

# **GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

## **STATE OF ARIZONA • EMERGENCY MEDICAL SERVICES AND TRAUMA SYSTEM**

### **Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

#### **Course Description**

This course is designed to provide instruction in a procedure for the administration of Naloxone by law enforcement officers and EMTs.

#### **Requirements for Naloxone Administration**

1. Licensed physician or nurse practitioner issuance of a standing order for Naloxone
2. Completion of ADHS approved training

#### **Prerequisites**

1. Standard AZ Police Officer Standards and Training Board (POST) first aid law enforcement training or current EMT certification
2. Current CPR certification

#### **Refresher Suggestion**

1 hour of Continuing Education refresher training every two years

#### **Methodology**

1. This guidance document suggests the following minimum hours for training to ensure proficiency:
  - 1.5 hours – Didactic/lecture (Module One)
  - 0.5 to 1.0 hour – Skills practice and validation (Module Two)
2. The curriculum may be used for both law enforcement officers and EMTs.
3. Agencies utilizing Naloxone must have agency-specific guidelines regarding storage, accountability, reporting, and replacement.

#### **Instructor/Faculty**

The instructor must be approved by the administrative medical director for the organization or be an AZ POST-approved first aid instructor.

#### **Equipment**

The following minimum equipment is required for the course:

1. Naloxone auto-injector trainers (if agency will be utilizing this device)
2. Naloxone intranasal mucosal atomizer trainers

## **GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

### **Course Competencies:**

Upon completion of the course the student shall be able to:

1. Describe what opioids are and how they work on human anatomy.
2. List three common opioids that are available to the public.
3. List the common routes of administration.
4. Differentiate between an opioid overdose and an “opioid high”.
5. State the signs and symptoms of an opioid overdose.
6. Describe how Naloxone works to counteract opioids.
7. List the types of overdoses that Naloxone does not reverse.
8. Describe the signs and symptoms of Opioid withdrawal.
9. State the difference between the duration of Naloxone and the duration of most opioids.
10. Describe the routes of administration of Naloxone for EMT and Law Enforcement Officers.
11. State the indications for Naloxone use.
12. State the dosages of Naloxone for both intramuscular and intranasal use.
13. Demonstrate proficiency in the administration of the medication. (Module Two)
14. List possible safety and post-administration considerations.
15. Describe the agency specific follow-up and documentation guidelines.

## **COURSE OUTLINE**

### **Module One: Lecture Approximate time: 1.5 Hours**

#### **Introduction**

- I. Objectives
  - A. Background and statutes
  - B. Define Naloxone
  - C. Routes of administration
  - D. Training requirements
  - E. Immunity
  
- II. The Opioid Problem
  - A. Lethal drug overdose is the leading cause of accidental death in America.
  - B. Opioids include legal prescriptions and illegal drugs.
  
- III. Use of Naloxone by Law Enforcement Officers and EMTs
  - A. Safe, effective, well established practice
  - B. Few side effects
  - C. First step in combating deaths from overdose
  - D. Time-sensitive emergency
  
- IV. A.R.S. § 36-2228
  - A. Requires a standing order issued by a licensed physician or nurse practitioner
  - B. Mandates training on the use of Naloxone and other opioid-reversal drugs before an EMT or a law enforcement officer may administer Naloxone
  - C. Allows a trained EMT or law enforcement officer to administer Naloxone
  - C. States that Naloxone may be administered to a person if an EMT or a law enforcement officer believes that the person is suffering from an opioid-related overdose
  - D. Requires a uniform training module for both EMTs and law enforcement officers
    1. Help identify persons suffering from an opioid-related overdose
    2. Use of Naloxone
  - E. Provides immunity for:
    1. Physicians and nurse practitioners who issue the standing order
    2. Trained EMTs and law enforcement officers who administer the drug
  - F. Does not create a duty to act or standard of care for law enforcement officers to administer an opioid antagonist

**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

- V. Definition of Opioids/Opiates
  - A. Opioids – synthetic drugs
  - B. Opiates – naturally derived from the poppy plant
  - C. Central Nervous System (CNS) Depressants
    - 1. CNS or brain function
    - 2. Respiratory system
    - 3. Cardiovascular system
  - D. Abused for euphoric effects (to get high) and for pain control
  
- VI. How Opioids Kill
  - A. Respiratory and CNS depression
  - B. “Slows” everything down
  - C. Decreased level of consciousness
  - D. Decreases respiratory drive
  - E. Decreases heart rate and lowers blood pressure
  - F. Respiratory drive is taken away
  - G. Lack of oxygen (hypoxia)
  - H. Aspiration (inhaling vomit)
  - I. Eventual cardiopulmonary arrest
  
- VII. Increased Incidence of Overdose

The following substances, when combined with opioids, can increase the incidence of overdose:

  - 1. Alcohol
  - 2. Benzodiazepines (sedatives)
  - 3. Other medications
  
- VIII. Common Opioid Medications
  - A. Buprenorphine
  - B. Codeine
  - C. Fentanyl
  - D. Hydrocodone (Vicoden/Norco/Lortab)
  - E. Hydromorphone (Dilaudid)
  - F. Methadone
  - G. Morphine
  - H. Oxycodone (Percocet, Oxycontin)
  - I. Illegal Opioids (heroin, opium)
  
- IX. Routes of Opioid Administration
  - A. Oral (pills)

**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

- B. Intravenous (IV)
  - C. Snorting
  - D. Smoking
  - E. Subcutaneous, e.g. under skin (“skin popping”)
- X. Naloxone (Narcan)
- A. Developed in the 1960’s
  - B. Opioid antagonist (reversal drug)
  - C. Used as an emergent overdose treatment in the hospital and in pre-hospital settings
  - D. Increased need for Narcan due to:
    - 1. Greater variety of available opioids
    - 2. Increased opioid use and abuse
- XI. Naloxone Mechanism of Action
- A. Naloxone displaces the opioid from the opioid receptor in the nervous system
  - B. Temporarily reverses respiratory and CNS depression
  - C. May result in a sudden onset of withdrawal
- XII. Signs and Symptoms of Opioid Withdrawal
- A. Agitation
  - B. Tachycardia (rapid heart rate)
  - C. Pulmonary edema (fluid in the lungs)
  - D. Nausea
  - E. Vomiting
  - F. Seizures
- XIII. Overdoses that Naloxone does not work for:
- A. Sedatives
    - 1. Valium
    - 2. Ativan
    - 3. Xanax
    - 4. Alcohol
  - B. Stimulants
    - 1. Cocaine
    - 2. Amphetamines
- XIV. Routes of Administration of Naloxone
- A. EMTs or law enforcement officers
    - 1. Intramuscular (IM)

**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

- 2. Intranasal (IN)
- B. Paramedics, AEMTs, or EMT-I(99)s
  - 1. Intramuscular (IM)
  - 2. Intranasal (IN)
  - 3. Intravenous (IV)
  - 4. Intraosseous (IO)
  - 5. Endotracheal (ET)
  
- XV. Benefits of Naloxone Administration by Intranasal Route or Auto-injector
  - A. IV access may be difficult to establish in chronic IV drug abusers
  - B. Decreased risk of needle-stick injury
  - C. Decreased risk for infectious disease exposure
  - D. Simple, rapid, and convenient
  
- XVI. Benefits of Naloxone Administration
  - A. Intranasal
    - 1. Works quickly; drugs absorb into nasal mucosa
    - 2. Nose is an easy access point
    - 3. Starts working as fast as IV administration
    - 4. Atomizer facilitates quick administration
    - 5. Painless
  - B. Auto-injector
    - 1. Contains pre-measured dose, reduces medication dosing errors
    - 2. Designed for self-administration of medication by patients or ease of use by laypersons
  
- XVII. Safety Considerations & Adverse Impacts
  - A. Use caution when administering Naloxone to narcotic-dependent patients.
  - B. Rapid opioid withdrawal may cause nausea/vomiting and may cause combativeness.
  - C. Roll patient on their side after administration to keep airway clear.
  - D. If patient does not respond within 3 to 5 minutes, administer second dose, if available.
  - E. Other disease processes may mimic opioid overdose; be aware of possible low blood sugar, head injury, stroke, shock, or hypoxia.
  
- XVIII. Indications for Naloxone Use
  - A. Altered Level of Consciousness (LOC)
  - B. Respiratory depression or apnea (not breathing)
    - 1. Shallow, slow respirations – less than 8 to 10 breaths per minute
    - 2. Inadequate respirations

**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

- C. Unable to wake up with painful stimuli
  - D. Constricted pupils (miosis)
  - E. Needle track marks
  - F. Profuse sweating (diaphoresis)
  - G. Cardiac arrest
- XIX. Differentiating between “High” vs. Overdose (See Appendix A)
- A. High
    - 1. Muscles become relaxed
    - 2. Speech is slow/slurred
    - 3. Sleepy looking
    - 4. Responsive to stimuli
    - 5. Normal heart rate pulse
    - 6. Normal skin color
  - B. Overdose
    - 1. Pale, clammy skin; limp
    - 2. Very infrequent or no breathing
    - 3. Deep snoring or gurgling
    - 4. Not responsive to stimuli
    - 5. Slow heart beat pulse
    - 6. Blue lips and or fingertips
- XX. Patients at Risk for Opioid Overdose
- A. Chronic users, especially with recent release from jail or detox or a recent history of relapse
  - B. Young adults or teens experimenting with drugs
  - C. People with chronic illness and chronic pain; includes all ages and demographics
- XXI. Naloxone Algorithm (See Appendix B)
- XXII. Naloxone vs. Opioid Drug Durations (See Appendix C)
- A. Naloxone has a relatively short duration compared with opioid drugs.
  - B. Naloxone may wear off and, dependent upon the amount of opioid in the system, signs of overdose may reappear.
- XXIII. Procedure for Administration of Naloxone (See Appendix D)
- A. Recognize opiate overdose
    - 1. Decreased Level of Consciousness (LOC)
    - 2. Decreased or no breathing

**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

3. In setting of likely opioid ingestion
- B. Give sternal rub/stimulate
- C. If no response, administer Naloxone
- D. Place patient on side (recovery position)

**XXIV. Naloxone Dosage (Adult and Pediatric)**

- A. Auto-injector (IM)
  1. 0.4 mg IM dose
  2. If no response after 2 minutes, may repeat as necessary
  3. Max dose 4.0 mg
- B. Intranasal (IN)
  1. 1.0 mg in each nostril using Mucosal Atomizer Device for a total of 2.0 mg
  2. If no response after 2 minutes, may repeat
  3. Max dose of 4.0 mg

**XXV. Intranasal (IN) Naloxone Administration**

- A. Take cap off medication.
- B. Remove the two caps from each end of the applicator.
- C. Apply atomizer onto the end of the applicator.
- D. Tightly screw the medication into the applicator.
- E. Insert the atomizer into the nostril and push the syringe.
- F. Apply 1.0 ml into each nostril.
- G. The tip of the atomizer should be placed near or just inside the nostril:
  1. Placement of the syringe too far inside the nasal cavity may traumatize the nasal passages or cause bleeding.
  2. The use of the atomization device on the tip of the syringe prevents nasal trauma and maximizes the delivery of the medication to the patient.

**XXVI. Auto-injector Intramuscular (IM) Administration (Note: There is currently only one Naloxone auto-injector available, the EVZIO. If other auto-injectors become available, the following may need to be amended to follow manufacturer's recommendations.)**

- A. Pull the auto-injector from the outer case.
- B. Pull off the red safety guard. The red safety guard is made to fit tightly. Pull firmly to remove.
- C. Do not touch the black base of the auto-injector, which is where the needle comes from.
- D. Do not replace the red safety guard after it is removed.
- E. Place the black end against the middle of the patient's outer thigh, through clothing if necessary.
- F. Press firmly and hold in place for 5 seconds after hearing the popping sound and the hiss.



## **GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

- G. For an infant less than 1 year old, pinch the middle of the outer thigh before you administer the auto-injector and continue to pinch while you give the medication.
- H. The needle will inject and then retract back into the auto-injector and is not visible after use.
- I. The auto-injector cannot be reused.
- J. After use place the auto-injector back into its outer case.
- K. Do not replace the red safety guard.

### **XXVII. Post Naloxone Administration**

- A. Place the patient in the recovery position.
- B. If the patient is not breathing and/or has no pulse, begin rescue breathing/ventilations or CPR.
- C. Be alert for vomiting/diarrhea and agitation (withdrawal symptoms).
- D. If no response after 2 minutes, repeat dose.
- E. Even if the person wakes up and starts breathing, the overdose symptoms can come back.
- F. The patient should be transported to the hospital by EMS.

### **XXVIII. Documentation**

- A. EMS - Document patient encounter on a prehospital incident history report.
- B. Law enforcement officer - data to collect:
  - 1. Patient name and DOB
  - 2. Location of incident
  - 3. Indications for use
  - 4. Dose, route, and time of Naloxone administration
  - 5. Response to administration
  - 6. Patient Disposition, i.e. EMS, DOA, Elope, etc.

**Module Two: Skills Practice/Validation**  
**Approximate time: 0.5 to 1.0 hours**

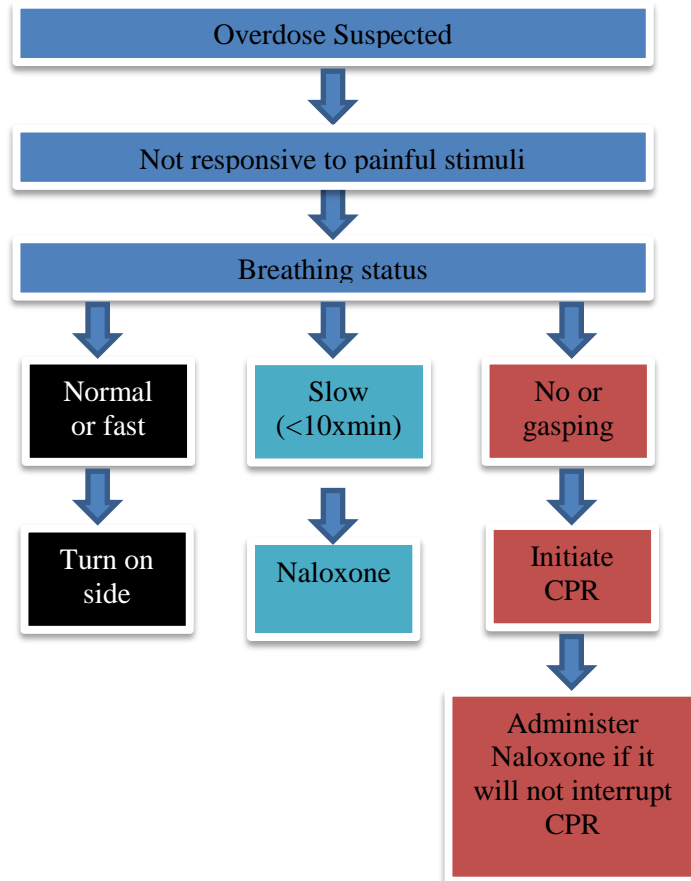
- I. Provide Appropriate Equipment
  - A. Auto-injector Trainer
  - B. Pre-filled Naloxone syringe with atomizer device
  - C. Optional – mannequins as available
- II. Instructor will demonstrate administration techniques and equipment use.
- III. The student will demonstrate proficiency on the skills evaluation form. (See Appendix E)
- IV. The instructor will verify, complete, and sign the skills evaluation form and will maintain the completed form in agency training files
- V. Post-Test
- VI. The instructor will provide remediation and retesting as necessary.

**Appendix A – “High” vs. Overdose**

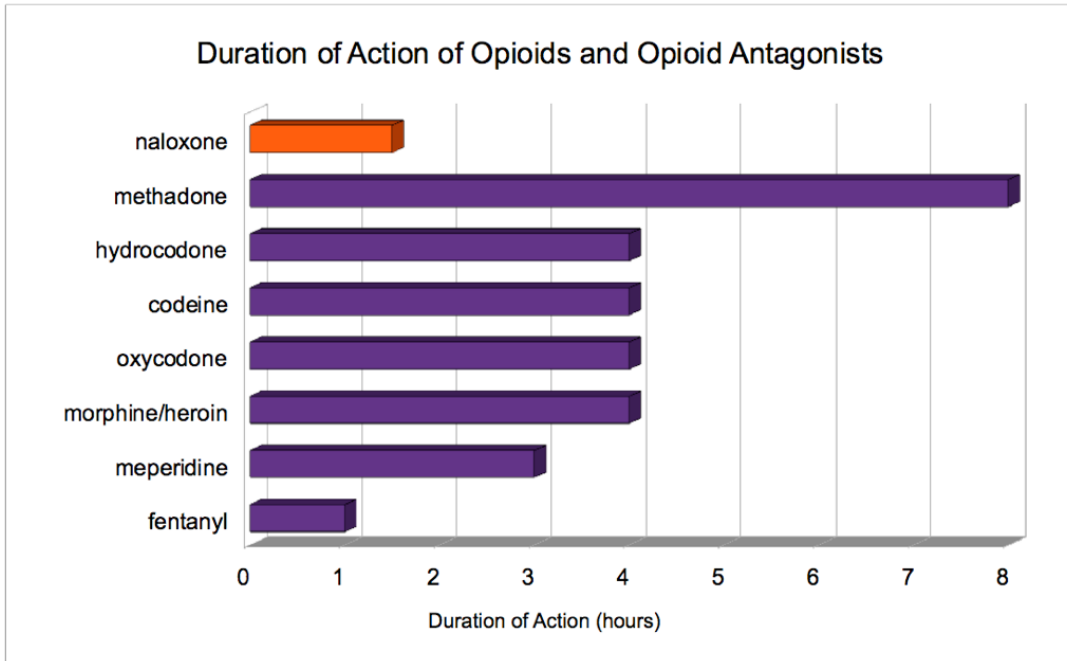
REALLY HIGH	OVERDOSE
Muscles become relaxed	Pale, clammy skin
Speech is slow/slurred	Very infrequent or no breathing
Sleepy looking	Deep snoring or gurgling (death rattle)
Responsive to stimuli (such as shaking, yelling, sternal rub, etc.)	Not responsive to stimuli (such as shaking, yelling, sternal rub, etc.)
Normal heart beat/pulse	Slow heart beat/pulse
Normal skin tone	Blue lips and / or fingertips

**Appendix B – Naloxone Algorithm**

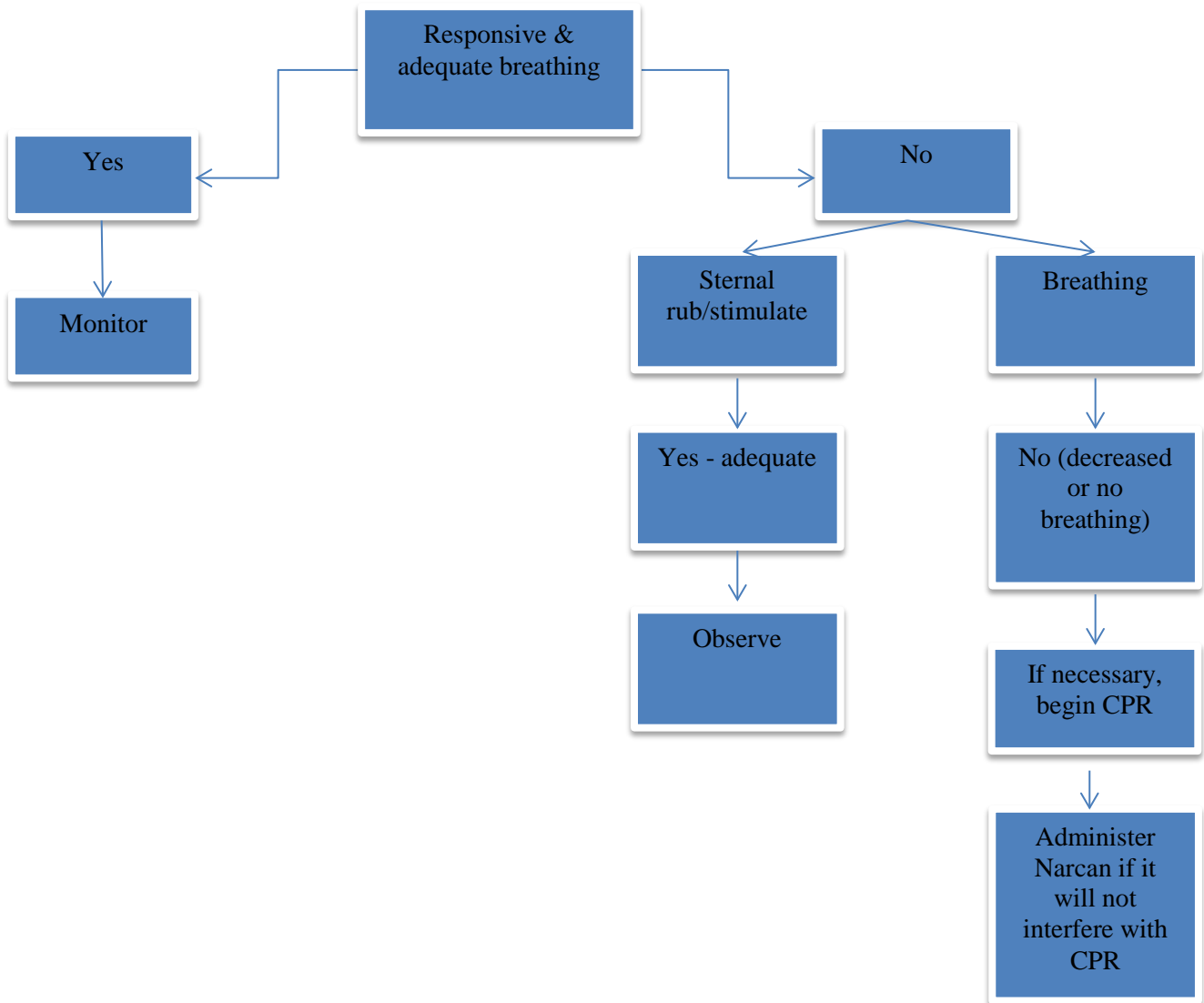
**When to Use Naloxone**



**Appendix C – Comparison of Duration of Naloxone and Opioids**



**Appendix D – Procedure for Naloxone Use**



**GD-112-PHS-EMS: Curriculum for Law Enforcement/EMT Administration of Naloxone in the Pre-Hospital Setting**

---

**Proposed Skills Evaluation  
Naloxone Administration Skill Sheet**

Student's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Attempt# \_\_\_\_\_

Evaluator: \_\_\_\_\_

Signature: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Criteria	Points Possible	Points Attained
Takes or verbalizes universal Body Substance Isolation techniques	1	
Completes assessment(s) and determines patient needs medication	1	
Lists indications for Intranasal Naloxone administration:		
• CNS and respiratory depression induced by narcotics suspected with at least one of the following:		
1. Overdose History by bystanders	1	
2. Paraphernalia consistent with opiate/narcotic use	1	
3. Medical History consistent with opiate/narcotic use	1	
4. Respiratory depression with pinpoint pupils	1	
• Coma	1	
• Suspected narcotic overdose	1	
• Age of >5	1	
Checks for known allergies, contraindications or incompatibilities	1	
Checks the medication to determine:		
• Correct Medication	1	
• Expiration Date	1	
• Concentration	1	
• Clarity	1	
Lists the appropriate dosage for the medication: (Use applicable dosage requirement)	1	
• For Intranasal: >5 years old to adult: 2.0 mg; may repeat dose of 2.0 mg if no response after 2 minutes from initial dose		
• For Auto-injector: >5 years old to adult: 0.4 mg; may repeat dose after 2 minutes, up to 4.0 mg (10 times total), if no response from previous dose		
Properly administers the medication: (Use applicable list of steps)	3 (1 point for each step)	
• Intranasal:		
1. Assembles Mucosal Atomization Device (MAD) to syringe securely		
2. Inserts MAD into the nostril		
3. Administers the medication in a fast push manner		
• Auto-injector:		
1. Prepares the auto-injector for use		
2. Places the black end against the outer thigh		
3. Holds in place for 5 seconds		
Verbalizes the need for ongoing assessments, including observing the desired effects	1	
Verbalizes the indications for an additional dose	1	
Verbalizes the need for transport	1	
Voices proper documentation of medication administration	1	
<b>Total</b>	<b>22</b>	

**Critical Criteria**

- \_\_\_\_\_ Fails to take or verbalize Body Substance Isolation precautions.
- \_\_\_\_\_ Fails to complete, or verbalize completion of, patient assessment.
- \_\_\_\_\_ Fails to verbalize the indications for medication administration.
- \_\_\_\_\_ Fails to reassess the patient.

(Failure to meet any of the critical criteria constitutes failure. The student must be remediated prior to retesting.) The student has three (3) opportunities to successfully complete the test. If a student fails to achieve a passing grade after three (3) opportunities, the student must repeat the entire course.