

Automated External Defibrillation (AED) Program

Background

Section 1797.196 of the Health and Safety Code in coordination with Education Code Section 49417 provides that a school which acquires AEDs for emergency use is **not** liable for any civil damages resulting from the use of AEDs to provide emergency care if the school does the following:

- Comply with all regulations governing the placement of AEDs
- Notify its local EMS agency of the existence, location, and type of AEDs
- Maintains and tests its AEDs per the manufacturer's guidelines
- Tests the AEDs at least twice a year and after each use
- Inspects all AEDs on the premises at least every 90 days
- Maintains records of the maintenance and testing of the AED as required by the statute
- Requires its school principals to ensure that instructions, in no less than 14-point type, on how to use the AED are posted next to every AED.

<u>Scope</u>

This policy is for Birmingham Community Charter High School (School), which is dedicated to establishing, maintaining, and overseeing a successful Automated External Defibrillation (AED) Program. The purpose is to provide guidance on program requirements, placement, care and use, training, and other components that may be required by schools to ensure that an effective AED program is in place. These guidelines also inform employees and volunteers about the mandate to introduce CPR education commencing with the 2018-19 school year for most schools and the mandate to comply with the Eric Paredes Sudden Cardiac Arrest Prevention Act.

Education in CPR

Education Code Section 51225.6 mandates that, commencing with the 2018–19 school year, charter schools that require a course in health education for graduation from high school must include instruction in performing compression-only cardiopulmonary resuscitation (CPR) as part of their required health education course offering. This instruction shall include the following:

• An instructional program based on national evidence-based emergency cardiovascular care guidelines for the performance of compression-only CPR, such as those developed by the American Heart Association

or the American Red Cross.

• Instruction to pupils relative to the psychomotor skills necessary to perform compression-only CPR.

The Chain of Survival

Early defibrillation will succeed only when implemented as part of the chain of survival. The links of the chain of survival include early recognition of cardiopulmonary arrest and activation of 911 by trained responders, early CPR, and early defibrillation when indicated, and early advanced life support. Establishment of early defibrillation within a strong chain of survival will ensure the highest possible survival rate.

Use of AEDa in Schools

When an AED is placed in the School, the principal shall ensure that the school administrators and staff annually receive a brochure, approved as to contents and style by the American Heart Association or the American Red Cross that describes the proper use of an AED. The principal shall also ensure that similar information is posted next to every AED. The principal shall, at least annually, notify school employees as to the location of all AED units on the campus.

The School will notify an agent of the local EMS agency of the existence, location, and type of AED.

An AED should never be removed by anyone other than the AED program administrator.

Storage and Accessibility

The School's AED program administrator with guidance from a medical/ health care provider shall determine the locations to place AED's within the school site. AED's shall be placed for the most efficient response time. An AED should be available within a four (4) minute walk of every person on a school site during normal operating school hours.

The following will be taken into consideration when designating locations for AED placement:

- Assess each building for optimal location for storage of the AED. Locations should be readily accessible but secure.
- Staff should be notified of the location and how to access the AED in an emergency.
- Access and use of the AED by third parties and facility users as necessary.

The Response Team

The principal (or designee) will serve as site coordinator, and will select an AED program administrator, health technician (generally the school nurse), volunteer responders (teachers or staff). Responsibilities for each role include:

Site Coordinator (Principal or designee)

- Assist to ensure compliance with School policies and procedures
- Notify school employees as to the location of all AED units on the campus annually

AED Program Administrator

- Oversee the implementation of the program
- Communicate with key decision makers
- Review the program annually to evaluate effectiveness
- Accurately maintain and update the AED monthly inspections
- Update the AED program policy, as needed
- Identify, approve, and review training programs
- Identify and review local and state regulations
- Notify the local EMS or regulatory agency of the location of AED's where applicable by law or regulation
- Identify local EMS policy and procedures and communicate them to the School Nurse/ Health Technician, Site Coordinator(s), and Volunteer Responders
- Share AED use data per local and state regulations
- Notify the School Nurse/ Health Technician and Site Coordinator(s) of upcoming volunteer responder expirations in a reasonable amount of time so that replacements and re-certifications may be obtained prior to expiration.
- The AED Program Administrator along with the Director of Human Resources has the authority to suspend or terminate volunteer responder privileges based upon deficiencies in compliance with School protocols, policies and procedures, training, or inappropriate actions that are not consistent with program policies.

School Nurse/ Health Technician

- Communicate with program administrator and local EMS
- Review all incidents involving the use of an AED
- Provide post-event debriefing and support
- Maintain a current list of trained volunteer responders*
- Assure overall program quality*
- Adhere to the school guidelines for maintenance and upkeep involving the AED(s)*
- Accurately maintain and update their AED monthly inspections via written log*

*These actions may be done by the program administrator in place of the school nurse upon consent of both parties.

Volunteer Responders (Teachers or Staff)

• Successfully complete all training and skills evaluation as detailed by the AHA and the medical director

- Comply with the Emergency Response Guide and respond to emergencies as designated
- Maintain current certification and participate in re-certification

Use of AEDs by Staff Members other than Volunteer Responders

At all times, instructions, in no less than 14-point type, on how to use the AED are posted next to every AEDa. AEDs can be used for emergency applications by any School employee without prior training or certification.

Response and Response Equipment

Any employee who recognizes an emergency must first call 911 immediately. Notifying emergency medical services is the first link in the chain of survival and is a very crucial step. After the call (or simultaneous with the call if a person other than the ultimate AED responder is present), use the AED. AEDs should be used per manufacturer instructions and training.

AED's and other emergency response equipment support the chain of survival in the event of a sudden cardiac arrest. Each device should be maintained per policy and following the manufacturer's guidelines. The AED shall only be applied to:

- 1. Unresponsive and not breathing victims and
- 2. Victims at least 8 years of age or weighing at least 55 pounds.

All accessory equipment must remain with the AED and includes the following:

- Electrode pads
- Batteries
- Rescue essentials (including scissors and/ or razor)

All equipment and accessories must be inspected monthly for readiness of use and integrity of device.

Post Incident Follow-Up

After the victim has been attended by professional first responders; staff must complete the following post incident procedures:

- Notify the AED Program Administrator immediately
- Complete a School Incident Report to document the event
- Complete post incident equipment maintenance as follows:
 - o Data Retrieval The event data will be retrieved from the AED and submitted to the overseeing physician for review and filing according to local requirements. Data cards may also be submitted in lieu of AEDs for data retrieval.
 - o AED Return to Service Once the AED has been returned to the specified location, inspect the AED for any damage and/or missing parts. Contact the AED Program Administrator to replace all supplies used during the event such as batteries and electrode pads.
- Participate in a critical incident debriefing session. A critical incident debriefing session should be held as soon as possible following an event. This will be done on an informal basis. The purposes of debriefing are as follows:
 - A.Determine the need for emotional support for the volunteer responders
 - B. Evaluate the effectiveness and quality of the Emergency Response Plan
 - C. Determine the need for additional training
 - D. Recommend corrective actions

No changes to the Emergency Response Plan should be made without conferring with the program administrator, and the expressed authorization from School based on consultation with and approval by the health technician.

Confidentiality

The Post Incident Report (see Appendix IV) is part of the patient care record and is confidential information. This report should not to be copied or altered after it is completed. Compliance with HIPAA is mandatory. Volunteer responders must refrain from any discussion with co-workers about any aspects of the emergency, including outcome. A critical incident debriefing session will be held with the volunteer responders involved with the care of the patient. This is the only time that confidential information is allowed to be shared with the Program Administrator and the AED Site Coordinator.

Report of Misuse or Defects

Any defects in the AED operation or deviation from the protocols established herein are to be reported to the program administrator. Any suspected tampering and/or misuse must be reported immediately so the AED can be inspected for proper operation.

APPENDIX I

Periodic Maintenance Checklist

To check your device:

- 1. Go to the location in your facility where the device is located. Verify that the AED still indicates a "ready status." Refer to the manufacturer's guidelines for further information on verifying "ready status."
- 2. Check the expiration date on the electrode pads and the batteries. Note: The AED's self-diagnostic may detect the expiration status of your AED battery.
- 3. If your device is not in ready status when you click on the "no" bubble, the system will open another box that will explain and allow you to correct the problem.

APPENDIX II

Response Plan

The following AED protocol is for use by the School volunteer responders. The protocol will be reviewed on an annual basis and replaced by a revised protocol as necessary. See the following AED protocol flow:

- 1. Conduct an initial assessment:
 - Assess for scene safety; use universal precautions.
 - Assess patient for lack of consciousness, lack of pulse and signs of circulation.
- 2. Ensure that 911 has been notified and that the local EMS response agency is en-route. When an emergency call is received, the following information must be obtained:
 - Type of emergency
 - Location of the emergency
 - Breathing/consciousness of patient and whether or not CPR is in progress and
 - Any special access instructions
- 3. Open the patient's airway and initiate CPR until the AED arrives.
- 4. As soon as the AED is available, power on the AED and follow the prompts. Read and follow the 14-point font Instruction Sheet located next to the AED. [This may be similar to the Appendix IV instructions.] Make sure that the AED pads are placed in their proper location and that they are making effective contact with the patient's chest. Do not place the AED pads over the nipple, medication patches, or implantable devices. It is vital that the electrode pads are placed on the patient as soon as possible.
- 5. Deliver a shock to the patient when advised by the AED after first clearing the patient area. Administer additional shocks as prompted by the AED until the AED advises no shock, or a series of three (3) consecutive shocks has been delivered.

6 If no shock is advised, check the patient's airway, breathing, and pulse prior to initiation of CPR. 7. If the patient exhibits no pulse or respiration, continue to perform CPR until otherwise prompted by the AED, EMS medics, and/or the health technician.

- 8. Transfer patient care to EMS. No more than 24 hours following the event and complete the AED Incident Report (complete all fields). Provide all documentation to the AED site coordinator/program administrator within 24 hours of the occurrence of the event.
- 9. Follow post-event procedures as documented in these Guidelines. Post-event procedures shall commence including:

- a. AED Incident Report (See Appendix III)
- b. Notification of supervisor/AED site coordinator/program administrator
- c. Replacement of all equipment used.

APPENDIX III

SAMPLE AED INCIDENT REPORT FORM FOR CARDIAC ARRESTS

1.	Date of Incident:				
2.	Location of Incident:				
3.	Estimated time of incident:				
4.	Patient Gender: Male 🗆 Female 🗆				
5.	Estimated age of patient:years				
6.	Did the patient collapse (become unresponsive)? Yes 🗆 No 🗆 (If no, skip to #7)				
	a. If Yes, what were the events immediately prior to collapse?				
	(check all that apply)				
	Difficulty breathing \square	Chest pain 🗆	No signs/ symptoms 🗆		
	Drowning 🗆	Electrical shock	Injury 🗆		
	Unknown 🗆				
	b. We compare present to see the person collapse $2 \log - \log - (1f no. doin to #7)$				
	b. Was someone present to see the person compset res \Box No \Box (in no, skip to #7.)				
	d After collanse at the time of natient assessment and just prior to the facility AFD pads being				
	annlied as the person breathing? Yes \Box No \Box				
	e Did the person have signs of circulation? Yes \Box No \Box				
7.	Was CPR given prior to 911 FMS arrival? Yes \Box No \Box (If no. skip to #8.)				
	a. Estimated time CPR started:				
	b. Was CPR started prior to the arrival of an AED? Yes \Box No \Box				
	c. Who started CPR? Bystander 🗆	Trained AED Employ	ee Untrained AED Employee		
8.	Was an AED brought to the patient's side prior to 911 EMS arrival? Yes 🗆 No 🗆				
	If No, briefly describe why and skip to	#9			
	a Estimated time AED was at natient's side:				
	a. Estimated time ALD was at patient's side.				
	b. Were the AED pads placed on the patient? Yes \square No \square (If no, skip to #9.)				
	c. Was the AED turned on? Yes \square No \square (If no, skip to #9.)				
	d If Yes, estimated time AED was turned on:				
	e. Did the AED ever shock the patient? Y	es \square No \square (If no, skip to #9.)		

f. Estimated time of 1st shock by facility AED: _____

g. How many shocks 9. Name of person operating 10. Is this person a trained AE	were delivered prior to the EMS a g the AED: D employee? Yes 🗆 No 🗆	mbulance arrival?	(First Middle Last)		
a. Highest level of me	edical training of person administ	ering the facility AED	:		
Public AED trained	□ First responder AED trained □	EMT-E	B 🗆		
CRT/EMT-PD	Nurse/Physician 🗆	Other health	care provider 🗆		
No known training					
11. Were there any mechanic	al difficulties or failures associate	d with the use of the	facility		
AED? Yes 🗆 No 🗆					
12. If res, prietly explain & attach a copy of the completed FDA reporting form (required by law)					
13. Did any of the below perso	Did any of the below personal concerns regarding the patient apply?				
Surface	essive chest hair 🗆	Sweaty 🗆	water/ wet		
Other concerns not listed	above:				
14. Were there any unexpected AED?Yes □ No □	ed events or injuries that occurred	l during the use of th	ne facility		
If yes, briefly explain:					
15. Indicate the patient's stat	us at the time of the 911 EMS arr	ival:			
a. Circulation restore	d: Yes 🗆 No 🗆 Unsure 🗆				
b. Breathing restored	: Yes 🗆 No 🗆 Unsure 🗆				
c. Responsiveness Re	stored: Yes 🗆 No 🗆 Unsure 🗆				
16. Was the patient transport	ed to the hospital? Yes \Box No \Box				
a. If applicable, pleas	e provide name of transporting a	mbulance service and	d the facility the patient was		
18. Other comments/concern	s not referenced on this form tha	t may be useful for th	ne medical director?		
19. Report completed by:			_(please print name)		
Signature:		Date:			
<u> </u>					
PLEASE RETURN TO AEL) PROGRAM ADMINISTRATOR W	ITHIN 24 HOURS FOL	LOWING INCIDENT		

APPENDIX IV

How To Use an Automated External Defibrillator (AED)

Note: These are <u>generic instructions on AED use</u> that have been copied from the website of the National Institute of Health, a part of the U.S. Department of Health and Human Services. There are to be posted, in no smaller than 14 point font, next to AEDs on campus.

Before using an automated external defibrillator(AED) on someone who you think is having sudden cardiac arrest (SCA), check him or her.

If you see a person suddenly collapse and pass out, or if you find a person already unconscious, confirm that the person can't respond. Shout at and shake the person to make sure he or she isn't sleeping.

Never shake an infant or young child. Instead, you can pinch the child to try to wake him or her up. Call 9–1–1 or have someone else call 9–1–1. If two rescuers are present, one can provide CPR (cardiopulmonary resuscitation) while the other calls 9–1–1 and gets the AED.

Check the person's breathing and pulse. If breathing and pulse are absent or irregular, prepare to use the AED as soon as possible. (SCA causes death if it's not treated within minutes.)

If no one knows how long the person has been unconscious, or if an AED isn't readily available, do 2 minutes of CPR. Then use the AED (if you have one) to check the person.

After you use the AED, or if you don't have an AED, give CPR until emergency medical help arrives or until the person begins to move. Try to limit pauses in CPR.

After 2 minutes of CPR, you can use the AED again to check the person's heart rhythm and give another shock, if needed. If a shock isn't needed, continue CPR.

Using an Automated External Defibrillator

AEDs are user-friendly devices that untrained bystanders can use to save the life of someone having SCA.

Before using an AED, check for puddles or water near the person who is unconscious. Move him or her to a dry area, and stay away from wetness when delivering shocks (water

conducts electricity).

Turn on the AED's power. The device will give you step-by-step instructions. You'll hear voice prompts and see prompts on a screen.

Expose the person's chest. If the person's chest is wet, dry it. AEDs have sticky pads with sensors called electrodes. Apply the pads to the person's chest as pictured on the AED's instructions.

Place one pad on the right center of the person's chest above the nipple. Place the other pad slightly below the other nipple and to the left of the ribcage. Automated External Defibrillator



The image shows a typical setup using an automated external defibrillator (AED). The AED has step-by-step instructions and voice prompts that enable an untrained bystander to correctly use the machine.

Make sure the sticky pads have a good connection with the skin. If the connection isn't good, the machine may repeat the phrase "check electrodes."

If the person has a lot of chest hair, you may have to trim it. (AEDs usually come with a kit that includes scissors and/or a razor.) If the person is wearing a medication patch that's in the way, remove it and clean the medicine from the skin before applying the sticky pads.

Remove Metal necklaces and underwire bras. The metal may conduct electricity and cause burns. You can cut the center of the bra and pull it away from the skin.

Check the person for implanted medical devices, such as a <u>pacemaker</u> or <u>implantable</u> <u>cardioverter defibrillator</u>. (The outline of these devices is visible under the skin on the chest or abdomen, and the person may be wearing a medical alert bracelet.) Also check for body piercings.

Move the defibrillator pads at least 1 inch away from implanted devices or piercings so the electric current can flow freely between the pads.

Check that the wires from the electrodes are connected to the AED. Make sure no one is touching the person, and then press the AED's "analyze" button. Stay clear while the machine checks the person's heart rhythm.

If a shock is needed, the AED will let you know when to deliver it. Stand clear of the person and make sure others are clear before you push the AED's "shock" button.

Start or resume CPR until emergency medical help arrives or until the person begins to move. Stay with the person until medical help arrives, and report all of the information you know about what has happened.