

## **AUTOMATED EXTERNAL DEFIBRILLATORS**

### **Purpose**

To establish policies and procedures for the development of an Automated External Defibrillator (AED) Program and the use of AEDs on school campuses. The policies and procedures provide uniformity in conjunction with management and guidance in the administration and maintenance of the AED Program.

These policies and procedures shall not be deemed to create a guarantee or obligation to use the AED in the case of an emergency nor any expectation that an AED or trained employee will be present and/or able to use an AED in an emergency or any expectation that the AED will operate properly.

### **I. Responsibilities**

#### **A. Program Coordinator**

The District Health Coordinator/Designee will oversee the AED Program. The Program Coordinator's responsibilities shall include but are not limited to:

1. Oversee and assist with program management and development and communicate with a licensed physician in developing a program to ensure compliance with regulations and requirements for training, notification, and maintenance.
2. Assist with policy development, procedures, and protocols for emergencies related to performing cardiopulmonary resuscitation (CPR) and use of an AED.
3. Review recorded data from the AED within five days following an incident where the AED was used on a student or adult.
4. Ensure that the AED program is in compliance with Los Angeles County EMS Agency policies and procedures.

#### **B. Site Coordinator**

The site school nurse or health assistant shall be designated as the Site Coordinator. The Site Coordinator's responsibilities shall include but are not limited to:

1. Assist with AED medical policies and procedures.
2. Coordinate CPR/AED training courses and maintain training records.
3. Establish an AED Program binder and maintain all original documents related to the program for four years.
4. On an annual basis, verify that CPR/AED cards are current for the Emergency Response Team. Maintain copies of certification records for a period of four years.
5. Coordinate equipment and accessory maintenance and preserve maintenance records. The Daily/Monthly Maintenance Checklists must be completed. The Site Coordinator will complete the monthly checklist and the Site Coordinator or designated personnel will complete the daily checklist.
6. Take corrective action on reported AED problems in accordance with guidelines set forth by the manufacturer within one school day or as soon as possible. (Corrective actions will be documented on the Maintenance Checklist)
7. Complete the Site Emergency Response Plan and update it annually. Ensure that a copy is posted with the AED and a copy is sent to the Program Coordinator.
8. Conduct and document a program readiness review once each school year. The review shall include:
  - a. Training Records, Maintenance Checklists, and all other documentation sent to Program Coordinator and filed at the District Office.
  - b. Emergency Response Plan and Daily/Monthly Maintenance Checklists located at designated sites.
9. Maintain on file a specifications/technical information sheet for each approved AED assigned or donated to the school.
10. Notify an agent of the local EMS agency of the existence, location, and type of AED acquired.

11. Communicate with Program Coordinator on issues related to policies, procedures, Emergency Response Plan, and post-incident reviews.
12. Coordinate annual Emergency Response Plan practice drills (*It is recommended that practice drills be conducted at the beginning of each school year prior to the last school day in September*).
13. Coordinate the post-incident report and return the AED to readiness status.
14. Participate in post-incident reviews, debriefings, and quality assurance/improvement.

C. Principal or Administrative Designee

1. Notify all employees annually of the location of all AED units on campus.
2. Ensure that all school 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 and ensure that this brochure is posted next to every AED unit.
3. Identify employees that will be offered the opportunity to receive training for CPR and AED use. *This may include administrators, security, teachers, office staff, nurses, health assistants, athletic directors, or other designated personnel.*
4. Designate trained employees as members of the Emergency Response Team, who shall be available to respond to an emergency that may involve the use of an AED. *There should be a sufficient number of trained personnel to guarantee that at least one trained CPR/AED responder will be on site during school hours and school sponsored events occurring on school grounds.*
5. Ensure that practice drills of the Emergency Response Plan are conducted at least once per school year (*It is recommended that practice drills be conducted at the beginning of each school year prior to the last school day in September*).
6. Confer with the AED Emergency Response Team upon receipt of the AED to determine:

- a. A secure placement for the AED(s). The first AED should be placed in an unlocked but alarmed cabinet in a central location for all athletic events. Subsequent AEDs should be placed near the Main Office and close to athletic events and practices.
- b. Who will activate the Emergency Response Team and how will the team be notified.

#### D. AED Emergency Response Team

1. Complete a basic CPR course that includes instruction on the use of the AED that complies with the regulations adopted by Emergency Medical Services Authority (EMSA) and standards of the American Heart Association (AHA) or the American Red Cross (ARC).
2. Possess a current certificate of completion from AHA or ARC in CPR/AED use.
3. Activate the Emergency Response Plan and provide CPR and AED procedures according to training and experience as needed for incidents of sudden arrest.
4. Practice the Emergency Response Plan during annual drills.

## II. Emergency Response Plan

### A. Scene Safety

1. Rescuer safety is of utmost importance. Rescuers are volunteers and are not expected to place themselves at risk in order to provide aid to others. Instead, the scene or environment around a victim must be made safe prior to providing aid.
2. Rescuers should verify that the victim is not in contact with any live electrical connections.
3. Rescuers should remove the victim to a dry surface away from any exposure to water whenever possible.
4. Refrain from using any portable radios near the victim while the AED is analyzing.

## B. Recommended Incident Response

1. Assess the victim for consciousness. If the victim is unconscious, has no pulse, and is not breathing regularly continue to step 2.
2. Activate the AED Emergency Response Team by using the walkie-talkie/radio and asking for the AED team to respond to your location and ask that the office manager or other designee call 9-1-1 immediately.
3. Begin CPR and continue CPR until the AED arrives.
4. School administrator will assign a member of the AED Emergency Response Team to get the AED and take it to the scene while also ensuring that 9-1-1 has been contacted.
5. Once the AED arrives, continue with CPR while another member of the AED Emergency Response Team connects the AED and turns the AED unit on.
6. Continue AED and CPR procedures until EMS arrives.
7. An AED Emergency Response Team member should be assigned to control the area or “crowd control” to ensure that rescuers have space to provide emergency services.
8. An AED Emergency Response Team member should be assigned to document the incident with special attention given to the start and end time of the incident.
9. After the incident, notify the Program Coordinator of the incident and complete an Internal Incident Report Form immediately and send a copy to the Program Coordinator within 24 hours.
10. Site Coordinator will inspect the AED and put it back into readiness and document it on the Daily/Monthly Checklist. This includes replacing the items that were used during the incident as well as ensuring that the AED is in proper working condition per manufacturer guidelines. *A readiness check as described under Monthly Readiness Status Check below must be conducted after each use.*

11. Site administrator will conduct an informal debriefing and post-event review. Items to be discussed include:
  - a. Identification of actions that went well
  - b. Identification of areas for improvement
  - c. Stress debriefing
12. Site Coordinator will complete the EMSA PAD Post Event Report immediately and send a copy to the Program Coordinator within 24 hours.
13. Program Coordinator will notify the licensed physician of the incident within 24 hours and provide copies of necessary documentation.

### **III. CPR and AED Training**

CPR and AED training shall comply with the American Heart Association or American Red Cross CPR and AED guidelines. For every AED unit acquired, up to 5 units, no less than one employee per AED unit shall complete a training course in CPR and AED use. The training shall include the following topics and skills:

1. Basic CPR skills;
2. The proper use, maintenance, and periodic inspection of the AED;
3. The importance of early activation of the Emergency Response Plan, early CPR, early defibrillation, early advanced life support;
4. Overview of the local EMS system, including 9-1-1 access and interaction with EMS personnel;
5. Assessment of an unconscious victim, to include evaluation of airway and breathing, to determine the appropriateness of applying and activating an AED;
6. Information relating to defibrillator safety precautions to administer shock without jeopardizing the safety of the patient or the rescuer or other nearby persons to include, but not be limited to:

- a. Age and weight restrictions for use of the AED,
  - b. Presence of water or liquid on or around the victim,
  - c. Presence of transdermal medications,
  - d. Presence of implantable pacemakers or automatic implantable cardioverter-defibrillators;
7. Recognition that an electrical shock has been delivered to the patient and that the defibrillator is no longer charged;
  8. Rapid, accurate assessment of the patient's post-shock status to determine if further activation of the AED is necessary; and,
  9. The responsibility for continuation of care, such as continued CPR and repeated shocks, as indicated, until the arrival of more medically qualified personnel.

#### **IV. AED Equipment Maintenance and Supplies**

##### **A. Supplies**

AED equipment is the property of the school. The school will be responsible for maintaining the equipment and supplies as noted below. *All expired items must be replaced by the school.*

1. Automated External Defibrillator Case which includes:
  - a. Automated External Defibrillator with battery.
  - b. Extra battery to remain in sealed plastic.
  - c. Two sets of adult defibrillator pads and one set of pediatric pads to remain in sealed packaging.
2. Fast Response Kit attached to AED Case includes:
  - a. Mouth-to-Mouth Protective Barrier/Mask
  - b. Scissors
  - c. One pair of disposable gloves
  - d. Disposable razor
  - e. Disposable towel

**B. Maintenance of AED Equipment**

The AED shall be maintained and regularly tested according to the operation and maintenance guidelines set forth by the manufacturer, in accordance with any applicable rules and regulations set forth by the governmental authority under the federal Food and Drug Administration and any other applicable state and federal authority as noted below.

**1. Daily AED Readiness Status Check**

Site Coordinator or designated personnel will perform a Daily AED Readiness Status Check which includes the visual inspection of the AED to confirm the following:

- a. AED is in the proper location.
- b. AED case is intact and has no signs of tampering.
- c. Readiness Status for the Zoll AED Plus is checked by viewing the green “check mark” in the Status Display Window. If a solid red “X” is seen in the Status Display Window, it should be reported to the Site Coordinator immediately. *The Status Display Window is located on the front of the AED near the handle opposite the On/Off button.*
- d. The Daily Readiness Status Checklist is completed daily. *This should be posted with the AED unit.*

**2. Monthly Readiness Status Check**

Site Coordinator will perform a more extensive AED readiness status check monthly. The Monthly AED Readiness Status Check should confirm the following:

- a. Defibrillator Pads: Confirm that two sets of adult pads and one set of pediatric pads are present and that they have not expired as indicated on the outside of the package. *One set of adult pads should be connected to the AED unit at all times.*
- b. Spare Battery: Present and has not expired as indicated by the expiration date on the battery. *Recommended batteries for the Zoll AED Plus are 10 Duracell 123A Lithium batteries.*
- c. Fast Response Kit: Ensure that the kit is present and attached to the AED unit and includes all of the supplies listed under the AED Equipment section above.
- d. Readiness Check: Perform at least monthly. Hold the “On/Off” button down for 5 seconds. If the AED unit is ready for use it will say, “Unit Okay”. If it is not ready for use it will say, “Unit Fail” and the red “X” will appear in the Status Display Window. If the unit fails, press the

“On/Off” button once and the unit will report the problem. *The problem should be fixed immediately and the Readiness Check should be completed again to ensure that the unit is ready for use.*

- e. The Monthly Readiness Status Checklist is completed. *This should be posted with the AED unit.*

## V. **Practice Drills/Program Evaluation**

### A. Practice Drills

Practice drills should be conducted at least once per school year and should include the entire AED Emergency Response Team. It is recommended that an annual practice drill occur at the beginning of each school year, prior to the last school day in September. The goals of the practice drill include the following:

1. Practice the Emergency Response Plan including scene safety and recommended steps to be taken during an emergency incident.
2. Assess the steps taken during the practice drill to determine if all recommended steps were completed. *The recommended steps are noted above under “Recommended Incident Response”.*
3. Assess the emergency response time. This refers to the time that it takes from when the first responder arrives on scene to when the AED is applied to the victim. *If the time from sudden cardiac arrest to AED application is greater than 3 minutes the plan must be re-evaluated.*

### B. Evaluation

Evaluation of the Emergency Response Plan and overall AED Program should be conducted after each incident requiring the AED unit as well as during each practice drill.

1. Recommended Incident Response

Evaluate whether all of the recommended steps were completed. If not, identify the causing factors and provide further education for the AED team and/or work with the Program Coordinator to amend the response plan as necessary. *This may be an indication that additional practice drills should be conducted during the school year.*

## 2. Emergency Response Time

If the time from when the first responder arrives on scene and activates the AED Emergency Response Team to when the AED is applied to the victim is greater than 3 minutes then corrective action is necessary. Identify the causing factors (i.e. AED location, environmental factors, staff knowledge) and rectify immediately. *This may be an indication that additional practice drills should be conducted during the school year.*

## 3. Program Evaluation

The most important outcome to evaluate during each incident requiring the AED unit is survival rates after the incident. Specifically, survival to hospital discharge and survival 1 month post incident. The Program Coordinator should evaluate these outcomes after each incident and amend the policy as necessary.

The Program Coordinator should also evaluate the “Recommended Incident Response” and “Emergency Response Time” as specified above after each incident and amend the policy as necessary.