# Early Defibrillation

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Sudden cardiac death is a major public health problem, claiming as many as 350,000 lives each year in the United States. Many who suffer sudden cardiac arrest can be successfully resuscitated if certain critical actions such as 9-1-1 access, bystander cardiopulmonary resuscitation, rapid defibrillation and prehospital advanced life support, are accomplished in a timely and effective manner. Since rapid defibrillation is the most critical of these interventions, strategies to enhance survival should focus on reducing the interval from collapse to defibrillation.

The development of the automated external defibrillator (AED) has made it feasible to train and equip basic level emergency responders with defibrillators and thus make early defibrillation more readily achievable. Available data indicate that AEDs can generally

be effective when used by traditional (EMS & fire service) and some non-traditional (police, security, or flight attendant)' first responders.

Increased survival has been postulated if other non-traditional first responders (building managers or health club employees, for example) and minimally trained or untrained bystanders have access to AEDs. The use of AEDs by this group is a concept that holds promise, despite insufficient data to demonstrating effectiveness or safety. One important concern is that providing these groups with access to AEDs could result in potential delays in activation of the EMS system that may be detrimental to patient outcome.

The Vision of NAEMSP is that all victims of sudden cardiac arrest should have rapid defibrillation available. Each community must perform a needs assessment and make appropriate resource allocations to identify optimal AED deployment strategies. To explore the role of nontraditional AED providers, NAEMSP strongly encourages continuing scientific studies of the effectiveness, safety and costs of AED programs. To enable cost-effective and appropriate public health policy decisions, cardiac arrest should be subject to the same epidemiologic scrutiny as are other reportable public health events.

Making AEDs available to non-traditional responders or minimally trained or untrained bystanders may be an effective strategy for achieving early defibrillation in certain communities. Regardless of the deployment strategy, there must be strong medical direction for each AED program and each community must also assure these AED programs are integrated into the local EMS system and included in quality assurance activities. Integration of AED programs into existing EMS systems is essential to ensure there are minimal delays in activating and transitioning care to the EMS system. State and federal governments must support persons who do not have a 'duty to respond' by developing or revising Good Samaritan laws to protect them from liability for good faith use of AEDs.

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