Session 9 – Airway Obstructions and Rescue Breathing 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 basic life support for a victim experiencing an airway obstruction [34.VIII.C.1] and to provide rescue breathing. [34.VIII.C.2]

Learning Objectives:

- Recognize circumstances under which a victim's airway should be opened by using a: [34.III.D]
 - Head tilt/chin lift maneuver [34.III.D.1]
 - Jaw-thrust maneuver [34.III.D.2]
- Identify the difference between a mild and severe airway obstruction [34.III.E]
- Demonstrate procedures for clearing an obstruction from the airway of a conscious or unconscious: [34.III.F]
 - o Adult [34.III.F.1]
 - Child [34.III.F.2]
 - o Infant [34.III.F.3]
 - Pregnant or obese individual [34.III.F.4]
- Discuss rescue breathing techniques including [34.III.G]
 - Mouth-to-mouth [34.III.G.1]
 - Pocket mask or other barrier devices [34.III.G.2]
 - Bag valve mask [34.III.G.3]
- Discuss the recovery position [34.III.H]
- Recruits will demonstrate basic life support techniques [34.VIII.C.1-2]

Session Time: 1 hour

Resources:

- Classroom with tables
- White board
- Dry-erase markers
- Adult mannequins (6)
- Infant mannequins (6)

Session Summary: This module begins with a facilitated discussion of airway obstructions, including open a victim's airway and clearing mild and severe airway obstructions. The students will then participate in a learning activity to practice clearing an airway obstruction. Next is a facilitated discussion about rescue breathing techniques. Finally, the students will participate in a learning activity to practice rescue breathing on both adults and infants.

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			Outline	Instructor Notes
١.	Airway obs	struct	ions and rescue breathing	Facilitated discussion:
	•		ructions [1]	
	1. Op		g an airway [2] [34.III.D]	[1] Ask – How does an airway
	a.		nd tilt/chin-lift [34.III.D.1]	obstruction affect CPR?
			Provides maximum airway opening	[2] Ask – What is the importance of
		2)	Place one hand on the victim's	opening the airway?
		-)	forehead	• Ask – What causes an airway to be
		3)	Technique [3]	obstructed?
			a) Place the fingers of the other hand	[3] Ask – How do you open an airway
			under the bony area at the center of the victim's lower jaw	and why are there different ways?
			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	[4] Ask – Why is a jaw-thrust better than
		5)	Do not place thumb or finger(s) inside	a head-tilt/chin-lift for victims with a
			the victim's mouth	suspect head, neck or spinal injury?
	b.		-thrust [4] [34.III.D.2]	
		1)	Use when a head, neck, or spinal	
		2)	injury is suspected	
			To open an airway on an unconscious	
			victim Allows airway to be opened without	
		5)	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	[5] Ask – In what situations do you need
			e) Gently push the victim's jaw	to take special care when attempting to
			forward	open the airway?
			 f) If necessary, use thumb to pull open the victim's lips 	
		5)	Do not tilt or rotate the victim's neck if	
		5)	airway does not open	
	C.	Spe	cial considerations when attempting to	
		-	en a victim's airway [5]	
			Infants and Children	

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	a) Trachea is narrower, softer, and	
	more flexible than adults	
	b) Over extension of an	
	infant's/child's neck may occlude	[6] Ask – Why are some airway
	the trachea	obstructions considered mild?
	c) Tongue takes up more space in	How could you determine if an
	the mouth	obstruction is mild?
	d) Airways are smaller and easily	
	obstructed	
	2) Facial injuries	
	a) Severe swelling	
	b) Bleeding	
	3) Dental appliances	
	a) Full/partial dentures should be left	
	in	
	b) Remove only if they have become	
	dislodged and endanger the	
	victim's airway	[7] Ask – When is an airway obstruction
2. 1	Mild airway obstructions [6] [34.III.E]	considered severe?
	a. The victim can speak or cough	
1	b. There is adequate air exchange to prevent	
	respiratory failure	
(c. A victim who is conscious with a mild	[8] Ask – What is the purpose of a finger
	airway obstruction should be encouraged	sweep?
	to cough forcefully to dislodge and expel	Why should you only use a finger
	the object	sweep when you can clearly see the
	1) Do not interfere with the victim's	object?
	attempts to cough	Object:
	2) Do not pound on the victim's back	
	d. Treat as a severe airway obstruction if	
,	1) The obstruction cannot be removed	
	,	
	by coughing and the victim has labored breathing	
	_	[9] Ask – What is an abdominal thrust?
		What is another name for an
	breathing sounds, or is turning	abdominal thrust?
2	blue/grey	When would you choose to use an
	Severe airway obstructions [7] [34.III.E]	abdominal thrust?
č	a. The victim is unconscious and unable to be	
	ventilated after the airway has been	
	opened	[10] Ask – Where should you place your
ł	b. Conscious but unable speak, cough, or	fist when performing an abdominal
	breathe	thrust?
4. 1	Removing obstructions [34.III.F]	
ä	a. Finger sweep [8]	
	1) Only if the object can be seen	
	a) Do not use a blind finger sweep	
	b) The object must be seen clearly	

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2) Open the victim's mouth by grasping	
the tongue and lower jaw between	
the thumb and index fingers	[11] Ask – How does your treatment
 Insert index finger of the other hand 	change when a conscious choking victim
	becomes unconscious?
down along the cheek in a hooking	becomes unconscious?
motion	
4) If the object can be felt, grasp it and	
remove it	
Abdominal thrust [9] [34.III.F.1] [34.III.F.2]	
1) Conscious adult or child	
a) Determine that the victim is	
choking	
 b) Inform the victim before acting 	
c) Stand or kneel behind the victim	
and wrap your arms around the	[12] Ask – What is the benefit of chest
victim's waist	thrusts vs. abdominal thrusts?
d) Make a fist with one hand	On what type of victim would you
 e) Place the thumb side of the fist 	use a chest thrust?
against the victim's abdomen [10]	
at the midline, slightly above	
the navel	
(2) Well below the breastbone	
f) Grasp your fist with your other	
hand and press your fist into the	
victim's abdomen with a quick,	
forceful upward thrust	
g) Give each new thrust with a	
separate, distinct movement to	
relieve the obstruction	
h) Do not use on infants, pregnant	
women, or obese patients	[12] Ack In what ways is clearing an
· · ·	[13] Ask – In what ways is clearing an
,	airway obstruction in an infant
unconscious [11]	different?
a) Activate the EMS system	
b) Place the victim in a supine	[14] Ask – Has anybody ever
position	experienced a choking infant situation?
c) Open the victim's airway	How did you feel when you
d) Look inside the victim's mouth	observed the infant not breathing?
e) Conduct a finger sweep if you see	• Why is it more common for infants
the object	to choke than adults?
f) Attempt to ventilate	What are some of the common
g) If the breaths do not go in,	items that an infant could choke on?
reposition the head and attempt	
to ventilate again	
h) If airway remains obstructed, give	
30 chest compressions	
i) Repeat until chest rise is achieved	

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c. Chest th	nrust [12] [34.III.F.4]	
1) Use	d when the victim is	
a)	Pregnant	
b)	Obese	
2) Con	scious adult	
,	Determine that the victim is	
-,	choking	
h)	Inform the victim before action	[15] Ask – For how long should you
	Take a position behind the victim	repeat the sequence back blows and
	Slide arms under the victim's	chest thrusts?
u)		 What factors would cause me to
	armpits and encircle the victim's	
-)	chest	stop giving back blows and chest
,	Form a fist with one hand	thrusts?
f)	Place the thumb side of fist on the	
	midline of the victim's sternum,	[16] Ask – How would you feel if an
	level with the armpits	infant was choking and you forgot how
	Grasp the fist with the free hand	to clear the obstructed airway?
h)	Direct thrusts straight back toward	Why is it so important to clear the
	the victim's spine	airway quickly?
i)	Use care not to direct the thrusts	 If the infant becomes unconscious,
	up, down, or to either side	what steps do I need to take?
j)	Repeat thrusts until the object is	
	expelled or victim loses	Run learning activity (15 minutes) –
	consciousness	Basic Life Support – Airway Obstructions
3) Infa	nts [13] [34.III.F.3]	
a)	Conscious choking infant [14]	Facilitated discussion:
	(1) Kneel or sit with the infant in	
	your lap	[17] Ask – What is Rescue Breathing?
	(2) If it is easy, remove clothing	Why is it important to know Rescue
	from infant's chest	Breathing?
	(3) Deliver up to 5 back slaps	[18] Ask – Why is the rate of breaths
	(a) Forcefully	different for an adult vs. a child?
	(b) Between the infant's	 How is it different?
	shoulder blades	- now is it different;
	(c) Using the heel of your	
	hand	
	(d) Deliver each slap with	
	sufficient force to attempt	[19] Ack - W/by is it important to
	to dislodge the foreign	[19] Ask – Why is it important to
	body	periodically re-check the victims
	(4) Place your free hand on the	breathing and circulation?
	infant's back, supporting the	
	back of the head	
	(5) Turn the infant as a unit while	
	carefully supporting the head	
	and neck	[20] Ask – When would you stop rescue
	(6) Hold the infant face up	breathing?

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(a) Rest your forearm on your	
thigh	
(b) Keep the infant's head	
lower than the trunk	
(7) Provide up to 5 quick	
downward chest thrusts	
(a) Middle of the chest	
(b) Over the lower half of the	
breastbone	
(c) Rate of 1 per second	
(d) Each with the intention of	
creating enough force to	
dislodge the foreign body	
(8) Repeat the sequence of up to	
5 back slaps and up to 5 chest	
thrusts [15]	
(a) Until the object is	
removed	
(b) Or the infant becomes	
unresponsive	
b) Conscious infant becomes	
unconscious [16]	
(1) Activate EMS	
(2) Place the infant on a firm, flat	
surface	
(3) Begin CPR	
(a) Starting with	
compressions	
(b) Every time you open the	
airway, look for the	
obstructing object	
B. Rescue breathing [34.III.G]	
1. The process of using one's own breaths to	
artificially breathe for a victim [17]	Run learning activity (15 minutes) –
a. If the victim is not breathing	Basic Life Support – Rescue Breathing
b. But has a pulse	
2. Rate [18]	
a. Adult	
1) Puberty and above	
2) Give 1 breath every 5-6 seconds	
3) 10-12 breaths per minute	
b. Child	
1) Newborn to puberty	
2) Give 1 breath every 3-5 seconds	
3) 12-20 breaths per minute	
3. Each breath is 1 second long	
4. Each breath should result in visible chest rise	

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E	Cho	eck the pulse every 2 minutes [19]
6.		hnique
	a.	Open the victim's airway using the head-
		tilt-/chin-lift or jaw-thrust maneuver
		(whichever is most appropriate for the
		situation)
	b.	Take a position at the top of the victim's
		head
	с.	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 [34.III.G.2]
	d.	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. [34.III.G.1-2]
	e.	If using a bag valve mask, squeeze the bag
	-	gently instead of exhaling into
		valve[34.III.G.3]
7	Sto	pping rescue breathing [20]
		Victim begins to breathe without
	u.	assistance
		1) Continue to assess the victim's
		condition
		2) Place in recovery position [34.III.H]
		a) Roll the victim onto their left side toward the rescuer
		b) Keep the victim's body in one unit
		with the spine straight
		c) Move the victim's lower arm up
		and bend at the elbow
		d) Move the victim's top leg toward
		the victim's chest
		e) Continue to monitor the victim's
		breathing
		3) Provide care for shock
	b.	Officer is relieved by an equally or higher
		medically trained person
	с.	Officer becomes too exhausted to
		continue
	d.	Unable to detect a pulse after 2 minutes
		of rescue breathing
	e.	Victim is declared dead by an authority
8.	Gas	stric distention

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	a. When air is forced into the victim's
	stomach as well as lungs
	b. Reposition the airway
	c. Give smaller, slower breaths
9.	Vomiting
	a. Turn the victim on left side
	b. Turn the entire body, not just the head
	c. Wipe vomit from the victim's mouth
	d. Return the victim to the supine position
	e. Open the airway
	f. Continue rescue breathing
	g. This process should take less than 10
	seconds

Stand Alone 6 – First Aid Session 9 – Airway Obstructions and Rescue Breathing LD 34 – First Aid Learning Activity – Basic Life Support - Airway Obstructions

Purpose: Peace officers may be required to provide basic life support for a victim, fellow officer, or themselves until additional medical service become available. This may include check for responsiveness [34.VIII.C.1.a], check pulse [34.VIII.C.1.b], check airway
[34.VIII.C.1.c], check for breathing [34.VIII.C.1.d], and clearing an obstructed airway of a victim until emergency medical services arrive. This learning activity will reinforce the students' knowledge and give them an opportunity to physically practice these techniques. [34.VIII.C]

Description: The instructor will begin the activity by explaining the purpose and expectations. Next, the instructor will demonstrate the proper execution of treatment for each scenario that the students will practice. The instructor will then break the class into the smallest groups possible based on the number of mannequins available. The instructor should write each of the scenarios on the board for reference.

Each student in the group will play the role of the responding officer at least once. The students will rotate playing the role of victim. The students not participating will direct and oversee the scenario, advising the responding officer of the results of each step of treatment. The students should use only the space immediately around their table. The student may choose to perform the technique on the table, on the floor or in a chair. When not participating in the scenario, students should observe and make notes of questions or issues noticed during the scenario. Each group should complete the scenarios below. Each group will be given an adult and an infant mannequin. Students will need their pocket masks.

Scenario #1: Obstructed airway, conscious adult or child. [34.VIII.C.1.a]

The responding officer finds a conscious adult or child with an obstructed airway. The victim role will be played by a member of the group. The victim may be standing, sitting or lying on the ground. The role player should demonstrate or state the common signs of a choking victim.

Scenario #2: Obstructed airway, conscious infant. [34.VIII.C.1.b]

The responding officer finds a conscious infant with an obstructed airway. The responding officer will use an infant mannequin for the victim. Another student in the group will give the responding officer the objective signs of the victim.

Scenario #3: Obstructed airway, obese or pregnant person. [34.VIII.C.1.c]

The responding officer finds a conscious obese or pregnant person with an obstructed airway. The victim role will be played by a member of the group. The victim may be standing or sitting. The role player will either demonstrate or state the common signs of a choking victim.

Scenario #4: Obstructed airway, unconscious adult or child. [34.VIII.C.1.a]

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The responding officer finds an unconscious adult or child with an obstructed airway. The responding officer will use an adult mannequin for the victim. The victim may be on the table or on the floor. Another student in the group will give the responding officer the objective signs of the victim.

Scenario #5: Obstructed airway, unconscious infant. [34.VIII.C.1.b]

The responding officer finds an unconscious infant with an obstructed airway. The responding officer will use an infant mannequin for the victim. Another student in the group will give the responding officer the objective signs of the victim.

<u>Scenario #6:</u> Obstructed airway, unconscious obese or pregnant person. [34.VIII.C.1.c]

The responding officer finds an unconscious obese or pregnant person. The responding officer will use an adult mannequin for the victim. The victim will be on the ground. Another student in the group will give the responding officer the objective signs of the victim.

Resources needed:

- Classroom with tables
- White board
- Dry erase marker(s)
- Adult and infant mannequins

Key learning points:

- The inability to take in oxygen to the point where life cannot be sustained is respiratory failure.
- When breathing stops completely, the victim is respiratory arrest.
- Respiratory arrest can quickly lead to cardiac arrest if action is not taken quickly.
- Establishing and maintaining an open airway is of the highest priority.

Time required: 15 minutes

Stand Alone 6 – First Aid Session 9 – Airway Obstructions and Rescue Breathing LD 34 – First Aid Learning Activity – Basic Life Support - Rescue Breathing

Purpose: Peace officers may be required to provide basic life support for a victim, fellow officer, or themselves until additional medical service become available. This may include rescue breathing for a victim (adult, child, or infant) until emergency medical services arrive. This learning activity will reinforce the students' knowledge and give them an opportunity to physically practice these techniques. **[34.VIII.C.2.a-d]**

Description: The instructor will begin the activity by explaining the purpose and expectations. Next, the instructor will demonstrate the proper execution of treatment for each scenario that the students will practice. The instructor will break the class into the smallest groups possible based on the number of mannequins available. The instructor should write the scenarios on the board for reference.

Each student in the group will play the role of the responding officer at least once. The students not participating will direct and oversee the scenario, advising the officer on the result of their treatment. The students should use only the space immediately around their table. The student may choose to perform the technique on the table or on the floor. When not participating in the scenario, students should observe and make notes of questions or issues noticed during the scenario. Each group should complete the scenarios below. Each group will be given an adult, child, or an infant mannequin. Students will need their pocket masks.

Scenario #1: Rescue breathing, adult or child. [34.VIII.C.2.a-b]

The responding officer conducts a primary survey on an adult or child and finds the victim with a pulse but not breathing. The responding officer will us an adult mannequin for the victim. The victim will be lying on the ground. As the officer proceeds, another student in the group will direct the scenario and give the officer details where options are available.

Scenario #2: Rescue breathing, infant. [34.VIII.C.2.c]

The responding officer conducts a primary survey on an infant and finds the victim with a pulse but not breathing. The responding officer will use an infant mannequin for the victim. As the officer proceeds, another student in the group will provide various options.

Resources needed:

- Classroom with tables
- White board
- Dry erase marker(s)
- Adult and infant mannequins

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Key learning points:

- Rescue breathing is the process of using one's own breaths to artificially breath for the victim
- Rescue breathing continues until the victim can breathe without assistance or other breathing support is provided by EMS personnel.

Time required: 15 minutes