

# **Public Access Defibrillation Web Page**

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## **Alameda County EMS's PAD Program**

Our goal is to participate actively in strengthening the links in the chain of survival in our county by

1. Being a point of contact for those interested in establishing a Public Access Defibrillation (PAD) program
2. Providing a resource packet for laypersons, corporations, work sites, and prescribing physicians with the information necessary to implement PAD programs.
  - ALCO PAD program background
  - PAD program statistics and component information
  - Vendor information
  - Consultant / trainer information
  - Application and usage forms
  - Prescribing Physician information and forms
  - State and county regulations

In the same way that CPR has become a skill that thousands of lay people have learned, the skill sets for using an AED can be easily taught. Most machines are very user friendly—some models use only simple pictures to demonstrate how to use the machine.

The most common statement by those who have used Automatic External Defibrillators (AEDs), in whatever the setting, is, “It does save lives.” As AEDs become more commonplace in business and public places, we in EMS hope to see more lives saved. The life you save could be one of your own.

We welcome your interest and participation and will do everything possible to help you make an informed decision about establishing a PAD Program.

## **The Case for AEDs**

### **Cardiac Arrest**

Sudden cardiac arrest (SCA) claims about 350,000 American lives each year. In most cases this event occurs due to ventricular fibrillation, an abnormal heart rhythm that causes the heart muscle to fibrillate or quiver in a chaotic motion. If left untreated, this condition leaves the heart muscle unable to pump blood and death occurs within minutes. Because sudden cardiac arrest is one of the leading causes of death in our nation, it is a major public health problem.

Statistics show that less than 5% of those who experience cardiac arrest outside of a hospital will survive. Defibrillators, however, have been shown to boost a person’s chances of survival when used immediately. Data from studies of lay rescuer defibrillation programs in public locations that show the highest survival from sudden cardiac arrest occurs when the arrest is witnessed and when bystanders provide immediate CPR and defibrillation within three to five minutes of the arrest.

### **PAD in Action**

Employees of the NUMMI Toyota plant in Fremont have first-hand experience in the benefits of a PAD Program. Over the course of two years, two assembly line workers have experienced cardiac arrest while working. In any other company, they might have died. However, at NUMMI, their co-workers were trained in the use of an AED and promptly applied the AED pads, and let the machine analyze the rhythm and shock the employee back to a life sustaining rhythm. Both employees are back at work, with no health deficits, thankful they work at a company that supports PAD. Two arrests—two saves!

## **Chain of Survival**

### **Who is at Risk**

Sudden Cardiac Arrest (SCA) is unpredictable. Although the average victim is about 60 years old, SCA can affect anyone, regardless of their age, race, or gender. However, according to the National Center for Early Defibrillation, some conditions can put people at greater risk for SCA. These conditions include:

- Age greater than 40 (men)
- Post-menopausal status (women)
- Inactive lifestyle
- High blood pressure
- High cholesterol
- Diabetes
- History of heart disease (either personal or in the family)

Unfortunately, SCA can affect children as well as adults. Some causes of pediatric SCA include SIDS, trauma or accident (e.g., electrocution, drowning, overdose/ poisoning), illness, and congenital heart disease. A hard blow to the chest (such as with a baseball) can also trigger cardiac arrest.

### **How AEDs Work**

Highly sophisticated AEDs that are accurate, inexpensive and virtually maintenance-free enables their use in the home, workplace and public buildings. An AED is a device used to treat a patient with cardiac arrest whose heart is beating irregularly (fibrillating). If the heart does not return to a regular rhythm within 5-7 minutes, this fibrillation could be fatal. To stop the fibrillation, an AED is used to administer an external electric shock through the chest wall to the heart with the use of conductive adhesive pads. Built-in computers analyze the patient's heart rhythm, and interpret the rhythms that require defibrillation shocks. Audible and/or visual prompts guide the user through the process. Most AEDs require an operator to initiate the delivery of the shock in some way, such as pushing a button.

In order to have AEDs available more quickly for the persons who need them, some facilities (such as hotels, airports, and country clubs) are purchasing these devices under what is called a Public Access Defibrillation (PAD) program. However, since AEDs are prescription devices and must be labeled with the prescription statement required by law (CFR 801.109), a physician who oversees the PAD program at a facility must write a prescription for the AED in order for the facility to purchase it.

Public access refers to accessibility for trained users to use AEDs in public places. Public access does not mean that any member of the public witnessing a sudden cardiac arrest should be able to use the device.

AEDs are to be used only by individuals with the proper training and certification in accordance with state and local laws.

### **Good Samaritan Protection**

Since 1990, our county has had a successful First Responder Defibrillation Program. Now with the Good Samaritan Laws that give critical protection to the AED trainer, the prescribing physician, the AED owner, and individuals who use an AED in rendering emergency care, Alameda County EMS will be providing information for greater public access to defibrillation. Our goal will be to participate actively in strengthening the links in the chain of survival in our county by providing a resource packet for laypersons, corporations, work sites, and prescribing physicians with the information necessary to implement PAD programs.

## **Establishing a Program**

### **Components of a PAD Program**

- A company deciding to implement AEDs into their health and safety program
- A prescribing physician that oversees the program
- A training organization that trains employees
- Employees of the company trained in the use of an AED and CPR
- Integration of the program into the local EMS system
- A plan of ongoing training and AED checks

### **Projected Annual Costs**

An estimate of projected annual program costs can include the following:

- Devices (about \$2500.00 per unit; remember to divide initial cost by the projected life of the device, usually five years)
- Peripheral equipment costs (about \$75 per device)
- Maintenance (about \$100 per device)
- Insurance (variable)
- Training costs (variable: includes personnel and equipment)
- Program management costs (variable)
- Event documentation costs (variable)
- Quality assurance tools (variable)
- Community-wide CPR training (variable)

There are organizations and companies that assist determining an appropriate AED model for your business and in setting up all or some of the above elements of a PAD program for free or for a fee.

### **How You Can Help**

If you would like more information on how to establish an AED program for your business or agency or if you would like to help make the

County of Alameda a safer community email us at [jovonho@co.alameda.ca.us](mailto:jovonho@co.alameda.ca.us) or call us at (510) 618-2038.

### **New PAD Site Identification**

- Site information given to Alameda County EMS
- EMS passes information to local Fire Department
- Fire adds the information to the 911 / Emergency Medical Dispatch database

### **The Role of the Prescribing Physician**

A Prescribing Physician has a positive role in the placement and use of an AED in Alameda County. The following program points outline this role.

#### **1. Understand the Legal Requirements**

- A prescribing physician means a physician and surgeon, licensed in California, who issues a written order for the use of an AED. The prescribing physician may affiliate with a training program or may work directly with an agency, business, organization or individual who purchases an AED.
- A PAD program must meet the requirements of the California Code of Regulations, Title 22, Section 1797.196 of the Health and Safety Code Section 3 & 4, and Section 1714.21 of the Civil Code Section 2, and local policies. The prescribing physician retains the responsibility to assure that the PAD program meets these requirements. Registration packets are available online or by mail.

#### **2. Develop Medical Oversight**

- The prescribing physician is involved with the agency, business, organization or individual in developing an Internal Emergency Response System. An Internal Emergency Response System is a plan of action which utilizes responders within a facility to activate the “9-1-1” emergency system, and which provides for the access, coordination, and management of immediate medical care to seriously ill or injured individuals.
- Ensures compliance with regulations and requirements for training, notification, and maintenance,
- Assures a mechanism for the continued competency of the authorized individuals in the AED Service Provider’s employ to include periodic training and skills proficiency demonstrations.

#### **3. Complete PAD Program Forms**

- Notice of New AED program
- Report AED use to EMS Agency – When an AED is used, the Fire Department and/or AMR paramedics will complete the *Utstein* form to record relevant data tracked by Alameda County. This information is passed along to the state for tracking cardiac arrest outcomes between

EMS systems. If a cardiac arrest happens at your AED site, please work with the EMS responders to provide the necessary information.

**4. Understand Title 22 AED Regulations**

## **AED Vendor, and Consultant & Training Organizations List**

### **AED Vendor List**

There are presently seven companies in the United States that manufacture AEDs. All of these companies have devices that are currently available. All AEDs on the market have been cleared by the Food and Drug Administration and thus are considered safe and effective. AED companies are listed below.

#### **Access CardioSystems**

150 Baker Avenue Ext.  
Suite 108  
Concord, MA 01742  
Phone: 978-371-4985  
Fax: 978-318-9258  
Web site: [www.accesscardiosystems.com](http://www.accesscardiosystems.com)

#### **Cardiac Science, Inc.**

5420 Feltl Road  
Minneapolis, MN 55343  
Phone: 800-991-5465 or 949-587-0357  
Fax: 949-951-7315  
Web site: [www.cardiacscience.com](http://www.cardiacscience.com)

#### **Laerdal Medical Corporation**

167 Myers Corners Road  
P.O. Box 1840  
Wappingers Falls, NY 12590-8840  
Phone: 800-431-1055 or 914-297-7770  
Fax: 800-227-1143 or 914-298-4545  
Web site: [www.laerdal.com](http://www.laerdal.com)

#### **Medical Research Laboratories, Inc.**

1000 Ashbury Drive  
Buffalo Grove, IL 60089  
847-520-0300  
847-520-0303 (fax)  
Web site: [www.aedsolutions.com](http://www.aedsolutions.com) or [www.mrlinc.com](http://www.mrlinc.com)

#### **Medtronic Physio-Control Corporation**

11811 Willows Road NE  
P.O. Box 97006

Redmond, WA 98073-9706  
Phone: 800-442-1142 or 425-867-4000  
Fax: 800-426-8049 or 425-867-4462  
Web site: [www.aedhelp.com](http://www.aedhelp.com)

**Philips Medical Systems**

3000 Minuteman Road  
Andover, MA 01810  
Phone: 1-800-934-7372 or 1-866-DEFIB-HOME (1-866-333-4246)  
Fax: 206-664-2000  
Web site: [www.medical.philips.com/crs](http://www.medical.philips.com/crs) or [www.heartstarhome.com](http://www.heartstarhome.com)

**Zoll Medical Corporation**

32 Second Avenue  
Burlington, MA 01803  
Phone: 800-348-9011 or 781-229-0020  
Fax: 781-272-5578  
Web site: [www.zoll.com](http://www.zoll.com)

**AED Consultant & Training Organization List**

The following organizations have notified us that they provide program development and / or training in the use of AEDs. Many of them also offer on-going maintenance and access to prescribing physicians). You are encouraged to independently evaluate these organizations to determine which one offers the type of services that fits your needs.

Symbols: PD = Program Development, T = Training

American Heart Association – (PD, T)  
11200 Golf Links Road  
Oakland, CA 94605-5796  
(510) 632-9606  
[www.americanheart.org](http://www.americanheart.org)

DiPietro & Associates – (PD, T)  
895 Bolton Circle  
Benicia, CA 94510  
(707) 747-6407  
[www.dipietroassociates.com](http://www.dipietroassociates.com)

Health Education Services (PD, T)  
200 Waverly Street  
Menlo Park, CA 94025  
(650) 321-6500  
[hes6500@aol.com](mailto:hes6500@aol.com)

ICE Safety Solutions – (PD, T)  
32688 Colorburst Court  
Union City, CA 94587  
(510) 441-9411  
[www.getice.com](http://www.getice.com)

Life Safety Associates – (PD, T)  
53A Bonaventura Drive  
San Jose, CA 95134  
(408) 577-1929  
[www.lifesafety.com](http://www.lifesafety.com)

Rescue Training Institute – (PD, T)  
2091 Portsmouth Drive  
El Dorado Hills, CA 95762  
(916) 939-2277  
[www.rescuetraininginstitute.com](http://www.rescuetraininginstitute.com)

*The Alameda County EMS Agency does not endorse any specific consultation or training organization.*

### **AED Training Organizations**

American Red Cross (T)  
3903 Broadway  
Oakland, CA  
(510) 595-4400

Fast Response (T)  
1015 University Avenue  
Berkeley, CA 94710  
(510) 849-4009  
[fastresponse@jps.net](mailto:fastresponse@jps.net)

Life Support Services (T)  
38279 Paseo Padre Parkway  
Fremont, CA 94536  
(510) 790-2778  
[cprneal@aol.com](mailto:cprneal@aol.com)

Emergency Management Resources (T)  
969-G Edgewater Blvd. #363  
Foster City, CA 94404  
(650) 358-9341

*The Alameda County EMS Agency does not endorse any specific consultation or training organization.*

## **PAD FAQs**

### **Where should AEDs be placed?**

Studies have shown a higher incidence in certain locations. Some of the typical locations include: airports, community/senior citizen centers, dialysis centers, transportation terminals, gold courses, health centers/gyms, jails, large industrial sites, large shopping malls, nursing homes, private businesses, sport/event complexes, and cardiology, internal and family medicine practices and urgent care centers.

### **How many AEDs do I need at my worksite?**

The placement of AEDS is usually determined by the size of your facility. Often one AED is enough, but if your facility is spread out or on several floors of a building, more than one may be recommended.

### **How can I get an AED and what does training involve?**

AEDs can be purchased through one of several vendors. A vendor list can be found at [URL hotlink]. Training typically involves a course in CPR, the use of barrier devices in CPR, the use of an AED, and how to recognize the signs of four major emergencies. A list of known trainers can be accessed at [URL hotlink]

### **Am I legally liable for using an AED?**

The Good Samaritan Law of January 1, 2000 and another in January 1, 2003 give critical protection to the owner of an AED and those trained to use it. There are no reported instances of lay users or their employers being sued for the use of an AED. Rather, all PAD cases in courts revolve around the failure to have or use an AED.

### **Is there funding available to help offset the cost of a PAD program?**

Funds are available through many sources. If outside funding is desired, check the links at PAD/AED Links [URL hotlinks] for possible funding channels and assistance in applying for a grant.

### **Why can't I just buy an AED unit and keep it at my company worksite?**

AEDs are regulated by the FDA and require medical oversight.

### **Why must there be oversight by a medical doctor?**

An AED is a medical device authored by the FDA and must be prescribed by an MD. The MD will also provide oversight according to their role of support identified at [URL hotlink].

### **Why do I notify the county when a PAD program is implemented?**

When an AED is placed, the site information needs to be given to the Alameda County EMS office. This information in turn is passed to local Fire

Department and used to update their 911 / Emergency Medical Dispatch database. When a 911 call is placed from that site, EMS dispatchers and responders are aware of the AED onsite.

## **PAD / AED Links**

American Heart Association - <http://www.americanheart.org>

National Center for Early Defibrillation - <http://www.early-defib.org>

Public Access Defibrillation League - <http://www.padl.org/>

AED Instructor Foundation - <http://www.aedinstructorfoundation.org/>

## **ALCO EMS Disclaimer / Contact Information**

### **Disclaimer**

Alameda County and its departments, divisions, sections and units, while strongly supporting the concept of PAD Programs, do not endorse any specific PAD programs, AEDs, consultants, or training organizations.

### **Contact Information**

Alameda County EMS Agency

PAD Program Coordinator

1850 Fairway Drive

San Leandro, CA 94577

Phone: (510) 618-2038

Fax: (510) 618-2099