Standard Practice for Training Instructor Qualification and Certification Eligibility of Emergency Medical Dispatchers¹

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INTRODUCTION

The emergency medical dispatcher (EMD) is the principal link between the public requesting emergency medical assistance and the emergency medical services (EMS) system. The EMD plays a key role in the ability of the EMS system to respond to a perceived medical emergency. The benefits of specifically trained emergency medical dispatchers are far reaching. Through medical dispatch, specific education, and compliance to medically sound policies and procedures, the EMD is able to accurately interrogate the caller, dispatch the appropriate responders, provide pertinent information to responders, and give instructions to aid patients via the caller.

This practice provides direction for the training and certification of emergency medical dispatchers to assist them in making appropriate decisions about EMS responses in a safe, consistent and non-arbitrary manner. EMS systems with emergency medical dispatchers trained to this practice provide pre-arrival instructions to the caller to assist the patient until pre-hospital care arrives. The EMD concept provides for safer vehicle response configurations and modes. It may reduce operating costs by preserving specialized EMS resources for those emergencies requiring them.

The EMD training curriculum is not intended to furnish all inclusive telecommunications education required for the emergency medical dispatcher or public safety telecommunicator. EMD training provides only the additional education affecting the practice of dispatching emergency medical resources such as ambulances, rescue units, first responder units and other types of responding units of an emergency medical nature; coordinating these response units with those of other public safety agencies; and providing instructions to the calling party to assist in preserving life prior to the arrival of responding units. The curriculum is intended to provide specific knowledge and medical information above that required of a previously trained and educated basic public safety telecommunicator. EMD training is only one module of education required of emergency medical services telecommunicators. It is a subspecialty of both public safety communications and emergency medical services systems that is required within a comprehensive public safety communications center where other disciplines of communications are practiced and should be present in all EMS systems. Additional disciplines include law enforcement, fire, and aeromedical telecommunications.

This practice is one of a set of applicable standards relating to the emergency medical dispatch function. The reader is directed to obtain related ASTM documents that encompass the administration of EMD programs and Practice F1258.

1. Scope

1.1 This practice covers the training structure and primary function of emergency medical dispatchers. The primary function of the emergency medical dispatcher is the management of

calls for emergency medical assistance as outlined in Practice F1258 and NAEMSP Position Paper on emergency medical dispatch. Training as an emergency medical technician, paramedic, nurse, physician, or basic telecommunicator does not prepare a person to function as an EMD. The emergency medical dispatching functions have become so specialized that only an individual with dispatch specific medical training can perform the required tasks. This practice will delineate the training structure for the essential role of emergency medical dispatcher.

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- 1.2 This practice is intended to outline the basic areas of knowledge required for an EMD, and to standardize the expectations and training between the various educational settings that are available to deliver the EMD training. This practice is not intended to serve as a curriculum for a training agency. All curricula developed or selected shall include the key components outlined in this practice.
- 1.3 It is understood that each agency may possess special and unique needs related to the training of EMDs. However, those specialty training areas that lie outside the scope of this standard shall not be included in selected 24 h minimum curriculum delineated by this practice. Additional training as desired may be annexed but may not supplant the learning goals required by this practice.
 - 1.4 The scope of this standard includes:
 - 1.4.1 EMD instructor qualifications,
- 1.4.2 Student selection criteria for emergency medical dispatcher candidates,
- 1.4.3 Emergency medical dispatcher training curriculum guideline,
- 1.4.4 Guidelines for EMD course goals and minimum time allocations,
- 1.4.5 Testing and evaluation of the student utilizing the stated course goals as basis for certification or certification eligibility as an emergency medical dispatcher,
- 1.4.6 Recommended equipment, materials, and facilities for training,
- 1.4.7 Guidelines for training course administration and record maintenance, and
 - 1.4.8 Guidelines for an optional EMD preceptorship.
- 1.5 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 ASTM Standards:²

F1177 Terminology Relating to Emergency Medical Services

F1258 Practice for Emergency Medical Dispatch

3. Terminology

- 3.1 Definitions of Terms Specific to This Standard:
- 3.1.1 *coding*—the selection and assignment of an alphanumeric classification to a call by an EMD.
- 3.1.2 emergency medical dispatcher (EMD)—a trained public safety telecommunicator with additional training and specific emergency medical knowledge essential for the efficient management of emergency medical communications.
- 3.1.3 emergency medical dispatch priority reference system (EMDPRS)—a medically approved reference system used by a
- ² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

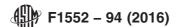
- local dispatch agency to dispatch aid to medical emergencies, which includes: systematized caller interrogation questions, systematized pre-arrival instructions, and protocols matching the dispatcher's evaluation of injury or illness severity with vehicle response mode and configuration.
- 3.1.3.1 *Discussion*—An EMDPRS is not any particular proprietary set of cards or questions. It is a generic set of protocols meeting this description.
- 3.1.4 *EMD preceptorship*—a supervised dispatcher internship sponsored by the training agency.
- 3.1.5 *EMD selection*—the process that establishes criteria to identify a candidate for training as an emergency medical dispatcher (EMD).
- 3.1.6 *pre-arrival instructions*—telephone rendered, medically approved written instructions given by trained emergency medical dispatchers through callers that help to provide aid to the victim and control of the situation prior to patient access by pre-hospital care providers.
- 3.1.7 public safety telecommunicator—an individual trained to communicate by electronic means with persons seeking emergency assistance and with agencies and individuals providing such assistance.

4. Significance and Use

4.1 The emergency medical dispatcher should be a specially trained telecommunicator with specific emergency medical knowledge. These EMS personnel have traditionally performed this role without the benefits of dispatch specific medical training and medically sound protocols. Prompt, correct, and appropriate patient care can be enhanced with the use of a standardized approach to selection, training and performance assessment. This standard guide is intended for use by agencies, organizations and jurisdictions having the responsibility for providing the training, practice, and evaluation of emergency medical dispatchers.

5. Instructor Qualifications

- 5.1 All instructors shall be thoroughly knowledgeable about the emergency medical dispatching environment and with the working environment of public safety telecommunications.
- 5.2 It is essential that the emergency medical dispatch instructor be capable of understanding, adequately presenting, and defending ALS level-Dispatch Life Support information. This necessitates that the instructor responsible for teaching the medical portion of the training program have training, skill, and experience at the advanced EMT (EMT-I/EMT-P) level. Alternatively, this instructor may be a critical care trained physician, nurse or physician assistant. This level of instructor qualification is necessary to facilitate the student's understanding of medical classifications necessary to interrogate and evaluate the input of the caller, as well as their ability to systematically categorize the information obtained from the caller and assign appropriate and locally designed response configurations and modes.
- 5.3 The instructor shall have proven competence as an instructor in a related field.



- 5.4 EMD instructors shall be proficient in the specific skills and concepts taught in the EMD course.
- 5.5 Each instructor shall have successfully completed a recognized EMD training course.

6. Selection Criteria for Training

- 6.1 Each EMD training entity shall adopt a formal written policy delineating the selection procedures for individuals to be trained or employed as emergency medical dispatchers, or both. It must address the ability to:
- 6.1.1 Read and write at a high school graduate or GED level;
- 6.1.2 Perform those clerical skills as delineated by the employing agency;
- 6.1.3 Perform verbal skills in a clear and understandable manner, in the required language or languages established in the criteria as necessary to that dispatch provider agency;
- 6.1.4 Perform alpha-numeric transcription skills necessary to correctly record addresses, locations, and telephone numbers; and.
- 6.1.5 Demonstrate competency in basic telecommunications skills as defined by the training or hiring agency.
- 6.2 Selection criteria should also include the following traits:
- 6.2.1 A clear attribute of helpfulness and compassion toward the sick or injured patient and the caller advocate;
- 6.2.2 The attributes necessary to clearly guide callers in crisis through necessary interrogation procedures and the provision of telephone pre-arrival instructions;
- 6.2.3 The attributes of learning necessary to master the skills, philosophy, and knowledge required to successfully complete the training process;
- 6.2.4 The attributes necessary to efficiently and effectively organize multiple tasks and complicated situations and activities;
- 6.2.5 The ability to handle the known levels of emotional stress clearly present in caller/patient crisis intervention, death and dying situations, call prioritization and triage, and multiple tasking;
- 6.2.6 The abilities necessary to function within the team framework of public safety and EMS systems;
- 6.2.7 The abilities to elicit and assimilate caller information and then to prioritize but appropriately consolidate (summarize) this information in a format used to inform the public safety responders.

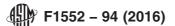
7. Emergency Medical Dispatcher Training Curriculum Guidelines

- 7.1 The EMD curriculum must be specific to this subspecialty of telecommunications and emergency medical systems.
- 7.2 The EMD curriculum used shall consist of lesson plans with defined educational goals and objectives. The lesson plans and their individual objectives shall coincide with the practice standards listed in reference documents and in the appendix. The EMD training curriculum shall address the concepts of design and the application of skills necessary for the appropriate use of the EMDPRS utilized within their dispatch agency.

- 7.3 The curriculum used shall include the learning goals contained in this practice.
- 7.4 The specific curriculum used must follow a logical and progressive sequence of presentation.
- 7.5 The medical portion of the emergency medical dispatch priority reference system (EMDPRS) shall not be modified or changed in any manner by the instructing agency or instructors.

8. Emergency Medical Dispatcher Course Goals and Minimum Time Allocations

- 8.1 This course provides instruction and skills practice sufficient to achieve EMD certification eligibility. The minimum time allocation of this course shall be 24 h.
- 8.2 The following EMD course goals are delineated with their associated minimum time allocations. Although 19 h are mandated, all 24 h of the EMD course must be utilized in teaching these required goals. The remaining 5 h are to be dispersed so the learning goals may be tailored to each training agencies requirements. It is imperative the "no less than" (NLT) hours be followed when developing an EMD course.
- 8.3 Develop a basic understanding of the rationale for emergency medical dispatching including (NLT 1 hour):
 - 8.3.1 The history of EMD,
 - 8.3.2 The evolution of EMD,
 - 8.3.3 The philosophy of EMD,
 - 8.3.4 Common misconceptions of EMD,
- 8.4 Develop a basic understanding of the roles and responsibilities of EMD: (NLT 1 h),
 - 8.4.1 The sub-roles and segments of the duties,
 - 8.4.2 Professional subspecialties,
 - 8.4.2.1 Public safety community,
 - 8.4.2.2 Law enforcement,
 - 8.4.2.3 Fire communications.
 - 8.4.2.4 EMS communications,
 - 8.4.2.5 The medical community team,
 - 8.4.2.6 A colleague of the medical profession,
- 8.5 Develop an understanding of the medical-legal aspects of EMD (NLT 1 h),
 - 8.5.1 The legal concepts affecting the EMD,
 - 8.5.1.1 Negligence,
 - 8.5.1.2 Abandonment,
 - 8.5.1.3 Foreseeability,
 - 8.5.2 Misconceptions and inappropriate concerns, and
 - 8.5.3 Appropriate concerns.
- 8.6 Gain the knowledge necessary to successfully interrogate callers to obtain relevant information (NLT 1 h):
 - 8.6.1 Rationale for interrogation,
 - 8.6.2 Understand the psychology of the caller,
 - 8.6.3 Chief complaint determination,
 - 8.6.4 The caller's hysteria threshold,
 - 8.6.5 The concept of repetitive persistence, and
- 8.6.6 The types of callers (minority groups, third party, children, disabled and speech impaired, and so forth).
- 8.7 Develop an understanding of the concepts of dispatch life support (DLS) and the psychological aspects of providing pre-arrival instructions (NLT 1 h):



- 8.7.1 Practical limitations confronting the EMD, and
- 8.7.2 Predictable events affecting DLS delivery.
- 8.8 Develop an understanding of the methodologies for delivering pre-arrival instructions and demonstrate the practical use of the pre-arrival instructions (NLT 1 h):
- 8.8.1 Understand the various categories of pre-arrival instructions contained in the employing agency's EMDPRS including written protocols and verbatim scripts,
- 8.8.2 Understand the requirements for formal pre-arrival instructions,
- 8.8.3 Understand the necessity for formal written treatment scripts,
- 8.8.4 Demonstrate the practical application of pre-arrival instruction, and
- 8.8.5 Demonstrate the verbatim delivery of formal treatment scripts.
- 8.9 Develop an understanding of those pre-hospital medical emergencies and emergency medical complaints as found in the employing agency's EMDPRS (NLT 8 h).
- 8.10 Develop a working knowledge of each EMDPRS chief complaint to include interrogation, coding, response, and related pre-arrival instructions (NLT 1 h):
- 8.10.1 Configuration of EMDPRS used by the employing agency,
 - 8.10.2 Flow through the configuration, and
 - 8.10.3 Interaction between EMDPRS elements.
- 8.11 Develop an understanding of how to handle all EMD functions in a prompt and accurate manner while being courteous and professional in dealing with all callers.
- 8.12 Demonstrate the ability to utilize all of the components of the employing agency's EMDPRS (NLT 2 h):
 - 8.12.1 Interrogation,
 - 8.12.2 Coding,
 - 8.12.3 Response, and
 - 8.12.4 Related pre-arrival instructions.
- 8.13 Gain an appreciation of the influence of the correct functioning of trained professional emergency medical dispatchers through their routine utilization the EMDPRS.
- 8.14 Understand the basic principles and components of quality assurance/improvement and their relationship to the application of correct dispatch processes (NLT 1 h).
- 8.15 Become certified or certification eligible emergency medical dispatcher via designated agency or government channels (NLT 1 h):
 - 8.15.1 Required testing and evaluation.

9. Equipment, Materials, and Facilities

- 9.1 The need for the audio-video equipment will be determined by the types of audio-visual teaching materials utilized.
- 9.2 Suggested audio-visual equipment and materials needed for an EMD course may include:
 - 9.2.1 Lectern/podium,
 - 9.2.2 Chalk board or dry erase board,
 - 9.2.3 Flip chart (if used),
 - 9.2.4 Overhead slide or movie projector, or both,

- 9.2.5 Spare bulbs for projector,
- 9.2.6 Electrical extension cords as needed,
- 9.2.7 Projection screen,
- 9.2.8 Audio tape player,
- 9.2.9 Videotape player and monitor,
- 9.2.10 Pointer, and
- 9.2.11 Additional audio-video equipment and training aids as required.
- 9.3 Student and instructor textbooks and reference materials, including:
 - 9.3.1 Instructor's lesson plan,
- 9.3.2 Lesson plans shall be based on the EMDPRS used by the employing dispatching agency,
- 9.3.3 Each lesson plan must contain a listing of the unit performance objectives, needed materials and equipment, textual content, practice exercises and review questions or evaluation mechanisms,
 - 9.3.4 Student study guide (one for each student),
- 9.3.5 The study guide shall include the same performance objectives as the lesson plans and shall be used as a working document throughout the instructional course. The student study guide shall be retained by the student at the completion of the EMD course and may serve as a review tool after the student has completed the training program,
 - 9.3.6 Course schedule (one for each student), and
 - 9.3.7 Student performance objectives (one for each student).
- 9.4 Films, slides, overhead transparencies, audio and video tapes to accompany lessons, as required for instructional objectives.
 - 9.5 Written final examination.
 - 9.6 Written course evaluation.
- 9.7 Emergency medical dispatch priority reference system (EMDPRS) approved by the medical control physician (one for each student).
- 9.8 The classroom must be well lighted to permit students to take notes and refer to the study guide and handouts. The room must have adequate heating, ventilation, or air conditioning, or both, to ensure the comfort of the students and instructor.
- 9.9 Each student should have a chair and table or desk at which to take notes.

10. Training Course Administration

- 10.1 The collection, maintenance and dissemination of records required to document the conduct of the program and to assess how well the course achieves its objectives must occur. The following records shall be maintained:
 - 10.1.1 Factual and accurate student attendance records,
- 10.1.2 Factual and accurate student performance records, including, comments regarding need for improvement in skills or knowledge,
 - 10.1.3 Identity and qualifications of the instructor(s),
- 10.1.4 Records of the evaluation of instructor(s) performance, and
 - 10.1.5 Records of course content evaluations.

11. Optional Preceptorship for Emergency Medical Dispatchers

- 11.1 Once an individual has successfully completed the initial EMD training course, an optional preceptorship program may allow the individual to experience the intense and demanding conditions that exist in an emergency communications center. It may include:
- 11.1.1 Orientation manual for new EMDs specific to the participating agency's operation,
- 11.1.2 Orientation through one-on-one preceptorship with a competent, experienced, trained, emergency medical dispatcher, and
- 11.1.3 Evaluation should be performed through the participating agency's quality assurance/quality improvement program.

12. Student Reference Texts

- 12.1 Textbooks and course material from established EMD programs may be utilized.
- 12.2 Students should have access to a selection of reference documents and training materials that deal with emergency medical dispatching.

13. Keywords

13.1 curriculum; dispatcher; dispatch life support (DLS); emergency medical dispatch; emergency medical dispatcher (EMD); pre-arrival instructions; preceptorship; telecommunicator

APPENDIX

(Nonmandatory Information)

X1. RELATED PUBLICATIONS

- X1.1 Principles of EMS Systems: A Comprehensive Text for Physicians. Roush, W. R. ed, American College of Emergency Physicians, Dallas, 1989.
- X1.2 *EMS Medical Directors Handbook*, Kuehl, Alexander. C. V. Mosby Company, St. Louis, Second edition, 1993.
- X1.3 Principles of Emergency Medical Dispatch, Clawson, Jeff J., M.D. and Dernocoeur, Kate B., Brady/Prentice Hall,

Englewood Cliffs, NJ 1988.

- X1.4 APCO Basic Telecommunicator Student Manual, APCO Inc., South Daytona Beach, FL.
- X1.5 Emergency Dispatching: A Medical Communicators Guide. Steel, S., Brady/Prentice Hall, Englewood Cliffs, NJ, 1992.

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