Automated External Defibrillator (AED) Program

California State University, Chico has made the commitment to help increase survival rates of persons who are stricken with sudden cardiac arrest (SCA) by placing publically accessible Automated External Defibrillators (AED) at numerous locations on the campus.

Sudden cardiac arrest is a sudden and unexpected pulseless condition attributed to cessation of cardiac mechanical activity. It is usually caused ventricular fibrillation, an abnormality in the heart’s electrical system. When SCA occurs, blood stops flowing to the brain, the heart, and the rest of the body, and the person collapses. In fact, the victim is clinically dead and will remain so unless someone helps immediately. While a heart attack can lead to SCA, there are many other causes of heart attacks.

Lives can be saved if bystanders activate the “chain of survival” quickly by utilizing early access, CPR, and if needed, provide defibrillation. Lifesaving actions include calling 911, beginning CPR, and if needed, providing defibrillation using an AED. We have chosen Cardiac Science Powerheart G3 or G5 Plus AEDs for their ease of use and advanced rescue technology. The newest model, the G5 Powerheart Plus features bilingual (English-Spanish) capabilities at the touch of a button.

Training in CPR and the use of an AED is preferred but not essential. Anyone can use these lifesaving devices by following the verbal directions provided by the unit. For those with visual impairments, the AED also provides written directions throughout the use. Opening the case activates the unit, the rescuer will be provided verbal and written instructions. The AED unit also provides a CPR cadence prompt when appropriate for the conditions.

Overview

The CSU, Chico AED Program has been established and managed in accordance with the California Health & Safety Code, Section 1797.796, and meets the guidelines set forth by the American Heart Association and the American Red Cross. The program has also received an endorsement from our base Hospital, Enloe Medical Center and has been approved by the regional EMS agency authority, Sierra-Sacramento Valley Emergency Medical Services.

The CSU, Chico AED Program is medically supervised by a state-licensed physician, who as the AED Program Director, verifies the University is compliant with applicable regulations, provides medical oversight for the program, and approves CPR/AED training. The Program Director will conduct an incident review each time an AED is used.

(Attachment A)

The AED Program is managed by the Department of Environmental Health and Safety (EHS).

Maintenance and Testing Procedures

EHS is responsible for ensuring that each defibrillator is maintained and regularly tested according to the operation and maintenance guidelines set forth by the manufacturer.

- The monthly inspection and test checklist has been compiled by referencing both the AED manufacturer’s instructions and recommendations from the American Heart Association. Additionally, Cardiac Science AED units require an annual inspection and test. (Attachments B &C)
• EHS maintains records of pad/electrode and battery replacement dates and will ensure all components are replaced on or before the date specified. Components will also be replaced if indicated by the unit’s inspection & testing results.

• Monthly and annual inspections are performed and documented by the Department of Environmental Health and Safety (EHS). Inspection forms will be retained both physically and electronically for a minimum of 2 years.

• All persons testing devices have been trained in the proper inspection and testing of AED units, and have read the owners instruction manuals of both Cardiac Science and Zoll AED units.

EHS provides to local Emergency Medical Service (EMS) providers of the location, type, and number of AEDs that are at CSU, Chico.

• Each of the EMS agencies listed below has been provided with the CSU, Chico campus AED location map and list of AED by building and location. EHS will ensure notification is made to all agencies if any changes to the program.

**Emergency Response Plan**

In accordance with the American Heart Association’s guidelines; the following adult “Chain of Survival” practices will be utilized:

1. **Early Access** to EMS- Recognize an emergency exists, immediately call 911.
   Means of notifying EMS include but are not limited to; blue light phones which directly route to UPD, all campus building phones will reach UPD by dialing 911 or 5555. Cell phone calls to 911 may be routed to either UPD or Chico Fire, dependent on the location of the caller and the carrier. UPD can be reached directly by calling (530)898-5555

2. **Early CPR**- CPR should be started immediately after cardiac arrest. Chest compressions circulates oxygen-rich blood to the brain and heart. This action should be provided for the victim until defibrillation can be performed.

3. **Early Defibrillation**- If needed, defibrillate the victim as soon as the AED arrives. This is most effective within 1 to 5 minutes.

4. **Early Advanced Care**- Ensure trained healthcare providers are responding to provide advanced care. (Call 911 without delay)

All AED activations with or without an administered shock shall be reported to both the AED Program’s Program Manager and Medical Director for the purpose of a review and to ensure the AED is restored to readiness as soon as possible.

**Transfer of Patient Care**

Information that is provided to first responders will be shared with the receiving hospital; the transfer of patient care should include as much information regarding the patient and the incident as possible.

Currently, local first responders utilize Zoll™ AEDs, therefore the pads from campus Cardiac Science AED unit will be removed from the patient, the pads and AED will be left at the scene. The pads and AED must be removed from service until a Post Incident Review has been completed by the campus AED Program Manager and the Medical Director.

When possible, provide first responders with the following information:

• Time of call or time when person was found or noticed to be unconscious
• Was CPR administered and for how long
• Were shocks administered and how many
• Cause or conditions at onset of incident (if known)
Post Incident Procedures

In the event of an AED activation the following actions must be taken, even if a shock was not administered:

- After the incident gather the names and contact information of all persons involved in the rescue (excluding the patient).
- Remove the AED from service and immediately deliver the unit to the Environmental Health and Safety Office. If the incident occurs outside of normal business hours, UPD will secure the AED for delivery to EHS.
- EHS will complete the post incident review form and provide to the Program Medical Director

The AED contains an internal memory with valuable information regarding the incident; this information must be retrieved in a timely manner and will be provided to the Hospital for review.

Campus Information and Notification

EHS is responsible for providing information and notification to the campus community regarding the number of, location, status, and any changes to the AED program.

- An AED link on the Emergency Preparedness Home Page provides an overview of the program, and a CSU, Chico campus map indicating the location of each AED.
- The AED link and all related information will be reviewed and updated as needed in order to provide accurate information to the campus community.

Contact Information

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Local Emergency Medical Service Providers (EMS)

Butte County EMS (530) 332-5555
City of Chico Fire Department (530) 897-3400
CAL FIRE/Butte County Fire (530) 538-7111

Manufacturer Information

Cardiac Science
3303 Monte Villa Parkway
Bothell, WA 98021-8969
(800) 426-2006
www.cardiacscience.com

Zoll Medical Corporation (only applies to AED in Holt 369)
269 Mill Road
Chelmsford, Massachusetts 01824-4105
(978) 421-9655