poison identification
      a. What substance(s) is involved
      b. When was the victim exposed

c. How much were they exposed to
d. Length of time exposed
e. What effects have they experienced
f. What interventions have others already taken

2. Look for indicators
   a. Medical and or mental problems
   b. Existence of injuries
   c. Evidence of alcohol or illegal drugs
3. Peace officer safety
   a. Do not enter any environment containing poisonous gases or fumes
   b. Use care when handling hypodermic needles or other sharp objects
   c. Do not take any actions that could cause you to become a victim
   d. Follow agency policies
4. Manner of exposure
   a. Ingestion
      1) Swallowing the substance
      2) Possible burns around the mouth or hands
      3) Unusual stains or colors on the skin
      4) Strong odor on victim's breath
      5) Difficulty breathing
      6) Sudden unexplained, severe illness
      7) Vomiting, abdominal cramping
   b. Inhalation
      1) Breathing in the substance in the form of gases, vapors, or fine sprays
      2) Dizziness
      3) Headache
      4) Nausea, vomiting, abdominal cramping
   c. Absorption
      1) Taking in the substance through unbroken skin membrane
      2) Itching
      3) Redness, rash
      4) Increased skin temperature
      5) Headache
      6) Eye irritation
      7) Allergic reaction
   d. Injection
      1) Through deliberate or accidental punctures to the skin
      2) Swelling at injection site
      3) Redness of affected skin
   e. Systemic reaction
      1) Whole body reaction
      2) Anaphylactic shock
         a) Causes airway to swell
         b) Makes breathing difficult or impossible
5. First aid measures
   a. Determine the victim's level of consciousness
   b. Conduct primary and secondary surveys
   c. Attempt to identify the poisonous substance
   d. Remove victim from the source of poison

e. If unconscious, place in recovery position
f. Contact poison control center: (800)222-1222
g. If exposure has been through absorption
    1) Flood affected areas with water
    2) Wash affected areas with soap and water
h. Take precautions to prevent shock
i. Continue to monitor victim

6. Assisted Naloxone administration
    a. Naloxone is sometimes provided to temporarily reverse the effects of a suspected opiate overdose.
    b. Officers may assist in the administration of this medication if it is consistent with their department policy
        1) Prior to assisting with administering naloxone, an officer should request additional EMS resources
        2) Continue to monitor the victim's ABCs
        3) Naloxone administration may result in an immediate violent reaction by the victim. Officers should consider precautionary actions to take, which may require restraints, prior to assisting with administration of naloxone
        4) Victims treated with naloxone may require additional doses so EMS follow up is essential
7. Indications of withdrawal from alcohol or drugs
    a. Confusion
    b. Hallucinations or psychotic behavior
    c. Blackouts
    d. Altered mental status
    e. Tremors or shaking
    f. Profuse sweating
    g. Increased pulse and breathing rates

J. Temperature related emergencies
1. Cold related emergencies
    a. Hypothermia
        1) Definition
            a) The body's internal temperature drops to the point where body systems are affected
            b) Can range from mild to severe due to several factors
            c) Can occur in temperatures above freezing
                (1) Length of exposure to cold temperatures
                (2) Condition of victim's clothing
                    (a) Wet
                    (b) Dry
                (3) Age of the victim
                (4) Existence of underlying illnesses or disorders
                    (a) Circulatory problems
                    (b) Infections
                    (c) Fever
                (5) Traumatic injury
                (6) Alcohol consumption
        2) Mild-moderate
            a) Indicators

(1) Violent shivering
(2) Numbness
(3) Fatigue
(4) Forgetfulness
(5) Confusion
(6) Cold skin
(7) Loss of motor coordination
(8) Rapid breathing and pulse

b) First aid measures
(1) Move victim to a warm environment
(2) Remove any wet clothing
(3) Re-warm slowly
(4) Provide care to prevent shock
(5) Monitor the victim
(6) If victim can swallow easily, give warm liquids
(7) Do not give alcoholic or caffeinated beverages, or nicotine
(8) Keep the victim moving to increase circulation

3) Severe
a) Indicators
(1) Lack of shivering
(2) Rigid muscles and joints
(3) Slow, shallow breathing
(4) Irregular, weak, slow pulse
(5) Dilated pupils
(6) Decreased level of consciousness leading to unconsciousness
(7) Unwilling or unable to do simple activities
(8) Slurred speech
(9) Blue-grey skin color
(10) Unconscious victims with hypothermia may appear clinically dead
(a) Stiffness
(b) Extremely low pulse
(c) Low respiration rate

b) First aid measures
(1) Determine victim's level of consciousness
(2) Conduct primary and secondary surveys
(3) Begin rescue breathing or CPR if necessary
(4) If the victim cannot be moved, take necessary measures to keep the victim from losing more body heat

b. Frostbite
1) Definition
a) Exposure to cold temperatures can lead to cold-related injuries to parts of the body.
b) They are a result of cold or freezing tissue
c) Areas most commonly affected
(1) Ears
(2) Face and nose
(3) Hands
(4) Feet and toes

2) Indicators

a) Freezing of tissue below the skin's surface
b) Skin feels stiff to the touch
c) Pale, grey-yellow, grey-blue, waxy, blotchy skin color
d) Pain or aching sensation to the area upon warming

3) First aid measures
a) Immobilize and protect the area
b) Wrap area in dry, loose, bandage
c) Wrap each digit separately
d) Allow area to re-warm slowly
e) Provide care to prevent shock
f) Do not rub the area
g) Do not allow the area to refreeze after warming

4) Frostnip
a) Indicators
(1) Superficial freezing of skin's outer layer
(2) Numbness
(3) Pale skin color
(4) Skin feels flexible to the touch
(5) Tingling or burning sensation to the area upon warming
b) First aid measures
(1) Remove victim from source of cold
(2) Remove/loosen any clothing that may restrict circulation to the area

2. Heat related emergencies
a. Heat cramps
1) Definition
a) Body loses too much salt
b) Due to prolonged perspiration
2) Indicators
a) Painful muscle spasms
(1) Usually in legs
(2) Or abdomen
b) Lightheadedness
c) Weakness
3) First aid measures
a) Remove victim from source of heat
b) Have victim rest massage cramped muscles
c) Provide water in small amounts
d) Do not give alcohol or caffeinated beverages

b. Heat exhaustion
1) Definition
a) More serious than heat cramps
b) Form of shock
c) Occurs when the body is dehydrated
2) Indicators
a) Profuse sweating
b) Dizziness
c) Headache
d) Pale, clammy skin
e) Rapid pulse

f) Weakness
g) Nausea and vomiting

3) First aid measures
a) Remove victim from source of heat
b) Have victim rest massage cramped muscles
c) Provide water in small amounts

4) Do not give alcohol or caffeinated beverages

c. Heat stroke

1) Definition
a) The body's internal temperature rises abnormally high
b) Life-threatening condition requiring immediate attention

2) Indicators
a) Red, hot, dry skin
b) Rapid, irregular pulse
c) Shallow breathing
d) Confusion
e) Weakness
f) Possible seizures and/or unconsciousness

3) First aid measures
a) Remove victim from the source of heat
b) Loosen or remove victim's clothing
c) Cool victim's body as rapidly as possible
(1) Douse the person with cool water
(2) Wrap in wet sheet or blanket
(3) Place an ice pack wrapped in a towel on the person's neck, groin, or armpits
d) Provide care to prevent shock

K. Stings and bites

1. Anaphylactic shock

a. Definition

1) Anaphylaxis is a severe, life-threatening allergic reaction
2) Caused by exposure to certain allergens, often through insect stings, food, medications or environment
3) Causes blood vessels to dilate leading to a sudden drop in blood pressure
4) Causes swelling of the tissues that line the respiratory system causing an obstructed airway

b. First aid measures

1) Epinephrine is a hormone produced by the body
2) Constricts blood vessels and dilates the bronchioles helping to open the victim's airway
3) Individuals may carry prescription epinephrine
4) When a victim possesses a prescribed epinephrine auto-injector, officers may assist the victim with the administration of the medication but may not directly administer it.

2. Insect stings and bites

a. Indicators

1) Usual reaction
a) Local swelling
b) Minor pain

c) Itching
2) Allergic reaction
a) Itching
b) Burning sensation
c) Hives
d) Swollen lips and tongue
e) Difficulty breathing
f) Respiratory failure
b. First aid measures
1) Usual reaction
a) Remove stinger by scraping with firm object
b) Do not attempt to pull out with tweezers
c) Wash area with soap and water
d) Apply ice to reduce swelling and slow the rate of toxin absorption
2) Allergic reaction
a) Assist victim in taking prescribed epinephrine
b) Activate EMS
c) Monitor victim
d) Take precautions to prevent shock
e) Be prepared to use rescue breathing or CPR if necessary

3. Marine life stings
a. Indicators
1) Pain
2) Swelling
3) Discoloration
b. First aid measures
1) Wash area with soap and water
2) Apply heat (not cold) to deactivate venom enzymes
3) Apply dressing to puncture wounds if necessary
4) Monitor the victim
5) If an allergic reaction is suspected:
a) Assist victim in taking prescribed epinephrine
b) Activate EMS
c) Take precautions to prevent shock
d) Be prepared to use rescue breathing or CPR if necessary

4. Spider bites
a. Black widow
1) Indicators
a) Dull pain within 15 minutes of bite
b) Headache
c) Chills
d) Sweating
e) Dizziness
f) Nausea and vomiting
2) First aid measures
a) Wash site with soap and water
b) Apply ice to reduce swelling and slow the rate of venom absorption
c) Monitor victim
d) Have victim seek medical treatment

e) Treat for shock

b. Brown recluse
   1) Indicators
      a) Painless ulcer at site where bitten
      b) Ulcer gradually increases in size (bull's-eye appearance)
      c) Chills
      d) Aches
      e) Nausea
   2) First aid measures
      a) Wash site with soap and water
      b) Apply ice to reduce swelling and slow the rate of venom absorption
      c) Monitor victim
      d) Have victim seek medical treatment

5. Snake bites
   a. Indicators
      1) Pain, redness, and swelling
      2) Fang marks
      3) Shortness of breath
      4) Tingling around victim's mouth
      5) Bloody vomiting (appearance of coffee grounds)
      6) Shock
      7) Coma
   b. First aid measures
      1) Keep the victim calm and quiet
      2) Place the affected area in a neutral position
      3) Immobilize the affected area (use splints if necessary)
      4) Do not attempt to suck the venom from the bite
      5) Do not cut the area
      6) Take measures to prevent shock
      7) Seek medical attention
      8) Attempt to identify the snake
6. Animal and human bites
   a. Indicators
      1) Pain, redness, swelling at the site
      2) Damage can range from puncture wound of skin to severe laceration or avulsion of tissue
   b. First aid measures
      1) Control bleeding if necessary
      2) Wash site with soap and water
      3) Cover with clean, dry dressing
      4) Take measures to prevent shock
      5) Monitor victim
      6) Seek medical attention

XVI. Childbirth 1400-1500 (60 Min)

A. Normal labor and childbirth
   1. First responder actions
      a. Use PPE's
      b. Prevent explosive delivery with gentle head pressure

c. Use a firm grip on the infant
d. Dry infant quickly and keep warm
e. Keep newborn at the same level as the mother
f. Deliver the placenta and save it for transport with mother

2. Transport prior to birth
   a. Only if the mother is in the first stage of labor
      1) Not straining
      2) Contractions are greater than 5 minutes apart
      3) No signs of crowning
   b. If transport is safe, continue to monitor the woman while waiting for EMT's to arrive
3. Imminent birth
   a. Contractions are less than two minutes apart (five minutes if second or subsequent birth)
   b. The woman feels and urgent need to bear down
   c. Crowning is present
   d. The amniotic sac has ruptured (water has broken)

B. Complications in childbirth
1. Excessive bleeding
   a. Profuse bleeding from vagina
   b. Mother may or may not experience abdominal pain
   c. Take appropriate measures to prevent shock
   d. Absorb blood with towels or pads, apply more as necessary
   e. Arrange for immediate transfer to a medical facility
2. Transportation considerations
   a. Immediately transport to nearest medical facility if:
      1) Limb presentation
      2) Breach presentation (buttocks first)
      3) Cord presentation
      4) Delayed delivery
   b. In preparing for transportation, ensure mother is in the prone knee to chest position
3. Newborn fails to breathe
   a. A newborn should begin breathing on its own within 30 seconds after birth
   b. If it fails to breathe, rubbing the infant's back or tapping the infant's feet may stimulate spontaneous respiration
   c. If the newborn still fails to breathe on its own:
      1) Check for a brachial pulse
      2) If there is a pulse, begin rescue breathing
         a) Use caution not to overextend the infant's neck
         b) Use reduced volume for breaths being careful not to over inflate the infant's lungs
      3) If no pulse, begin CPR immediately

Day Four

XVII. Instructor Development 0600-0800 (120 Min)

A. Adult learning strategies
1. Create task-oriented training
   a. Content should be practical

   b. Learning objectives should include realistic tasks that are necessary in the students' work assignments
   c. Training must apply to real world situations
2. Adults bring experience with them
   a. Have a lot of pre-existing knowledge
   b. Life experience that may relate to the topic
3. Need to see the professional development relevance
   a. Training should improve the quality of the students' work
   b. May lead to promotions
   c. Provides skills above and beyond what they already know
4. Training should include positive feedback from instructors
   a. Validates the students
   b. Promotes participation
5. Students may have trouble dealing with their own ego
   a. They may perceive that they know more than the instructor
   b. Instructors should acknowledge that experience, and attempt to draw on it

B. Teaching methods
1. Lecture
2. Facilitated discussion
3. Small group exercises
4. Large group exercises
5. Role-play scenarios
6. Case studies
7. Table top activities

C. Student learning styles
1. Learning style preference
   a. Some prefer structure, others flexibility
   b. Some prefer independence, others social or group learning
   c. Some prefer auditory, others visual, others kinesthetic
2. Visual
   a. Learns best through seeing
   b. Provide handouts
   c. Use video case studies, slide presentations, other visual props
3. Auditory
   a. Learns best through hearing
   b. Benefits from oral presentations and discussions
   c. May learn best from lecture or facilitated discussions
4. Read/Write
   a. Learns best through reading material and writing
   b. Benefits from handouts
   c. Encourage to write notes
5. Kinesthetic
   a. Learns best through manipulation
   b. Benefits from hands on activities
   c. Use scenarios and role play
6. Assessing your personal style
   a. You can find learning styles assessments online
   b. Be aware that we tend to teach the way we like to learn
      1) Could be a disservice to some students

2) May cause misunderstandings
c. Teaching methods should include all styles
1) Provide visual stimulation like PowerPoint, writing on white board/flip charts
2) Provide kinesthetic activities such as use of equipment or skill labs
3) Provide group activities such as discussion groups, work groups, teams.
7. Social and independent learning styles
a. Social learners
1) Process information best when multi-tasking
2) Tend to enjoy study sessions, group projects, cooperative learning
b. Independent learners
1) Process information best when working independently
2) Tend to work best in quiet, undisturbed environments
3) Use reading assignments, written exams and reports

D. Learning domains
1. Three level system to classify learning in each domain
a. Knowledge
1) Helps students comprehend facts, procedures, feelings
2) Includes simple skills or thought processes like recall and imitation
b. Application
1) Builds on the knowledge foundation
2) Involves integrating and execution of principles and valuing beliefs
c. Problem solving
1) Builds on the application and indicates mastery
2) Involves analysis of information, procedures and feelings in order to modify and adapt to specific situations.
2. Learning domains
a. Cognitive learning domain
1) Definition
2) Common verbs
a) Define
b) Know
c) Describe
d) Design
e) Analyze
f) Discuss
g) Identify
3) Taxonomy
a) Remembering
b) Understanding
c) Applying
d) Analyzing
e) Evaluating
f) Creating
b. Psychomotor learning domain
1) 5 levels of psychomotor skills
a) Imitation
b) Manipulation
c) Precision
d) Articulation

e) Naturalization
2) Teaching psychomotor skills
a) Setup the technique
(1) What is the problem?
(2) How did we get here?
(3) Why do we need this technique?
(4) What is coming next?
b) Dynamic demonstration
(1) Full speed demo
(2) No talking, no breakdown, just demo
c) Breakdown demonstrations
(1) Walk through the technique step by step
(2) At least 3 demos
(a) What
(b) What, how
(c) What, how, why
d) Improving skills sessions tips
(1) Have all necessary equipment set-up prior to class starting
(2) Use realistic equipment in good working order
(3) Use standardized skill sheets
(4) Allow ample practice time
(5) Always model correct behavior
(6) Keep student active and involved
(7) Insist students respect equipment
(8) Add realism
(9) Place skill in context of real-life scenario
(10) Limit objective of scenario to three learning points
(11) Make scenario realistic as possible
(12) Use actual equipment
(13) Consider use of props

c. Affective learning domain
1) Mission, vision, values
2) Emotions
3) Feelings
4) Taxonomy
a) Receiving
b) Responding
c) Valuing
d) Organization
e) Characterization

3. Lesson plans
a. Purpose of lesson plan
b. Serves as framework or guide
c. Provides information to the instructor for motivating students
d. Guides the pace of the course
e. Difference between expanded course outline and lesson plans
f. Lesson plan components
1) Learning objectives
2) Content

3) Instructional resources
4) Time allotments

g. Using the lesson plan
1) Explain the importance of the content
2) Explain the objectives (what they're going to get)
3) Allow student to give feedback
4) Deliver the content as outlined
5) Including selected learning methods
6) Allow student time to practice skills
7) Document competence
8) Encourage interaction and contributions
9) Allow time for remediation
10) Evaluate performance of students and lesson plans

XVIII. Small group teach backs 0800-1500 (360 Min)

A. Class setup
1. Groups of 6 or less
2. One instructor per group;
3. One flip chart and markers per group
4. Assign topics in order, one at a time.
5. 5-minute teach back per topic
a. Focus on the key points and essential details
b. Not every piece of information on each topic should be covered for the sake of time
6. 5 minute debrief/critique per teach back
a. Did the student teach the key points?
b. Did they have good time management?
c. Were they clear?
d. Did they allow the students to participate in the training?
e. Did they know the material well?
f. Did they utilize good presentation skills?
7. Switch to the next student
8. Continue until all of the course content has been covered, or until the end of watch

B. First Aid/CPR small group teach back topics
1. Blood borne pathogens
2. Law enforcement and EMS
3. Victim assessment
4. Adult/child CPR
5. Infant CPR
6. AED
7. Airway obstructions
8. Rescue breathing
9. Bleeding control
10. Shock
11. Head/facial injuries
12. Chest/abdominal injuries
13. Bone, joint, muscle injuries
14. Burns
15. Tactical casualty care

16. Cardiac emergencies
17. Respiratory emergencies
18. Seizures
19. Strokes
20. Altered mental status
21. Severe abdominal pain
22. Psychological emergencies
23. Diabetic emergencies
24. Poisoning and substance abuse
25. Temperature related emergencies
26. Stings and bites

C. Final evaluated activity assignments
   1. Assign one topic per student
      a. The instructor from each small group will assign the topics for their group
      b. Must be different from the topics they taught during the small group teach backs
      c. Classroom numbers permitting, topics should not overlap with other students
   2. Give the testing parameters and explain expectations
      a. 15-minute presentation
      b. Cover all key points of the topics
      c. Utilize adult learning concepts
      d. Involve the students in the presentation
      e. Avoid excessive lecture
      f. Assess students learning
      g. 5 minute debrief/critique upon completion
   3. Pass out student presentation order sign-up sheet

XIX. Final evaluated activity **0600-**1400 **(420 Min)**

A. Class setup
   1. The first student will be given 5 minutes to set up
   2. The student will teach for 15 minutes
   3. The instructor will lead an overhead facilitated debrief with the entire class
      a. Critique the positive and the negative
      b. Focus on making the student better for future presentations
   4. The next student will be setting up during the debrief
   5. The designated grading instructors will complete a First Aid CPR Instructor Course Checklist after each student completes their presentation
   6. Students that receive a “Fail” will be notified at the next class break
      a. Instructors should make accommodations to remediate these students as soon as possible
      b. Remediation may take place in another classroom/location while the remaining students finish their presentations
      c. If time permits, students that receive a “Fail” may be given an opportunity to present for a second time when all other students have completed their presentations
      d. If the student receives a “Fail” on their second attempt, they will be required to complete the entire course a second time and will not receive a certificate of completion or POST course credit
   7. Students that receive a “Pass” will be notified at the next class break

B. First Aid/CPR final evaluated activity topics

1. Blood borne pathogens
2. Law enforcement and EMS
3. Victim assessment
4. Adult/child CPR
5. Infant CPR
6. AED
7. Airway obstructions
8. Rescue breathing
9. Bleeding control
10. Shock
11. Head/facial injuries
12. Chest/abdominal injuries
13. Bone, joint, muscle injuries
14. Burns
15. Tactical casualty care
16. Cardiac emergencies
17. Respiratory emergencies
18. Seizures
19. Strokes
20. Altered mental status
21. Severe abdominal pain
22. Psychological emergencies
23. Diabetic emergencies
24. Poisoning and substance abuse
25. Temperature related emergencies
26. Stings and bites

XX. Critiques and certificates **1400 -1500 (60 Min)**

A. Course critiques
   1. Pass out 1 per student
   2. Encourage thoroughness, honesty, and constructive critiques
B. Certificates
   1. Pass out once all course critiques have been collected
   2. Call each student up 1 at a time
   3. Thank students for their participation and effort