



AED and PAD Programs

Q&A

What is an AED?

The *automated external defibrillator* (AED) is an electronic medical device. It can

- Check a person's heart rhythm
- Recognize a rhythm that requires a shock
- Advise the rescuer to give a shock (defibrillation) if one is needed

AEDs use voice prompts, lights, and screen messages to tell rescuers what steps to take.

US Food and Drug Administration (FDA)–approved AEDs are accurate and easy to use. Anyone can operate one safely. And the same basic steps apply to all of them.

There are many makes and models of AEDs. The American Heart Association (AHA) doesn't recommend one over another.

What is public access defibrillation?

Public access defibrillation (PAD) means providing AEDs in the community for members of the public to use. PAD programs help to make bystander resuscitation and early defibrillation possible.

What is the first step for implementing an AED or PAD program?

Your local emergency medical services (EMS) system can help you find out about local and state protocols and requirements for AED training and use. You can also refer to the AHA's guide, *Your On-site AED Program—An Implementation Guide*, for more details.

What is the AHA's position on where to place AEDs?

The AHA supports placing AEDs in places where a number of people may regularly be present, such as doctors' offices, gated communities, gyms, sports arenas, public sports complexes (indoor/outdoor), office complexes, and shopping malls. For a community or business facility with an AED or PAD program, the AHA strongly encourages being part of a defibrillation program in which

- Persons who acquire an AED notify local EMS
- A licensed physician or medical authority provides oversight to ensure quality control and training
- People responsible for using the AED are trained in cardiopulmonary resuscitation (CPR) and how to use an AED

Why is notifying local EMS important?

AEDs can't help save lives if rescuers don't know where to find them. When a 9-1-1 dispatcher knows that an AED is on-site, they can tell the lay responders who are already on the scene. They can also inform the EMS responders en route.

Why is it important to work with a medical authority?

This is for quality control. A licensed physician or medical authority can help ensure that

- All designated responders are trained in CPR and AED use
- The AED is properly maintained

The physician also can help organizations develop an emergency response plan for the AED program.

Why do people who are responsible for operating AEDs need CPR training?

Early CPR is a key part of giving lifesaving aid to someone who has a sudden cardiac arrest. CPR helps to circulate oxygen-rich blood to the heart and brain. After an AED delivers a shock, it prompts the operator to continue CPR while it continues to analyze the person's heart rhythm.

If AEDs are so easy to use, why is training needed?

Someone using an AED must know

- How to recognize the signs of a sudden cardiac arrest
- When to phone 9-1-1
- How to do CPR

It's also important for operators to receive training on the specific AED model they will use. That way they will be better able to successfully operate it in an emergency. Training also teaches how to handle potentially hazardous situations. The more familiar a person is with the AED, the more confident they will feel—and the more likely they will be to use it.

Can anyone buy an AED?

Yes. However, some states may require that a physician review or oversee an organization's AED or PAD program. The devices are manufactured and sold under guidelines approved by the FDA. It is important to ensure that your AED is FDA approved.

What legislation is currently in effect to protect lay rescuers who use an AED?

Organizations should seek legal counsel before implementing an AED program to understand state and local regulations and applicability of protective statutes.

How much does an AED cost?

The price varies by make and model. Currently, most AEDs cost between \$1500 and \$3000.

What steps should an organization take to buy an AED for use on-site?

First, make sure you have medical oversight to help with quality control and training. Then, include these elements in your AED program:

- **CPR AED training.** Train all users (this can be done through the AHA Heartsaver CPR AED Course; if the people being trained must comply with OSHA regulations, they must first complete a First Aid CPR AED course).
- **Physician oversight or a maintenance plan.** This ensures 2 things:
 - Appropriate AED use
 - The AEDs are always in working order
- **Local EMS involvement.** Make sure that EMS knows the type and location of your AED(s).
- For more details, refer to *Your On-site AED Program—An Implementation Guide* from the AHA.

Can AEDs be used on children?

Yes—you can use an FDA-approved AED for children and infants as well as for adults. Some AEDs can deliver a reduced shock dose for children and infants when you use child pads or when the AED has a child-cable key or switch. If the AED can deliver a reduced shock dose, use it for infants and children less than 8 years of age. If the AED cannot deliver a child shock dose, you can use adult pads and give an adult shock dose for infants and children less than 8 years of age. When placing pads on the child's bare chest, make sure they don't touch each other. If the child's chest is so small that the pads would touch, place one pad on the center of the child's chest and the other on the center of the child's back. (Don't use child pads for an adult. Child pads deliver a shock dose that is too low for an adult and will likely not be successful.)

Which AED model does the AHA recommend?

The AHA does not recommend a specific device—only that it be FDA approved. All AED models have similar features, but the differences between them allow them to meet a variety of needs. The AHA encourages potential buyers to consider all models and make a selection based on the buyer's particular needs. The local EMS system can help with this decision.

How can I enroll in a CPR AED course?

The AHA offers Heartsaver First Aid CPR AED eLearning and instructor-led training courses. Visit heart.org/workforcetraining for more information.

Note: This guide is provided for your convenience. The AHA does not recommend particular manufacturers' products and cannot provide legal advice. It does, however, publish research and offer training relating to heart health.