

# FIRST RESPONSE

Understanding Automated External Defibrillators (AED) and AED management programs. | **Marlene Kenney**

**Y**ou've seen them walking through the mall corridors, airports, schools, health clubs or public event arenas. They are usually located next to the fire extinguisher or close to the public restrooms. It looks like a box. It may be yellow, green, red or blue and above this box is a sign reading AED or Emergency Defibrillator. If you've never really given "this box" a second glance, read on because that is about to change.

Sudden cardiac arrest claims over 1,200 lives daily in the United States; that's a life lost almost every 2 minutes. It is the leading cause of death, claiming 330,000 lives each year in the United States alone. Sudden cardiac arrest (SCA) strikes without notice. Unlike a heart attack there aren't any telltale signs. Sudden cardiac arrest is caused by an "electrical short" in the heart resulting in a too rapid or chaotic rhythm. When beating with these rhythms, known as ventricular tachycardia or ventricular fibrillation (V fib), the heart pumps little or no blood.

The victim loses consciousness, drops to the floor and does not appear to be breathing. Are you prepared to react during this emergency situation? Would you know what to do?

Since the survival rate for SCA drops 7% to 10% every minute without defibrillation, the first few minutes after the arrest are critical. Community EMS

and rescue services can't always be on the scene fast enough (the American Heart Association recommends optimum deployment of an AED 3 to 5 minutes or sooner from the onset of cardiac arrest). CPR combined with the delivery of early defibrillation enables on-site lay responders to provide the victims of SCA with the best opportunity



**Are you prepared to react when someone in your store has sudden cardiac arrest? Would you know what to do?**

for a second chance at life. CPR and the proper use of an AED are by no means intended to replace the care provided by paramedics, but rather to provide "first aid" during the time it takes EMS providers to arrive on the scene.

The Automated External Defibrillator (AED) is a computerized medical device

which checks a person's heart rhythm. It recognizes when a shock needs to be delivered and guides the rescuer step by step by audio or visual prompts without judgment on the user's part. An AED can restore a victim's normal heart rhythm by providing defibrillation and, as part of a resuscitation effort including CPR, can significantly increase the victim's chance of survival. The AED has proven to be safe and reliable when employed by laypersons in a variety of work and public settings. An AED cannot be misused on someone not in cardiac arrest; it is designed to provide a shock only when needed.

Clinical studies evaluating the use of an Automated External Defibrillator (AED) by laypersons in Public Access Defibrillation Programs (PAD Programs) have demonstrated a significant improvement in survival when defibrillation provided by the AED is added to a CPR regimen. To achieve optimal outcome, a comprehensive emergency response program is necessary. A vital component of the program is CPR/AED training. You and your staff must be trained and ready to respond in any life-threatening situation. Once equipped with this knowledge and training, you as a lay responder will be able to react to any emergency situation and begin effective treatment.

This initiative brings an added value to your retail organization, showing