Standard Practice for Performance of Prehospital Manual Defibrillation¹

This standard is issued under the fixed designation F 1254; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

ε¹ Note—Section 7 on Keywords was added editorially in November 1995.

1. Scope

- 1.1 This practice covers guidelines for prehospital providers performing manual defibrillation.
- 1.2 This practice is one in a set of performance guidelines for prehospital defibrillation.
- 1.3 This practice is specifically not meant to deal with equipment specifications, quality assurance, or training.
- 1.4 This practice is limited to external defibrillators used in the prehospital setting.
- 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:
- F 1031 Practice for Training the Emergency Medical Technician (Basic)²
- F 1149 Practice for Qualifications, Responsibilities, and Authority of Individuals and Institutions Providing Medical Direction of Emergency Medical Services² ASTM F
- F 1177 Terminology Relating to Emergency Medical Services²
- 2.2 American Heart Association Document:
- National Standards and Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care (ECC), American Heart Association (Current Edition)³

3. Terminology

- 3.1 Definitions of Terms Specific to This Standard:
- 3.1.1 basic life support/cardiopulmonary resuscitation (BLS/CPR)—a set of skills that includes airway management, chest compressions, and others defined by the American Heart Association.
- 3.1.2 *defibrillation*—the discharge of an electrical current through the heart for the purpose of restoring a perfusing

cardiac rhythm. For the purpose of this document, defibrillation may include cardioversion.

- 3.1.3 *manual defibrillator*—a monitor/defibrillator that has no capability for rhythm analysis and will charge and deliver a shock only at the command of the operator.
- 3.1.4 operator—as outlined in this practice, an Emergency Medical Technician (Practice F 1031) who has successfully completed a course of training and may treat prehospital cardiac arrest with a manual defibrillator. Legal functioning as an operator will be based upon licensure/certification requirements as established by the authority or authorities having jurisdiction.
 - 3.1.5 protocols—See Terminology F 1177.
- 3.1.6 *service medical director*—the physician who is medicolegally responsible for the patient care provided by the operator (Practice F 1149).
- 3.1.7 standing orders—See Terminology F 1177.

4. Significance and Use

- 4.1 This practice establishes minimum guidelines for prehospital manual defibrillation.
- 4.2 Any person who is identified as prehospital manual defibrillation operator shall be an Emergency Medical Technician, as defined by the authority or authorities having jurisdiction, and shall meet the requirements of this practice.
- 4.3 Using this practice, emergency medical service institutions, organizations, and certification/licensing agencies should be able to develop standards for the certification/licensing and practice of the prehospital manual defibrillation operator.

5. Standards for Prehospital Manual Defibrillation

- 5.1 The operator shall be familiar with all operations of the defibrillator.
- 5.2 The operator shall be capable of performing prehospital defibrillation in accordance with standing orders or protocols, or both, developed or approved, or both, by the service medical director or other medical authority or authorities, or both, having jurisdiction.
- 5.3 The operator shall be capable of recognizing a patient who is unresponsive, apneic and pulseless.
- 5.4 The operator shall be capable of applying and activating the defibrillator according to manufacturer's recommendations and standing orders/protocols.
 - 5.5 The operator shall be capable of assessing certain

 $^{^{1}}$ This practice is under the jurisdiction of ASTM Committee F-30 on Emergency Medical Services and is the direct responsibility of Subcommittee F30.02 on Personnel, Training, and Education.

Current edition approved March 5, 1990. Published April 1990.

² Annual Book of ASTM Standards, Vol 13.01.

³ Available from the American Heart Association, 7320 Greenville Ave., Dallas, TX 75231.