The SADS Foundation Position on AEDs

Tragically, several thousand young people between the ages of 1 and 22 die of sudden cardiac arrest (SCA) each year in the United States. Another 350,000 middle-aged and elderly people lose their lives to SCA annually. Most of these deaths occur in the home or in the community and not in the hospital.

In sudden cardiac arrest, the heart no longer pumps blood to the brain. Without the oxygen and nutrients supplied by the blood, brain cells begin to die within minutes, and death soon follows. Cardiopulmonary resuscitation (CPR) can help keep blood circulating, but unless Emergency Medical Services (EMS) arrive quickly, survival is unlikely. SCA is the most prevalent medical emergency today.

Cardiac arrest does not have to be fatal. Just as many of us have witnessed on television’s “ER”, it is often possible to shock the heart back into a normal rhythm with a device called a defibrillator. If an SCA occurs outside a hospital environment and if an Automated External Defibrillator (AED) is available in this same location, then an AED can be used to shock the heart of the victim and hopefully restore normal rhythm. Early defibrillation of cardiac arrest victims is essential. The earlier the victim is defibrillated, the greater the chance of survival. In cities where CPR training is widespread and EMS response is rapid, the survival rate increased from nine percent to 30 percent when AEDs were available to first responders (American Heart Association, 1998). When an AED is used, SCA survival rates can rise from under 5% to over 60%. This increase in the rate of survival occurs because the window of opportunity for restoring life after a SCA is very short—only about 5 minutes.

Advances in technology have made AEDs small, portable, and easy-to-use. This means that AEDs can be used by members of the public, including security guards, teachers, coaches, students, recreational facility staff, and family members or caregivers of people at high risk for cardiac arrest. The training required to use an AED is relatively brief and can be delivered in conjunction with a CPR course.

Therefore, the SADS Foundation recommends:

- All EMS personnel, including first responders (firefighters, police, security personnel etc.) should be trained to operate AEDs and have easy access to AEDs. All emergency medical vehicles should be equipped with defibrillators (manual or AEDs).
- Early access defibrillation must be combined with other elements of the American Heart Association's "Chain of Survival"-early access, early CPR, and early access to Advanced Cardiac Life Support (ACLS).
- People should have access to AEDs at home when combined with CPR and AED training
- Bystander-initiated automatic external defibrillation should be available in rural communities and congested urban areas where resuscitation strategies have had little success.
- Legislation to ensure AED access for emergency medical services and at public sites such as office buildings, stadiums, arenas, and other sites where large numbers of the public gather.
- Legislation to ensure immunity from liability for any person using an AED to save a life.