

**Use of Automated External Defibrillators  
In Public Facilities Gaining**

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**Sudden cardiac arrest is the cause of nearly one-sixth of workplace deaths** according to Occupational Safety and Health Administration studies. Without immediate intervention, the chances of survival diminish rapidly with time. While mainstream first aid – such as CPR – is critical, frequently too much time passes until trained rescue personnel can administer more advanced lifesaving techniques.

Technology and automation have made it possible for non-medically trained individuals to assist sudden cardiac arrest victims, as Automatic External Defibrillators (AEDs) have become available in public buildings, on airline flights, and workplaces. AEDs can often buy the extra time needed to save a patient until emergency medical technicians or hospital staff can treat them. Although they have been used since 1979, their design and function has been improved over the past 20 years. Modern AED devices provide simple procedures, voice-prompt instructions, and no user decision-making required. Once a patient is connected to the device, AEDs have computers that analyze heart rhythms and determine whether to administer an electrical pulse to defibrillate. In those settings where AEDs have been made available, their use has contributed significantly to the survival rates from cardiac arrest.

California is among 48 states that have passed laws regarding AEDs, both regulating their use and providing liability protection for “good samaritans” that assist victims. Since the federal Cardiac Arrest Survival Act was signed into law in 2000, there has been great progress in developing standardized guidelines for the placement and use of AEDs in public facilities. The American College of Occupational and Environmental Medicine (ACOEM) is leading the way in promoting workplace AEDs and assisting employers in establishing procedures.

Placing AEDs in your facilities is a significant commitment and there are many important considerations to review before embarking on an AED program. Once committed, it is difficult to back out of an AED program. Assessment of an AED program should begin in consultation with medical professionals and should be viewed on an organization-wide basis. Placement of a single AED in one building or department places obligations on the entire organization and its facilities.

An AED program requires a centralized management system to ensure consistency and reliability. Clear lines of responsibility, appropriate documentation and quality control will minimize risk management problems and help make the program more effective. Involvement by qualified medical professionals in supervising placement of devices, administration, training, and coordination with emergency response agencies is critical to regulatory compliance.

Additional considerations in developing an AED program include:

- A complete written program description to be placed in every location an AED will be placed
- Integration with local emergency medical services and worksite emergency response plan
- Evaluation of technical specifications and equipment/supplies
- Establishment of scheduled maintenance and replacement for devices and supplies
- Quality assurance and recordkeeping, including case-by-case medical review and evaluation whenever an AED is used
- Periodic review, modification and re-communication of the workplace AED program as necessary.

The financial commitment is also an important factor in determining the feasibility of an AED program. A fully automated AED device costs approximately \$4,500. Other supplies for emergency care may include oxygen, responder protection from bloodborne pathogens, and clean-up kits. Personnel, and other expenses, will also be needed for training, equipment maintenance, monitoring and evaluating the program, and medical consultation.

Resources for evaluating a workplace AED program are available from the [American College of Occupational and Environmental Medicine](#), the [Occupational Safety and Health Administration](#), and the [National Institutes of Health](#). The **Keenan & Associates** Loss Control Department is available to work with you in assessing the feasibility and risk management considerations of a workplace AED program. Please contact your local **Keenan & Associates** office for more information.