

# SAFETY BULLETIN

## *AUTOMATED EXTERNAL DEFIBRILLATORS (AED)*



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Sudden Cardiac Arrest (SCA) can happen to anyone, and without warning. When someone is in SCA, every second counts. An AED (Automated External Defibrillator) is a device, which used in combination with CPR, can potentially save the life of someone who is experiencing SCA. AEDs have historically been used by EMS, fire fighters, and doctors to essentially, shock, and reset one's heart. Now, thanks to advancing technology, AEDs are available for purchase, and are commonly used in public places.

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AED's are incredibly simple to use, and with more AEDs in the community, everyday citizens can become part of the emergency response system, increasing the likelihood that first responders can save a life.

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## *WHY ARE AED'S IMPORTANT*

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According to recent surveys by the American Heart Association, most US employees are not prepared to handle cardiac emergencies in the workplace because they lack the proper training. The surveys also revealed that most workers do not have access to CPR training and two thirds of workers in the hospitality industry cannot even locate the AED at work. OSHA has been pushing the need for AEDs since 2001. The following illustrates some surprising statistics.

- More than 400,000 Americans die from cardiac arrests outside of hospitals every year
- Waiting for EMS arrival only generates a 5-7% survival rate
- Survival rate jumps to 90% with immediate defibrillation (within the first minute)
- Survival rates drop 7-10% every minute that passes without defibrillation
- Dr. Michael Kurz, professor of Department of Emergency Medicine at University of Alabama Birmingham, played part in conducting these surveys. He concluded that the data is suggesting that workers are most likely relying on their untrained peers in the event of an emergency, leaving employees with a false sense of security that someone in the workplace will be qualified to respond. "First Aid, CPR and AED training need to become part of a larger culture of safety within workplaces," said Dr. Kurz. The Occupational Safety and Health Administration (OSHA) says that communities where volunteers are trained in CPR and AEDs had two times as many cardiac arrest victims survive, compared to communities that had CPR training alone.

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## **INDUSTRIES AND AED REGULATIONS**

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AEDs are not nationally mandated currently, however at the state level it is becoming increasingly required. The table below lists the states that are requiring AEDs to be available in various public assemblies, schools, health clubs, and athletic facilities.

<b>Location</b>	<b>States that Require AEDs</b> <span style="float: right;">*2016</span>
Schools	Colorado, Florida, Georgia, Illinois, Iowa, Maryland, Michigan, Nevada, New Jersey, New York, Ohio, Pennsylvania, South Carolina, Virginia, Wisconsin – California & Tennessee “urge” AED placement as well
Health/Sports Clubs	California, Illinois, Indiana, Massachusetts, Michigan, New Jersey, New York, Pennsylvania, Rhode Island, Arkansas, Iowa, Louisiana, Maryland, Mississippi, Oregon – Recommended but not legally required in Nevada and North Carolina
Day Care Centers	Wisconsin
Dental Offices	Illinois & Wisconsin
Places of Public Assembly	New York
Swimming Pools	New York

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## **AED LIABILITY**

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Many companies and organizations are concerned about their liability for having and using AEDs. The perception is that having an AED places greater liability on the organization that installs the device. However, this view is misguided and incorrect. All 50 states and the District of Columbia now includes AED usage as part of their Good Samaritan laws. Good Samaritan laws are designed to protect lay bystanders from being sued for trying to help. This means that individuals cannot be held liable for the harm of a victim by providing improper care if the harm was not intentional. While there are no known cases of lay bystanders being sued for trying to help, there have

been cases where people or organizations have been sued for not helping when they could. Furthermore, there is growing case law and legal precedent where entities have been held negligent for not having an AED.

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## *AED PROGRAM STANDARDS*

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According to the American College of Sports Medicine (ACSM) standards, along with advice from other industry leaders, the following standards will help to cover a facility's liability as well as give trained staff the best shot at saving a person in need.

- Purchase an AED from a reputable manufacturer
- Install an AED so that one is always available within a 1.5 minute walk
- This may require multiple AEDs depending on the site
- Extend an opportunity for employees to receive CPR and AED training
- Ensure employees are recertified every two years
- Include AED location and instructions in emergency response policies
- Conduct a skills review/practice session at least every 6 months
- Appoint at least one trained, on duty, staff member to respond to emergencies during all hours of operation
- Ensure unstaffed facilities comply with federal and state regulations as well as include them in the written emergency response plan
- Install panic buttons which notify EMS, provide video monitoring, and have AEDs properly located with proper signage
- Placement of AED/First Aid equipment is highly visible and easily accessible with easily identifiable signage in place

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## *WHAT'S THE NEXT STEP?*

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The information below is designed to help your facility develop an AED plan and to ensure your facility is providing the best opportunity for care.

1. Read the Good Samaritan Act for your state. These acts vary by state, but generally, they limit the liability of rescuers using AEDs.
2. Ensure staff members are CPR and AED trained. This doesn't necessarily mean everyone, but one or two people at all times a facility is open should be ready to provide assistance. It is considered a best practice to have one person designated per shift, to ensure someone is always trained to respond during business hours.

The following links provide information regarding various training opportunities:

<http://www.redcross.org/prepare/location/workplace/easy-as-aed>

<http://www.usa.philips.com/healthcare/education-resources/education-training>

[http://www.heart.org/HEARTORG/CPRAndECC/CPR\\_UCM\\_001118\\_SubHomePage.jsp](http://www.heart.org/HEARTORG/CPRAndECC/CPR_UCM_001118_SubHomePage.jsp)

3. Designate an Emergency Response Plan for AEDs, or add to your existing plan. Information should include who the designated emergency responders are (staff members' names and positions) and contact information for EMS. If adding to existing plan, be sure to differentiate between AED use situations and other medical emergencies.
4. Purchase AEDs as needed according to your facility. Patients shocked within the first 5 minutes show significantly higher survival rates. This is why making sure an AED is always within a 1.5 minute walk is crucial. Multiple AEDs may need to be purchased. The following sites offer high quality products:

<http://www.cardiacscience.com/>

<http://www.usa.philips.com/healthcare/solutions/emergency-care-resuscitation/automated-external-defibrillators>

<http://www.aed.com/>

5. The laws in your state may require that you have a physician prescribe and supervise the entire AED program. You can contact your corporate physician or consult with an AED service provider for medical direction and physician oversight plans. The following sites can provide assistance:

<https://onlineoversight.com/home>

[https://www.aeduniverse.com/AED\\_Medical\\_Direction\\_and\\_Physician\\_Oversight/s/61.htm](https://www.aeduniverse.com/AED_Medical_Direction_and_Physician_Oversight/s/61.htm)

[http://www.usa.philips.com/healthcare/articles/what-is-an-aed#\\_contact-form](http://www.usa.philips.com/healthcare/articles/what-is-an-aed#_contact-form)

6. Have your legal counsel, and if appropriate, your risk management or safety team review your AED program.
7. Ensure your facility stays up- to- date. AEDs should be checked twice a year to make sure they are still in working order. Batteries should be replaced every 5 years. In addition to this, staff should receive continued training and re-certification every 2 years.
8. The most important factor in SCA survival is early access to an AED through the presence of a trained rescuer. Thousands of Americans are alive today because of

public access AEDs, but that number could be higher with broader AED implementation. Establishing an AED program at your facility is simple, affordable, and could save a life.

## Sources

<https://www.osha.gov/SLTC/aed/standards.html>

<http://news.heart.org/americans-unprepared-for-workplace-cardiac-emergencies/>

<http://www.usa.philips.com/healthcare/education-resources/education-training>

[http://www.ncsl.org/research/health/laws-on-cardiac-arrest-and-defibrillators-aeds.aspx#Health\\_Clubs](http://www.ncsl.org/research/health/laws-on-cardiac-arrest-and-defibrillators-aeds.aspx#Health_Clubs)

<http://resources.lawinfo.com/personal-injury/what-are-good-samaritan-laws.html>

ACSM's Health/Fitness Facility Standards and Guidelines. American College of Sports Medicine.

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If you or your staff have any questions concerning this important Safety Bulletin, please contact us today.



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