

AED Implementation Guidance



In an effort to assist departments on campus that are considering implementing a Public Access Automated External Defibrillator (AED) Program, the University of Wisconsin Police Department and University Health Services have created this guidance to assist in this effort.

The university recognizes that early defibrillation is the key to survival from sudden cardiac arrest (SCA). One of the strategies for achieving early defibrillation is placement of AEDs at locations that are readily accessible by designated trained responders, the general public or both, Public Access Automated External Defibrillation. An effective AED program, however, requires both careful set-up as well as an ongoing maintenance program. The purpose of this guide is to help entities determine whether an on-site AED program is advisable and to provide an overview on AED programs.

What is an AED?

The automated external defibrillator (AED) is a computerized medical device. An AED can check a person's heart rhythm. It can recognize a rhythm that requires a shock and it can advise the rescuer when a shock is needed. The AED uses voice prompts, lights and text messages to tell the rescuer the steps to take.

What are the ideal locations for AED's?

While there is still some debate on the ideal placement of AEDs in a community setting, research has shown that SCA occurs most often at home. When SCA does occur in non-residential or public places, it is often an isolated event which makes it difficult to predict when and where it is going to happen. Even with this being the case, research has shown that SCA happens at a higher rate in some locations.

- Airports
- Community/senior citizen centers
- Dialysis centers
- Ferries/train terminals
- Golf courses

- Health centers/gyms
- Cardiology, internal and family medicine practices, and urgent care centers
- Jails
- Large industrial sites
- Large shopping malls
- Nursing homes
- Sports/events complexes

Where are AED's located on campus?

AED's are currently available in many locations throughout campus including in all UW Police Department vehicles, in UW medical facilities, and in many large campus venues such as the Kohl Center, Camp Randall Stadium, SERF, Camp Randall Memorial Shell, Natatorium, Nielsen Tennis Stadium and many others.

Should an AED be placed in our facility?

The National Center for Early Defibrillation has issued the following guidance to be used in determining if a Public Access AED program is right for your facility.

If you can answer “yes” to one or more of the questions below, an on-site AED program should be considered.

- Is it unlikely that the existing EMS system would be able to reliably achieve a “call-to shock” in five minutes or less at this site?
- Has an SCA incident occurred at this site in the past five years and have the demographics of the population served by this site remained relatively constant?
- Do 10,000 or more persons regularly gather at this location?
- Does this site have a large concentration of persons over 50 years old?
- Is there a high probability of SCA at this site? (See formula below.)

Formula for estimating high probability of SCA

1. Take the number of individuals at a particular location and multiply this number by the percentage of people age 50 or over.
2. Multiply this number by the average number of hours spent at the location each day.
3. Multiply this number by 350 if the location is residential or 250 if the location is non-residential. (This equals the number of exposure hours. Locations with 1.4 million exposure hours may experience .48 SCA per year.)

4. If your answer is 600,000 or higher, this location has a high probability of SCA (likelihood of one case every five years).

What are the steps to implement a successful AED Program?

If it is determined that an on-site AED program is desirable and needed in your facility, please review the American Heart Associations AED Implementation Guide. This can be downloaded at: <http://www.americanheart.org/downloadable/heart/110262192170770-2272%20AED%20ImplementGuide.pdf>

Your AED program should include:

- A designated program manager
- Available responders with an ongoing training program
- Careful device selection and placement including consideration of accessibility, signage, and alarms.
- Appropriate policies and procedures
- Maintenance schedule and documentation
- Adequate budget to cover initial and ongoing costs

Who should be notified about an AED program?

Units with an AED program should notify **both** the UW-Madison Police Department and the Madison Fire Department.