

Richland School District One
1616 Richland Street
Columbia, SC 29201



Automated External Defibrillation Program



Richland School District One
Automated External Defibrillation Program

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Section One: Current Signatures Authorizing Program

Richland School District One

Automated External Defibrillation Program

Superintendent

AED District Coordinator

AED Oversight Physician

Section Two: Program Description

Richland School District One

Automated External Defibrillation Program

Definitions

Automatic External Defibrillator (AED) – A device used to treat a patient with cardiac arrest whose heart is beating irregularly (fibrillating) by assessing the patient’s heart rhythm, judging whether defibrillation is needed, and then administering a shock to return the heart to normal.

AED District Coordinator (DC) – The health care professional designated by Richland School District One who is responsible for coordinating the AED program in the district and who serves as the Oversight Physician’s point of contact for the AED program.

AED School Coordinator (SC) – The health care professional designated by each school that has an AED who conducts the day-to-day duties associated with the AED program.

AED Oversight Physician (OP) – A designated, licensed physician providing medical oversight to the AED program and authorizing the purchase of the AEDs for the district.

Sudden Cardiac Arrest (SCA) – A condition where the heart stops beating suddenly and unexpectedly, due to a disturbance in the heart’s electrical system called ventricular fibrillation.

Trained Rescuer – A designated AED user trained to respond to medical emergencies that possess certified training in CPR, First Aid, and AED use within the confines of the AED program including defibrillation of the victim.

Purpose

The practices and procedures described in this document describe Richland School District One's Automated External Defibrillator (AED) Program. The program will adhere to the legislative requirements of the State of South Carolina (see attachment A). The purpose of the program is to enable school personnel, through the use of AED devices, to intervene promptly in the case of a Sudden Cardiac Arrest with technology that may help sustain a student's life until trained EMS personnel arrive on the scene. However, given the fact that the primary mission of the school district is educational and not medical, the school district does not purport to imply that AEDs will be available in all medical emergencies that might occur on school property. The first action taken by school district personnel in any medical emergency will be to contact Richland County Emergency Medical Services.

Implementation

Richland School District One will provide Automated External Defibrillators initially to the middle and high schools, since funding is not available to provide Automated External Defibrillators in every setting. If or when funding becomes available, additional schools may be equipped with AEDs and added to the program and will be expected to adhere to all requirements of the program. In order to protect the security and proper use of AEDs, the school district will ensure access to AEDs, and use by trained rescuers. Access to school AEDs may be provided if trained rescuers will be present. The school district cannot guarantee that a trained rescuer will be present for the duration of every school-sponsored event.

Responsibilities

A. Oversight Physician

The Oversight Physician providing medical direction to this program is:

Dr. C. Osborne Shuler
Pediatric Cardiology
1 Medical Park – Suite 410
Columbia, SC 29203

Medical Direction will include the following:

- Review of policies and procedures defining the standards of patient care and utilization of all AEDs used within Richland School District One.
- Review of response documentation and rescue data for all uses of AEDs.
- Quality Improvement recommendations determined after review of literature, consultation with experts, and review of AED utilization at the school.

B. AED District Coordinator

The AED District Coordinator, the Coordinator of Nursing Services, is:

Margie Moore, RN, MEd.
Coordinator of Nursing Services
1225 Oak Street
(803) 231-6751

The AED District Coordinator is responsible for the following:

- Serves as liaison between the AED program and the Oversight Physician.
- Oversees implementation of the program requirements, including training programs and maintenance of all AED equipment and related supplies, at each school through coordination with School Coordinators.
- Forwards incident data to the Oversight Physician.
- Review of response documentation and rescue data for all uses of AEDs.
- Quality Improvement recommendations determined after review of literature, consultation with experts, and review of AED utilization at the schools.

C. AED School Coordinator (to be designated by the Coordinator of Nursing)

The AED School Coordinator is responsible for the following:

- Serves as liaison between the school level AED program and the AED District Coordinator
- Oversees implementation of the program requirements at the school level, including training programs and maintenance of all AED equipment and related supplies
- Forwards incident data to the AED District Coordinator
- Reviews response documentation and rescue data for all uses of AEDs with AED District Coordinator

D. Trained Rescuers

The Trained Rescuers are responsible for the following:

- Activating the internal emergency response system during medical emergencies.
- Providing CPR and application of AEDs to victims of SCA.
- Understanding and complying with the requirements of this program.

NOTE: Any Trained Rescuer, who is expected to provide emergency care to a patient of SCA, or other medical emergency, will be trained in CPR and AED use. This training will conform to the American Heart Association Standards, American Red Cross Standards, or the standards of another nationally recognized training organization and will be current according to the requirements of the training organization.

Program Components

NOTE: OP = Overseeing Physician; DC = District Coordinator; SC = School Coordinator; TR = Trained Rescuer

A. Setting up the program initially

1. The OP will authorize purchase of AED units
2. The DC will designate one SC for each school (Appendix B) and will provide appropriate orientation.
3. TRs will be appropriately trained (CPR, AED), including the contents of this training manual, and a list developed of those personnel (see Appendix B). This list will be revised at the beginning of each year.
4. The AEDs will be installed (complete form in Appendix C) and the program implemented.

B. Yearly implementation overview

1. The DC will designate the SC for each school (Appendix B) that has AEDs and will provide appropriate orientation.
2. TRs will be appropriately trained and the list updated (Appendix B). The SC will make this list available to the DC and to all TRs in the school.
3. The list of AED locations will be updated (Appendix C), as well as the list of TRs having the key to silence alarm for the AED storage cabinet, if necessary, (Appendix C) and provided by the SC to the DC and to all TRs in the school.
4. The DC will send lists of TRs and AED locations to Emergency Medical Services.

5. The SC will provide a system whereby AEDs are checked on a regular schedule and a record maintained (see Appendix D).
6. An incident report (Appendix I) will be completed by the TR and given to the SC after any incident involving use of an AED; this report will in turn be given to the DC and processed by the SC, DC and OP.
7. The DC will monitor whether all of the above procedures are being followed and ensure compliance.

C. Emergency Procedures

Please see Appendix F for a handout that is to be kept with each AED for reference purposes in the case of an emergency. The Trained Responder to the crisis situation will follow accepted procedures of emergency response by assessing scene safety, assessing unresponsiveness, activating the EMS system by dialing 9-1-1, sending for the AED if it is not at the scene already and performing CPR until it arrives, then following all the voice prompts for the AED. When EMS arrives all information about the patient will be transferred to the EMS personnel, including information from the AED screen.

D. Post-Event Review

The Trained Responder must complete an AED Response Documentation Form (Appendix H) and Incident Report Form (Appendix I) after each use of the AED. This form, along with all AED-generated rescue data, must be provided to the SC. The DC, after examination, will then forward the information to the Oversight Physician for review.

After each use of the AED, the School Coordinator shall conduct an incident debriefing with Trained Responders to determine any deficient practices and opportunities for improvement. All expired/deleted AED supplies must be restocked, and the AED checked for damage. The AED battery must be checked prior to returning it to storage.

Section Three: Appendices

Appendix A- South Carolina AED Law

SOUTH CAROLINA AED LAW

The following is a summary containing relevant portions of the law(s). This material is not intended as legal advice and may contain inaccurate or incomplete information.

Background

On June 1, 1999, the Governor of the State of South Carolina signed [Senate Bill 728](#). This legislation "encourages greater acquisition, deployment, and use of automated external defibrillators in communities across the State." This legislation adds Sections 44-76-10 to 44-76-50 to the South Carolina Code.

AED Definition

An AED is "an automated external defibrillator which is a medical device heart monitor and defibrillator that:

1. has received approval of its pre-market notification filed pursuant to the United States Code, Title 21, Section 360(k), from the United States Food and Drug Administration;
2. is capable of recognizing the presence or absence of ventricular fibrillation or rapid ventricular tachycardia and is capable of determining, without intervention by an operator, whether defibrillation should be performed; and
3. upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to an individual's heart."

Use Compliance Requirements

"A person or entity that acquires an AED shall:

1. require its designated AED users to have current training in CPR and AED use...
2. maintain and test the AED according to the manufacturer's operational guidelines and keep written records of maintenance and testing;
3. employ or obtain a health care professional (a licensed physician, surgeon, physician's assistant, nurse practitioner, or nurse) to serve as its AED liaison;
4. have in place an AED program approved by its AED liaison which includes CPR and AED training, AED protocol or guidelines, AED deployment strategies, and an AED equipment maintenance plan;
5. include in its AED protocol or guidelines that a person who renders emergency care or treatment to a person in cardiac arrest caused by ventricular fibrillation/tachycardia by using an AED must activate the emergency medical services system or 911 as soon as possible;
6. report any clinical use of the AED to the AED liaison."

Training Requirements

Designated AED users are to receive training in CPR and AED use "by the American Heart Association, American Red Cross, or National Safety Council."

Liability

"Any person or entity acting in good faith and gratuitously shall be immune from civil liability for the application of an AED unless the person was grossly negligent in the application."

"Any designated AED users meeting the requirements of [this legislation] and acting according to the required training shall be immune from civil liability for the application of an AED unless the application was grossly negligent."

"A person or entity acquiring an AED and meeting the requirements of [this legislation] or an AED liaison meeting the requirements of [this legislation] shall be immune from civil liability for the application of an AED by any person or entity described in items (1) or (2) of this section."

"A prescribing physician shall be immune from civil liability for authorizing the purchase of an AED, unless the authorization was grossly negligent."

(A34, R73, S728)

AN ACT TO AMEND TITLE 44, CODE OF LAWS OF SOUTH CAROLINA, 1976, RELATING TO HEALTH, BY ADDING CHAPTER 76, SO AS TO ENACT THE “SOUTH CAROLINA AUTOMATED EXTERNAL DEFIBRILLATOR ACT” WHICH REQUIRES PERSONS OR ENTITIES THAT ACQUIRE AN AUTOMATED EXTERNAL DEFIBRILLATOR TO COMPLY WITH CERTAIN TRAINING, TESTING, AND USE PROCEDURES AND TO PROVIDE IMMUNITY FROM CIVIL LIABILITY WHEN IN COMPLIANCE.

Whereas, the General Assembly of the State of South Carolina finds that each year more than two hundred fifty thousand Americans die from out-of-hospital sudden cardiac arrest. More than ninety-five percent of these deaths occur, in many cases, because lifesaving defibrillators arrive on the scene too late, if at all; and

Whereas, the American Heart Association estimates that more than twenty thousand deaths could be prevented each year if defibrillators were more widely available to designated responders; and

Whereas, communities in South Carolina, as well as around the country, have invested in 911 emergency response systems, personnel providing emergency services, and ambulance vehicles. However, many of the communities do not have enough defibrillators to meet the needs of their communities. Accordingly, the General Assembly encourages greater acquisition, deployment, and use of automated external defibrillators in communities across the State. Now, therefore,

Be it enacted by the General Assembly of the State of South Carolina:

Automated External Defibrillators; definitions; training and use procedures; immunity

SECTION 1. The 1976 Code is amended by adding:

“CHAPTER 76

Automated External Defibrillators

Section 44-76-10. This act may be cited as the ‘South Carolina Automated External Defibrillator Act’.

Section 44-76-20. For purposes of this chapter:

(1) ‘Automated external defibrillator’ or ‘AED’ means an automated external defibrillator which is a medical device heart monitor and defibrillator that:

(a) has received approval of its pre-market notification filed pursuant to the United States Code, Title 21, Section 360(k), from the United States Food and Drug Administration;

(b) is capable of recognizing the presence or absence of ventricular fibrillation or rapid ventricular tachycardia and is capable of determining, without intervention by an operator, whether defibrillation should be performed; and

(c) upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to an individual’s heart.

(2) ‘Health care professional’ means a licensed physician, surgeon, physician’s assistant, nurse practitioner, or nurse.

(3) ‘Designated AED user’ means a person identified by the person or entity acquiring an AED who has received training in the use of an AED pursuant to this chapter.

Section 44-76-30.(A) A person or entity that acquires an AED shall:

(1) require its designated AED users to have current training in CPR and AED use by the American Heart Association, American Red Cross, or National Safety Council;

(2) maintain and test the AED according to the manufacturer’s operational guidelines and keep written records of maintenance and testing;

(3) employ or obtain a health care professional to serve as its AED liaison;

(4) have in place an AED program approved by its AED liaison which includes CPR and AED training, AED protocol or guidelines, AED deployment strategies, and an AED equipment maintenance plan;

(5) include in its AED protocol or guidelines that a person who renders emergency care or treatment to a person in cardiac arrest caused by ventricular fibrillation/tachycardia by using an AED must activate the emergency medical services system or 911 as soon as possible;

(6) report any clinical use of the AED to the AED liaison.

Section 44-76-40.(1) Any person or entity acting in good faith and gratuitously shall be immune from civil liability for the application of an AED unless the person was grossly negligent in the application.

(2) Any designated AED users meeting the requirements of Section 44-76-30(1) and acting according to the required training shall be immune from civil liability for the application of an AED unless the application was grossly negligent.

(3) A person or entity acquiring an AED and meeting the requirements of Section 44-76-30 or an AED liaison meeting the requirements of Section 44-76-30 shall be immune from civil liability for the application of an AED by any person or entity described in items (1) or (2) of this section.

(4) A prescribing physician shall be immune from civil liability for authorizing the purchase of an AED, unless the authorization was grossly negligent.

Section 44-76-50.The provisions of this chapter do not apply to emergency medical services, a physician’s office, or a health care facility as defined in Section 44-7-130(10).”

Time effective

SECTION 2. This act takes effect upon approval by the Governor.

Ratified the 26th day of May, 1999.

Approved the 1st day of June, 1999.

Appendix B- School Coordinator and Trained Responders

School Coordinator for _____ School is: Name _____

Title _____

Main Location _____

Phone Number _____

Pager Number _____

Trained Responders:

Name _____

Title _____

Main Location _____

Phone Number _____

Name _____

Title _____

Main Location _____

Phone Number _____

Name _____

Title _____

Main Location _____

Phone Number _____

Name _____

Title _____

Main Location _____

Phone Number _____

Appendix B – School Coordinator and Trained Responders – Page 2

Name _____
Title _____
Main Location _____
Phone Number _____

Name _____
Title _____
Main Location _____
Phone Number _____

Name _____
Title _____
Main Location _____
Phone Number _____

Name _____
Title _____
Main Location _____
Phone Number _____

Name _____
Title _____
Main Location _____
Phone Number _____

Appendix C: Locations of AEDs and Personnel with Keys to Turn Off Alarm

AED Locations at _____ School

- 1. _____; keys held by

- 2. _____; keys held by

- 3. _____; keys held by

- 4. _____; keys held by

Appendix D: AED Inspection Log
(To be checked weekly)

_____ School _____ Year

Inventory Items

- | | |
|--|-----------------------------------|
| Storage Cabinet Intact | Incident Report Forms (2) |
| AED Exterior Intact | Pen |
| Battery Installed & Functional | Mouth Barrier Device (2) |
| Spare Battery Available | Razor |
| AED Self Test | Scissors |
| AED Guide Available | Non-Latex Gloves (2 pairs) |
| CPR Guide Available | Gauze Pads or Towel |
| Two Sets of Electrodes (within expiration date) | |
| 2 adult | |
| 1 pediatric | |

DAYS	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
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26												
27												
28												
29												
30												
31												

PERSON (S) CHECKING AED

SIGNATURE

INITIALS

SIGNATURE

INITIALS

Appendix D – Continued - Corrective Action Required and Completed:

DATE	<i>DETAILS</i>	<i>INITIALS</i>

Appendix E Response Procedures – Sudden Cardiac Arrest

1. Care will be provided in accordance with First-Aid/CPR Standards of the American Red Cross, American Heart Association, or other nationally recognized training organizations. (See attached procedures)
2. Staff will remain with patient and send or call front office for assistance.
3. Office staff will announce school-wide “Code Blue” and give location of emergency. Next, alert school nurse, First Aid Responders and Administration of the nature and location of emergency, and call 911 if indicated.

AED location _____

Will be delivered to emergency site by _____

(Does not have to be First-Aid Responder)

4. Advise EMS of:
 - a. Description of incident
 - b. School location-physical address and phone number
 - c. Alert someone to meet and direct EMS upon arrival
 - d. Remain on standby for additional instructions and assistance.
5. A staff member will remove other students from the area as soon as possible, but will not leave until another adult comes to assist with the emergency.
6. As soon as the situation warrants, administration will call family and report nature of the incident and disposition of the patient.
7. In the event of EMS transport, a staff member should accompany the patient if family member is unavailable. The school nurse will stay on campus.
8. If the AED is used during normal school hours, the school nurse will notify the coordinator of nursing services and Richland One Communication Department of the EMS transport and file an AED Incident Report (Appendix H) within 5 days.
9. The Nursing Coordinator within 24 hours of event shall report the use of the AED via telephone to the Pediatric Cardiologist, Dr. Osborne Shuler. Also, within 7 days a copy of the incident report (Appendix H) will be faxed to Dr. Osborne Shuler’s office

Appendix F – Emergency Procedures

To be laminated and stored with AED

- A. **Assess scene safety**
During emergency situations, Trained Rescuers must assess the scene for safety hazards.
- B. **Assess unresponsiveness**
Verify that the victim is actually unconscious. Tap the victim on the shoulder and shout, “Are you OK?”
- C. **Activate the EMS system by dialing 9-1-1**
Have a designated person wait outside for EMS to arrive to lead emergency response personnel to the victim.
- D. Use the pre-selected code over the school administrative radio system to **have the AED brought to the scene**, or send someone to get the AED.
- E. **Perform CPR until the AED arrives at the scene.** Check for signs of circulation such as pulse, coughing or movement. Remember, verify that the victim:
- Is unconscious
 - Is not breathing
 - Has no pulse
- F. **Turn on the AED and follow all voice prompts**
- Place electrodes
 - NOTE: For patients with large amounts of body hair, it may be necessary to shave areas prior to placement of electrodes since body hair may interfere with the AED. The AED kit includes disposable razors and shave cream
 - Stand clear of the victim
 - Follow AED voice prompts
- G. **When EMS arrives, provide the following information:**
- Victim’s name
 - Any known medical problems, allergies or medical history
 - Time victim was found
 - Initial and current condition of the victim
 - Information from the AED screen (number of shocks delivered, length of time the defibrillator has been used)
- H. **Return the AED to a state of readiness**
- Replace the pads, pocket mask and other supplies that were used
 - Use the AED Maintenance Checklist to certify the device and supplies are ready for use

Public Safety Automated External Defibrillator (AED) Protocol
Appendix G

Patient in cardiac arrest being 1 – 8 years of age and weighing 55 pounds or less will be regarded as a Child and the **Pediatric Pads** must be used.

Patient in cardiac arrest but 9 years of age or 55 pounds or more will be regarded as an adult and the **Adult Pads** must be used.

1. Check ABC's.(airway, breathing, circulation/pulse)
 2. Call 911.
 3. Perform one (1) minute of CPR.
 4. Attach AED using either the **Adult Pads or the Pediatric Pads** after one (1) minute of CPR.
 5. The AED will “Analyze” the heart rhythm.
 6. Once rhythm has been analyzed and AED advised to shock, defibrillate up to three (3) times if needed.
 7. Check pulse.
 8. If pulse is absent, perform CPR for one (1) minute.
 9. Check pulse, if absent, the AED will “Analyze” the heart rhythm.
 10. Once rhythm has been analyzed and AED advised to shock, defibrillate up to three (3) times if needed.
 11. Check pulse.
 12. Repeat steps 8, 9, 10 & 11 as needed until EMS arrives.
- **NOTE: Cell phones must not be used within 6 Feet while AED is in use.**

Appendix H- AED Response Documentation Form

AED Response Documentation Form

Date _____
Time patient found _____
Location of incident _____
Patient Name _____
Patient Age _____
Patient Gender _____

*Arrest witnessed yes no
Bystander CPR yes no
Breathing on arrival of Trained Rescuers yes no
Pulse on arrival of Trained Rescuers yes no
Number of shocks by AED _____

Trained Rescuers Responding:

Comments:

**Cardiac arrest – heart stops beating – no pulse*

**Respiratory arrest – not breathing*

Appendix I - Incident Report

Date of Incident ____/____/____ Time of Incident ____:____ AM/PM

Location of Incident (which building, where in building, playground, etc.)

Patient's Age _____ Patient's Sex: _____ Male _____ Female

CPR prior to defibrillation: _____ Attempted _____ Not attempted

Cardiac Arrest: _____ Not witnessed _____ Witnessed bystander _____ Witnessed by AED person

Estimated time (in minutes) from arrest to CPR _____ Shock: _____ Indicated _____ Not indicated

Estimated time (in minutes) from arrest to 1st AED shock _____ Number of shocks: _____

Additional comments:

Patient Outcome at incident site:

- | | |
|---|---------------------------------------|
| _____ Return of pulse and breathing | _____ No return of pulse or breathing |
| _____ Return of pulse with no breathing | _____ became responsive |
| _____ Return of pulse, then lose of pulse | _____ remained unresponsive |

Name of AED operator: _____ Transporting ambulance _____

Name of facility patient was transported to: _____

Name of Emergency Health Care Provider: _____

Signature of Health Care Provider

Date of Report

Within 48 hours of incident, a copy of this report will be faxed to:

Margie Moore, RN, MEd. (803) 231-6758
Coordinator, Nursing Services
Waverley Administration Building

C. Osborne Shuler, MD (803) 434-2262
Pediatric Cardiologist

