

MONTANA BOARD OF MEDICAL EXAMINERS
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Terminal Objectives

AIRWAY Endorsement

Terminal Objectives
for the EMT Airway Endorsement

The purpose of the Airway Endorsement for EMT is to provide the EMT with the knowledge and skills to manage difficult airways and initiate corrective action with a King Airway and CPAP.

Patient care should always be based on patient presentation and Montana Prehospital Treatment Protocols.

FORWARD

The Montana Board of Medical Examiners (BOME) developed the ECP endorsement process to provide the local EMS medical director the ability to expand the individual ECP scope of practice. The BOME has defined the "maximum allowable" skills for each endorsement and established statewide protocols. The endorsement process consists of education and verification.

The local EMS medical director is responsible for verifying an EMT's knowledge and skills for a particular endorsement. This can be accomplished via a training program; or the medical director may take into account an ECP's previous education, skill ability or other personal knowledge to determine whether an ECP meets the endorsement knowledge and skill requirements. The local medical director is responsible for the quality of all endorsement training via direct participation and/or oversight.

The medical director cannot exceed the scope of the endorsement, but may set limits on the ambulance service or the individual ECP.

The endorsement material that follows provides the knowledge and psychomotor objectives at the specific endorsement level. Some endorsements may also include sample lesson plans for use in presenting the material. The endorsements (specifically at the AEMT and Paramedic levels) may be non-specific in certain areas (such as specific medications or routes of administration) as the Board does not intend to "practice medicine". The medical director "practices medicine" and has the ability to determine the specific's concerning the endorsement. The Board approved protocols define the extent of the local medical directors flexibility: *"...The Board authorizes the service medical director to use the Board approved protocols in their entirety or may determine to limit individual EMT providers function / practice where appropriate and in accordance with provider's abilities. However, the service medical director may not significantly alter (change the performance expectations of the ECP) or expand approved Board protocols without first seeking Board of Medical Examiners approval."* If the medical director wishes to request the Board to "significantly alter" the protocol there is a process identified in the rules for that to occur.

The endorsement process for the EMR level is slightly different. The local Lead Instructor is allowed to document the successful completion of the educational requirements for the EMR endorsement. The Lead Instructor may not take into consideration previous education or training as the local medical director is allowed when completing the individual's verification

form. The Lead Instructor can only verify the individual's successful completion of the training/educational requirements. This is only allowed at the EMR endorsement levels of monitoring.

The Lead Instructor must remember the endorsement process is a privilege granted to a Montana licensed ECP. Endorsement education can only be offered to Montana ECP licensees; therefore, the Lead Instructor may not combine initial EMR education. The endorsement education must be done independently of the initial program.

The endorsement process requires that the medical director complete a standardized "verification form" (certificate of completion) documenting that an individual ECP has the knowledge and skills identified at the specific endorsement level. The individual ECP then submits an application to the Board to establish the endorsement on their license. The medical director then has the option of granting permission to the individual ECP to perform the endorsement to the extent defined by the medical director. All forms and endorsement materials can be obtained from the web site; www.emt.mt.gov. Any questions or concerns can be addressed to Ken Threet at (406) 841-2359 or kthreet@mt.gov.

TERMINAL OBJECTIVE SUMMARY

At the completion of this lesson, the EMT airway endorsement student will be to place a King Airway in any unconscious / unresponsive (no gag response) and be able to utilize a Continuous Positive Airway Pressure (CPAP) device in the out of hospital environment.

COGNITIVE OBJECTIVES

At the completion of this unit, the EMT will be able to:

- Explain the primary objective of airway maintenance.
- Identify commonly neglected prehospital skills related to airway.
- Identify the anatomy and functions of the upper airway.
- Describe the anatomy and functions of the lower airway.
- Explain the differences between adult and pediatric airway anatomy.
- Define normal tidal volumes for the adult, child, and infant.
- Explain the relationship between pulmonary circulation and respiration.
- List the factors which cause decreased oxygen concentrations in the blood.
- List the factors that increase and decrease carbon dioxide production in the body.

- Describe the measurement of oxygen in the blood.
- Describe the measurement of carbon dioxide in the blood.
- List the concentration of gases that comprise atmospheric air.
- List the factors that affect respiratory rate and depth.
- Describe the voluntary and involuntary regulation of respiration.
- Describe causes of upper airway obstruction.
- Define normal respiratory rates for adult, child, and infant.
- Describe causes of respiratory distress.
- Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for using a dual lumen airway or King Airway.
- Describe the special considerations in airway management and ventilation for patients with facial injuries.
- Describe the special considerations in airway management and ventilation for the pediatric patient.
- Describe how CPAP functions
- Describe the CPAP out of hospital indications.
- Describe CPAP absolute contraindications.
- Describe CPAP relative contraindications.
- Describe CPAP hazards.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the EMT will be able to:

- Perform body substance isolation (BSI) procedures during basic airway management, advanced airway management, and ventilation.
- Demonstrate ventilating a patient by the following techniques:
 - One person bag-valve-mask
 - Two person bag-valve-mask
- Ventilate a pediatric patient using the one and two person techniques.
- Insert a dual lumen airway.
- Ventilate a patient with a dual lumen airway or King airway inserted.
- Set up and assist a patient with a (CPAP) device (not to exceed 10cm H₂O)

LESSON PLAN: can be obtained from the AEMT or Paramedic Curriculum.

RECOMMENDED TIME TO COMPLETE: 3 hours for lecture and skills practice.

RECOMMENDED EQUIPMENT:

Intubation Manikin
King Airway
Oxygen Set

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Bag-Valve-Mask
CPAP unit

OVERVIEW:

While the major purpose of this endorsement is to prepare the student to place a King Airway in any unconscious / unresponsive (no gag response) patient, and utilization of a CPAP device on patients with difficulty breathing; overall airway management is the goal. Airway management beginning from simple patient positional airways, through King Airway placement and utilization of CPAP is the expected outcome.