Cal Poly Humboldt.

AED & Trauma Kit Program

Standard Operating Procedures (SOP)

Campus Address: 1 Harpst Street, Arcata, CA 95521

Phone Number: 707-826-3302

Campus Program Contact: Environmental Health & Safety

Email: risk-management@humboldt.edu

Contents

1.0 Purpose & Scope 2
2.0 Program Administrator, Medical Oversight, & Department Owner's 2
3.0 Definitions 3
4.0 Procedures for AED Use 3
5.0 AED Training & Notifications 4
6.0 Maintenance & Inspection of AEDs 4
7.0 AED Use Event 6
8.0 Trauma Kits 6
9.0 AED & Trauma Kit Locations and Procurement Process 7
10.0 References 7
11.0 Program Review 8

Attachment A - Medical Authorization Form 9
Attachment B - Current AED & Trauma Kit Locations 10
Attachment C - AED Use Form 13
Attachment D – AED Training Checklist 14
Attachment E - AED & Trauma Kit Check Tags 15
Attachment F – AED & Trauma Kit Quarterly Inspection 16
Attachment G - Wall Sign Examples 17

1.0 Purpose & Scope

This document has been established to set forth responsibilities, maintenance, recordkeeping and training associated with the use and proper operation of automated external defibrillators (AEDs) and future Trauma Kits at Cal Poly Humboldt.

According to the American Heart Association's 2022 update on cardiovascular health, instances of out-of-hospital Sudden Cardiac Arrest (SCA) continue to rise in the United States coinciding with the COVID-19 pandemic, and disproportionately affect vulnerable populations and communities of color. Cal Poly Humboldt strives to increase survivability for those suffering from SCA by spreading awareness and broadening public access to Automated External Defibrillator (AED) devices on campus. These devices are intended to provide a lifesaving bridge during the critical minutes between the onset of SCA and the arrival of Emergency Medical Services (EMS) personnel.

To ensure Cal Poly Humboldt is not held liable for any civil damages resulting from any acts or omissions in the rendering of emergency care by use of a university-owned AED, all conditions in subdivision (b) of Section 1797.196 must be met as outlined in this plan to cover signage[1], notification, training, recordkeeping, and maintenance requirements.

As of January 1, 2017, an AED is required to be installed in newly constructed high-occupancy buildings. Additionally, as of January 1, 2020 an AED is required to be installed in all high occupancy buildings that undergo modifications, renovations, and tenant improvements amounting to $100,000 or more in a single calendar year. This requirement applies to commercial, educational, institutional, and factory buildings with an occupancy load of 200 or more. This includes assembly buildings, auditoriums, and theaters with an occupancy of greater than 300 people. In assembly buildings, there is no dollar threshold for improvements made.

As of January 1, 2023, AB 2260 requires certain high occupancy buildings constructed on or after that date, to comply with certain requirements, including acquiring and placing at least 6 trauma kits on the premises, periodically inspecting and replacing the contents of the trauma kits, providing contact information for training, and notifying tenants of the building or structure of the location of the trauma kits.

For more information on support organizations, regulations, and standards, please see Section 10.0 References.

2.0 Program Administrator, Medical Oversight, & Department Owner's

The Environmental Health & Safety Department (EH&S) oversees the University's AED Program. EH&S collaborates with the physician of the Student Health & Well Being Services for medical guidance and oversight of the AED Program. See Attachment A for the AED Medical Authorization Form.

Each AED and Trauma Kit will be assigned to the department owners responsible for inspections and ordering/maintaining necessary supplies. See Attachment B for current locations and assignments.

[1] Not all University-owned AEDs are mounted (i.e. publicly accessible at all times) so signage requirements are not applicable, but all other requirements of this plan are met. See Attachment B for more information.

3.0 Definitions

a. **Automated External Defibrillator (AED):** An automated portable device that delivers an electric shock through the chest to the heart. The shock can potentially stop an irregular heart beat (arrhythmia) and allow a normal rhythm to resume following sudden cardiac arrest.

b. **Cardio Pulmonary Resuscitation (CPR):** The application of learned techniques in order to maintain basic life support. Manual application of chest compression and ventilations to a person experiencing cardiac arrest.

c. **Emergency Medical Services (EMS):** Professional community responder agency for emergency events, who provide acute medical care and patient transportation to a medical facility for more advanced treatment.

d. **Sudden Cardiac Arrest (SCA):** A condition in which the heart suddenly and abruptly stops beating or fails to produce a pulse, stopping blood flow to the brain and other vital organs. SCA usually causes death if not treated within minutes.

4.0 Procedures for AED Use

When someone appears to be suffering from a heart related medical emergency.

a. Contact University Police at (707) 826-5555 from a cell phone or dialing 911 from any campus phone.

Calling 911 from cell phone, depending on location can transfer to University Police, Arcata Police or California Highway Patrol

b. Assess the victim's condition and begin AED use if warranted (i.e. victim is unconscious and not breathing). Pursuant to CIV §1714.21 Section 1(b) Any person who, in good faith and not for compensation, renders emergency care or treatment by use of an AED at the scene of an emergency is not liable for any civil damages resulting from any acts or omissions in rendering emergency care.

c. Continue life saving techniques and leave the AED on until local Emergency Medical Services (EMS) arrives. At that time, EMS may direct you to aid them in on-going procedures or completely relieve you.

d. The user of the AED shall document the use of the AED using the AED Use Form (Attachment C) or online using the AED Use Form and be prepared to participate in a debriefing of the incident.

e. EH&S will document an incident investigation review by collecting data from the AED and the participants in the event.

f. Following manufacturer specific AED use, the batteries, electrodes, or other parts may need to be replaced or repaired by the manufacturer. Follow manufacturer requirements or recommendations after use of an AED.

g. Additionally, ensure the AED has been tested after each use before placement in the AED cabinet.

5.0 AED Training & Notifications

Training

For every (5) AEDs on campus, (1) employee shall maintain current CPR/First Aid/AED Training that conforms to the American Red Cross (ARC) or American Heart Association (AHA) standards. Certificates in CPR/First Aid/AED training must be kept current and at a minimum a refresher course must be completed every 2 years. For Department Owners that do not maintain this level of training, other CPR/First Aid/AED trained employees can provide the training to them.

In addition, Department Owners will demonstrate the use of the AED to at least (1) other person in their department that occupies the space. Attachment D contains a checklist for topics to cover during the training and a signature space for the trainer and the trainee to document each year and keep on file in their department.

Notifications

At least once a year, EH&S will notify campus students, faculty, and staff of the current AED locations and services providing voluntary CPR and AED training.

6.0 Maintenance & Inspection of AEDs

Manufacturer guidance shall be followed on the maintenance and inspection processes. AEDs have parts which need to be inspected, serviced or replaced at different frequencies (i.e. monthly or annually), depending on the manufacturer's recommendations. These parts include, but are not limited to, batteries, electrodes, and high voltage circuits. See Appendix B for links to current manufacturer owner's manuals.

Department owners of AEDs are responsible to adhere to their specific manufacturer requirements. Properly functioning AED devices will conduct a periodic self-check for the integrity of the installed pads, batteries, and electronic systems and will display their status with an indicator light flashing green.

Inspection Recordkeeping for Regulatory Requirements

- Monthly/Periodic Inspections:

  It is recommended that AED Owner or their assigned staff conduct periodic inspections of the AED device in their building on a monthly basis. This can be accomplished by

checking the flashing status indicator light located at the top of the AED device and tracking the expiration dates indicated on the AED Check Tag in Appendix D.

- Quarterly Inspections:

  EH&S will notify AED Owners on a quarterly basis to conduct their inspections and document either on the form in Appendix E or directly to the online form here. Quarterly inspections will assess the condition of the AED device, case, installed pads, spare pads, and batteries as well as test the device. Any materials past their expiration date will be replaced at the time of inspection. EH&S will review the results and provide assistance as needed to resolve any issues identified.

Signage

Any AED that is permanently placed in public areas of a building needs appropriate wall signage to identify the unit and provide basic instruction for AED use. ADA requires the AED wall sign must be ~7 feet above the ground and California regulations require the posted instructions be in a minimum 14 pt. size font. Trauma Kits are required to be collocated with the AED. See Appendix F for signage examples.

FAQ's (Frequently Asked Questions)

Refer to the model specific user manual for troubleshooting guidelines.

1. **Why is my AED beeping?**

   a. A self-test error has occurred, there is a problem with the pads or the battery power is low.

   b. Press the i-button (information) for instructions.

2. **Can I clean my AED?**

   a. The outside of the AED and its carry case can be cleaned with a soft cloth dampened in soapy water, chlorine bleach (2 tablespoons per quart or liter of water), or ammonia-based cleaners.

   b. REMINDERS:
      i. Do not use isopropyl (rubbing) alcohol, strong solvents such as acetone or acetone-based cleaners, abrasive materials, or enzymatic cleaners to clean your AED.
      ii. Do not immerse the AED in fluids or allow fluids to spill onto it.
      iii. Do not sterilize the AED or its accessories.

3. **What happens if my AED components, batteries or First Aid kit supplies expires?**

    a. Contact EH&S if assistance needed for resupply information.

7.0 AED Use Event

Whenever an AED is applied to a patient (whether or not defibrillator shocks are delivered), EH&S or UPD shall provide both electronic data and written documentation to the Prescribing Physician for review.

In the event that installed pads of the AED are used to discharge an electric shock to an individual suffering SCA, used pads and cartridges shall be removed by the Department Owner and replaced with an appropriate model prior to reuse of the AED device. A spare pad cartridge is provided in the AED case and should be checked for expiration date prior to installation into the AED device. The Department Owner will also test the unit prior to putting back into operation.

AED Use Form

Information regarding the use of the AED shall be gathered by an on-site responder and documented on the AED Use Form in Appendix G or available online (form). This data will be provided to the prescribing physician.

8.0 Trauma Kits

First-Aid response kits provided in AED cabinets do not meet the requirements of “Trauma Kits” as defined by the Tactical Response to Traumatic Injuries Act (AB 2260). AB 2260 requires certain high occupancy buildings constructed on or after January 1, 2023, to comply with certain requirements, including acquiring and placing at least 6 trauma kits on the premises, periodically inspecting and replacing the contents of the trauma kits, providing contact information for training, and notifying tenants of the building or structure of the location of the trauma kits.

There are specific items that the trauma kits must contain. The trauma kits must contain, at a minimum, the following:

- (1) approved tourniquet
- (1) bleeding control bandage
- (1) pair of nonlatex protective gloves
- (1) marker
- (1) pair of scissors
- Instructional documents from an approved partner of the United States Department of Defense
- Additional supplemental items that are used to adequately treat a traumatic injury and are stored in a readily available kit may be included if they are approved by the medical director.

Inspections

EH&S will notify AED Owners on a quarterly basis to conduct their inspections and document either on the form in Appendix E or directly to the online form here. Quarterly inspections will assess the condition of the Trauma kits and confirm minimum items are included and/or order replacements. Any materials past their expiration date will be replaced at the time of inspection. EH&S will review the results and provide assistance as needed to resolve any issues identified.

9.0 AED & Trauma Kit Locations and Procurement Process

Departments seeking to place/replace an AED device in their building shall:

- Adopt all financial responsibility for acquiring a new or replacement AED and its components. These costs may be shared with other departments in the building and include: the AED unit, the AED cabinet, installation by Facilities Services, and other costs associated with upgrades for each AED unit that may be required.

- Notify EH&S of intent to obtain or upgrade an AED or cabinet. Include proposed location and reasoning for acquiring/replacing the AED along with the name of the owner responsible for inspections and maintenance.

- Purchase AED unit and components from the approved vendor/manufacturer. Once AED components are purchased, contact Facilities Management for installation. Contact EH&S for guidance and to provide the AED serial number.

- Update EH&S of changes or issues with the AED unit, cabinet, and other supplies, observed between inspection periods.

- EH&S will update the current list of AED locations and assign responsibility to the owner for the routine maintenance inspections.

Trauma kits will be included in all building designs that meet the regulatory criteria post January 1, 2023 and will be co-located with the AED and assigned to the Department Owner for the building. If additional kits are requested, follow the process above.

10.0 References

See support organizations and Regulation & Standards links below:

Support Organizations for Training & Manuals

- Stop the Bleed
- American College of Surgeons Committee on Trauma
- Committee for Tactical Emergency Casualty Care
- American Red Cross, First Aid/CPR/AED Participants Manual.

Regulations & Standards

- California Code, Health and Safety Code - HSC § 1797.196
- California Code, Health and Safety Code - HSC § 19300
- California Code, Civil Code - CIV § 1714.21
- United States. (2010). 2010 ADA Standards for Accessible Design. Washington, D.C.:
- Dept. of Justice
- AB-2260 Emergency Response: Trauma Kits

11.0 Program Review

EH&S shall review this document on an annual basis to determine if modifications or revisions are necessary.

Date	Revision	Notes	Initials
9/28/2023	September 2023	Updated plan to include additional regulatory requirements and updated AED information.	TN
10/23/2023	October 2023	Updated plan to include comments from the Medical Director and Department Owners.	TN
9/5/2026	September 2026	Updated plan to include new AED locations @ the marine lab and North Wind.	TN

Attachment A - Medical Authorization Form

Organization:	Cal Poly Humboldt
Address:	1 Harpst Street, Arcata, CA 95521
Contact Person:	Environmental Health & Safety
Contact Phone:	707-826-3302
Email Address:	risk-management@humboldt.edu

I hereby prescribe AED(s) and any listed supplemental Trauma Kit items to be used at the organization listed above.

Medical Director:	Dr. Chia Chen
Medical License:	CA #A61881
Address:	1 Harpst Street, Arcata, CA 95521
Phone:	707-826-3146
Email Address:	health@humboldt.edu

Attachment B - Current AED Locations

AED Locations & Department Owners

AED Serial No.	AED Manufacturer & Model (click for link to owner's manual)	Location	Building ID	Room #	Reasoning/Activities	Department
35926020	Metronic/Life Pak	Vehicle #113*	SBS	N/A - In vehicle.	First Responders on Main Campus	University Police Dept. (UPD)
35926022	Metronic/Life Pak	Vehicle #945*	SBS	N/A - In vehicle.	First Responders on Main Campus	University Police Dept. (UPD)
35926023	Metronic/Life Pak	Vehicle #113*	SBS	N/A - In vehicle.	First Responders on Main Campus	University Police Dept. (UPD)
35926024	Metronic/Life Pak	Vehicle #028*	SBS	N/A - In vehicle.	First Responders on Main Campus	University Police Dept. (UPD)
35926025	Metronic/Life Pak	Vehicle #155*	SBS	N/A - In vehicle.	First Responders on Main Campus	University Police Dept. (UPD)
X09G416119	ZollAED Plus	Student Health Center	SHC	H-1	Health Care Equipment	Student Health Center (SHC)
X13F607625	ZollAED Plus	Student Health Center	SHC	131 (crash cart)	Health Care Equipment	Student Health Center (SHC)

Cal Poly Humboldt
AED & Trauma Kit Program

AED Serial No.	AED Manufacturer & Model (click for link to owner's manual)	Location	Building ID	Room #	Reasoning/Activities	Department
A08J-03463	Phillips M5066A	Kinesiology & Athletics	KA	254B	Intensive testing and exams	Kinesiology
A13K-06256	Phillips M5071A	Kinesiology & Athletics	KA	256B	Intensive testing and exams	Kinesiology
B08F-00504	Phillips Heart Start FRX	Kinesiology & Athletics*	KA	122	Diving Safety Program	Kinesiology
A09J-0438	Phillips Heart Start HS1	Coral Sea Marine Vessel	N/A	N/A	Remote location	Vessel Operations
22G91037600J22	HeartSine Samaritan	Forbes Gym	FGYM	154	Athletic events/Practices	Athletics
A22J0-2060	Phillips M5066A	Trinity Annex	ANNEX	Reception Area	Childcare Facility	Children's Center (CC) & Children's Development Lab (CDL)
A49820P-7045	Philips Heartstart FRX	Kinesiology & Athletics	KA	Pool Deck	Health Fitness Facility	KA
(01) 0 0847946 00223 7 (21) X19F173299	ZollAED Plus	Student Rec Center	SRC	181	Health Fitness Facility	SRC

Cal Poly Humboldt
AED & Trauma Kit Program

AED Serial No.	AED Manufacturer & Model (click for link to owner's manual)	Location	Building ID	Room #	Reasoning/Activities	Department
B22I-06271	Philips Heartstart FRX	Recreation & Wellness Center	RWC	N/A - brought to games/events	Athletic events/Practices	Rec Sports
B20E-06325*	Philips Heartstart FRX	Crew Team*	HBAC	109	Remote Location	Athletics
B07F-01469	Philips Heartstart FRX	KA Athletic Training Room*	KA	255	Athletic Events/Practices	Athletics
800015227	Defibtech Lifeline AED Package	Telonicher Marine Lab*	CCFLR	116	Marine Research Activities	Telonicher Marine Lab
A23L-12295	Philips Heartstart	North Wind R/V	Woodley Island Marina	N/A	Research vessel activities	Telonicher Marine Lab

*Indicates AED unit is not permanently mounted for public use.

Attachment C - AED Use Form

AED Users: The following form should be completed each time an AED is used in a rescue and submitted to the EH&S. This form can also be completed electronically here.

Name of Patient: _____ **Phone Number**:_____

Date of Birth: _____ **Age**: _____

Date of AED Use: _____**Time of Day of Use**: _____ **AM / PM (Circle one)**

AED Serial Number: _____**Location of Incident**: _____

Description of Incident (Attach additional sheets of paper as needed):

_____

_____

_____

_____

_____

_____

_____

_____

Were witnesses present?: Yes / No

_____

If Yes, please provide contact information of witnesses: _____

_____

_____

Identify the EMS response transportation team(s): _____

_____

Date of EMS Arrival: _____ **Time of Arrival**: _____ **AM / PM (Circle One)**

Name of AED Operator at the Incident: _____

AED Operator Phone: _____ **Date**: _____

AED Operator's Signature:_____

Attachment D – AED Training Checklist

This form is to be completed by the Dept. Owner with current CPR/First Aid/AED training to train other Dept. Owners w/o this certification. Once trained, these Dept. Owners can conduct this AED training with another employee working in the building annually (same form can be used). The Department Owner will maintain these records and have them available for review upon request.

Date of Training: _____

Employee Name: _____ Job Title: _____

Dept. Owner Name: _____ Job Title: _____

Certified CPR/First Aid/AED's Name: _____ Job Title: _____

Training Topics Covered:

- ✓ Show the Employee where the unit is located and review any manufacturer/model-specific details for the unit in their space.

- ✓ Demonstrate the steps to operate the unit in the event of an emergency:

    - Check for safety to enter the scene and check if the patient is unconscious and not breathing.
        - Ask a bystander to call 911 for help and bring the AED to the patient's side.
        - Once the AED is available, turn it on and follow the voice prompts.

    - Remove clothing and attach pads as shown in the diagrams on the unit (one on the upper right side of chest and other on lower left side of chest).

    - Prepare to let the AED analyze the person's heart rhythm.
        - Make sure no one is touching the victim.

    - If the AED determines a shock is needed, deliver a shock:
        - Make sure no one is touching the person.
        - Say "Clear!" in a loud, commanding voice.
        - Push the "shock" button to deliver the shock.

    - After the AED delivers the shock, follow the AED instructions.

    - Review the AED Post Use form to complete with the Employee.

- ✓ Review Quarterly AED/Trauma Kit Inspection form with Employee and demonstrate conducting a quarterly inspection.

Attachment E - AED & Trauma Kit Check Tags

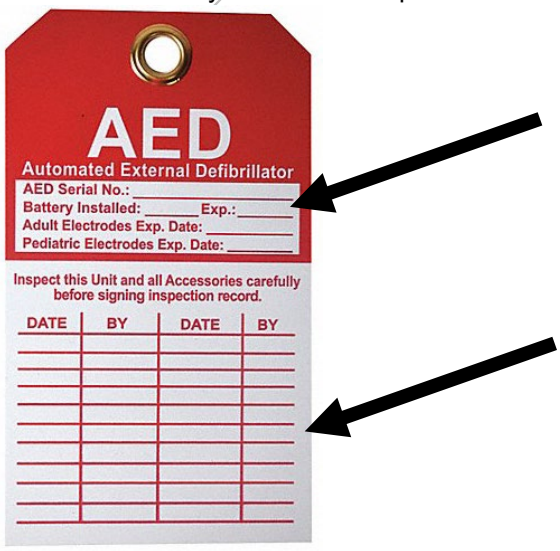
It is important to be able to periodically verify that an AED has been properly inspected and maintained. The tags provide a record of the inspections for the equipment. Complete the following:
:

AEDs

1. Write the AED's Serial Number on the tag (found on the back of the unit).
2. Fill out the date for when the battery was installed and the expiration date.
3. Monthly Inspections – check the flashing status indicator and note on the tag.
4. Quarterly Inspections - Be familiar with the manufacturer's owner's manual and complete the Quarterly AED & Trauma Kit Inspection Form that will be sent to the AED Owner quarterly from EH&S.
    a. Electrodes
    b. Battery
    c. Status Indicator
    d. General Condition
5. Fill out the date of the inspection and who conducted.
6. If any items are identified reach out to EH&S if they cannot be resolved by the department owner.

Trauma Kits

1. Fill in "Trauma Kit" for the "Equipment ID" and include the trauma location (minimum of (6) per affected building constructed on or after January 1, 2023).
2. Be familiar with trauma kit requirements and inspection for the following:
    a. Approved tourniquet
    b. (1) Bleeding control bandage
    c. (1) pair of non-latex gloves
    d. (1) marker
    e. (1) pair of scissors
    f. (1) Set of instructional documents from an approved partner of the US DOD
3. Inspect Trauma Kits quarterly and restock after each use and replace any materials, supplies, and equipment as necessary. Document inspections annually on the inspection tag attached to the unit.





*Note: Tags are available from Grainer.

Attachment F – AED & Trauma Kit Quarterly Inspection

The AED Owner or their delegate is responsible for maintaining the AED device, cabinets, and components throughout the lifespan of the AED. The AED owner shall conduct a full equipment inspection for each AED according to the manufacturer's guidelines and maintain inspection records for review. Full inspections are conducted quarterly (every 90 days). For any items identified as "No", include Comments in "Needs Work" at the end of the survey. Contact RMSS if assistance is needed to resolve an issue identified during the inspection.

Date/Time of Inspection: _____
Name of Inspector: _____
AED/Trauma Kit Location & Serial Number if applicable (include all those under your responsibility): _____

Inspection Items	Comments
Is the AED case accessible and highly visible? There should be nothing that obstructs or obscures the AED from quickly finding and accessing for use. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Is the Quick Reference Guide available and all signage legible? Instructions on how to use the AED should be posted next to the AED in 14-point font. See AED & Trauma Kit Program, Attachment F for more details. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Is the AED intact and free of damage? Inspect the overall condition of the AED. Pay particular attention to connector sockets. AED and case should be clean. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Is the AED battery properly charged and not nearing expiration date? A properly charged battery will show a black hourglass symbol or a green check mark or blinking light. If other indicator (often red) or no indicators visible, check Owner's Manual. Remove AED until ready status can be confirmed. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Are the AED pads and a spare set present, in good condition, and unexpired? Packages must be sealed. Visible wires and connections in good condition. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Is a spare battery present? Manufacturers often recommend a spare battery be kept in the AED case. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Test the AED. Does it perform properly? Yes _____ No _____ (Include details/resolution in Comments) N/A _____	
Has at least one person in the building been offered a demonstration of how to properly use an AED in an emergency annually? Yes _____ (Include date conducted and name of trainee in Comments) No _____ (Include details/resolution in Comments) N/A _____	
Is the building required to have a minimum of (6) Trauma Kits containing required contents (see AED & Trauma Kit Program for details)? This requirement applies to certain high concupiscence buildings constructed on or after January 1, 2023. Yes _____ No _____ (Include details/resolution in Comments) N/A _____	

Attachment G - Wall Sign Examples









AED wall unit identification signs and instructional signs (order the 14x20 size poster to ensure 14 pt. font size) meeting the ADA and California requirements are available from the AED Superstore. Trauma Kit signage can be found on Amazon.