EMD STANDARDS: WHAT DO THEY MEAN?

Standards dictate the level of knowledge and expertise required of students and instructors.

By Dorothy Cave

Any emergency medical dispatch (EMD) program in the United States must adhere to the emergency medical dispatch national standards. These standards were created by ASTM International, National Highway Traffic Safety Administration (NHTSA) and American Heart Association (AHA). The standards provide specific information about what we can and cannot do within the EMD program. They also outline the specific requirements and credentials for individuals who can teach EMD.

Who provides these national standards? One such group is ASTM International, founded as the American Society for Testing and Materials, provides over 12,000 ASTM standards globally. Not only do their standards provide direction for the EMD program, which includes training requirements for students as well as requirements for instructors and emergency medical dispatch managers.

**ASTM Standard F1258 – Student:** This standard provides the responsibilities, knowledge and practices for students. The standard states that anyone who is an emergency medical dispatcher must have additional training and specific emergency medical knowledge. They are trained to diagnose any issue a caller has and to evaluate the patient based on symptoms and signs they are provided by the caller. From there the EMD must allocate the proper resources. Depending on the information given, this could be anything from a basic life support (BLS) ambulance to an advanced life support (ALS) ambulance with law enforcement and fire. Once the initial information is provided, documented and dispatched, the EMD will provide callers with pre-arrival instructions. One thing to remember is that these directions are not given by the EMD without the direction of an agency medical director. This is a medical doctor that agrees to oversee the EMD program along with the agency EMD manager or agency EMD instructor. Everyone plays a part in ensuring the program is correct and the information that the EMDs are providing to callers is current. The EMDs must have a knowledge and understanding of interrogation techniques, triage decisions, information transmission and medical intervention via the telephone. They must also be able to coordinate with other agencies and emergency services; they must know how and when to use their mutual aid agreements.

**ASTM Standard F1552 – Instructor:** This standard provides the specialized training any emergency medical dispatch instructor must have in order to remain compliant with national standards. All instructors must be knowledgeable in reference to EMD and hold an EMD certification. If they choose to teach the entire course — medical information as well as the telecommunicator information — they must not only be a proven instructor but also have experience as an advanced EMT or paramedic. This is not to ensure that the dispatchers have in-depth medical training but to ensure the students have the knowledge they need. Agencies may have one instructor that can fulfill both the medical and telecommunicator roles or have two instructors, one for each portion of the training.

**ASTM Standard F1560 – Management:** Even though the emergency medical dispatcher is the direct link with responders, agencies must have someone in place that handles the day-to-day operations of the EMD program. This person is the emergency medical dispatch manager, who serves as the direct link between the telecommunicators and the medical director and higher chain of command. This person works hand in hand with the medical director when creating and updating guidecards and oversees the program elements of training, instruction and emergency medical service (EMS) responses. The EMD manager will also be responsible for all quality assurance/quality improvement (QA/QI) plans for the telecommunicators. The standard states that QA/QI must be based on a telecommunicator’s performance over a minimum of 7% to 10% of the entire spectrum of call types.
Other standards that should be followed for emergency medical dispatch are provided by NHTSA, the EMD Instructors Guide. These standards are free for download to anyone. Even though NHTSA primarily deals with our EMS providers, they also tend to agree with the ASTM standards. These are used a great deal as reference material due to the fact that the last update was in 1995 for EMD. They provide the basic steps for telecommunicators, instructors and EMD managers.

The last national standard an EMD program should follow is for cardiopulmonary resuscitation (CPR). One of the partnering forces for CPR guidelines is American Heart Association. Their focused update guidelines are based on the systematic review of antiarrhythmic therapy. The focused update is a result of the 2018 International Consensus on Science with Treatment Recommendation (CoSTR) statements. The Advanced Life Support (ALS) Task Force of the International Liaison Committee on Resuscitation (ILCOR) are the driving forces that partners with AHA. This task force drives the recommendations for how CPR is to be conducted on an ambulance, which in turn drives how an EMD is to give CPR directions. All EMDs must maintain a current CPR card during their EMD career.

These recommendations have changed a lot over the last nine years. CPR guidecards tend to follow the directions for CPR that AHA provides. They went from giving rescue breaths to chest compressions only and now a combination of chest compressions and rescue breaths. The chest compression count has also changed. We now advise that between 100 and 120 chest compressions must be performed in one minute. The reason for the chest compression is to ensure that oxygenated blood continues to flow through vital organs. This is a life-saving guidecard and must be read verbatim to ensure everyone that gives the CPR instructions does it the same way.

The EMDs must have a knowledge and understanding of interrogation techniques, triage decisions, information transmission and medical intervention via the telephone.
exact same way every time no matter who the telecommunicator is.

Why do we have to follow the national standards? The main reason is because the people that created and update the national standards understand that accurate and consistent information and caller instructions are vital to the effectiveness of and EMD program. They also have their fingers on the pulse of the medical industry, and they see the changes far quicker than we do in the emergency communications centers. If EMDs follow the agency guidelines and guidecards that the EMD manager and medical director have worked on, the liability is greatly diminished.

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**REFERENCES**
Circulation, “2018 American Heart Association Focused Update on Advanced Cardiovascular Life Support Use of Antiarrhythmic Drugs During and Immediately After Cardiac Arrest: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care” by Ashish R. Panchal, et. al. www.ahajournals.org/doi/full/10.1161/CIR.000000000000613


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**CDE EXAM #54560**

1. The national standard EMD follows are all of the following except?
   a. ASTM
   b. CDC
   c. NHTSA
   d. AHA

2. Quality assurance/quality control should consist of ___ to ___% of the entire spectrum of call types.
   a. 7-10
   b. 15-18
   c. 3-5
   d. 10-12

3. The EMD manager only works closely with the telecommunicator?
   a. True
   b. False

4. The last update from NHTSA for EMD came in?
   a. 1995
   b. 2001
   c. 1982
   d. 2019

5. The AHA CPR compression rate is ____ per minute?
   a. 90-100
   b. 100-120
   c. 150-180
   d. 65-75

6. American Heart Association teams with ___ and ___ to create the Focused Update?
   a. ALS
   b. ILCOR
   c. ICMA
   d. GMA

7. The ASTM standard that directs the EMD Instructor is?
   a. F1552
   b. F1258
   c. F1560
   d. F1392

8. The ASTM standard that directs the EMD manager is?
   a. F1552
   b. F1258
   c. F1560
   d. F1392

9. The ASTM Standard that directs the EMD Student is?
   a. F1552
   b. F1258
   c. F1560
   d. F1392

10. There is no need to remain CPR certified during your EMD career after the first time CPR certified?
    a. True
    b. False

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