

Bag-Valve-Mask Ventilation of an Apneic Adult Patient

And

Oxygen Administration by Non-rebreather Mask Essays

to Skill Examiners

Thank you for serving as a Skill Examiner at today's examination. Before you read the specific essay for the skill you will be evaluating today, please take a few moments to review your general responsibilities as a Skill Examiner:

- Conducting examination-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, sex, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help assure that the EMT Assistant and/or Simulated Patient conduct himself/herself in a similar manner throughout the examination.
- Objectively observing and recording each candidate's performance.
- Acting in a professional, unbiased, non-discriminating manner, being cautious to avoid any perceived harassment of any candidate.
- Providing consistent and specific instructions to each candidate by reading the "Instructions to the Psychomotor Skills Candidate" exactly as printed in the material provided by the OEMS. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Recording, totaling, and documenting all performances as required on all skill evaluation forms.
- Thoroughly reading the specific essay for the assigned skill before actual evaluation begins.
- Checking all equipment, props, and moulage prior to and during the examination.
- Briefing any Simulated Patient and EMT Assistant for the assigned skill.
- Assuring professional conduct of all personnel involved with the particular skill throughout the examination.
- Maintaining the security of all issued examination material during the examination and ensuring the return of all material to the Exam Coordinator.

In this skill, the candidate will have five (5) minutes to provide ventilatory assistance to an apneic patient who has a weak carotid pulse and no other associated injuries. The patient is found supine and unresponsive on the floor. The adult manikin must be placed and left on the floor for these skills. If any candidate insists on moving the patient to a different location, you should immediately dismiss the candidate and notify the Exam Coordinator. For the purposes of this evaluation, the cervical spine is intact and cervical precautions are not necessary. This skill was developed to simulate a realistic situation where an apneic patient with a palpable carotid pulse is found. Bystander ventilations have not been initiated. A two (2) minute time period is provided for the candidate to check and prepare any equipment he/she feels necessary before the actual timed evaluation begins. When the actual timed evaluation begins, the candidate must immediately assess the patient's responsiveness and immediately request additional EMS assistance after determining that the

patient is unresponsive. Next, the candidate must check for breathing and a carotid pulse simultaneously for no more than ten (10) seconds in accordance with 2015 American Heart Association Guidelines for CPR and Emergency Cardiovascular Care. You should inform the candidate that the patient is apneic but has a weak carotid pulse of 60. The candidate should next open the patient's airway. Immediately you should inform the candidate that he/she observes secretions and vomitus in the patient's mouth. The candidate should attach the rigid suction catheter to the suction unit and operate the equipment correctly to suction the patient's mouth and oropharynx. Either electrical or manual suction units are acceptable and must be working properly in order to assess each candidate's ability to suction a patient properly. If the suctioning attempt is prolonged and excessive, you should check the related "Critical Criteria" and document the exact amount of time the candidate suctioned the patient. After suctioning is complete, you should then inform the candidate that the mouth and oropharynx are clear.

The candidate should then initiate ventilation using a bag-valve-mask (BVM) device unattached to supplemental oxygen. If a candidate chooses to set-up the reservoir and attach supplemental oxygen to the BVM device prior to establishing a patent airway and ventilating the patient, it must be accomplished within thirty (30) seconds of beginning his/her performance. The point for this step should be awarded and is explained on the skill evaluation form (denoted by **). Regardless of the candidate's initial ventilatory assistance (either with room air or supplemental oxygen attached), ventilation must be accomplished within the initial thirty (30) seconds after taking appropriate PPE precautions or the candidate has failed to ventilate an apneic patient immediately. It is acceptable to insert an oropharyngeal airway prior to ventilating the patient with either room air or supplemental oxygen. You must inform the candidate that no gag reflex is present when he/she inserts the oropharyngeal airway.

After the candidate begins ventilation, you must inform the candidate that ventilation is being performed without difficulty. It is acceptable to re-check the pulse about every two (2) minutes while ventilations continue. The candidate should also call for integration of supplemental oxygen at this point in the procedure if it was not attached to the BVM initially. You should now take over BVM ventilation while the candidate gathers and assembles the adjunctive equipment and attaches the reservoir to supplemental oxygen if non-disposable equipment is being used. If two or more testing rooms are set-up and one is using a disposable BVM, be sure to leave the mask and reservoir attached to all the non-disposable BVMs throughout the examination. To assist in containing costs of the psychomotor examination, the oxygen tank used may be empty for this skill. The candidate must be advised to act as if the oxygen tank were full. However, the supplemental oxygen tubing, regulator, BVM, and reservoir should be in working order.

After supplemental oxygen has been attached, the candidate must oxygenate the patient by ventilating at a rate of 10 – 12/minute (1 ventilation every 5 – 6 seconds) with adequate volumes of oxygen-enriched air. Ventilation rates in excess of 12/minute have been shown to be detrimental to patient outcomes. It is important to time the candidate for at least one (1) minute to confirm the proper ventilation rate. It is also required that an oxygen reservoir (or collector) be attached. Should the candidate connect the oxygen without such a reservoir or in such a way as to bypass its function, he/she will have failed to provide a high percentage (at least 85%) of supplemental oxygen. You must mark the related statement under "Critical Criteria" and document his/her actions. Determination of ventilation volumes is dependent upon your observations of technique and the manikin's response to ventilation attempts. For the purposes of this evaluation form, a proper volume is defined as a ventilation that causes visible chest rise. Each breath should be delivered over one (1) second and cause visible chest rise. Be sure to ask the candidate, "How would you know if you are delivering appropriate volumes with each ventilation?" Be sure to document any

incorrect responses and check any related “Critical Criteria” statements. After the candidate ventilates the patient with supplemental oxygen for at least one (1) minute, you should stop the candidate’s performance.

Throughout this skill, the candidate should take or verbalize appropriate PPE precautions. At a minimum, examination gloves must be provided as part of the equipment available in the room. Masks, gowns, and eyewear may be added to the equipment for these skills but are not required for evaluation purposes in order to help contain costs of the psychomotor examination. If the candidate does not protect himself/herself with at least gloves before touching the patient or attempts direct mouth-to-mouth ventilation without a barrier, appropriate PPE precautions have not been taken. Should this occur, mark the appropriate statement under "Critical Criteria" and document the candidate's actions as required.

Oxygen Administration by Non-rebreather Mask

This skill is designed to test the candidate’s ability to correctly assemble the equipment needed to administer supplemental oxygen in the out-of-hospital setting. A two (2) minute time period is provided for the candidate to check and prepare any equipment he/she feels necessary before the actual timed evaluation begins. The candidate will then have five (5) minutes to assemble the oxygen delivery system and deliver an acceptable oxygen flow rate to a patient using a non-rebreather mask.

When the actual timed evaluation begins, the candidate will be instructed to assemble the oxygen delivery system and administer oxygen to the Simulated Patient using a non-rebreather mask. During this procedure, the candidate must check for tank or regulator leaks as well as assuring a tight mask seal to the patient’s face. If any leak is found and not corrected, you should deduct the point, check the related “Critical Criteria” and document the actions. You should do the same if the candidate cannot correctly assemble the regulator to the oxygen tank or operate the regulator and delivery device in a safe and acceptable manner.

Oxygen flow rates are normally established according to the patient history and patient condition. Since this is an isolated skills verification of oxygen administration by non-rebreather mask, oxygen flow rates of at least 10 L/minute are acceptable. Once the oxygen flow rate has been set, you should direct the candidate to stop his/her performance and end the skill.

The equipment needed for these skills is listed below. The oxygen tank must be fully pressurized for this skill (air or oxygen) and the regulator/flow meter must be functional. The Simulated Patient may be a live person or a manikin. However, the manikin must be anatomically complete and include ears, nose and mouth.

Equipment List

Do not open this skill for testing until the following equipment is available. You must assure that all equipment is working adequately throughout the examination. All equipment must be disassembled (reservoir disconnected and oxygen supply tubing disconnected when using only non-disposable equipment, regulator turned off, etc.) before accepting a candidate for evaluation:

- Examination gloves (may also add masks, gowns, and eyewear)
- Intubation manikin (adult)
- Bag-valve-mask device with reservoir (adult)
- Oxygen cylinder with regulator:
 - One must be fully pressurized with air or oxygen in order to test oxygen administration by non-rebreather mask.

- A second empty oxygen cylinder may be used to test BVM ventilation of an apneic adult patient.
- Oxygen connecting tubing
- Selection of oropharyngeal airways (adult)
- Suction device (electric or manual) with rigid catheter and appropriate suction tubing
- Various supplemental oxygen delivery devices (nasal cannula, non-rebreather mask with reservoir, etc. for an adult)
- Stethoscope
- Tongue blade

INSTRUCTIONS TO THE PRACTICAL SKILLS CANDIDATE FOR BAG-VALVE-MASK VENTILATION OF AN APNEIC ADULT PATIENT

This skill is designed to evaluate your ability to provide immediate and aggressive ventilatory assistance to an apneic adult patient who has no other associated injuries. This is a non-trauma situation and cervical precautions are not necessary. You are required to demonstrate sequentially all procedures you would perform, from simple maneuvers, suctioning, adjuncts, and ventilation with a BVM.

You must actually ventilate the manikin for at least one (1) minute with each adjunct and procedure utilized. I will serve as your trained assistant and will be interacting with you throughout this skill. I will correctly carry-out your orders upon your direction. Do you have any questions?

At this time, please take two (2) minutes to check your equipment and prepare whatever you feel is necessary.

[After two (2) minutes or sooner if the candidate states, "I'm prepared," the Skill Examiner continues reading the following:]

Upon your arrival to the scene, you find a patient lying motionless on the floor. Bystanders tell you that the patient suddenly became unresponsive. The scene is safe, and no hemorrhage or other immediate problem is found. You have five (5) minutes to complete this skill.

INSTRUCTIONS TO THE PRACTICAL SKILLS CANDIDATE FOR OXYGEN ADMINISTRATION BY NON-REBREATHING MASK

This skill is designed to evaluate your ability to provide supplemental oxygen administration by non-rebreather mask to an adult patient. The patient has no other associated injuries. This is a non-trauma situation and cervical precautions are not necessary. You will be required to assemble an oxygen tank and a regulator. You will then be required to administer oxygen to an adult patient using a non-rebreather mask. I will serve as your trained assistant and will be interacting with you throughout this skill. I will correctly carry-out your orders upon your direction. Do you have any questions?

At this time, please take two (2) minutes to check your equipment and prepare whatever you feel is necessary.

[After two (2) minutes or sooner if the candidate states, "I'm prepared," the Skill Examiner continues reading the following:]

Georgia Office of EMS and Trauma – EMT Psychomotor Examination Users Guide

A 45-year-old male is short of breath. His lips are cyanotic, and he is confused. You have five (5) minutes to administer oxygen by non-rebreather mask.