

Emergency Medical Technician Psychomotor Examination

Attempt:	
#1	
#2	
#3	

OXYGEN ADMINISTRATION

PASS / FAIL
PASS / FAIL
PASS / FAIL
PASS / FAIL
1

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

VCEMSA EMT Education Sub Committee - Rev 01/02/2025 FINAL

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

Key Concepts

Personal protective equipment

o 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.
- o 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 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.
- o 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

- o 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
- o Do not exceed a flow rate of 6 L/min with a standard nasal cannula. This will dry out the mucosal lining.
- o 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 CO₂, acidosis, hypoxia, and death.