

AED Consulting, LLC

FREQUENTLY ASKED QUESTIONS Automated External Defibrillators (AEDs)

Q: How does an AED work?

A: AEDs (Automated External Defibrillators) are simple to use and the operator is directed through audible prompts. A microprocessor inside the defibrillator analyzes the victim's heart rhythm through adhesive electrodes and advises whether a shock is needed. AEDs advise a shock only to ventricular fibrillation and fast ventricular tachycardia, the most common reasons for SCA. The electric current is delivered through the victim's chest wall through adhesive electrode pads. The defibrillator will not charge unless it detects a "shockable" rhythm and therefore, will not allow an unadvised shock to be delivered. A responder cannot shock a victim inappropriately.

Q: What do the Good Samaritan Laws provide?

The Good Samaritan Laws provide a general framework for designing Public Access Defibrillation (PAD) Programs for business, private home, office buildings, malls, golf courses, etc. They provide basic information about the essential elements of an AED program. The laws vary from state to state and it is important to be aware of the laws for the state where each program is located. The goal of most Good Samaritan Laws is to provide protection from liability for all connected with the use of an AED as long as the guidelines are met.

Q: What is the difference between PAD Programs and First Responder AED Programs?

AEDs are the actual machines that are used to defibrillate victims of sudden cardiac arrest. The terms AED (Automated External Defibrillator) and PAD (Public Access Defibrillation) are often used interchangeably when referring to first responder programs. AED programs include PAD programs, but also may include other programs, such as those associated with businesses, airports, or other locations where lay responders are not a part of the response team.

Q: What are the essential parts of an AED Program?

Each AED program should include the following major elements:

- Support of the Program by company and/or community leadership.
- On-going program medical direction and oversight.

- Cardiopulmonary Resuscitation (CPR) or Continuous Chest Compression (CCC) training/refresher training and certification for designated personnel.
- Training/refresher training for designated personnel in the use of the AED and its accessories.
- Development of a written policy and procedure specific to each site.
- Continued review of the policy and procedure.
- Development of a Notification System to activate First Responders.
- Program integration with all parties involved, including employees, students, facility security and Emergency Medical Services (EMS) Systems.
- Regular Maintenance Programs for hardware and support equipment in between and after each use.
- Development and utilization of a Quality Assurance Program and AED Data/Information Management Systems.
- Periodic review of new technologies.

Q: Are protocols or standard operating procedures necessary for a successful AED Program.

A key element in assuring that your AED program will be clearly understood and will function well is the development of written protocols.

Q: Does your company need a physician's prescription to obtain an AED?

Yes. AEDs are medical devices that require prescriptions to purchase.

Recently, AEDs for home use have been developed which do not require a prescription. However, Medical Direction is needed for use of this machine in any other environment outside of the home.

Q: Does my company need an AED protocol?

Yes. The protocol for AED usage that is developed as part of a facility's AED Program is an integral part of the physician's prescription and serves as the authorizing document for AED use. Essentially, the protocols that are signed by the Medical Director set the medical standards and criteria for the operation of the AED Program and all of its components. Systems operated within the boundaries and criteria of these signed protocols are considered to be under a physician's supervision.

Q: Who provides medical oversight of AED Programs?

A: AEDs are medical devices that are to be used under the advice and consent of a physician. This oversight can be provided either by a facility's own medical staff, contract physician or by the a designated physician. It is best to seek medical input from the very beginning of the design of your program.

Q: Should Lay Responders/Rescuers (LRR) be trained?

A: Yes. A volunteer AED Response Team should be trained and designated as the first responders to a cardiac emergency. The greater the number of well-trained LRRs who are available, the more effective an AED program will be. Overall effectiveness will be improved as the number of personnel who are fully trained and willing to respond increases.

Q: Are AEDs safe to use on children?

A: An AED can be used on children. Most manufacturers come equipped with pediatric capability i.e. special pads. The pediatric pads are to be used with children under 55 pounds. The AED can also be used on children with adult pads should the pediatric pads not be available.

Q: Where should AEDs be placed?

A: There is no set “formula” to determine the number and placement for AEDs. However, there are several factors that should be considered: (1) an optimal response time of three minutes or less and (2) assessing the level of risk in a facility's environment.

Many elements help determine the placement of AEDs. The major elements are:

- An easily accessible position
- Unobstructed access to the AED
- A secure location that prevents or minimizes the potential for tampering, theft, and/or misuse, while at the same time making it readily accessible for responders.