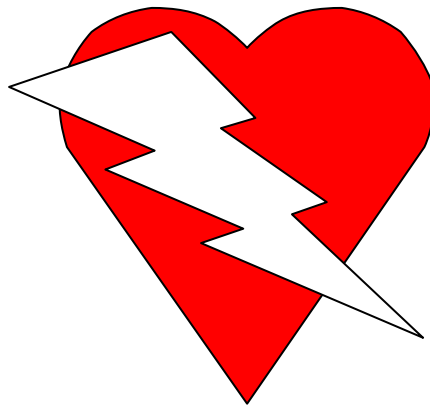




# **Automatic External Defibrillator Program (AED)**



**May 2009**



## **AUTOMATED EXTERNAL DEFIBRILLATOR PROGRAM**

### **Objective**

The authorized automated external defibrillator (AED) program will enable targeted responders in a corporate setting to deliver early defibrillation to patients experiencing a sudden cardiac arrest. Responders' use of the AED doesn't not replace the care provided by professional emergency medical services (EMS) providers, but is meant to provide a lifesaving bridge during the first few critical minutes it takes for advanced life support providers to arrive. Upon arrival of EMS providers, patient care will be transferred.

### **Medical Direction**

The Medical Director, a licensed California Physician, has authority over the entire AED program and its participants. General responsibilities include the establishment and maintenance of the guidelines for care included in this protocol.

**Medical Director:**      **Dr. Richard Hughes**  
**1300 N. Kraemer Blvd.**  
**Anaheim, CA 92806**  
**(714) 630-6363**

### **AED Coordinator**

The AED Coordinator is an employee of the corporation who is the primary liaison for the organization's AED program and Medical Director. This person has the responsibility for maintaining all equipment and supplies, organizing training and regular review programs, forwarding any incident data to the Medical Director and holding post-incident debriefing sessions for any responders involved.

**AED Coordinator:**      **Steven Rodriguez**  
**Director of Campus Safety**  
**Concordia University Irvine**  
**Admin 120B**  
**(949) 854-8002 x1123**

### **Authorized Responders**

Specific individuals certified and authorized to use an AED in a sudden cardiac arrest emergency. These individuals are trained by and operated under the direction of the AED coordinator, according to established protocols. Authorized responders may be emergency health care certified, or lay first responders.

A list of authorized responders is maintained by the AED coordinator, Steven Rodriguez, in the Director of Campus Safety Office (Admin 120B).

**Location of AED's**

Concordia University maintains eleven (11) automated external defibrillator units in the following locations:

1. Good Shepherd Chapel (GSC) – Entry way on the left (west) wall
2. Grimm Hall (GH) – South building, second floor across from the stairwell
3. CU Center (CUC) – West entrance stage left
4. CU Arena (Gym) – South east entrance, first floor by the training room
5. Training Room – Portable AED for athletic trainers
6. Administration – North-east entrance, first floor by stairwell
7. Student Union (SU) – Center column of mail box area facing room 201
8. Beta Offices – North-east entrance, first floor by drinking fountain
9. Lower Quad Residence Halls – Epsilon, first floor next to laundry room
10. Sigma Residence Halls – Front (east) entrance by vending machines
11. Rho Residence Halls – South-west entrance by Rho 126

For buildings not furnished with an AED, consult the list below for the designated AED location.

<b>Building</b>	<b>AED Location</b>
Alpha Offices	# 6 Administration
Grimm Hall North	# 2 Grimm Hall
Library and Arts Department (LAT)	# 2 Grimm Hall
Theatre	# 3 CU Center
Performing Arts Annex (PAX)	# 4 CU Arena
Hallerberg Building (Bookstore)	# 4 CU Arena
Student Leadership Center (SLC or CSLD)	# 7 Student Union
Upper Quad Residence Halls	# 10 Sigma
Maintenance	# 11 Rho

**AED Training Program**

Training standards shall adhere to definitions prescribed in the California Code of Regulations; Title 22; Division 9, Chapter 1.8, for non-licensed or non-certified personnel. An individual shall be eligible for the training prescribed in this chapter if the person has been trained in CPR, and has demonstrated proficiency in CPR practices.

Initial training shall consist of not less than four (4) hours, and shall include the following topics and skills:

- A. The proper use, maintenance, and periodic inspection of the AED;
- B. The importance of:
  - a. CPR
  - b. Defibrillation
  - c. Advanced life support
  - d. Internal emergency response system;
- C. Overview of the local EMS system, including 911 access, and interaction with EMS personnel.
- D. Anatomy and Physiology of the heart;
- E. Basic electrophysiology;
- F. Assessment of an unconscious patient to determine if cardiac arrest has occurred and the appropriateness of applying and activating an AED
- G. Information relating to defibrillator safety precautions to enable the individual to administer shock without jeopardizing the safety of the patient, or the authorized individual, or other nearby persons.
- H. Recognition that an electric shock has been delivered to the patient and that the defibrillator is no longer charged.
- I. Rapid, accurate assessment of the patient post-shock status to determine if further activation of the AED is necessary; and,
- J. Authorized individual's responsibility of continuation of care, such as repeated shocks if necessary, support of critical body systems, and accompaniment to the hospital, if indicated, or until the arrival of advanced life support personnel.

In order for an individual to be authorized to use the AED, the individual shall pass written and practical skills examination, which tests the ability to assess and manage the specified conditions prescribed in this chapter.

Continued competency of the authorized individual shall include periodic review, and skill proficiency demonstrations at least quarterly. The examination and skill demonstration is to be monitored by the AED Coordinator.

### **AED Protocol**

1. **Assess scene safety**
2. **Assess responsiveness.** Tap Shoulder and shout, "Are you Okay?"
3. **Activate emergency response plan**
  - Call 911. Provide dispatcher with location, emergency details and notify them that an AED is being utilized on site
  - Broadcast and announcement via team radio to activate authorized responders, and indicate the location of the patient. (e.g., code blue, building 2)
  - Have a designated person at strategic location to lead Paramedic EMS personnel to the patient.

### **Check ABC's**

- Assess airway (**A**). Perform head tilt-chin to open patient's airway.
- Assess breathing (**B**). Look, listen, and feel. If breathing is absent, use barrier mask to deliver two rescue breaths.
- Assess circulation (**C**). Check carotid pulse. If pulse is absent, begin CPR.

### **Early CPR**

- Perform CPR until AED arrives.
- Compress chest thirty (30) times (rate 80-100 compressions/minute).
- Ventilate. Give two (2) rescue breaths
- Continue CPR thirty (30) compressions followed by two (2) rescue breaths until:
  - An AED Arrives
  - Paramedics Arrive
  - You become exhausted
  - Another trained person takes over
  - Signs of life return

### **Early Defibrillation**

- Place AED near head of patient on same side as the rescuer.
- Turn on AED unit
- Bare and prepare patient chest. Remove/cut away clothing. If excessive chest hair, shave or clip, and dry chest if wet. Remove metal jewelry, wire-frame braziers, etc. from person.
- Follow AED's visual and verbal prompts.
- Apply electrodes below right clavicle, and left lateral chest, below left breast (following drawings on pads, and AED unit)
- Plug in defibrillation pads connector to AED unit.
- Allow AED unit to analyze uninterrupted.
- Stand clear of person
- If indicated, deliver shock by pressing the shock delivery button.
- Allow AED to re-analyze, delivering up to (3) shocks as indicated by prompts from the device.
- Resume CPR for (1) minute after assessing ABC's
- Allow AED to re-analyze and follow prompts from unit until professional advanced life support arrives.

### **Early Advanced Life Support**

- Have a designated person wait at strategic location to guide EMS providers to the patient.
- Authorized responders working on victim should provide information to the EMS providers such as:
  - Patients name, any known medical problems, allergies, or history
  - Time and patient was found
  - Initial and current condition of the patient
  - Information from the AED unit

- Number of shocks delivered
- Length of time AED has been functioning on patient
- Assist EMS personnel as requested
- Have someone document the response using the Post-AED Use Record available at the location of the AED.

### **Regular AED Maintenance**

#### **AED coordinator shall perform monthly and after each use**

- Check the AED status indicator, verifying readiness for use, following manufacturer guidelines.
- Ensure that all supplies, accessories and spares are present and are in operating condition. Check expiration dates and any obvious signs of damage.
- Inspect the exterior and electrode connector for signs of damage.

#### **After each use**

- Inspect the exterior and connector for dirt or contamination
- Check AED status indicator. Perform Battery Insertion Test (BIT).

#### **Supplies**

- CPR mask
- Two pair of gloves (large and regular)
- Emergency shears
- Prep razor
- Gauze pad/towel
- Anti-septic towelette
- Biohazard Bag

**Consult AED manual for additional maintenance instructions.**

**AED coordinator shall log all inspections for AED program records.**