

SANTA BARBARA SIPE SCHOOL DISTRICT
Automated External Defibrillation Program
Rev 10/2018

1. Scope

Santa Barbara Self Insured Program for Employees (SIPE) is dedicated to establishing, maintaining, and overseeing a successful Automated External Defibrillation (AED) Program for SIPE Schools in Santa Barbara County. SIPE Safety Office will work with employees who volunteer to serve as trained responders in the event of a medical emergency requiring cardiopulmonary resuscitation (CPR) and the use of an AED. This document describes the guidelines.

2. Purpose

The purpose of this document is to establish effective, comprehensive, and consistent guidelines. These guidelines will apply to the site assessment, application, maintenance, training and other components that may be required by Santa Barbara School Districts so that SIPE can ensure that an effective AED program is in place.

3. Definitions

Automated External Defibrillator (AED)

A small, portable, electronic medical device with a computer that will automatically analyze the heart rhythm. If the AED detects a life-threatening abnormal rhythm, the AED will provide voice prompts and a visual message for the responder. The AED instructs the responder to move away from the victim and to push the shock button to deliver a life saving shock.

Volunteer Responder

An employee of a Santa Barbara School District who volunteers to respond to an emergency at work. The volunteer responder is trained in CPR and the use of the AED and has received certification with a nationally recognized training institution. This would also include any security personnel who have been contracted by the company or organization and who are also required to respond to medical emergencies. Certification must be current.

Cardiopulmonary Resuscitation (CPR)

External chest compressions and artificial ventilation applied to a victim of Sudden Cardiac Arrest.

Emergency Medical Services (EMS)

A national system of professional responders who have been trained to provide pre-hospital, immediate care for victims of sudden illness or injury.

Risk

The chance of injury or illness as determined by the presence of hazards and/or the probability of an adverse event occurring.

Sudden Cardiac Arrest (SCA)

Sudden cardiac arrest is an electrical problem whereby the heart function ceases abruptly and without warning. The heart no longer pumps blood throughout the body and death occurs. The usual cause is an arrhythmia known as Ventricular Tachycardia (VT) or Ventricular Fibrillation (VF) or both.

Heart Attack

A heart attack is a pumping problem whereby one or more vessels of the heart are blocked, preventing proper blood flow that results in heart muscle death.

4. The Concepts of an Early Defibrillation Program

Early defibrillation addresses the problem of sudden cardiac arrest. Early defibrillation is most successful 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 advance life support. Establishment of early defibrillation within a strong chain of survival will ensure the highest possible survival rate.

5. The Response Team

Goal: The goal of the response team is to increase the rate of survival of people who have sudden cardiac arrest at work. Effective programs deliver a shock to a victim within 3 to 5 minutes of collapse.

Roles and Responsibilities: Listing all those trained in current CPR and AEDs as potential responders. These responders are protected by California's Good Samaritan Laws as defined in SB 658.

A. Program Administrator

It is the responsibility of the SIPE Safety Office to:

- A. Oversee the implementation of the program
- B. Designate the AED site coordinators(s)
- C. Communicate with key decision makers
- D. Review the program annually to evaluate effectiveness
- E. Accurately maintain and update the AED monthly inspections

B. Site Coordinator

It is the responsibility of the Site Coordinator to:

- A. Communicate with SIPE with respect to:
 - i. Medical director and medical oversight
 - ii. Program administration, management and EMS notification
 - iii. Volunteer responders
 - iv. Compliance with SIPE policies and procedures
- B. Maintain a current list of trained volunteer responders
- C. Facilitate event review, data collection and quality initiatives
- D. Adhere to the SIPE guidelines for maintenance and upkeep involving the AED(s) they are responsible for
- E. Accurately maintain and update their AED monthly inspections via the Internet or maintenance work order.

C. Volunteer Responders

Volunteer responders are responsible to:

- A. Successfully complete all mandatory training and skills evaluation as detailed by the AHA and the medical director
- B. Maintain current certification and participate in re-certification

D. SIPE Safety Manager

It is the responsibility of the SIPE Safety Manager to:

- A. Identify and review local and state regulations
- B. Notify the local EMS or regulatory agency of the location of AED's where applicable by law or regulation
- C. Identify local EMS policy and procedures and communicate them to the Program Administrator
- D. Share AED use data per local and state regulations
- E. Provide CPR and AED training for any district with AED's
- F. Provide an "online oversight" AED maintenance program to assist districts in keeping compliant with regulations that require regular inspections and tracking of AEDs.

6. The Response Equipment

A. Description

The AED and other emergency response equipment support the chain of survival in the event of an SCA. Each device should be maintained according to policy and following the manufacturer's guidelines. The AED and equipment will only be used at the facility and is not for personal use.

The AED shall be applied to:

- A. Unresponsive and not breathing victims
- B. Victims that are infant to pre-pubescent
 - i. Pediatric electrodes, if available; If not, Adult pads used like pediatric pads (affixing upper right chest pad to the center chest, and the lower left rib cage pads moved to the center of the back between shoulder blades)

B. Location

The AED's will be placed in the location recommended by SIPE and the program administrator to ensure availability of the AED is within the 3-5 minute recommended response time. AED's are placed for the most efficient response time to ensure that the goal of the AED program is reached. AEDs should be stored with the appropriate accessories.

C. Accessories

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

| Item Description | Quantity |
|-------------------------|-----------------|
| Electrode pads | 1 or more |
| AED battery | 1 or more |
| Rescue essentials | 1 or more |

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

7. AED Maintenance

See Appendix 1 for the *Periodic Maintenance Checklist*

A. Report of Damage

Follow SIPE guidelines for all scheduled AED maintenance checks. Report immediately, any defects, missing, damaged or expired accessories to SIPE.

B. Required Maintenance Schedule

The site coordinator is required to complete the periodic maintenance verification checklist on each AED to ensure the quality of the AED program. Monthly checks are required to be recorded by the 28th of every month, but no sooner than the 18th of each month.

The site coordinator will receive an email reminder five (5) days prior to the required verification date. If the verification is not performed, the site coordinator will be notified again the day the check is due.

If the AED has not been checked within three (3) days following the required maintenance deadline, the program administrator and the site coordinator will be notified that the site has reached an out-of-compliance status.

8. The AED Response Plan Overview

See Appendix II for the *Response Plan*

A. Call 911

Notifying emergency medical services is the first link in the chain of survival and is a very crucial step. Any employee who recognized an emergency must call 911 immediately. Information that needs to be provided to 911 may include:

- A. The type of emergency
- B. The location of the emergency
- C. A brief description of the victim including approximate age, gender, status of victim and CPR
- D. Special access instructions to the site of the emergency

Any employee should then summon the volunteer responders.

B. Volunteer's Respond

Volunteer responders will provide care based on:

- A. Scene safety
- B. Victims condition and initial assessment
- C. The emergency response plan
- D. SIPE protocols

C. Transfer of Care

Upon arrival of EMS, the volunteer responders will transfer care to EMS, the volunteer responders may assist with care, if requested by EMS. Volunteer responders will provide the following information to EMS:

- A. Victim's condition upon the arrival of responder
- B. Time of incident
- C. All care provided to the victim

D. Post Incident Procedures

The volunteer responders will follow these procedures after the incident:

- A. Notify SIPE immediately by calling (805) 922-8003 (Monday-Friday, 8:00 a.m. - 5:00 p.m.)
- B. Complete the Post Incident Report Form
- C. Complete post incident equipment maintenance
- D. Participate in critical incident debriefing session
- E. Notifying SIPE will activate the loaner system so that a loaner AED may be sent to the site. The site address will be verified so that SIPE may send a loaner AED and a return shipment label to the site via UPS. The site coordinator must return their AED back to SIPE in the loaner box utilizing the label provided. SIPE will retrieve the event data from the AED and submit the information to the overseeing physician for review.

F. Critical Incident Debriefing

A critical incident debriefing session will be held as soon as possible following an event. This will be done on an informal basis. The purpose of debriefing is to:

- 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 will be made without conferring with the program administrator, and the expressed authorization from SIPE based on consultation with and approval by the medical director.

9. Protocol Authorization

SIPE and the program administrator will review and approve all emergency response procedures including AED protocol and any addendums or changes.

A. Protocol Approval

The procedures and protocols are developed with guidance from SIPE for the specific use by Santa Barbara County SIPE School Districts.

B. Protocol Review

An annual review will be conducted to ensure quality and consistency with the program. No changes to the Emergency Response Plan will be made without conferring with the program administrator and the expressed authorization from SIPE based on consultation with the approval by the medical director.

C. Operational Guidelines

The protocol detailed in the Emergency Response Plan is intended for the volunteer responders.

D. Protocol Qualifications

The qualifications of the volunteer responders are:

- A. Successful completion of AHA and/or any nationally recognized and approved training program, such as Red Cross or Medic first Aid.
- B. The minimum training to be completed is CPR and AED
- C. Volunteer responders perform only to the level of training completed and indicated on the certification card.
- D. The site coordinator must identify and accept the volunteer responder as part of the emergency response team
- E. Current certification must be maintained

10. Emergency Response Protocol

A. Initial Assessment

The first volunteer responder conducts an initial assessment to determine the level of response required from the team and local EMS. The initial assessment includes, but is not limited to:

- A. Determine scene safety for self and other responders
- B. Assess the victim; determine if the victim is responsive or unresponsive
- C. Consider universal precautions prior to patient contact

B. Call 911

The first volunteer responder should call for additional help. A second responder should be sent to call 911.

If alone and no other person responds, the first volunteer responder should not delay and call 911 immediately.

The following information is to be provided to 911:

- A. Type of emergency
- B. Exact location of emergency
- C. Any special access instructions
- D. Victim assessment, responsive/unresponsive, breathing/not breathing, if known

Note: 911 may be able to assist with directions for care.

C. Retrieve the AED

If available, a second person or another responder should be sent to get the AED immediately. If alone, call 911 from a portable phone if possible so you can

retrieve the AED while you call 911. If you are alone and no portable phone is available, retrieve the AED immediately after calling 911.

D. Begin CPR

Volunteer responder will provide CPR as follows:

- A. Check for breathing
 - i. Assess face for signs of shock
- B. Check for normal breathing
 - i. Look for chest to rise, if none
- C. Immediately begin chest compressions
 - i. Push hard on lower center of chest at a depth of 2"-2-1/2" depth at a rate of 100 compressions/minute
 - ii. Do 30 Compressions then give 2 rescue breaths
 - iii. If you do not have a CPR Barrier, do compression only CPR with continuous chest compressions. If you have help, switch off with another CPR provider every 2 minutes or as needed.
- D. If you plan on giving rescue breaths, use head tilt, chin lift method, open mouth and quickly inspect for obstructions, apply CPR Barrier and give two (2) one second breaths each. Ensure that each breath makes the chest rise and fall.
- E. Continue cycles of 30 compressions and 2 rescue breaths until and AED arrives, or EMS takes over or the victim becomes responsive

DI. AED Arrives

It is extremely important that the AED be used immediately.

As soon as the AED arrives:

- A. Power on the AED
 - i. Push the on/off button
 - ii. Remove the cover/lid
 - iii. Follow the voice prompts
- B. Follow the pictures on the AED electrode pads for proper placement
- C. Perform any special procedures as needed
 - i. Wearing protective gloves, remove any medication patches on the surface of the chest and then wipe the chest
 - ii. Using supplied prep razor, shave excessive chest hair
 - iii. Do not place AED electrode pad directly over implanted devices, however, move the pads slightly if possible.
 - iv. Dry the chest if wet so the AED pads adhere properly

F. Allow the AED to Analyze

When the AED pads are in place the AED will automatically analyze the victim's Heart rhythm and indicate a "shock" or "no shock" status.

A. If SHOCK ADVISED

- i. **Clear** the victim - do not touch the victim
- ii. **Press** the flashing button to deliver the shock when prompted
- iii. **Resume CPR** immediately after the shock, the AED will prompt to resume CPR
- iv. **Begin with compressions**, continue with 30 compressions and 2 breaths
- v. The AED will re-analyze in two (2) minutes, follow the voice prompts

B. If NO SHOCK ADVISED

- i. **Resume CPR immediately**
- ii. Continue with 30 compressions and 2 breaths until the victim moves or breathes normally, or until EMS arrives
- iii. The AED will re-analyze rhythm every 2 minutes.
- iv. Follow the voice prompts

G. AED Application Guidelines

Once the AED electrode pads are applied, do not remove them. If victim shows signs of responsiveness, stop CPR and put victim in a recover position if no injuries are suspected. If injuries are suspected, do not move patient, but maintain the airway with head-tilt, chin-lift procedure. Do not power off the AED. The AED will continue to monitor the patient's heart rhythm.

H. Patient Monitoring

If the victim becomes unresponsive again after regaining consciousness following a shock, the AED will alert the volunteer responder to:

- i. **Clear** the victim
- ii. **Press** the shock button if an additional shock is needed
- iii. **Follow** the voice prompts of the AED
- iv. **Resume CPR**

I. Transfer of Care to EMS

Upon arrival of EMS, transfer patient care to the EMS team. Provide as much information as possible to EMS as requested.

J. AED Application Guidelines

Once the AED electrode pads are applied, do not remove them. If victim shows signs of responsiveness, stop CPR and put victim in a recover position if no injuries are suspected. If injuries are suspected, do not move patient, but maintain the airway with head-tilt, chin-lift procedure. Do not power off the AED. The AED will continue to monitor the patient's heart rhythm.

K. Patient Monitoring

If the victim becomes unresponsive again after regaining consciousness following a shock, the AED will alert the volunteer responder to:

- v. **Clear** the victim
- vi. **Press** the shock button if an additional shock is needed
- vii. **Follow** the voice prompts of the AED
- viii. **Resume** CPR

L. Transfer of Care to EMS

Upon arrival of EMS, transfer patient care to the EMS team. Provide as much information as possible to EMS as requested.

M. Post Incident Report

Contact SIPE within 24 hours of the event. The Post Incident Report, along with any other forms required by local law, will be sent to the Site Coordinator in charge of the site which used the AED. The volunteer responders who provided care will document the care given and the use of the AED. The Post Incident Report Form will be used.

- i. This form is to be given to the Site Coordinator and/or the Program Administrator.
- ii. This report will then be forwarded to SIPE within 24 hours of the event.

11. Confidentiality

The Post Incident Report is part of the patient care record and is confidential information. This report is not to be copied or altered. 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 can be shared with the medical director and the AED site coordinator. This debriefing will be held via phone conference with SIPE.

12. Post Event Support and Data Retrieval

SIPE will begin the post event services at no additional charge.

A. Data Retrieval

Notifying SIPE of your AED use will activate the loaner system so that a loaner AED may be sent to the site. The site address will be verified so that SIPE may send a loaner AED and return their AED to SIPE in the loaner box utilizing the label provided. SIPE will retrieve the event data from the AED and submit it to the overseeing physician for review and filing according to local requirements.

Site coordinators may also retrieve their event data and email it to their SIPE Account Manager.

Data cards may also be submitted in lieu of AEDs for data retrieval.

B. AED Return to Service

Once the AED has been returned to the specified location, inspect the AED for any damage and/or missing parts. Replace all supplies used during the event such as batteries and electrode pads.

13. Report Misuse or Defect

Any defects in the AED operation or deviation from the protocols established herein are to be reported to the program administrator and to SIPE.

Tampering with medical equipment, including the AED, will not be tolerated. Any suspected tampering and/or misuse must be reported immediately so the AED can be inspected for proper operation.

APPENDIX I

Periodic Maintenance Checklist

SIPE recommends that your AED inspection be conducted and a record of this inspection be recorded into the database at www.safetymatters.onlineoversight.com. You will enter a record of inspection for each device for which you are the AED site coordinator.

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.

To enter the record of your inspection:

1. Go to www.safetymatters.onlineoversight.com and login using your AED site coordinator username and password.
2. For each site you are overseeing, you will need to enter the maintenance record.
3. Click on the dashboard tab to take you to your AED inventory and locations.
4. Click the status tab to see the AED inspection checklist. Verify you inspected by clicking “check now.” When done, click the save button.

What if something is wrong with my device?

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. If you still experience difficulties, please contact Safety Matters at (805) 705-9222.

APPENDIX II Response Plan

The following AED protocol is for use by the volunteer responders of your company. Safety Matters medical director/local medical director approves it for use by approved members only. The protocol will be reviewed on an annual basis and replaced by a revised protocol as necessary. See the following AED protocol flow chart.

1. Conduct an initial assessment:
 - a. Assess for scene safety; use universal precautions.
 - b. Assess patient for lack of consciousness, lack of breathing by quickly checking the face for signs of shock and the chest for rising and falling breathing.
2. Ensure that 911 have been notified and that the local EMS response agency is en-route. When an emergency call is received, the following information must be obtained:
 - a. Type of emergency
 - b. Location of the emergency
 - c. Breathing/consciousness of patient and whether CPR is in progress
 - d. Any special access instructions
3. Assess for breathing of patient. If patient is not breathing, perform CPR until the AED arrives.
4. As soon as the AED is available, power on the AED and follow the prompts. 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 patient as soon as possible.
5. If shock is advised by AED, make sure no one is touching the patient. Say "CLEAR" and deliver a shock to the patient if AED is a manual type. Automatic AED's will deliver a shock after a 3-second countdown. Make sure during the countdown and shock that no one is touching the patient. After shock or no shock prompt, listen for AED prompts that advise it is safe to touch the patient and to continue to do CPR. Per AHA guidelines, do 2 minutes of uninterrupted CPR. The AED will prompt you to "stop CPR" and will do an analysis of the patient's heart rhythm.
6. If no shock is advised, check for breathing, and continue doing CPR.
7. If the patient exhibits no breathing, continue to perform continuous CPR until otherwise prompted by the AED, EMS medics, and/or the medical director.
8. Transfer patient care to EMS. No more than 24 hours following the event, document the SCA 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. Contact Safety Matters Customer Support at (805) 705-9222 as soon as possible and follow post-event procedures found in Section 8, D & E. Post-event procedures shall commence including:

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

APPENDIX III
AED Incident Report

SIPE FACILITY AED REPORT FORM FOR CARDIAC ARRESTS

1. Facility Name: _____
2. Incident Location: _____
3. Street Address: _____

| City | State | Zip | County/Parish |
|------|-------|-----|---------------|
|------|-------|-----|---------------|

4. Date of Incident: _____/_____/_____(MM/DD/YYYY)
5. Estimated time of incident: _____:_____(HH/MM) circle AM or PM
6. Patient Gender: Male [] Female []
7. Estimated age of patient: _____yrs.
8. Did the patient collapse (become unresponsive)? Yes [] No []

a. If Yes, what were the events immediately prior to the collapse (check all that apply)

- | | | |
|---|---|---|
| Difficulty breathing [<input type="checkbox"/>] | Chest pain [<input type="checkbox"/>] | No signs or symptoms [<input type="checkbox"/>] |
| Drowning [<input type="checkbox"/>] | Electrical shock [<input type="checkbox"/>] | Injury [<input type="checkbox"/>] |
| Unknown [<input type="checkbox"/>] | | |

b. Was someone present to see the person collapse? Yes [] No []

If Yes, was that person a trained AED employee? Yes [] No []

c. After the collapse, at the time of patient assessment and just prior to the facility AED pads being applied:

Was the person breathing? Yes [] No []

Did the person have signs of circulation? Yes [] No []

9. Was CPR given prior to 911 EMS arrival? Yes [] Go to 9a No [] Go to 10
 - a. Estimated time CPR started: _____:_____(HH/MM) circle AM or PM
 - b. Was CPR started prior to the arrival of a trained AED employee? Yes [] No []

- c. Who started CPR? Bystander [] Trained AED employee []
10. Was a facility AED brought to the patient's side prior to 911 EMS arrival? Yes [] No []
- a. If No, briefly describe why and skip to #18 _____

- b. If Yes, estimated time (based on your watch) facility AED at patient's side:
____:____(HR:MM) AM or PM
11. Were the facility AED pads placed on the patient? Yes [] No []
- a. If Yes, was the person who put the AED pads on the patient a:
Trained AED facility employee [] Untrained AED facility employee []
Bystander []
12. Was the facility AED turned on? Yes [] No []
- a. If Yes, estimated time (based on your watch) facility AED was turned on:
____:____(HR:MM) AM or PM
13. Did the facility AED ever shock the patient? Yes [] No []
If Yes,
- a. Estimated time (based on your watch) of 1st shock by facility AED:
____:____(HR:MM) AM or PM
- b. If shocks were given, how many shocks were delivered prior to the EMS ambulance arrival? # ____
14. Name of person operating the facility AED: _____
First Middle Last
- a. Is this person a trained AED employee? Yes [] No []
- b. Highest level of medical training of person administering the facility AED:
Public AED trained [] First responder AED trained []
EMT-B [] CRT/EMT-P [] Nurse/Physician []
Other health care provider [] No known training []

15. Were there any mechanical difficulties or failures associated with the use of the facility AED?

Yes [] No []

If Yes, briefly explain and attach a copy of the completed FDA reporting form (required by Federal law):

16. Did any of the below personal concerns regarding the patient apply?

Vomiting [] Excessive chest hair [] Sweaty [] Water/Wet Surface []

Other concerns not listed above:

17. Were there any unexpected events or injuries that occurred during the use of the facility AED? Yes [] No []

If yes, briefly explain: _____

18. Indicate the patient's status at the time of the 911 EMS arrival:

Signs of circulation restored: Yes [] No [] Unsure []

Breathing restored: Yes [] No [] Unsure []

If yes, time breathing restored: ____:____(HH:MM) AM or PM

Responsiveness restored: Yes [] No [] Unsure []

If yes, time responsiveness restored: ____:____(HH:MM) AM or PM

19. Was the patient transported to the hospital? Yes [] No []

a. If yes, how was the patient transported?

EMS Ambulance [] Private vehicle [] Other _____

b. If yes, please provide name of transporting ambulance service and the facility the

patient was transported to:

20. Other comments/concerns not referenced on this form that may be useful for the medical director?

Report completed by:

| | |
|-------------------|------|
| Please print name | Date |
|-------------------|------|

| | |
|-----------|------|
| Signature | Date |
|-----------|------|

| | |
|-------|--------------|
| Title | Office Phone |
|-------|--------------|

Make/model of the facility AED used?

| | |
|--------------|-------|
| Manufacturer | Model |
|--------------|-------|

**PLEASE RETURN TO SIPE WITHIN 24 HOURS FOLLOWING
INCIDENT: FAX (805) 928-5414
PLEASE FORWARD QUESTIONS TO YOUR SITE
COORDINATOR OR
SIPE AT (805) 922-8003**

Facility Name _____