

## **RULE 500**

### Colorado Board of Medical Examiners Rules Defining the Duties and Responsibilities of Emergency Medical Services Medical Directors and The Authorized Medical Acts of Emergency Medical Technicians

#### **3-CCR-713-6**

##### SECTION 1 - Purpose and Authority for Establishing Rules

- 1.1 The purpose of these rules is to define the duties and responsibilities of medical directors to EMS service agencies and to define the authorized medical acts of emergency medical technicians (EMTs).
- 1.2 The general authority for the promulgation of these rules is set forth in § 12-36-104 and § 25-3.5-203, C.R.S.
- 1.3 These rules apply to and are controlling for any physician functioning as a medical director to an emergency medical services organization and who authorizes and directs the performance of medical acts by EMTs at all levels of certification in the State of Colorado. These rules also define the scope of practice for EMTs.

##### SECTION 2 – Definitions - All definitions that appear in § 25-3.5-103, C.R.S., shall apply to these rules.

- 2.1 “BME” - The Colorado State Board of Medical Examiners.
- 2.2 “Department” - The Colorado Department of Public Health and Environment.
- 2.3 “Department-certified EMT” – any individual who has been certified by the department to act as an EMT-Basic, an EMT-Intermediate or an EMT-Paramedic.
- 2.4 “Emergency Medical Technician-Basic (EMT-Basic)” - an individual who has a current and valid EMT-Basic certificate issued by the department in accordance with the Rules Pertaining to Emergency Medical Services, 6 CCR 1015-3 (referred to herein as the “State EMS Rules”), and is authorized to provide basic emergency medical care in accordance with these rules of the BME.
- 2.5 “Emergency Medical Technician-Basic with IV Authorization” – an individual who has a current and valid EMT-Basic certificate issued by the department in accordance with the State EMS Rules and has met the conditions defined in Section 4.4 of these rules.
- 2.6 “Emergency Medical Technician-Intermediate (EMT-Intermediate)” - an individual who has a current and valid EMT-Intermediate certificate issued by the department in accordance with the State EMS Rules and is authorized to provide limited acts of advanced emergency medical care in accordance with these rules of the BME.
- 2.7 “Emergency Medical Technician-Paramedic (EMT-Paramedic)” - an individual who has a current and valid EMT-Paramedic certificate issued by the department in

accordance with the State EMS Rules and is authorized to provide advanced emergency medical care in accordance with these rules of the BME.

2.8 Repealed.

2.9 “EMS Service Agency” - any organized agency including but not limited to a “rescue unit” as defined in § 25-3.5-103(11), C.R.S., using department-certified EMTs to render initial emergency medical care to a patient prior to or during transport. This definition does not include criminal law enforcement agencies, unless the criminal law enforcement personnel are EMTs who function with a “rescue unit” as defined in § 25-3.5-103(11), C.R.S. or are performing any medical act described in these rules.

2.10 “Graduate EMT-Intermediate” - an individual who has a current and valid Colorado EMT-Basic certification issued by the department in accordance with the State EMS Rules and has successfully completed a department-recognized EMT-Intermediate education program but has not yet successfully completed the certification requirements set forth in the State EMS Rules.

2.11 “Graduate EMT-Paramedic” - an individual who has a current and valid Colorado EMT-Basic certificate or a current and valid Colorado EMT-Intermediate certification issued by the department in accordance with the State EMS Rules and has successfully completed a department-recognized EMT-Paramedic education program but has not yet successfully completed the certification requirements set forth in the State EMS Rules.

2.12 “Medical Base Station” - the source of direct medical communications with and supervision of the immediate field emergency care performance by department-certified EMTs.

2.13 “Medical Director” - a physician who holds an active Colorado medical license, who authorizes and directs, through protocols and standing orders, the performance of students-in-training enrolled in department-recognized EMS education programs, graduate EMT-Intermediates or EMT-Paramedics, or department-certified EMTs of a prehospital EMS service agency and who is specifically identified as being responsible to assure the competency of the performance of those acts by such department-certified EMTs as described in the physician’s medical continuous quality improvement program.

2.14 “Protocol” - written standards for patient medical assessment and management.

2.15 “Standing Order” - written authorization by a medical director for the performance of specific medical acts by department-certified EMTs before such department-certified EMTs are able to establish communications with the supervising medical base station, or in the event of communications malfunctions with the medical base station.

2.16 “State EMS Rules” –Rules Pertaining to Emergency Medical Services, 6 CCR 1015-3, promulgated by the State Board of Health.

## SECTION 3 - Qualifications and Responsibilities of Medical Directors

### 3.1 A medical director shall possess the following minimum qualifications:

- a) Be a physician currently licensed to practice medicine in the State of Colorado.
- b) Be actively involved in the provision of emergency medical services in the community served by the EMS service agency being supervised. Involvement does not require that a physician have such experience prior to becoming a medical director, but does require such involvement during the time that he or she acts as a medical director. Active involvement in the community could include, by way of example and not limitation, those inherent, reasonable and appropriate responsibilities of a medical director to interact with patients, the public served by the EMS service agency, the hospital community, the public safety agencies, and the medical community, and should include other aspects of liaison oversight and communication normally expected in the supervision of department-certified EMTs.
- c) Be actively involved on a regular basis with the EMS service agency being supervised. Involvement does not require that a physician have such experience prior to becoming a medical director, but does require such involvement during the time that he or she acts as a medical director. Involvement could include, by way of example and not limitation, involvement in continuing education, audits, and protocol development. It is not acceptable merely to have passive or negligible involvement with the EMS service agency and supervision of department-certified EMTs.
- d) Be trained in Advanced Cardiac Life Support.
- e) Physicians acting as medical directors for department-recognized EMS education programs must possess authority under their licensure to perform all medical acts included in any and all curricula presented by the program.

### 3.2 The responsibilities of a medical director shall include:

- a) Notify the department of the service agencies and individuals for which medical control functions are being provided.
- b) Establish a medical continuous quality improvement program for each EMS service agency being supervised. The medical continuous quality improvement program must assure the continuing competency of the performance of that agency's department-certified EMTs. This medical continuous quality improvement program shall include, but not necessarily be limited to, appropriate protocols and standing orders, and provision for medical care audits, observation, critiques, primary and continuing medical education and direct supervisory communications.
- c) Submit to the department an affidavit that attests to the development and use of a medical continuous quality improvement program for an EMS service

agency's department-certified EMTs. The department and the BME may review the records of a medical director to determine compliance with the requirements in these rules.

- d) Provide monitoring and supervision of the medical field performance of each supervised EMS service agency's department-certified EMTs. This responsibility may be delegated to other physicians or other qualified health care professionals designated by the medical director. However, the medical director shall retain ultimate authority and responsibility for the monitoring and supervision, for establishing protocols and standing orders and for the competency of the performance of authorized medical acts.
- e) Ensure that each direct verbal order, written standing order or protocol is appropriate for the certification and skill level of each of the individuals to whom the performance of medical acts is delegated and authorized. The medical director shall be familiar with the training, knowledge and competence of each of the individuals to whom the performance of such procedures is delegated.
- f) Notify the BME and the department within fourteen business days excluding state holidays prior to his or her cessation of duties as medical director pursuant to these rules.
- g) Notify the department within fourteen business days excluding State holidays of his or her termination of the supervision of a department-certified EMT for reasons that may constitute good cause for disciplinary sanctions pursuant to the State EMS Rules. Such notification shall be in writing and shall include a statement of the actions or omissions resulting in termination of supervision and copies of all pertinent records.
- h) Physicians acting as medical directors for EMS education programs recognized by the department that require clinical and field internship performance by students shall be permitted to delegate authority to a student-in-training during their performance of program-required medical acts and only while under the control of the education program.

3.3 The medical director shall be accountable to the BME for all acts or omissions that fail to meet generally accepted standards of medical practice and/or that violate these rules. The department and the BME may review the records of a supervising physician to determine compliance with the requirements in these rules.

#### SECTION 4 - Medical Acts Allowed for the EMT-Basic

4.1 An EMT-Basic may, under the supervision and authorization of a medical director, perform emergency medical acts consistent with and not to exceed those listed in Appendix A of these rules in accordance with the provisions of Section 3 of these rules.

- 4.2 An EMT-Basic may, under the supervision and authorization of a medical director, administer and monitor medications and classes of medications defined in Appendix B of these rules in accordance with the provisions of Section 3 of these rules.
- 4.3 Any EMT-Basic who is a member or employee of an EMS service agency and who performs said emergency medical acts must have authorization and be supervised by a medical director to perform said emergency medical acts.
- 4.4 EMT-Basics may carry out a physician order for a mental health hold as set forth in § 27-10-105(1), C.R.S. Such physician order may be a direct verbal order or by electronic communications.
- 4.5 An EMT-Basic who has successfully completed a department-recognized intravenous education course may be referred to as an “Emergency Medical Technician – Basic with IV Authorization.” Any provisions of these rules that are applicable to an EMT-Basic shall also be applicable to an EMT-Basic with IV Authorization. In addition to the acts an EMT-Basic is allowed to perform, an EMT-Basic with IV Authorization may, under supervision and authorization of a medical director, perform medical acts consistent with and not to exceed those listed in Appendix A of these rules for an EMT-Basic with IV Authorization in accordance with the provisions of Section 3 of these rules. In addition to the medications and classes of medications an EMT-Basic is allowed to administer and monitor pursuant to these rules, an EMT-Basic with IV Authorization may, under supervision and authorization of a medical director, administer and monitor medications and classes of medications defined in Appendix B in accordance with the provisions of Section 3 of these rules.

#### SECTION 5 - Medical Acts Allowed for the EMT-Intermediate

- 5.1 In addition to the acts an EMT-Basic and an EMT-Basic with IV Authorization are allowed to perform pursuant to these rules, an EMT-Intermediate may, under the supervision and authorization of a medical director perform advanced emergency medical care acts consistent with and not to exceed those listed in Appendix A of these rules in accordance with the provisions of Section 3 of these rules.
- 5.2 In addition to the medications and classes of medications an EMT-Basic and an EMT-Basic with IV Authorization are allowed to administer and monitor pursuant to these rules, an EMT-Intermediate may, under the supervision and authorization of a medical director, administer and monitor medications and classes of medications defined in Appendix B in accordance with the provisions of Section 3 of these rules.
- 5.3 EMT-Intermediates may carry out a physician order for a mental health hold as set forth in § 27-10-105(1), C.R.S. Such physician order may be a direct verbal order or by electronic communications.
- 5.4 A medical director may allow an EMT-Intermediate to administer drugs described in Appendix B, under the direct visual supervision of an EMT-Paramedic when the following conditions have been established:

- a) Drugs administered must be limited to those authorized by the BME for EMT-Intermediates as stated in Appendix B in accordance with the provisions of Section 3 of these rules.
- b) The EMT-Paramedic must be supervised by the same physician supervising the EMT-Intermediate.
- c) The medical director must amend the appropriate protocols and medical continuous quality improvement program used to supervise personnel to reflect this change in patient care.

5.5 In the event of disaster or emergency, the Chief Medical Officer for the Department of Public Health and Environment or the State EMS Medical Director may temporarily authorize the administration of other immunizations, vaccines, biologicals or tests not listed in these rules.

#### SECTION 6 - Medical Acts Allowed for the EMT-Paramedic

6.1 In addition to the acts an EMT-Intermediate is allowed to perform pursuant to these rules, an EMT-Paramedic may, under the supervision and authorization of a medical director, perform advanced emergency medical care acts consistent with and not to exceed those listed in Appendix A of these rules in accordance with the provisions of Section 3 of these rules.

6.2 In addition to the medications and classes of medications an EMT-Intermediate is allowed to administer and monitor pursuant to these rules, an EMT-Paramedic may, under the supervision and authorization of a medical director, administer and monitor medications and classes of medications defined in Appendix B, under standing order or direct verbal order of a physician, including by electronic communications, in accordance with the provisions of Section 3 of these rules.

6.3 EMT-Paramedics may carry out a physician order for a mental health hold as set forth in § 27-10-105(1), C.R.S. Such physician order may be a direct verbal order or by electronic communications.

6.4 Except as provided below, a medical director may apply for a waiver from the BME to authorize EMTs under his or her direction to perform skills or administer specific medications not listed in Appendix A or B of this rule. In addition to the acts an EMT is allowed to perform, an EMT may, under supervision and authorization of a medical director who has been granted a waiver from the BME, perform advanced medical care acts and/or administer medications not listed in Appendix A or Appendix B of these rules in accordance with the provisions of Section 3 of these rules. Waivered skills or medication administration may be authorized by the medical director under standing orders or direct verbal orders of a physician, including by electronic communications, in accordance with the provisions of Section 3 of these rules. Under prior BME rules and policies, some EMT-Paramedics have been functioning as EMT-Paramedics with critical care authorization without going through the waiver process. In recognition of the time required to complete the waiver process, the BME will permit such EMT-Paramedics who were functioning in this capacity prior to June 30, 2005, to continue to perform the acts and administer and monitor the medications

referenced in this paragraph until June 22, 2008, without going through the waiver process. This grace period is not meant to encourage EMT-Paramedics and medical directors to postpone completing appropriate waiver applications, however. Instead, EMT-Paramedics and medical directors are encouraged to complete waiver applications as soon as possible. No EMT-Paramedic shall function beyond the scope of practice identified in Appendix A and Appendix B after June 22, 2008, unless that EMT-Paramedic's medical director has received a waiver.

## SECTION 7- General Acts Allowed

7.1 Department-certified EMTs may function in acute care settings. Functioning in this

a department-certified EMT pursuant to these rules of the BME may be initiated by any person or by the BME or the department.

9.2 Pursuant to § 12-36-106(2), C.R.S., any person who performs any of the acts constituting the practice of medicine as defined by § 12-36-106(1), C.R.S. and who is not licensed by the BME to practice medicine or exempt from licensure requirements by some provision of § 12-36-106, C.R.S. shall be deemed to be practicing medicine without a license. Such person may be held criminally liable pursuant to § 12-36-129(1), C.R.S. and/or may be the subject of injunctive proceedings by the BME in the name of the people of the State of Colorado pursuant to § 12-36-132, C.R.S.

9.3 All acts in violation of these rules of the BME by a physician shall be referred to the BME for review and appropriate action in accordance with § 12-36-118, C.R.S. Complaints in writing relating to the actions of any physician pursuant to these rules of the BME may be initiated by any person or by the BME or the department.

## APPENDIX A

### MEDICAL SKILLS AND ACTS ALLOWED

This document defines the maximum skills that may be delegated to an EMT-Basic, EMT-Basic with IV Authorization, EMT-Intermediate, EMT-Paramedic and by a medical director.

- Y = YES      May be performed by emergency medical technicians with physician supervision as described in these rules.
- Y<sup>1</sup> =      Medical skills and acts not specifically addressed in the National Standard EMT Curricula and additional local training is recommended. As such, medical directors shall ensure that individuals performing these skills and acts obtain appropriate additional training.
- N = NO      May not be performed by emergency medical technicians except with a BME-approved waiver as described in Section 7.4 of these rules.
- B =      Medical acts and skills that may be performed by an EMT-Basic with appropriate medical director supervision and training recognized by the department.
- B-IV =      Medical acts and skills that may be performed by an EMT-Basic with IV Authorization with appropriate medical director supervision and training recognized by the department.
- I =      Medical acts and skills that may be performed by an EMT-Intermediate with appropriate medical director supervision and training recognized by the department.
- P =      Medical acts and skills that may be performed by an EMT-Paramedic with appropriate medical director supervision and training recognized by the department.

<b>AIRWAY/VENTILATION/OXYGEN ADMINISTRATION</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Airway – Esophageal-Single Lumen	N	N	N	N
Airway – Laryngeal Mask	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Airway – Esophageal/Tracheal – Multi Lumen	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Airway – Nasal	Y	Y	Y	Y
Airway – Oral	Y	Y	Y	Y
Bag – Valve – Mask (BVM)	Y	Y	Y	Y
Oxygen Powered Ventilation Device	Y	Y	Y	Y
Chest Decompression – Needle	N	N	Y	Y
Chest Tube Insertion	N	N	N	N
Chest Tube Monitoring	N	N	N	N
CPAP/BiPAP/PEEP	N	N	N	Y
Cricoid Pressure (Sellick)	Y	Y	Y	Y
Cricothyroidotomy – Needle	N	N	N	Y
Cricothyroidotomy – Surgical	N	N	N	N
Demand Valve – Oxygen Powered	Y	Y	Y	Y
End Tidal CO <sub>2</sub> Monitoring/Capnometry/ Capnography	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Gastric Decompression – NG/OG Tube Insertion	N	N	N	Y
Head-tilt/Chin-lift	Y	Y	Y	Y
Intubation – Digital	N	N	N	Y
Intubation – Lighted Stylet	N	N	Y	Y
Intubation – Medication Assisted (non-paralytic)	N	N	N	N
Intubation – Medication Assisted (paralytics) (RSI)	N	N	N	N
Intubation – Maintenance with (paralytics)	N	N	N	N
Intubation – Nasotracheal	N	N	N	Y
Intubation – Orotracheal	N	N	Y	Y
Intubation – Retrograde	N	N	N	N
Extubation	N	N	Y	Y
Jaw-thrust	Y	Y	Y	Y
Jaw-thrust – Modified (trauma)	Y	Y	Y	Y
Mouth-to-Barrier	Y	Y	Y	Y
Mouth-to-Mouth	Y	Y	Y	Y
Mouth-to-Nose	Y	Y	Y	Y
Mouth-to-Stoma	Y	Y	Y	Y
Obstruction – Direct Laryngoscopy	N	N	Y	Y
Obstruction – Manual	Y	Y	Y	Y

<b>Skill (continued)</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Oxygen Therapy – Humidifiers	Y	Y	Y	Y
Oxygen Therapy – Nasal Cannula	Y	Y	Y	Y
Oxygen Therapy – Non-rebreather Mask	Y	Y	Y	Y
Oxygen Therapy – Simple Face Mask	Y	Y	Y	Y
Oxygen Therapy – Venturi Mask	N	N	Y	Y
Peak Expiratory Flow Testing	N	N	Y	Y
Pulse Oximetry	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Suctioning – Tracheobronchial	N	N	Y	Y
Suctioning – Upper Airway	Y	Y	Y	Y
Tracheal Tube Maintenance – Includes replacement	N	N	Y	Y
Ventilators – Automated Transport (ATV)	N	N	N	Y
<b>CARDIOVASCULAR/CIRCULATORY SUPPORT</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Cardiac Monitoring – Non-interpretive	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Cardiac Monitoring - 3 Lead, interpretative	N	N	Y	Y
Cardiac Monitoring – 12 Lead, interpretative	N	N	N	Y
Cardiopulmonary Resuscitation (CPR)	Y	Y	Y	Y
Cardioversion – Electrical	N	N	N	Y
Carotid Massage	N	N	N	Y
Defibrillation – Automated/Semi-Automated (AED)	Y	Y	Y	Y
Defibrillation – Manual	N	N	Y	Y
External Pelvic Compression	Y	Y	Y	Y
Hemorrhage Control – Direct Pressure	Y	Y	Y	Y
Hemorrhage Control – Pressure Point	Y	Y	Y	Y
Hemorrhage Control – Tourniquet	Y	Y	Y	Y
MAST/Pneumatic Anti-Shock Garment	Y	Y	Y	Y
Mechanical CPR Device	Y	Y	Y	Y
Transcutaneous Pacing	N	N	Y	Y
Transvenous Pacing – Maintenance	N	N	N	N
Implantable Cardioverter/Defibrillator Magnet Use	N	N	N	N
Arterial Blood Pressure Indwelling Catheter – Maintenance	N	N	N	N
Invasive Intracardiac Catheters – Maintenance	N	N	N	N
Central Venous Catheter Insertion	N	N	N	N

<b>Skill (continued)</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Central Venous Catheter Maintenance/Patency	N	N	Y	Y
Central Venous Catheter Maintenance/ Interpretation	N	N	N	N
Percutaneous Pericardiocentesis	N	N	N	N
<b>IMMOBILIZATION</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Spinal Immobilization – Cervical Collar	Y	Y	Y	Y
Spinal Immobilization – Long Board	Y	Y	Y	Y
Spinal Immobilization – Manual Stabilization	Y	Y	Y	Y
Spinal Immobilization – Seated Patient, etc.	Y	Y	Y	Y
Splinting – Manual	Y	Y	Y	Y
Splinting – Rigid	Y	Y	Y	Y
Splinting – Soft	Y	Y	Y	Y
Splinting – Traction	Y	Y	Y	Y
Splinting – Vacuum	Y	Y	Y	Y
<b>INTRAVENOUS CANNULATION/FLUID ADMINISTRATION/FLUID MAINTENANCE</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Blood/Blood By-Products Initiation (out of facility initiation)	N	N	N	N
Blood/Blood By-Products Initiation (post facility initiation)	N	N	N	N
Blood/Blood By-Products Monitoring	N	N	N	N
Colloids - (Albumin, Dextran) – Initiation	N	N	N	N
Crystalloids (D <sub>5</sub> W, LR, NS) – Initiation/Maintenance	N	Y	Y	Y
Intraosseous – Initiation	N	N	Y	Y
Medicated IV Fluids Maintenance – As Authorized in Appendix B	N	N	Y	Y
Peripheral – Excluding External Jugular - Initiation	N	Y	Y	Y
Peripheral – Including External Jugular – Initiation	N	N	Y	Y
Use of Indwelling Catheter for IV medications	N	Y <sup>1</sup>	Y <sup>1</sup>	Y
<b>MEDICATION ADMINISTRATION - ROUTES</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Aerosolized/Nebulized	N	N	Y	Y
Buccal	Y	Y	Y	Y
Endotracheal Tube (ET)	N	N	Y	Y

<b>Skill (continued)</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Extra-abdominal umbilical vein	N	N	Y <sup>1</sup>	Y <sup>1</sup>
Intradermal	N	N	Y	Y
Intramuscular (IM)	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Intranasal (IN)	N	Y	Y	Y
Intraosseous	N	N	Y	Y
Intravenous (IV) Piggyback	N	N	Y	Y
Intravenous (IV) Push	N	Y	Y	Y
Nasogastric	N	N	N	Y
Ophthalmic	N	N	Y	Y
Oral	Y	Y	Y	Y
Rectal	N	N	Y	Y
Subcutaneous	Y	Y	Y	Y
Sublingual	Y	Y	Y	Y
Topical	N	N	Y	Y
Use of Mechanical Infusion Pumps	N	N	Y	Y
<b>MISCELLANEOUS</b>				
<b>Skill</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Aortic Balloon Pump Monitoring	N	N	N	N
Assisted Delivery	Y	Y	Y	Y
Blood Glucose Monitoring	Y <sup>1</sup>	Y	Y	Y
Dressing/Bandaging	Y	Y	Y	Y
Eye Irrigation Noninvasive	Y	Y	Y	Y
Eye Irrigation Morgan Lens	N	N	Y	Y
Maintenance of Intracranial Monitoring Lines	N	N	N	N
Urinary Catheterization - Initiation	N	N	N	Y
Urinary Catheterization – Maintenance	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Venous Blood Sampling – Obtaining	N	Y	Y	Y

## APPENDIX B

### FORMULARY OF MEDICATIONS ALLOWED TO BE ADMINISTERED

#### COLORADO EMERGENCY MEDICAL TECHNICIAN

This document defines the medications that an EMT-Basic, EMT-Basic with IV Authorization, EMT-Intermediate and EMT-Paramedic may administer under appropriate supervision by a medical director.

Y = YES      May be performed by emergency medical technicians with physician supervision as described in these rules.

Y<sup>1</sup> =      Medications not specifically addressed in the National Standard EMT Curricula and additional local training is recommended. As such, medical directors shall ensure that individuals administering these medications obtain appropriate additional training.

Y\* =      Medications with an asterisk (\*) shall be administered only under direct verbal order by a physician. All other medications may be administered under standing orders or direct verbal orders.

N = NO      May not be performed by emergency medical technician except with a BME approved waiver as described in Section 100verbal 6( )se ru

Additions to this medication formulary cannot be delegated unless a waiver has been granted as described in Section 7.4 of these rules.

<b>GENERAL</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Over-the-counter-medications	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Oxygen	Y	Y	Y	Y
<b>ANTIDOTES</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Atropine	N	N	Y*	Y
Calcium salt - Calcium chloride	N	N	N	Y
Calcium salt - Calcium gluconate	N	N	N	Y
Cyanide antidote kit	N	N	Y <sup>1</sup>	Y
Naloxone (Narcan)	N	Y	Y	Y
Nerve agent antidote kit	Y <sup>1</sup>	Y <sup>1</sup>	Y	Y
Pralidoxime (Protopam)	N	N	N	Y
Sodium bicarbonate	N	N	N	Y
<b>BEHAVIORAL MANAGEMENT</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Anti-Psychotic - Haloperidol (Haldol)	N	N	Y*	Y
Anti-Psychotic - Olanzapine (Zyprexa)	N	N	N	Y
Anti-Psychotic - Zispraside (Geodon)	N	N	N	Y
Benzodiazepine - Diazepam (Valium)	N	N	Y*	Y
Benzodiazepine - Lorazepam (Ativan)	N	N	N	Y
Benzodiazepine - Midazolam (Versed)	N	N	N	Y
Diphenhydramine (Benadryl)	N	N	Y*	Y
<b>CARDIOVASCULAR</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Adenosine (Adenocard)	N	N	Y*	Y
Amiodarone (Cordarone)—bolus infusion only	N	N	Y*	Y
Aspirin	Y	Y	Y	Y
Atropine	N	N	Y*	Y
Calcium salt - Calcium chloride	N	N	N	Y
Calcium salt - Calcium gluconate	N	N	N	Y
Diltiazem (Cardizem)—bolus infusion only	N	N	N	Y

<b>Medications (continued)</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Dopamine	N	N	N	Y
Epinephrine	N	N	Y*	Y
Lidocaine (Xylocaine)—bolus and continuous infusion	N	N	Y*	Y
Magnesium sulfate—bolus infusion only	N	N	N	Y
Morphine sulfate	N	N	Y*	Y
Sodium bicarbonate	N	N	Y*	Y
Sublingual Nitroglycerin (Patient assisted)	Y*	Y*	Y	Y
Sublingual Nitroglycerin	N	N	Y	Y
Topical Nitroglycerin paste	N	N	Y*	Y
Vasopressin (Pitressin)	N	N	Y*	Y
Verapamil (Calan)—bolus infusion only	N	N	N	Y
<b>DIURETICS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Butanemide (Bumex)	N	N	N	Y
Furosemide (Lasix)	N	N	Y*	Y
Mannitol (Osmotrol) (trauma use only)	N	N	N	Y
<b>ENDOCRINE AND METABOLISM</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
IV Dextrose	N	Y	Y	Y
Glucagon	N	N	Y	Y
Oral glucose	Y	Y	Y	Y
Thiamine	N	N	N	Y
<b>GASTROINTESTINAL MEDICATIONS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Anti-nausea - Metoclopramide (Reglan)	N	N	Y*	Y
Anti-nausea - Ondansetron (Zofran)	N	N	Y*	Y
Anti-nausea - Prochlorperazine (Compazine)	N	N	N	Y
Anti-nausea - Promethazine (Phenergan)	N	N	Y*	Y
Decontaminant - Activated charcoal	Y	Y	Y	Y
Decontaminant – Sorbitol	Y	Y	Y	Y

<b>PAIN MANAGEMENT</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Benzodiazepine - Diazepam (Valium)	N	N	Y* <sup>1</sup>	Y
Benzodiazepine - Lorazepam (Ativan)	N	N	Y* <sup>1</sup>	Y
Benzodiazepine - Midazolam (Versed)	N	N	N	Y
General - Nitrous oxide (Nitronox)	N	N	Y*	Y
Narcotic Analgesic - Fentanyl (Sublimaze)	N	N	Y*	Y
Narcotic Analgesic - Hydromorphone (Dilaudid)	N	N	N	Y
Narcotic Analgesic - Morphine sulfate	N	N	Y*	Y
Ophthalmic anesthetic – Opthaine	N	N	Y	Y
Ophthalmic anesthetic –Tetracaine	N	N	Y	Y
Topical Anesthetic - Benzocaine (Cetacaine) spray	N	N	N	Y
Topical Anesthetic - Lidocaine (Xylocaine) jelly	N	N	N	Y
Topical Anesthetic – Lidocaine (for intraosseous)	N	N	Y	Y
<b>RESPIRATORY AND ALLERGIC REACTION MEDICATIONS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Antihistamine - Diphenhydramine (Benadryl)	N	N	Y*	Y
Bronchodilator – Anticholinergic – Atropine (aerosol/nebulized)	N	N	Y*	Y
Bronchodilator – Anticholinergic - Ipratropium (Atrovent)	N	N	Y*	Y
Bronchodilator - Beta agonist – Albuterol	N	N	Y*	Y
Bronchodilator - Beta agonist - L-Albuterol	N	N	Y*	Y
Bronchodilator - Beta agonist - Metaproterenol	N	N	Y*	Y
Corticosteroid - Dexamethasone (Decadron)	N	N	N	Y
Corticosteroid - Methylprednisolone (Solu-Medrol)	N	N	Y*	Y
Corticosteroid – Prednisone	N	N	N	Y
Epinephrine	N	N	Y*	Y
Epinephrine Auto-Injector	Y	Y	Y	Y
Magnesium Sulfate—bolus infusion only	N	N	N	Y
Racemic Epinephrine (Vaponephrine)	N	N	Y*	Y
Short Acting Bronchodilator meter dose inhalers (MDI) (Patient assisted)	Y*	Y*	Y*	Y
Short Acting Bronchodilator meter dose inhalers (MDI)	N	N	Y*	Y
Terbutaline (Brethine)	N	N	N	Y

<b>SEIZURE MANAGEMENT</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Benzodiazepine - Diazepam (Valium)	N	N	Y*	Y
Benzodiazepine - Lorazepam (Ativan)	N	N	Y*	Y
Benzodiazepine - Midazolam (Versed)	N	N	N	Y
OB -associated – Magnesium sulfate – bolus infusion only	N	N	N	Y
<b>VACCINES</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Post-exposure, employment, or pre-employment related - Hepatitis B	N	N	N	Y
Post-exposure, employment, or pre-employment related - Tetanus	N	N	N	Y
Post-exposure, employment, or pre-employment related - Influenza	N	N	N	Y
Post-exposure, employment, or pre-employment related - PPD placement	N	N	N	Y
Public Health Related - Vaccine administration in conjunction with County Public Health Departments and local EMS medical direction, after demonstration of proper training, will be authorized for public health vaccination efforts and pandemic planning exercises.	N	N	Y	Y
<b>MISCELLANEOUS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Phenylephrine – (Neo-synephrine) intranasal	N	N	N	Y

### **Technology- and Pharmacology- Dependent Patients**

The transport of patients with continuous intravenously administered medications and nutritional support, previously prescribed by licensed health care workers and typically managed day-to-day at their residence by either the patient or caretakers, shall be allowed in the state EMS formulary. This will simplify transport options for patients that currently may require specialized critical care transport teams under existing Rule. The EMS provider is not authorized to manage, alter, or interfere with these patient medication/nutrition systems except after direct contact with medical control, and where cessation and/or continuation of medication pose a threat to the safety and well-being of the patient.

### **Procedural Sedation**

Procedural sedation, as defined by the combination of intravenous agents such as benzodiazepines and/or narcotics for the planned purpose of facilitating the performance of a procedure is not an authorized EMS practice in Colorado.

## INTER-FACILITY TRANSPORT FORMULARY

The following formulary agents are approved for inter-facility transport of patients, with the requirements that the agents must have been initiated initially in a medical facility under the direct order and supervision of licensed medical providers, and are NOT authorized for field initiation. EMS continuation and monitoring of these agents is to be allowed without any upwards titration of these agents, with the EMS providers continuing the same medical standards of care with regards to patient monitoring and use of infusion pump technology that was initiated in the medical care setting.

It is understood that the inter-facility use of agents in this section is not addressed in the National Standard EMT-Intermediate or EMT-Paramedic Curricula. As such, it is the responsibility of individuals using the agents listed below to obtain appropriate additional training as needed to effectively utilize these medications in the inter-facility transport environment.

The hemodynamically unstable patient, as well as the critical patient requiring vasopressors, inotropes, other vasoactive medications, insulin infusions, or continuous anti-convulsant or sedative infusions represent an unstable or critical patient, and should be transported preferentially by a paramedic performing according to his/her certification in a safe manner under the control and quality improvement process of the medical director or via either specialty team critical care transport or accompanied by licensed personnel from the referring institution; such personnel may include a registered nurse or physician or other appropriate allied health care professional. Patients should be transported pursuant to transfer agreements that are consistent with the capability of the institution and the well-being of the patient.

<b>CARDIOVASCULAR</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Anti-arrhythmic - Amiodarone (Cordarone) – continuous infusion	N	N	Y	Y
Anti-arrhythmic - Lidocaine (Xylocaine)— continuous infusion	N	N	Y	Y
Anticoagulant - Glycoprotein inhibitors	N	N	N	Y
Anticoagulant - Heparin (unfractionated)	N	N	N	Y
Anticoagulant - Low Molecular Weight Heparin (LMWH)	N	N	N	Y
Diltiazem (Cardizem) (maximum rate of 15 mg per hour)	N	N	N	Y
Nitroglycerin, intravenous	N	N	N	Y <sup>1</sup>
<b>HIGH RISK OBSTETRICAL PATIENTS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Magnesium sulfate (monitor only, maximum 4 gram per hour)	N	N	N	Y
Oxytocin (Pitocin) – infusion	N	N	N	Y

<b>INTRAVENOUS SOLUTIONS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Hospital/medical facility initiated crystalloids	N	Y	Y	Y
Hospital/medical facility initiated colloids (non-blood component) infusions	N	N	Y	Y
Total parenteral nutrition (TPN) and/or vitamins	N	N	Y	Y
<b>MISCELLANEOUS</b>				
<b>Medications</b>	<b>B</b>	<b>B-IV</b>	<b>I</b>	<b>P</b>
Antibiotic infusions - Hospital initiated	N	N	Y	Y
Antidote infusion – Sodium bicarbonate infusion	N	N	N	Y
Electrolyte infusion – Magnesium sulfate (maximum rate 4 grams per hour)	N	N	N	Y
Electrolyte infusion – Potassium chloride (maximum rate of 10 mEq per hour)	N	N	N	Y
Methylprednisolone (Solu-Medrol) – infusion	N	N	N	Y

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