

STATE OF COLORADO

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Colorado Department
of Public Health
and Environment

May 1, 2009

To: EMS Medical Directors and Field Providers

From: Arthur Kanowitz, MD FACEP
Medical Director
Emergency Medical and Trauma Services (EMTS) Section

Re: Summary of Changes to Rule 500 Approved by the BME

Dear EMS Medical Directors and EMS Field Providers:

The Board of Medical Examiners (BME) recently approved changes to Rule 500 which are effective as of 4/30/2009. I am sending this communication to all EMS Medical Directors and EMS Field Providers because the changes to Rule 500 are very important and will in one way or another affect all of you.

Most of the approved changes result from the input we received from all of our stakeholders, including EMS Medical Directors, field providers, EMS agency directors, Fire Chiefs, hospital personnel, and the Colorado Hospital Association. Over a 9-month period, we received proposals for change as well as significant input on those proposals. The Medical Direction Committee, who makes recommendations to the BME on behalf of CDPHE, then reviewed that information. The BME took input from the public and reviewed the proposed changes at a rulemaking hearing on February 19, 2009.

The BME posted the revised Rule 500 on its website: www.dora.state.co.us/medical/rules.htm. Please make sure that when you download a new version of Rule 500 that you confirm that it is the newest version and that it has an effective date of 4/30/2009, listed on the last page of the Rule.

The following is a summary of the approved changes to Rule 500. There are a number of formatting and wording changes to the document that are not included in the summary.

Section 4.6

EMT-B-IVs will be allowed to administer medications which exceed those listed in Appendices B&D for EMT-B-IV, under the direct supervision of an EMT-I or EMT-P if the patient is in extremis or cardiac arrest. This must be authorized in written protocol by both the EMT-B-IV's medical director and the EMT-I / EMT-P's medical director.

Section 5.4

The EMT-I will be allowed to administer medications which exceed those listed in Appendices B&D for EMT-Intermediates under the direct supervision of an EMT-P if the patient is in extremis or cardiac arrest. This must be authorized in written protocol by both the EMT-I's medical director and the EMT-P's medical director.

Appendices (General Notes)

1. Y¹ in Appendix A refers to medical skills and acts not specifically addressed in the National Standard Curriculum for EMTs. The reference was there as a recommendation to medical directors that individuals performing these skills and acts obtain appropriate additional local training necessary to ensure competency. The Y¹ reference was removed and replaced by wording that states "the medical director must ensure appropriate training and competency for all skills and acts authorized under Rule 500, regardless of whether or not it is covered by a National Education Standard".
2. Y* references those medications that require a direct verbal order from a physician. A special circumstances section was added here to clarify those circumstances when the EMT-I may not be able to contact a physician for a direct order but would be allowed to administer them under standing order. Those situations include:
 - a. Cardiac arrest (amiodarone, atropine, epinephrine, lidocaine, vasopressin)
 - b. Behavioral management (haloperidol, diazepam, and midazolam) when the safety of the patient or the EMT are at risk.

In such special circumstances when a direct verbal order has not been obtained, the medical director should be notified.

Appendix A – Prehospital Skills

1. Several procedures were removed and included within the general classification of CPR (cardiopulmonary resuscitation):
 - c. Head-tilt/chin-lift
 - d. Jaw thrust
 - e. Mouth-to-mouth; mouth-to-nose; mouth-to-stoma; mouth-to-barrier
2. Carbon Monoxide Monitoring will be allowed by all levels.
3. Chest tube monitoring during interfacility transfer will be allowed for EMT-P. This will be placed under the new Appendix C.
4. CPAP for the EMT-I will be allowed. (Currently EMT-P only.)
5. Oxygen Powered Ventilatory Device will be replaced by Flow Restrictive Oxygen Powered Ventilatory Device.
6. Inspiratory Impedance Threshold Device will be allowed for all levels.
7. Bougie-Style Introducer for Intubation will be allowed for EMT-I and EMT-P.
8. Tracheostomy maintenance, when necessary for airway management, will be allowed for EMT-B and EMT-B IV. (Currently EMT-I and EMT-P.)
9. Tracheostomy maintenance Including Replacement will be allowed for the EMT-I. (Currently EMT-P only.)
10. Clarification: Application of EKG electrodes and EKG data transmission will be allowed for EMT-B and EMT-B-IV; Interpretation of both rhythm and 12-lead will be allowed for EMT-I in addition to EMT-P.
11. Central Venous Catheter Maintenance / Patency / and USE will be allowed for EMT-I and EMT-P.
12. Use of indwelling catheter for IV medications was clarified to indicate peripheral catheter and not central catheters including PICC lines.
13. EMT-B and EMT-B-IV will be allowed to use aerosolized / nebulized / atomized routes of medication administration.
14. Intra-Aortic Balloon Pump Monitoring was added to the Appendix A to specifically EXCLUDE its use by any level EMT.

15. Physical Examination was added to Appendix A. In the previous version there was no specific reference that allowed physical examination, sphygmomanometry, etc.
16. The types of restraint were added to Appendix A to clarify its use: verbal and physical restraint by all levels. Chemical restraint by EMT-I and EMT-P only.
17. Therapeutic Induced Hypothermia was added to Appendix A. Approved procedures related to TIH include
 - a. Approved surface cooling methods
 - i. Ice packs
 - ii. Evaporative cooling
 - iii. Cooling Blankets
 - iv. Surface heat-exchange devices
 - b. Approved internal cooling methods
 - i. Intravenous administration of cold (4⁰C / 39⁰F) crystalloids
 - ii. Endovascular Heat Exchange Catheters (NOT APPROVED)
 - c. Approved medication for reduction of shivering
 - i. Fentanyl
 - ii. Midazolam
 - iii. Paralytics (Require Waiver even if already approved for RSI)
 - d. Esophageal Temperature Probes will be allowed for TIH.
 - e. EMS Medical Directors should not put TIH into protocol unless receiving facilities have TIH.

Appendix B - Prehospital Medication Formulary

1. Glucagon will be allowed as an antidote (B-Blocker / Ca Channel Blocker OD) for EMT-I (direct order) EMT-P (standing order).
2. The word kit will be removed from all antidotes. Not all antidotes allowed come in kits. Some come in individual medications.
3. Droperidol was added to the behavioral management and anti-nausea sections to specifically indicate that it is NOT ALLOWED without waiver for any level.
4. Midazolam for pain management and seizure management will be allowed for EMT-I (direct order). Currently both diazepam and lorazepam are allowed but not midazolam.
5. Midazolam and Fentanyl for therapeutic induced hypothermia (TIH) will be allowed for EMT-I (direct order) and EMT-P.
6. Albuterol will be allowed for EMT-B and EMT-B-IV (direct order).

7. Lidocaine bolus for intubation of head injured patients will be allowed by EMT-I and EMT-P.

8. Topical hemostatic agents will be allowed for all levels.

Interfacility Transport

The following paragraph will replace the general introduction to the interfacility transport section:

The EMS Medical Director, in collaboration with the transferring facility's medical director, should have protocols in place to ensure the appropriate level of care is available during interfacility transport and the transporting EMT may decline to transport any patient they feel requires a level of care beyond their capabilities.

Inter-facility transport typically involves three types of patients:

- 1. Those patients whose safe transport can be accomplished by ambulance, under the care of an EMT-Basic, EMT-Intermediate, or EMT-Paramedic, within the "acts allowed" prescribed by Rule 500.*
- 2. Those patients whose safe transport can be accomplished by ambulance, under the care of an EMT-Paramedic, but may require skills to be performed or medications to be administered that are outside the "acts allowed" prescribed by Rule 500, but have been approved through waiver granted by the BME.*
- 3. Those patients whose safe transport requires the skills and expertise of a critical care transport team under the care of an experienced critical care practitioner.*

The hemodynamically unstable patient (typically from an Intensive Care setting) who requires special monitoring (i.e. CVP, ICP), multiple cardioactive/vasoactive medications, or specialized critical care equipment (i.e. intra-aortic balloon pump) should remain under the care of an experienced critical care practitioner and every attempt should be made to transport that patient while maintaining the appropriate level of care. The capabilities of the institution, the capabilities of the transporting agency and most importantly, the well-being of the patient, should be considered when making transport decisions.

New Appendix C – Interfacility Transport Skills

- 1. Intra-Aortic Balloon Pump Monitoring will be added here with a NO for all levels to clarify that IFT with IABP is not allowed.*

2. Central Venous Pressure Monitoring will be added to Appendix C with a NO for all levels to clarify that IFT with CVP Monitoring is not allowed.
3. Chest Tube Monitoring during IFT will be allowed for EMT-P.

New Appendix D – Interfacility Medication Formulary

1. Monitoring and maintenance of medical facility initiated blood as well as initiation of hospital supplied blood during IFT will be allowed by EMT-P.
2. Dobutamine infusions during IFT will be allowed for EMT-P.
3. Insulin Infusions during IFT will be allowed for EMT-P.
4. Mannitol infusions during IFT will be allowed for EMT-P.

There are a few revisions to Rule 500 that were introduced by the BME at the rulemaking hearing. These proposed revisions were discussed by those present and adopted by the BME. These changes included in the NEW Rule 500 deal with the “*sun-setting*” of waivers and are included in section 7.5:

7.5 Waivers granted by the Board on or after November 21, 2009 shall be in effect for a period not to exceed 2 years unless otherwise specified by the Board. For waivers authorized by the Board prior to November 21, 2009, the expiration date shall be as follows:

- a) *If the waiver identified a date of expiration, the waiver shall expire on that date.*
- b) *For waivers that do not include a date of expiration or otherwise identify any length of duration, such waivers shall expire in accordance with the schedule outlined below:*
 - i. *Waivers filed by a medical director whose last name begins with A through H shall expire on February 1, 2010.*
 - ii. *Waivers filed by a medical director whose last name begins with I through P shall expire on February 1, 2011.*
 - iii. *Waivers filed by a medical director whose last name begins with Q through Z shall expire on February 1, 2012.*
- c) *This provision does not prohibit a medical director from requesting that the Board renew a waiver previously submitted provided that the information is appropriately updated and otherwise in compliance with this rule.*

It is important that all EMS medical directors and EMTs of any level read, understand, and abide by the new rules as adopted by the BME. Please make sure to verify the April 30, 2009 effective date on the last page of Rule 500 before reading or distributing.

If you have any questions feel free to contact me at 303 692-2984 or Marilyn Bourn, the State Training Coordinator at 303 692-2995.

Sincerely



Arthur Kanowitz, MD FACEP

Chairman
Medical Direction Committee

Medical Director
Emergency Medical and Trauma Services Section
Colorado Department of Public Health and Environment