Additional Information

Questions and Answers About AEDs and Defibrillation (continued)



Fighting Heart Disease and Stroke

Can an AED make mistakes?

An AED will almost never decide to shock an adult victim when the victim is in non-VF. AEDs "miss" fine VF only about five percent of the time. The internal computer uses complex analysis algorithms to determine whether to shock. If the operator has attached the AED to an adult victim who's not breathing and pulseless (in cardiac arrest), the AED will make the correct "shock" decision more than 90 times out of 100 and a correct "no shock indicated" decision more than 95 times out of 100. This level of accuracy is greater than the accuracy of emergency professionals who must read and interpret the rhythms.

AED Placement

What's public access to defibrillation?

Public access to defibrillation (PAD) is the concept of placing AEDs in public and/or private settings where large numbers of people are found or where people generally considered at high risk for heart attacks live or are found.

What's the American Heart Association's position regarding the placement of AEDs?

We strongly advocate that all EMS first response vehicles and ambulances be equipped with an AED or another defibrillation device (semiautomatic or manual defibrillator).

We also support placing AEDs in targeted public areas such as sports arenas, gated communities, office complexes, doctors' offices, shopping malls, etc. When AEDs are placed in a community, the American Heart Association strongly encourages that they be part of a defibrillation program that includes these elements:

 Persons or entities that acquire an AED notify the local emergency medical services (EMS) office.

- A licensed physician or medical authority provides medical oversight to ensure quality control.
- **3.** Persons responsible for using the AED are trained in CPR and in how to use the AED.

Why is notifying the local EMS office important?

It's important because it lets the local EMS system know where AEDs are located in the community. In the event of a sudden cardiac arrest emergency, the 9-1-1 dispatch service will know if an AED is on the premises and can notify the EMS system as well as the responders already on the scene.



Why should a licensed physician or medical authority be involved with a person or entity that acquires an AED?

This is a quality-control mechanism. The licensed physician or medical authority will make sure that all designated responders are properly trained and that the AED is properly maintained.

Can anyone buy an automated external defibrillator (AED)?

Automated external defibrillators are devices manufactured and sold under guidelines approved by the FDA. Current FDA rules require a physician's prescription to buy an AED.

How much does an AED cost?

The price of an AED varies by make and model. Most AEDs cost around \$3,000.

Which AED model does the AHA recommend?

The AHA doesn't recommend a specific device. All the AED models available have similar features, but the slight differences allow them to meet a variety of needs. The AHA encourages any potential purchasers to consider all the models and make a choice based on their own needs. The local EMS office can help you in this decision.

AED Training

Why should people responsible for operating an AED receive CPR training?

Early CPR is an integral part of providing lifesaving aid to people suffering sudden cardiac arrest. The ventilation and compression skills learned in a CPR class help to circulate oxygen-rich blood to the brain. Most AEDs, after they have delivered a series of three electric shocks to a person, will prompt the operator to continue CPR while the machine continues to analyze the patient.

If AEDs are so easy to use, why do people need formal training on how to use them?

An AED operator must know how to recognize the signs of a sudden cardiac arrest, when to activate the EMS system and how to perform CPR. It's also important to receive formal training on the AED that will be used. That way the user becomes comfortable with the device and can successfully operate it in an emergency. Training also teaches the user how to avoid potentially hazardous situations.

