As the PAD initiative grows, the issue of lay rescuer training becomes more important. Earlier manual defibrillators required lots of training. Users of these models had to be able to visually interpret the patient’s heart arrhythmia displayed on a screen attached to the defibrillator. Through proper analysis of the rhythm, the user would determine if the rhythm required defibrillation, and if so, the user would manually deliver the shock. Due to the intense training needed, defibrillation was a skill reserved for highly trained emergency care professionals such as paramedics, nurses and physicians. But in the early 1990s, thanks to advances in technology, the development of automated external defibrillators (AEDs) made it possible for lay people with minimal training to use an AED to restore proper heart rhythm and save lives.

Why is training needed if AEDs are so advanced now? AEDs can analyze the electrical activity of the victim’s heart and determine if a shock is needed. However, more skills are needed to make sure the device is used most effectively and to ensure the safety of the user and bystanders. Training ensures that the AED is used properly to give the greatest benefit and the highest chance of survival to the patient. Training also teaches the user:

• How to recognize the warning signs of heart attack and stroke.
• Why and how to activate the Emergency Medical Services (EMS) system.
• How to buy time by performing one-rescuer adult CPR until the AED arrives.
• How to assess the patient and determine if using an AED is warranted.
• How to attach the AED pads if needed and ensure proper use.
• How to follow safety protocols to protect the user and any bystanders.
• How to deal with unusual situations (such as a victim with an implanted defibrillator or using an AED on a victim lying in water).

The American Heart Association AED Course

To meet the need for lay rescuer training, the American Heart Association has developed a course called Heartsaver AED for Lay Rescuers and First Responders. This 3 1/2- to 4-hour course prepares lay rescuers — including non-traditional first responders such as police, firefighters, airline personnel, security guards, senior care facility workers and other laypeople — to perform the essential CPR skills and to use an AED. Heartsaver AED uses a motivational video, several practice-after-watching videos, a scenario-based practice session, integrated skills evaluation and a case-based evaluation to reinforce the essential knowledge needed to properly use an AED.

This course offers a diversified educational model based on existing research that was tested in several national pilot programs. The resulting course is:

Criteria-based Satisfactory course completion is based on written and skills evaluations.

Video-based Motivational and practice-after-watching videos ensure consistent, efficient course delivery.

Instructor-based The instructor communicates cognitive objectives, supervises skills, corrects skills performance and gives supplemental explanation to questions.

Scenario-based Scenario-mediated practice sessions use multiple cases that replicate real-life events.

Hands-On The course design allows significant time for skills practice.

Flexible The course can be modified to accommodate various student populations and types of AEDs used.

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The Heartsaver AED course teaches the basic adult CPR techniques and how to use an AED. It also covers using barrier devices and giving first aid for a choking victim. Upon completion, participants will be able to achieve specific cognitive objectives of the course, which include:

• Describing the links in the American Heart Association chain of survival.
• Describing how to activate the local Emergency Medical Services (EMS) system.
• Recognizing the signs and symptoms of four major emergencies — heart attack, cardiac arrest, stroke and foreign body airway obstruction.

Using an adult manikin, an AED, pocket face mask and telephone, participants will also be able to achieve several major skills objectives of the course including:

• How to call 9-1-1 or the local EMS system.
• How to perform rescue breathing using mouth-to-mouth and mouth-to-mask techniques.
• How to perform one-rescuer adult CPR.
• How to relieve adult foreign body airway obstructions.
• How to provide defibrillation with an AED in less than 90 seconds from placement at the training manikin’s side.

The format of the Heartsaver AED course also greatly simplifies the learning process. The presentation and practice of critical psychomotor skills are divided into distinct components using short practice-after-watching videos. CPR is taught one component at a time (rescue breathing and chest compressions) before the student integrates the individual skills. Students practice using AEDs individually before adding CPR skills.

Course Completion Documentation

Successful completion of the course requires a score of 85 percent or higher on a 20-question multiple choice written evaluation and successfully completing a skills evaluation. The skills evaluation integrates the two core skills of Heartsaver AED — CPR and using an AED. Remediation and re-evaluation is provided when needed. All successful students receive an American Heart Association Heartsaver AED course completion card with a recommended renewal date of two years from the date of issue.

Ongoing Training

Refresher training should occur at least once every two years. More frequent training is recommended and may be dictated by local policies or regulations. The American Heart Association recommends that a review of CPR and AED skills be done regularly for all potential AED users. This helps participants retain skills.

AED Plus First Aid Training

In some companies, lay rescuers may be called on to respond to a variety of accidents in addition to cardiac emergencies. The American Heart Association has joined with the National Safety Council to create the Heartsaver FACTS course. This course includes a first aid training module that meets OSHA requirements in addition to the CPR and AED training of the Heartsaver AED course. This 8-hour course is available through the American Heart Association’s Community Training Centers and the National Safety Council.

Training Locations

The American Heart Association has over 3,000 Community Training Centers (CTCs) throughout the country. They offer a variety of American Heart Association programs, including Heartsaver AED, Heartsaver FACTS, basic CPR and advanced life support courses. These CTCs are located in every state and are equipped to offer courses both at their own location as well as on-site at your location. To learn more about providing Heartsaver AED training for your employees:

• Contact the nearest American Heart Association office in your community or state (check the telephone book white pages or your local telephone information services) for a referral to the closest CTC.
• Contact our Customer Support Center at 1-800-AHA-USA1 (800-242-8721) for the closest CTC.
• Visit our Web site at www.cpr-ecc.org to locate the closest CTC.