



Standard Practice for Performance of Prehospital Automated Defibrillation¹

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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:*²

F1149 Practice for Qualifications, Responsibilities, and Authority of Individuals and Institutions Providing Medical Direction of Emergency Medical Services

F1177 Terminology Relating to Emergency Medical Services

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.

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 Terminology **F1177**.

3.1.6 *service medical director*—the physician who is medico-legally responsible for the patient care provided by the operator (Practice **F1149**).

3.1.7 *standing orders*—See Terminology **F1177**.

4. Significance and Use

4.1 This practice establishes minimum guidelines for prehospital automated defibrillation.

4.2 This practice 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

¹ This practice is under the jurisdiction of ASTM Committee **F30** on Emergency Medical Services and is the direct responsibility of Subcommittee **F30.02** on Personnel, Training and Education.

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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.

³ Available from American Heart Association (AHA), 7272 Greenville Ave., Dallas, TX 75231, <http://www.americanheart.org>.