San Bernardino Valley College
Public Access AED (Automated External Defibrillator) Program Policy
July 16, 2009

Purpose

The college is a setting where large numbers of people congregate. We are committed to providing a safe learning centered environment for students, faculty, staff, and visitors. Training lay rescuers and providing them access to Automated External Defibrillators (AEDs) will save precious time and improve the survival rate for individuals experiencing a cardiac arrest while on campus.

Cardiac arrest is most often caused by an abnormal heart rhythm called an arrhythmia. Ventricular Fibrillation (VF) is the most common arrhythmia that causes cardiac arrest. Defibrillation is the only known therapy for VF. For every minute that passes without defibrillation the victim's chance of survival is decreased by 7 – 10 percent. Today a new generation of defibrillators (AEDs) makes it possible for trained lay rescuers to deliver safe and effective defibrillation.

Authority

Resources consulted in the development of this program include Title 22. Division 9. Chapter 1.8 Training Standards and Utilization for Use of the AED by Non-licensed or Non-certified personnel; California Health and Safety Code 1714.21, 1797.190, 1797.196 and Assembly Bill No. 2041; Federal Public Health Improvement Act of 2000 Section IV; American Heart Association Guidelines, HeartStart OnSite Defibrillator Owners Manual; personal communication with Sherri Shimshy of the local EMS agency and Dr. Wayne Dysinger M.D. from Loma Linda Department of Preventative Medicine.

Notification of Emergency Medical Services (EMSA) Authority

The local Emergency Medical Services Authority (EMSA) is provided with a copy of our Public Access AED program, policies, and procedures. They are notified that we have acquired Phillips Heart Start AEDs for use in our AED program. They are provided with information regarding the location of each AED and will be notified with updates as additional AEDs are acquired.

Any use of an AED will be reported to the licensed physician and to the local EMSA. The event summary form provided by the American Heart Association and an agency Report of Accident will be completed for each AED use. At the time the care of the patient is transferred to Emergency Medical Services (EMS) paramedics obtain the ICEMA number to place on the event summary form so that the EMSA is aided in following up on the event with the hospital. The local emergency medical services authority contact person, Sheri Shimshy can be contacts at (909) 388-5816 for instruction on where to send the event summary.

The licensed physician, Wayne Dysinger, MD, MPH, can be contacted at Loma Linda University, Department of Preventive Medicine (909) 558-7518 to provide them with event reports.

Placement of AEDs

Placement of AEDs needs to be in central locations, easily accessible, near to a telephone, and close to trained persons. The goal is to place AEDs so that victims can be reached in less than three minutes. Everyone using the building regularly needs to know the AED location. In multi-floor structures avoid placement where more than one elevator needs to be used. See Appendix A for current locations.

Appendix A. Map of Campus indicating AED locations

Training Requirements

Authorized Users are those who have complete a CPR course that includes training in the use of AEDs within the past two years.

It is recommended that a minimum of one lay rescuer per AED and location be trained in Adult CPR, Activation of the Emergency Medical Services (EMS) system, relief of adult foreign body obstruction, and safe effective provision of cardiac defibrillation with an AED. Lay rescuers to cover evening hours need to be trained for buildings open during evening hours.

The training must meet the standards of the American Heart Association or the American Red Cross. The training must also include a written and skills examination which tests the ability to assess and manage unconscious patients, cardiac arrest, airway obstruction, and special situations related to AED use.

The PAD program coordinator will record and maintain all training records in this area.

Appendix B. Sample documentation form of employees (Authorized AED Users) currently meeting training requirements.

Medical Oversight

San Bernardino Valley College is authorized to purchase automated external defibrillators and use the devices under the direction of, Dr. Wayne Dysinger, MD the Medical Director, a physician licensed in this state to practice medicine in all its branches. San Bernardino Valley College through the PAD Coordinator shall notify the local EMS agency and Medical Director Designee of the existence of the Phillip's Heart Start 1 AED Equipment. The Medical Director will also provide oversight to the program including training recommendations, coordination with

the local EMS, maintenance of quality, and consultation with the PAD program coordinator.

Maintenance and Use of AEDs

Defibrillator Use

This is a brand of automated external defibrillator (AED) used only to treat unconscious victims who are not breathing normally, and show signs of circulatory deficiency. This machine will interpret a victim's heart rhythm and advise whether to shock or not. If a shock is advised the machine will automatically charge to the appropriate energy level and advise the operator to shock the patient.

Maintenance

All AEDs must be evaluated for “readiness” at least every 30 days and after each use. The green light in the upper right corner of the machine should flash green every few seconds to indicate “readiness”. The expiration date (center bottom of cartridge window) on the SMART pad cartridge needs to be current. A battery insertion self test should be run only:

- When the On Site AED is first put into service
- After each use of the On Site AED to treat a patient
- When the battery is replaced
- When the On Site AED may have been damaged

The battery has an approximate 4-5 year life and can deliver up to 150 shocks. The AED will chirp and the i-button will flash if the battery is low or the SMART pad cartridge needs to be replaced. Replacement cartridges and batteries will be available from Campus Police.

The PAD program coordinator will perform or delegate maintenance activity as described by the manufacturer in the Philips HeartStart Onsite Defibrillator Owners manual and keeps maintenance records for each unit of the agency during each calendar year.

The OnSite AED exterior and carry case may be cleaned with soft cloth dampened in soapy water, chorine bleach (2T per quart or liter of water), or ammonia-based cleaners. *Do not use rubbing alcohol, acetone, strong solvents, or enzymatic cleaners since they will damage the AED. Do not immerse the OnSite in fluids or allow fluids to spill onto it. Do not sterilize the OnSite.*

Appendix C. AED Maintenance Log

Post Event Evaluation

Once an AED unit has been used on a victim and EMS has taken charge of the patient the following steps shall be taken:

- The employee will take steps to place the AED back in service as soon as possible by completing a battery insertion self test, replacing the SMART pad cartridge, assess the unit for damage, clean the unit as needed (see maintenance), and returning the unit to its storage location if the unit indicates “readiness” with the flashing green light. (Replacement batteries are available through the Coordinator and SMART pads are available in AED cabinets or from the Coordinator)

- A copy of the Event Summary Form and Report of Accident must be forwarded to the Medical Director and EMSA. The contact phone for the Medical Director is Dr. Wayne Dysinger at Phone – (909) 558-7518 And for EMSA Sherri Shimshy requests a phone call to (909) 388-5816 for instructions.

San Bernardino Valley College
Automated External Defibrillator Procedure

NOTE: Perform CPR until AED is at the scene

These are the steps to follow in the event of emergency where the automated external defibrillator (AED) may be needed.

At the Scene of the Accident/Event

- ✓ Assess for your own safety in entering the area
- ✓ Determine if the patient is non-responsive
- ✓ Activate campus response by having someone call 4491 so campus police can activate internal emergency processes, call 911, and direct EMS to the location
- ✓ Activate the emergency response system by calling 7- (911) if not done
- ✓ Open Airway, Check for Breathing (if none give two breaths), and Note signs of Circulation (pulse, cough, movement) if none noted...
- ✓ Perform CPR until the AED is applied
- ✓ Turn AED on by pulling the green handle - AED will automatically start giving voice prompt instructions as to its use and continuing CPR
- ✓ Per Instructions - apply electrodes on the victim's chest (see diagram) Adult patients only: one electrode pad is applied to the **Right upper chest and** second pad on the **Left** side of the **chest** 1-2 inches **below** the **nipple.** Make sure to remove any medication patches or gels in these areas. (Males with a lot of chest hair need to be shaved to achieve a good connection).
- ✓ Stand clear of the victim while AED is analyzing the heart rhythm and if a shock is needed.

Shock Advised

- ✓ **If** a **shock is advised** make sure **no one is touching** the **victim or anything that is touching them!** The AED will advise you when to push the SHOCK button and it will continue to analyze the patient's heart rhythm - giving up to three shocks in a row.
- ✓ AED will prompt you to **check** the **pulse** (breathing, movement). If absent **CPR** will continue for **1 minute** and AED will reanalyze heart rhythm automatically.

No Shock Advised - No Pulse

- ✓ AED will remind you to check **pulse** (breathing, movement) and if **absent CPR** needs to be start/continue. (cycles of 2 breaths than 30 quick chest compressions and repeat until paramedics arrive - AED will continue to reanalyze heart rhythm and give repeated instructions on continuing CPR)

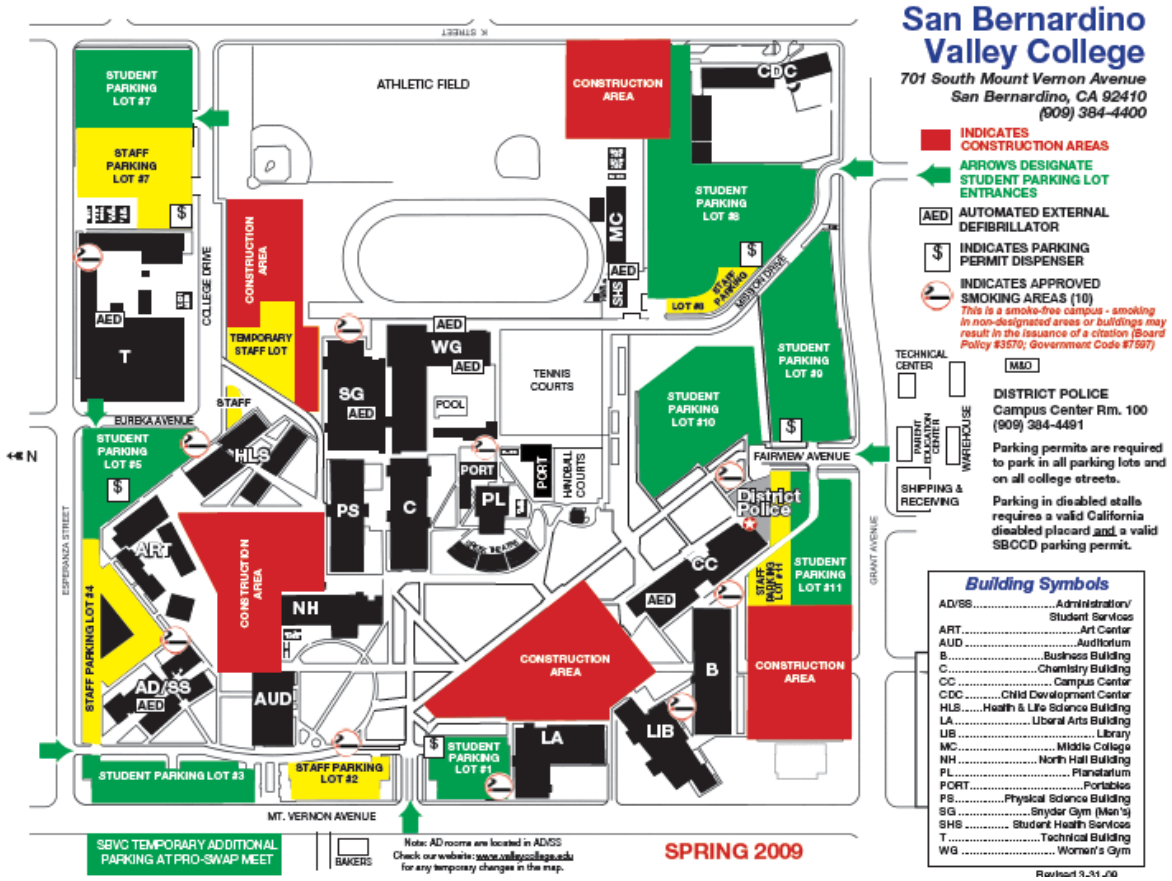
No Shock Advised -- Has a Pulse

- ✓ If victim **does have a pulse** and signs of circulation and movement, **check for normal breathing. If Not** breathing normally **give breaths** at a rate of 12 per minute. AED will reanalyze in 1 minute and continue CPR instructions until paramedics arrive and transport patient to hospital). Paramedics will disconnect AED when they are ready with their own AED.

After Incident

- ✓ Clean AED; replace electrodes, and resuscitation kit if used.

APPENDIX A - MAP OF CAMPUS INDICATING AED LOCATIONS



APPENDIX B - SAMPLE DOCUMENTATION FORM OF EMPLOYEES (AUTHORIZED AED USERS) CURRENTLY MEETING TRAINING REQUIREMENTS

(ON FOLLOWING PAGE)

Authorized ED Users

San Bernardino Valley College

NAME	Bldg	CPR AED Certification Date	EXP DATE	American Heart Association or Red Cross

APPENDIX C - AED MAINTENANCE LOG

(ON FOLLOWING PAGES (2))

Heartstart OnSite Defibrillator
AED Maintenance Log

San Bernardino Valley College

Year: Unit Serial Number: Location:

MONTH												
DATE												
INITIALS												
Instruction and Recommended Corrective Action												
Check the status/service indicator light (see troubleshooting below if no light)												
Check the defibrillator for damage or foreign substances. If it appears that unit was tampered with, immediately notify: Administrative Services & perform battery insertion self test.												
Note date electrode pads cartridge expire: _____. If date is passed, notify: District Police & ADE Coordinator for replacement.												
Resuscitation Kit containing: disposable gloves, face mask, trauma scissors and razor stored with AED. If kit or items missing, notify: AED Coordinator for replacement.												

Troubleshooting Readiness Display

AED will chirp and the i-button will flash if the battery is low or the SMART pad cartridge needs to be replaced. Document action taken on back of form.

Replacement cartridges and batteries will be available from District Police.

Signature _____ Signature _____ Signature _____

Print Name _____ Print Name _____ Print Name _____

Initials _____ Initials _____ Initials _____

Please see back for AED code self check Intervention

AED Code Self-Check Intervention

DATE	Reason for battery self-check Please check one:	Outcome of self-check Please check one:	Intervention Please check one:	After Intervention Please check one:
	☐ AED green light is not flashing ☐ On Site AED is first put into service ☐ On Site AED was used to treat a patient ☐ The battery was replaced ☐ On Site AED was damaged	☐ Passed ☐ Not passed	☐ Battery ☐ Parts replaced ☐ Other: ______________________	☐ Placed AED back in place ☐ Check with Coordinator
	☐ AED green light is not flashing ☐ On Site AED is first put into service ☐ On Site AED was used to treat a patient ☐ The battery was replaced ☐ On Site AED was damaged	☐ Passed ☐ Not passed	☐ Battery ☐ Parts replaced ☐ Other: ______________________	☐ Placed AED back in place ☐ Check with Coordinator
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