

# **Sample EMT-D AED Medical Control Program**

Agency Name: \_\_\_\_\_

## **Medical Control Committee**

Physician Advisor: \_\_\_\_\_

EMS Coordinator: \_\_\_\_\_

Hospital: \_\_\_\_\_

Training: \_\_\_\_\_ Group: \_\_\_\_\_

EMT-B AED Authorized: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Adapted with permission from Memorial Hospital, Colorado Springs, CO 80909. Courtesy of William G. Mayfield, RN, Nurse EMS Specialist.

This document is intended to be used as a guide. State and local legislation, regulations, documentation, data management requirements, and system design vary and must be taken into consideration when designing a medical control program.

## SECTION 1 — INTRODUCTION

This document outlines the requirements of all persons participating in the \_\_\_\_\_ (the Service) AED program. All members authorized to perform AED will do so only after approval and with the authorization of Dr. \_\_\_\_\_, physician advisor for the Service.

The Service is developing an early cardiac care system in attempt to reduce the morbidity and mortality associated with sudden cardiac death. The following components of an early cardiac care system are now being developed in our community.

### Early Defibrillation

It has been proven that defibrillation should be delivered to the victim of sudden cardiac death as soon as possible. The average response time of the emergency medical service is \_\_\_\_\_ minutes. By \_\_\_\_\_ (date) the service will be equipped to provide automated external defibrillation (AED) at their station.

### Advanced Life Support

Advanced Life Support (ALS) will be available from \_\_\_\_\_. All potential cardiac patients are transported as soon as possible to the most appropriate hospital where care is assumed by ACLS proficient nurses and physicians. The average response time for an ALS ambulance is \_\_\_\_\_ minutes. The service provides paid EMT-Basic level first response crews twenty-four hour each day allowing rapid response times.

### Training

Training of members will be provided by \_\_\_\_\_ EMT — AED Training Group. \_\_\_\_\_ is approved for AED education through the EMS Division of the State of \_\_\_\_\_.

## SECTION 2 — DEFINITIONS

The following definitions provide a working knowledge of terminology utilized in this document.

- A. AED — A semiautomatic or automatic defibrillation device.
- B. Audits — A medical review conducted by the EMS Coordinator or the Physician Advisor for an AED use.
- C. Case Reviews — A continuing education program conducted by the Physician Advisor or his designee in which actual run sheets of patient care are reviewed with AED providers. Prehospital care, in hospital care & patient outcome are discussed.
- D. EMT-B — Any person currently certified in the State at the EMT-Basic level.
- E. EMT-D — Any person registered with the EMS Division as an EMT-B who has been trained to perform automated defibrillation with permission of the Physician Advisor for their service agency.

- F. EMS Coordinator — The individual identified by the Physician Advisor who has certain responsibilities delegated to him or her from the Physician Advisor.
- G. Medical Control — Hospital (clinic) based physician available on request, for communication of medical direction to prehospital EMS providers in field locations.
- H. Medical Protocols — The specific patient care protocols for the EMT-D when using an AED.
- I. Medical Control Committee — A committee designed to monitor the AED program and insure appropriate patient care, documentation and medical control of the AED program. The committee shall consist of the Physician Advisor, EMS Coordinator, one representative of the hospital, one representative of the Training Group, and one practicing EMT-B with AED authorization.
- J. Physician Advisor — The physician responsible for all aspects of the service dealing with the provision of medical care.
- K. Professional BCLS — Basic cardiac life support training for health care providers that includes one and two person CPR.
- L. Response Time — From time of dispatch to arrival at scene.
- M. Survival — Discharge from the hospital with or without neurological deficit.

### **SECTION 3 — MEDICAL CONTROL COMMITTEE**

A Medical Control Committee has been formed to assist the Physician Advisor with the medical supervision of prehospital personnel and the patient care aspects of the agency. This responsibility now includes the AED program outlined in this document.

- A. The Committee consists of:
  - 1. Physician Advisor
  - 2. EMS Coordinator
  - 3. One RN from the hospital
  - 4. One representative of the Training Group
- B. The committee will meet at the request of the Physician Advisor or the EMS Coordinator at least every 90 days to review the AED program.
- C. The committee may change the requirements of the AED program subject to the approval of the Physician Advisor. The Committee shall at all times incorporate by reference and act in conformance to state statute, rules and regulations of the Board of Medical Examiners, EMS Division and local ordinances.

### **SECTION 4 — EMT-D SKILLS COMPETENCY REQUIREMENTS**

- A. Every three months, or sooner if needed, and as deemed necessary, the EMS Coordinator will schedule an EMT-D skills review. Each EMT-D supervised by the Physician Advisor is responsible for attending this session every 90 days. Each EMT-D will do the following at each skills session:
  - 1. Demonstrate AED use during one simulated case of ventricular fibrillation.
  - 2. Demonstrate at least one troubleshooting technique during a simulation of a cardiac arrest.
  - 3. Demonstrate inspection and testing of the AED unit using the checklist provided.
- B. Attendance at the skills sessions will be recorded by the EMS Coordinator.

- C. Any EMT-D who fails to attend and successfully demonstrate the above requirements will no longer be authorized to perform AED until the above requirements are met, and permission for reauthorization has been received by the EMT from the EMS Coordinator and the Physician Advisor.
- D. Any new member of the Service with state authorized AED training or any member who has not been authorized to perform AED under the physician advisor who wishes AED authorization must:
  - 1. Provide proof of successful completion of an approved EMT-D course, and
  - 2. Provide proof of current professional BLS course completion from AHA or American Red Cross (ARC), and
  - 3. Perform the skills demonstration requirements stated within this section to the satisfaction of the EMS Coordinator, and
  - 4. Have written authorization by the Physician Advisor.

## **SECTION 5 — EMT-D RESPONSIBILITIES FOLLOWING AED USE**

- A. When electrodes are applied and the AED is turned on, together these shall constitute "Use of the AED." After any use of the AED, the EMT-D will do the following:
  - 1. Transfer the data to medical control computer (when equipment is available) by direct connection or modem and/or print hard copy report and submit to medical control.
    - a. Print two copies of the report (when equipment is available).
    - b. Place one copy with the runsheet left at the hospital.
    - c. Submit one copy as stated below.
  - 2. Complete the AED reporting forms, and
  - 3. Retain a copy of the medical services report form (trip sheet) for review.
- B. The above documentation will be delivered to the EMS Coordinator or Physician Advisor by the next working day.
- C. Failure of the EMT-D to comply with this section may result in counseling and retraining.

## **SECTION 6 — AED AUDIT AND REVIEW**

- A. The EMS Coordinator or Physician Advisor shall review each AED use for at least the following criteria:
  - a. Dispatch appropriate
  - b. Witnessed arrest documented
  - c. Bystander CPR documented
  - d. Response time to scene
  - e. Appropriate use of the AED
  - f. Equipment properly and quickly setup according to protocol
  - g. Patient's pulse was checked according to protocol
  - h. EMT-D properly identified and gives report
  - i. First shock delivered within 90 seconds of initiation of use
  - j. Adequate BLS maintained
  - k. Reassessment adequate following every shock
  - l. All protocols followed
  - m. Time care was transferred to ALS personnel noted on audio
  - n. Appropriate transfer of care to ALS
  - o. Data properly transferred to Medical Control

- B. The Physician Advisor or the EMS Coordinator will forward a copy of the AED report, and run sheet to the address below within 30 days of the AED use and following a review of the AED use with the EMT-Ds involved.

Address:

## **SECTION 7 — AED REVIEW WITH EMT-Ds**

- A. Within 30 days of use of the AED, the EMS Coordinator and/or the Physician Advisor will contact the EMT-Ds involved to arrange for an AED review. The review is designed to give the EMT-D feedback on performance of the crew and the AED. The patient outcome will also be discussed.
- B. The EMS Coordinator and/or the Physician Advisor will review in person with the EMT-Ds involved all information about the call where appropriate.
- C. The review may be done by telephone for any AED use where protocol was followed, proper analysis was made, and no shock was advised.

## **SECTION 8 — CORRECTIVE ACTION FOR DEFICIENCIES**

- A. Any deficiency identified by the EMS Coordinator shall be promptly brought to the attention of the Physician Advisor. The EMS Coordinator and the Physician Advisor will decide on a case by case basis what action should be taken on any deficiency identified.
- B. All deficiencies in personnel performance will be addressed during the AED review with the EMT-Ds involved. The Physician Advisor will make the final decision as to when remedial training is necessary for any EMT-D, and requirements of such training.
- C. All deficiencies in machine performance shall be handled on a case by case basis by the EMS Coordinator with the assistance of the manufacturer's representative if necessary.
  - 1. If the machine is found to be malfunctioning, the EMS Coordinator shall be contacted immediately and an incident report will be completed and forwarded to the Physician Advisor.
  - 2. If the machine is found to be malfunctioning, the EMS Coordinator will place the AED unit out of service until it can be repaired or replaced by the Service representative.
  - 3. A maintenance log shall be maintained on all machine deficiencies. The log and all incident reports relating to machine performance will be reviewed at every Medical Control Committee meeting.

## **SECTION 9 — MAINTENANCE OF AED EQUIPMENT**

Each EMT-D shall make a commitment to assuring the equipment is in proper working order. The "Automated Defibrillators: Operator's Shift Checklist" shall be completed daily and after each AED use.

## SECTION 10 — ANNUAL AED SYSTEM REVIEW

- A. Once every year, the EMS Coordinator shall prepare a report for the Medical Control Committee that will contain at least the following:
  - 1. Summary data on use and survivability.
  - 2. Response times on all cardiac arrests and AED uses.
  - 3. Personnel deficiencies in the operation of the AED.
  - 4. AED machine deficiencies.
  - 5. Any trends identified through the AED Medical Control Program.
  - 6. All deviations from protocol.
- B. Once every year, the Medical Control Committee will meet to review the report prepared by the EMS Coordinator and all activities related to the AED program. At this meeting, the following shall be addressed.
  - 1. How to improve survivability and patient outcome.
  - 2. Cost effectiveness of the AED program.
  - 3. Recommendations for changes to the program.

## SECTION 11 — AED PROTOCOLS

- A. All AED machines have been programmed with the current AHA protocol (2001). This protocol shall be utilized by all EMT-Ds for the off-line medical direction of the Physician Advisor.
- B. Any deviation from this protocol shall be reported to on-line medical control as soon as radio or telephone contact is made.
- C. Any deviation from this protocol shall be reported to the EMS Coordinator using an incident report and the AED forms immediately after use of the AED.

Signature: \_\_\_\_\_, M.D.      Date: \_\_\_\_\_

## SECTION 12 — SUPPORTING INFORMATION

American Heart Association. *ACLS Provider Manual*. Chapter 3. AHA: 2001.

American Heart Association. *ACLS: Principles and Practice—The Reference Textbook*. Chapter 6. AHA: 2003

This “AED Medical Control Program” was developed through a collaborative effort of:

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