



Standard Practice for Performance of Prehospital Automated Defibrillation¹

This standard is issued under the fixed designation F 1255; 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 November 1995.

1. Scope

1.1 This practice covers guidelines for the performance of automated 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 1149 Practice for the Qualifications, Responsibilities and Authority of Individuals and Institutions Providing Medical Direction of Emergency Medical Services²

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 *automated defibrillator*—an automatic or semi-automatic device, or both, capable of rhythm analysis and defibrillation after electronically detecting the presence of ventricular fibrillation and ventricular tachycardia.

3.1.2 *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.

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.

3.1.3 *defibrillation*—the discharge of an electrical current through the heart for the purpose of restoring a perfusing cardiac rhythm. For the purpose of this practice, defibrillation may include cardioversion.

3.1.4 *operator*—as outlined in this practice, a person who has successfully completed a course of training and may treat prehospital cardiac arrest with an automatic or semi-automatic defibrillator. Legal functioning as an operator will be based upon licensure or certification requirements, or both, as established by the authority or authorities having jurisdiction.

3.1.5 *protocols*—See Definitions F 1177.

3.1.6 *service medical director*—the physician who is medico-legally responsible for the patient care provided by the operator (Practice F 1149).

3.1.7 *standing orders*—See Definitions F 1177.

4. Significance and Use

4.1 This practice establishes minimum guidelines for prehospital automated defibrillation.

4.2 This standard does not preclude the use of automated defibrillators as prescribed by a licensed physician.

4.3 All persons who are identified as prehospital automated defibrillation operators shall meet the requirements of this practice.

4.4 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 automated defibrillation operator.

5. Guidelines for Prehospital Automated Defibrillation

5.1 The operator shall be familiar with all operations of the automated defibrillator.

5.2 The operator shall be capable of performing prehospital defibrillation in accordance with standing orders, protocols developed, approval by the service medical director or other medical authority or authorities having jurisdiction, or a combination thereof.

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 preparing the automated defibrillator for operational use.

5.5 The operator shall be capable of applying and activating the automated defibrillator according to the manufacturer's recommendations and standing orders/protocols.