Session 12 – Medical Emergencies LD 34 – First Aid

Date Revised: 11/19/19

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

Session Goal: To teach recruit officers the knowledge and skills necessary to provide appropriate first aid for medical emergencies.

Learning Objectives:

- Recognize indicators of, and first aid measures for a victim experiencing: [34.V.A]
 - Cardiac emergency [34.V.A.1]
 - Respiratory emergencies including asthma and Chronic Obstructive Pulmonary disease (COPD) [34.V.A.2]
 - Drowning [34.V.A.3]
 - Seizure [34.V.A.4]
 - Stroke [34.V.A.5]
 - Altered mental status [34.V.A.6]
 - Severe abdominal pain [34.V.A.7]
- Identify the signs and symptoms of psychological emergencies [34.V.B]
- Differentiate between indicators and first aid measures for treating diabetic emergencies: [34.V.C]
 - Low blood sugar (hypoglycemia) including assisted oral glucose administration [34.V.C.1]
 - High blood sugar (hyperglycemia) [34.V.C.2]
- Recognize appropriate first aid measures for a victim experiencing signs of: [34.V.D]
 - o poisons that have been ingested, inhaled, absorbed, or injected [34.V.D.1]
 - Poison control system access [34.V.D.1.a]
 - Alcohol and/or drug-related emergencies including: [34.V.D.2]
 - Assisted Naloxone administration [34.V.D.2.a]
 - Accessing EMS [34.V.D.2.b]

Session Time: 2 hours

Resources:

- Classroom with tables
- White board
- Dry-erase markers

Session Summary: The instructor will lead an overhead facilitated discussion with the whole class.

Outline	Instructor Notes
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Session 12 – Medical Emergencies

LD 34 - First Aid

- I. Medical Emergencies [1]
 - A. Cardiac emergencies [2] [34.V.A.1]
 - 1. Definitions
 - a. Heart attack
 - Common term describing minor to severe conditions
 - 2) Blockage of blood or lack of oxygen to heart tissue
 - b. Coronary artery disease
 - Fatty deposits build up in the walls of the arteries that feed the heart's muscle
 - 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 [3]
 - 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 [4]
 - 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 victim's to take their medication

[1] Ask – List some types of medical emergencies.

Seeking:

- Cardiac emergencies
- Respiratory emergencies
- Altered mental status
- Severe abdominal pain
- [2] Ask What is a cardiac emergency?

[3] Ask — What indictors would you look for in a victim of cardiac distress?

[4] Ask – What steps would you take to treat a victim of a cardiac emergency?

Session 12 – Medical Emergencies

LD 34 - First Aid

- c. May assist if required
 - 1) Remove from container
 - 2) Place in victim's hand
- B. Respiratory emergencies [34.VA2]
 - 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 [5]
 - Existing illness, such as Asthma and Chronic Obstructive Pulmonary Disease (COPD)[34.V.A.2]
 - b. Allergic reaction
 - c. Cardiac emergency
 - d. Drowning / Obstructed airway[34.V.A.3]
 - e. Suffocation
 - f. Body positioning that restricts breathing
 - g. Drug overdose
 - h. Hyperventilation
 - 3. Indicators [6]
 - 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

[5] Ask – List some examples of respiratory emergencies

[6] Ask – What indicators would you observe with a victim having difficulty breathing?

[7] Ask – How can you treat a victim of a respiratory emergency?

Session 12 – Medical Emergencies LD 34 – First Aid

4) Altered

- 4. First aid measures [7]
 - 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 [8] [34.V.A.4]

- 1. Definition
 - a. Surge of energy through the brain
 - b. Massive involuntary contractions of muscles
 - c. Possible unconsciousness
- 2. Indicators [9]
 - 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
 - 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 [10]
 - a. Do not restrain the victim

[8] Ask – What is a seizure?

[9] Ask – What are some indicators of a seizure, or imminent seizure?

[10] Ask – What first aid measures can you begin to assist a person having a seizure?

[11] Ask – What is a stroke?

Session 12 – Medical Emergencies

LD 34 - First Aid

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
 - Be guided by agency policy regarding the administering of prescribed medications

D. Strokes [11] [34.V.A.5]

- 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 [12]
 - 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

[12] Ask – What are some indicators of a stroke?

[13] Ask – How can we treat a victim suffering from a stroke?

[14] Ask – List other examples of altered mental status beside stroke and seizure

Session 12 – Medical Emergencies

LD 34 - First Aid

- 2) Nausea, vomiting
- 3. First aid measures [13]
 - 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 [14] [34.V.A.6]
 - 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 [15]
 - 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

[15] Ask — What first aid measures would you implement for a victim with an altered mental status?

[16] Ask – What is severe abdominal pain?

[17] Ask – What are some indicators that a victim with abdominal pain could be suffering from a medical emergency?

Session 12 – Medical Emergencies

LD 34 - First Aid

- (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 [16] [34.V.A.7]
 - 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 [17]
 - 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 [18]
 - 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

[18] Ask – How would you treat a victim with severe abdominal pain?

[19] Ask – What is a psychological emergency?

[20] Ask – List signs and symptoms of a psychological emergency

[21] Ask – What can cause a psychological emergency?

[22] Ask – What is a diabetic emergency?

Session 12 – Medical Emergencies LD 34 – First Aid

- g. Monitor and treat for shock
- h. Reassure victim
- G. Psychological Emergencies [19] [34.V.B]
 - 1. Definition
 - 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 [20]
 - 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 [21]
 - 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 [22] [34.V.C]
 - 1. Definitions
 - a. An imbalance of insulin in the body and glucose in the bloodstream can lead to life-threatening conditions
 - b. Glucose
 - 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

[23] Ask – Explain the differences between hypoglycemia and hyperglycemia.

[24] Ask – What are indicators of a victim with low blood sugar?

[25] Ask – What are indicators of a victim with high blood sugar?

[26] Ask – How can a police officer tell the difference between a psychological

Session 12 – Medical Emergencies LD 34 – First Aid

- 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 [23]
- 2. Low blood sugar (hypoglycemia) indicators

[24] [34.V.C.1]

- 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
- I. Drooling
- m. Nausea or vomiting
- 3. High blood sugar (hyperglycemia) indicators [25] [34.V.C.2]
 - 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
 - I. Excessive urination
 - m. Abdominal pain, vomiting
 - n. Sunken eyes
- 4. Diabetic emergencies vs. alcohol intoxication or substance abuse [26]
 - a. Aggressiveness
 - b. Combativeness
 - c. Uncooperative behavior
 - d. Confusion, dazed appearance
 - e. Decreased level of consciousness
 - f. Impaired motor skills
- 5. First aid measures

emergency, an intoxicated suspect and a victim of a diabetic emergency?

[27] Ask – What first aid measures can an officer take to help a victim of a diabetic emergency?

[28] Ask – What are the immediate concerns when dealing with a victim of poison or overdose?

[29] Ask — What scene safety concerns should an officer consider during a poison or overdose emergency?

Session 12 – Medical Emergencies

LD 34 - First Aid

- 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 [27]
 - Place the victim in the recovery position
 - 2) Do not give the victim anything by mouth
- e. If conscious [34.V.C.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. First Aid measures for poisoning and substance abuse [28] [34.V.D]
 - 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 [29]
 - a. Do not enter any environment containing poisonous gases or fumes
 - b. Use care when handling hypodermic needles or other sharp objects

[30] Ask – What are the ways poisons can be introduced into the body?

• Give a description and example of each.

[31] Ask – What first aid measures can an officer take to treat a victim of poison or overdose?

Session 12 – Medical Emergencies

LD 34 - First Aid

- c. Do not take any actions that could cause you to become a victim
- d. Follow agency policies
- 4. Manner of exposure [30] [34.V.D.1]
 - 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
 - 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 [31]
 - a. Determine the victim's level of consciousness

[32] Ask – What is Naloxone and why is it used?

[33] Ask – List indicators of withdrawal from alcohol or drugs

Session 12 – Medical Emergencies LD 34 – First Aid

- 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 [34.V.D.1.a]
- 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 [32] [34.V.D.2.a]
 - Naloxone is sometimes provided to temporarily reverse the effects of a suspected opiate overdose.
 - Officers may assist in the administration of this medication if it is consistent with their department policy
 - Prior to assisting with administering naloxone, an officer should request additional EMS resources [34.V.D.2.b]
 - 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 [34.V.D.2.b]
- 7. Indications of withdrawal from alcohol or drugs [33] [34.V.D.2]
 - a. Confusion
 - b. Hallucinations or psychotic behavior

Session 12 – Medical Emergencies LD 34 – First Aid

C.	Blackouts	
d.	Altered mental status	
e.	Tremors or shaking	
f.	Profuse sweating	
g.	Increased pulse and breathing rates	