Attempt:
#1____
#2____
#3____

Emergency Medical Technician Psychomotor Examination

OXYGEN ADMINISTRATION

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

	PASS / FAIL
OXYGEN EQUIPMENT	
Cracks valve on the oxygen tank	
Check regulator for intact gasket	
Assembles the regulator to the oxygen tank	
Opens the oxygen tank valve	
Checks for minimum oxygen tank pressure	
Checks for leaks	
Secures the tank to keep from falling or rolling	
NASAL CANNULA	
Attaches nasal cannula to correct port of regulator	
Properly places and adjusts nasal cannula to patient	
Adjusts regulator flow rate between 2-6 lpm	
NON-REBREATHER MASK	
Attaches non-rebreather mask to correct port of regulator	
Adjusts regulator flow rate between 10-15 lpm	
Prefills non-rebreather mask reservoir bag before applying to patient	
Attaches mask to patient's face and adjusts to fit snugly	
CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) / BILEVEL POSITIVE AIRWAY PRESSURE (BiPAP) DEVICE	
Indications for use: All causes of severe respiratory distress or respiratory failure	
Contraindications for use: Absolute: Respiratory arrest, Cardiac arrest, Agonal respirations, Unconsciousness, Pneumothorax, Inability to maintain/protect airway; Relative: Vomiting, ALOC, Systolic BP <90	
Place patient in an upright seated position	
Evaluates lung sounds	
Set up CPAP system	
Adjusts regulator flow rate to manufacturers specifications	
Explain procedure to patient	
Apply mask while reassuring patient	
Frequently reevaluate patient	
NEBULIZER (HANDHELD/MASK) Set-Up	
Assembles handheld or mask small volume nebulizer	
Attaches to correct port of regulator	
Identifies 6 rights / DICCE of patient prescribed / EMS administered nebulized medications	
Inserts appropriate amount of medication into nebulizer chamber	
Determine the appropriate device: Ie: Handheld or mask	
Adjusts regulator flow rate between 8-12 lpm	
Instructs patient to sit up straight and continue inhaling and exhaling through the administration device	
Reevaluates patient	

You must factually document your rationale for checking any of the above critical items on this form.

CANDIDATE MUST BE SUCCESSFUL IN ALL STEPS IN ORDER TO PASS SKILL STATION

VCEMSA EMT Education Sub Committee – Rev 04/02/2026 FINAL

Revised 04/02/2026 Final Approval CPAP/Neb

Performance Objectives

Demonstrate competency in setting up and attaching an oxygen delivery device to a patient.

Equipment needed

- PPE (eye protection, masks, gown, gloves, etc.) Can use an image of PPE in place of actual items
- Adult and pediatric airway manikins
- Nasal cannula and Non-rebreather masks (adult and pediatric sizes)
- Oxygen tank or wall-mounted compressed air device
- Regulator and gasket
- Airway bag (agency items with above contents)
- Sharps/Biohazard/Trash containers
- CPAP-BiPap device
- Handheld/Mask nebulizer
- Simulated nebulized medication

Key Concepts

- ### Personal protective equipment
  - Gloves and goggles
- ### Oxygen Equipment
  - Ensure the tank is medical grade oxygen (green, green/white, unpainted aluminum with green). The pin index should easily align with the oxygen regulator.
  - To clear dust or debris from the opening, open the main valve slowly until gas flow is heard, and then immediately close the valve.
  - O-rings
    - Crush-type (plastic) is manufactured for single-use only and must be replaced each time a regulator is attached.
    - Brass and rubber-type O-rings are reusable multiple times
  - Attach the regulator by aligning the pin index and tightening the screw bolt with firm hand pressure. Do not use a wrench or other device as it may cause a break in the seal and/or damage the regulator.
  - Open the valve and check for leaks and the minimum oxygen tank pressure.
    - Full tanks read approximately 2000 psi
    - Portable tanks should be changed out when between 500 and 1000 psi (per agency policy) [bring a second tank and run it down]
    - House tanks should be replaced at 500 psi to ensure
  - Secure the tank to prevent falling or rolling. If the valve stem is damaged during a drop/roll, the tank will become a projectile that can easily go through a concrete wall.
- ### Nasal Cannula
  - The nasal cannula is a low-flow, low-oxygen concentration delivery device that delivers 24-44% oxygen with flow rates of 2-6 L/min
  - Do not exceed a flow rate of 6 L/min with a standard nasal cannula. This will dry out the mucosal lining.
  - The curvature of the prongs should be oriented so the tips will curve down and are slightly posterior once inserted
  - Slip the tubing around the patient's ears and under the chin. Tighten the tubing enough to maintain placement and not cause patient discomfort.
    - Placing the tubing behind the head may decrease the flow of oxygen.
- ### Non-Rebreather Mask
  - A non-rebreather mask is a low-flow, high-oxygen concentration delivery device that delivers 90-95% oxygen with a flow rate of 15L/min
  - The reservoir bag must be inflated completely before placing the mask on a patient
  - Never apply an oxygen mask to a patient without supplemental oxygen flowing; this may result in the patient rebreathing their CO_2, acidosis, hypoxia, and death.
- ### Continuous Positive Airway Pressure (CPAP) / Bilevel Positive Airway Pressure (BiPAP) Mask
  - Set oxygen flow to manufacturer recommended rate (15 lpm)
  - Place mask against patients' face without securing straps until patient can tolerate well
  - Secure mask straps (head gear)
  - Adjust head gear and forehead brace to lay flat and provide good seal
  - Ensure Manometer stays in green zone
- ### Handheld/Mask Nebulizer
  - Assemble HHN/Mask Nebulizer
  - Fill reservoir with appropriate amount of medication – Albuterol 5mg/6ml
  - Instruct patient to inhale and exhale through device