Automated External Defibrillators

What is an automated external defibrillator?

An automated external defibrillator (AED) is a device that gives an electric shock to the heart. It can be placed on your chest to revive you if your heart stops beating (cardiac arrest). Nonmedical people can use AEDs.

Do AEDs replace CPR?

No, CPR (cardiopulmonary resuscitation) is still needed. When a person goes into cardiac arrest, CPR helps keep blood flowing to the brain. AEDs can be used as part of CPR. The electric shock of an AED greatly improves the chances of getting the heart to start pumping again. The American Red Cross includes AED training in many CPR training classes.

AEDs can recognize different heart rhythms and decide whether a shock is needed, so that users don't have to. Defibrillation done as quickly as possible can be lifesaving.

How does an AED work?

The AED treats a heart in ventricular fibrillation (VF). In VF, the electrical signals in the heart stop working right. The heart twitches ineffectively and can't pump blood. The person's heart appears to have stopped beating. The AED stuns the heart and stops the abnormal activity. This gives the heart a chance to go back to beating effectively.

An AED may also be used to treat ventricular tachycardia.

When the AED is used, small sticky patches or suction cups are placed on the person's chest. The AED checks the person's heart rhythm, judges whether a shock is needed, and then gives the right level of shock.

AEDs are less successful if someone has been in cardiac arrest for more than a few minutes, especially if no CPR was given.

Why are AEDs important?

When cardiac arrest happens, lack of blood flow to the brain and other parts of the body causes death. The only treatment is to restore the normal rhythm of the heart before severe brain damage is done. AEDs can restore a normal heart rhythm.

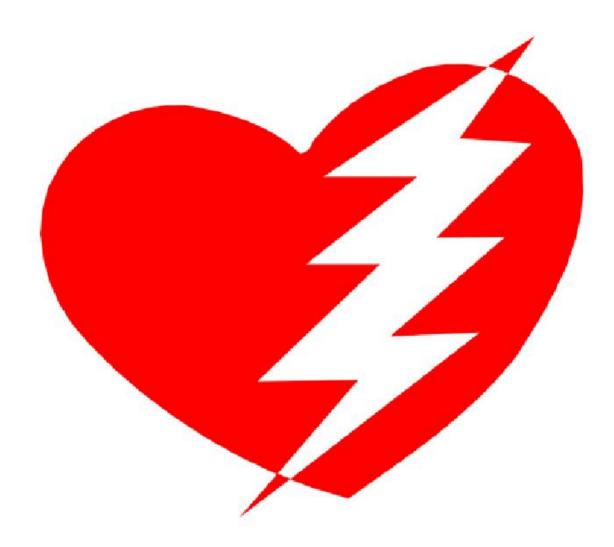
Who can use an AED?

Anyone trained in CPR can be trained to use an AED. AEDs are designed to be used by people without medical backgrounds. This includes police, firefighters, flight attendants, security guards, and lay rescuers. AEDs are available in many public places and on some airplanes. You can find an AED by looking for the universal AED symbol.

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Universal Symbol for AED



When you see this symbol it means that an automated external defibrillator (AED) is available.

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