

# Automated External Defibrillators Can Save Lives During Cardiac Emergencies

Automated External Defibrillators (AEDs) improve survival after an out-of-hospital cardiac arrest. Their presence reduces the critical time for treatment. Less time to defibrillation improves victims' chances of survival. Having the devices appropriately located in a business or workplace improves the survivability of people experiencing a cardiac crisis.

## Why should employers make Automated External Defibrillators available to employees?

- There are 300,000-400,000 deaths per year in the United States from cardiac arrest.
- Most cardiac arrest deaths occur outside the hospital. Current out-of-hospital survival rates are 1 to 5 percent.
- In 1999 and 2000, 815 of 6,339 workplace fatalities reported to OSHA were caused by cardiac arrest.
- Jobs with shift work, high stress, and exposure to certain chemicals and electrical hazards increase the risks of heart disease and cardiac arrest.

## What causes cardiac arrest, and how does an AED improve survivability?

- Abnormal heart rhythms, with ventricular fibrillation (VF) being the most common, cause cardiac arrest.

- Treatment of VF with immediate electronic defibrillation can increase survival to more than 90 percent.
- With each minute of delay in defibrillation, 10 percent fewer victims survive.

## **Is AED equipment expensive?**

- The average initial cost for an AED ranges from \$3,000 to \$4,500.

## **Are AEDs difficult to use?**

- AEDs are easy to use. In mock cardiac arrest, untrained sixth-grade children were able to use AEDs without difficulty.
- Automated external defibrillators are effective, easy to use, and relatively inexpensive. As a matter of policy, OSHA does not endorse or approve specific products or product manufacturers.

The purpose of this bulletin is for information only and does not impose and is not intended to result in the imposition of any new legal obligations or constraints on employers.

### **For more information:**

See OSHA's website at [www.osha.gov](http://www.osha.gov) or visit the American Heart Association website at [www.cpr-ecc.org](http://www.cpr-ecc.org).

