

SCHOOL-BASED PUBLIC ACCESS DEFIBRILLATION PROGRAM

INTRODUCTION

A public access defibrillation (PAD) program provides an opportunity for trained responders at Souhegan High School to deliver early defibrillation to victims of sudden cardiac arrest (SCA). Sudden Cardiac Arrest is a condition that occurs when the electrical impulses of the human heart malfunction causing a disturbance in the heart's electrical rhythm called ventricular fibrillation (VF). This erratic and ineffective electrical heart rhythm causes complete cessation of the heart's normal function of pumping blood resulting in sudden death. The most effective treatment for this condition is the administration of an electrical current to the heart by a defibrillator, delivered within a short time of the onset of VF. Use of an Automated External Defibrillator (AED) is intended to maximize the chance of survival based upon the steps taken during the critical minutes before emergency medical services (EMS) providers arrive and assume responsibility for care of the patient.

An AED is used to treat victims who experience SCA. It is only applied to victims who are unconscious, without pulse, signs of circulation and normal breathing. The AED will analyze the heart rhythm and advise operator if a shockable rhythm is detected. If a shockable rhythm is detected, the AED will charge to the appropriate energy level and advise operator to deliver shock.

I. GOALS AND OBJECTIVES

The goals of this AED program are to:

1. promote public awareness of AED use in the Amherst community as part of broader state and national initiatives;
2. improve the likelihood of survival for people suffering cardiac arrest by:
 - implementing an AED training program for designated Souhegan High School personnel
 - implementing a preparedness strategy intended to maximize the likelihood of a positive outcome for victims of cardiac arrest

This AED program is intended to make AEDs available for use only by individuals who have current evidence of successful completion of a course in CPR and use of an AED that meets or exceeds the standards established by the American Heart Association or the American National Red Cross. This program requires that any such person, in each

instance of responding to a request for emergency care, contacts EMS and provides a report to the AED program Medical Director.

II. SYSTEMS ORGANIZATION

1. The *Medical Director* is a physician licensed to practice in New Hampshire who practices in or adjacent to the EMS region in which Amherst is located, is knowledgeable about EMS protocols established under New Hampshire law, is familiar with CPR and AED action sequences, has specialized training and knowledge concerning public access defibrillation and who will
 - a. oversee all medical aspects of the program
 - b. ensure proper training and maintenance of skills for targeted responders
 - c. help the AED program by
 - establishing and reviewing policies and procedures
 - establishing a quality review and improvement program, including post-drill and post-incident debriefing
 - establish and maintain a relationship with local EMS
2. The *Program Coordinator* is an employee of Souhegan High School who will
 - a. have primary responsibility for AED program development and implementation
 - b. act as primary liaison among the AED program participants (e.g. Medical Director, school Site Leaders, EMS, etc.)
 - c. coordinate non-medical aspects of the AED program
 - d. coordinate documentation (relating to training, AED maintenance, use and post-incident data collection)
 - e. revision of policy and procedure as required
3. A *Site Leader* is an employee of Souhegan High School who will
 - a. be responsible for day-to-day operation and be accountable for the AED program at the site
 - b. check AED equipment and accessories (by Site Leader and/or designees) and document, in accordance with maintenance procedures
 - c. maintain a list of and documentation of training for all targeted responders at the site and forward copies to the Program Coordinator
 - d. coordinate and document site-specific drills and refresher training
 - e. maintain documentation regarding use of AEDs

- requests for deployment of an AED
- attachment of defibrillator pads to a patient
- f. notify Medical Director as soon as possible any time defibrillator pads are attached to a patient
- 4. The AED Site Advisory Team is a group that will include the Program Coordinator, Site Leader and representatives of the custodial department, physical education department and school administration (and others as appropriate), that will
 - a. develop site-specific policies and procedures and training programs in consultation with the Medical Director and Program Coordinator
 - b. support implementation of the AED program at the site
 - c. support consideration of, planning for and inclusion of AED and CPR training in the student curriculum

III. TRAINING

The Program Coordinator will coordinate and document initial AED training, annual refresher and biennial retraining for certain designated personnel. The AED Site Advisory Team will make recommendations as the number and identity of targeted responders and will develop a plan for initial AED training and retraining of the targeted responders for the site.

A. Targeted Responders

1. Required to have and to submit to the Program Coordinator/Site Leader current documentation of successful completion of a course in basic life support (BLS) that includes CPR (cardiopulmonary resuscitation) and the use of AEDs according to the standards and guidelines of the American Heart Association or the American National Red Cross
2. Responsible for being familiar with the Souhegan High School School-Based Public Access Defibrillation Program Policies and Procedures and the relevant site-specific policies and procedures, and required to sign a Targeted Responder Acknowledgement (Attachment III) at least once each year.
3. Expected to attend the AED Program site-based training and to achieve a satisfactory skills evaluation each school year.

B. Volunteer Responders

1. Anyone can, at their discretion, provide voluntary assistance to victims of medical emergencies. The extent to which these individuals respond shall be appropriate to their training and experience. These responders are encouraged to contribute to

emergency response only to the extent they are comfortable. The emergency medical response of these individuals may include CPR, AED or medical first aid.

IV. PROCEDURES

A. Location, Mobility of Device(s):

The AED devices shall be at the sites and specific locations listed on Attachment IV.A. Each AED will be the responsibility of the Site Leader or a designee (indicated in writing), or his/her designated back up.

B. Maintenance:

See the AED manufacturer's Operating Instructions Manual for detailed maintenance information and instructions. The Site Leader or designee responsible for an AED will perform and document as follows:

Daily and after each use (see Attachment IV.B.1)

- Check readiness display for "OK" and confirm no battery indicator or service indicator displayed
- Visually inspect AED: proper location, clean, cabinet and unit have not been tampered with
- Initial daily log (Attachment IV.B.1)

Monthly and after each use (See Attachment IV.2)

- Inspect AED, case, connectors, battery according to Operator's Checklist
- Check station against Station Inventory, and restock as needed
- Enter date, print and sign name on monthly log (Attachment IV.B.2)

After each use

- Inspect exterior for dirt or contamination and clean if needed (see Operating Instructions)

Whenever results of inspection require action (per manufacturer's Operating Instructions Manual or these procedures) and after each dispatch or use (that is, anytime defibrillator pads are attached to a patient), document in the AED General Log (Attachment IV.B.3). If the unit needs immediate supplies or service, remove from service and notify the Program Coordinator immediately. If the unit is still operational but requires service or supplies will expire soon, Site Leader should notify the Program Coordinator promptly.

C. Use of AED:

1. Early access to EMS (911)

Assess responsiveness – tap victim and shout, “Are you OK?”

If unresponsive, activate emergency response system

- if alone, activate EMS by calling 911 and get AED
if calling from high school phone, dial 9 first for outside line
- if not alone, stay with victim and assign someone to
 - activate EMS by calling 911
 - get AED

When activating 911, provide: location, telephone number, nature of emergency, what aid is being provided (example”We are using an AED)

1. Early CPR

Check ABC’s (Airway, Breathing, Circulation)

- if no breathing, provide rescue breathing
- if no circulation (no pulse present)
 - if AED is immediately available, attempt early defibrillation
 - if AED is not immediately available, perform CPR and prepare to attempt defibrillation when AED arrives

2. Early defibrillation

**NOTE: DO NOT USE AED ON VICTIM LESS THAN 8 YEARS OLD OR LESS THAN 55 POUNDS/25KILOGRAMS
REMOVE VICTIM FROM CONTACT WITH WATER AND DRY THEIR CHEST**

Power on the AED

Attach AED electrodes to victim’s bare chest as indicated on the electrodes

Allow AED to analyze heart rhythm (do not touch victim)

- clear victim during analysis (“I’m clear. You are clear. Everyone’s clear.”)

If advised to shock (*do not touch victim*)

- clear victim (announcing, “I’m clear. You’re clear. Everyone’s clear”).
- Press shock button

Continue to follow AED prompts until EMS arrives

3. Early advanced care

EMS takes charge of victim upon arrival

Provide victim information to EMS: name, age, known medical problems, details of incident, victim condition, and aid provided

(including number of shocks administered)
electrodes remain in place on victim (detached from device);
school's AED remains with representative of school who returns
device to Site Leader or Program Coordinator as soon as possible

B. Post-incident

Any time that defibrillator pads are attached to a patient/victim and when otherwise appropriate:

Targeted responder notifies Site Leader. Site Leader notifies Program Coordinator and Medical Director.

The AED responder must complete the event summary form (Attachment IV.D.) and return to Site Leader or provide the same information to Site Leader (who completes the form). Site Leader forwards copy to Program Coordinator, who retains one copy and forwards a copy to Medical director.

Site Leader documents additional information relating to incident as appropriate.

Site Leader or designee takes AED out of service. Any AED data will be downloaded or printed from AED by or under the direction of the Program

Coordinator. The Program Coordinator will retain one copy of the data Report, and forward one copy to the Medical Director.

Before AED is entered back into service, the Site Leader will inspect, clean if needed and restock AED station (according to "Maintenance" above).

The Medical Director will conduct a post-incident review (including quality improvement) and debrief program staff and those involved in the incident.

As appropriate, the Medical Director will also ensure patient outcome monitoring and a trained rescuer emotional support process.

ADOPTED: March 26, 2003

SOUHEGAN HIGH SCHOOL

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