

**Information Packet on
Community-Based Automatic External
Defibrillator (AED) Programs**

**Prepared for the
Western Fire Chiefs Association**

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AUTOMATIC EXTERNAL DEFIBRILLATORS

Consistent with the Western Fire Chiefs Association's adoption of a strategic goal to "Promote the Proliferation of Community-Based Automatic External Defibrillator (AED) Programs," the following materials are intended to assist the WFCA membership and its partner state associations and local fire agencies working to fulfill that goal.

While this document is an attempt to identify some of the key rationale for Community-based AED programs, it is not intended as a comprehensive resource for those seeking either clinical or cost data, nor does it include an "implementation" plan at the local level. Such information is readily available through a number of resources identified in the attached "resource guide."

Background:

Heart disease is the single greatest cause of death in the United States. Every year, almost 500,000 adult Americans die of coronary heart disease. Of those, 250,000 die of sudden cardiac arrest before they reach a hospital. Ventricular fibrillation, a disturbance in the heart's electrical activity, is the most common initial form of sudden cardiac arrest. A fibrillating heart quivers with chaotic electrical energy but does not pump blood or generate a pulse. Ventricular fibrillation can be lethal, but it is treatable. If the heart can be shocked quickly with a defibrillator (i.e., "defibrillated"), a normal heart rhythm may be restored and many victims can survive. In other words, sudden cardiac arrest need not be fatal.

Time is the enemy. The survival rate for sudden cardiac arrest falls almost 10% every 60 seconds. Clinical research has determined that reducing the interval between onset of sudden cardiac arrest and delivery of defibrillation by even one or two minutes not only significantly increases survival rates, but that it does so more than all other emergency cardiac care combined.

Survival from sudden cardiac arrest typically depends upon a series of events. Someone has to immediately recognize the problem, call 9-1-1, and start CPR. CPR buys time, keeping oxygen in the blood flowing to vital organs to give the victim the best chance of survival until defibrillation is administered. Defibrillation as early in the sequence as possible is essential for survival. Finally, emergency medical personnel trained in advanced life support (paramedics) can provide advanced airway procedures and medications to maintain a restored heartbeat, increase the amount of oxygen in a victim's system, and minimize the chance of refrillation.

The goal of Community AED (automated external defibrillator) Programs is to distribute AEDs as widely as possible in order to shorten the interval from sudden cardiac arrest to defibrillation.

Immunity Legislation:

Although literature provided by the American Heart Association states that “All 50 states have provided limited liability for lay persons trained in the use of AEDs,” concerns over liability may present the single greatest impediment to achieving the WFCA’s goal of increasing the number of community-based AED programs.

In reviewing the status of immunity legislation, there is not only a lack of consistency from state-to-state but, more importantly, there are serious questions about the strength and scope of existing immunity statutes. While this contributes to concerns about whether organizations actually enjoy the protection they believe they are afforded, it results in others who are reluctant to deploy AEDs because of legal liability risks.

The issue of questionable liability protection for all participants (business owners, users, and non-users) coupled with what appears to be extreme differences in legislation, or lack thereof, from state to state, the WFCA supports the simultaneous introduction of standardized comprehensive Good Samaritan language in all member states’ legislatures. To that end, the association will work with industry experts to prepare such language for review by the membership within 90 days.

While an alternative to this approach might be a federal Good Samaritan law that preempts state laws in order to create uniformity and consistency throughout the United States, this could prove more challenging and may be outside the scope of the association.

Mandate Legislation:

Although well-intended, the concept of “mandating” AEDs may be met with some resistance. For this reason, the association will address mandates as a separate matter from immunity. Moreover, the association will do so only after fully addressing the matter of immunity lest the issues become sufficiently entwined that one may jeopardize the other.

If, following resolution of the immunity issue, the association decides to promote legislation calling for the mandatory installation of AEDs, it recognizes and acknowledges the difference between community-based, e.g., lay person, AED programs and programs designed to expand AED availability within the local public safety community. More specifically, while the association may support legislation to require AEDs in certain target locations, the association does not support usurping a local government’s authority to determine public safety service levels within their community. Doing so would be tantamount to requiring a local fire department to provide advanced

life support services when the locally elected officials had established basic life support as the community's standard of care.

Whether or not the association adopts a position that, long-term, AEDs should be mandated, pending passage of described immunity language the association actively encourages expansion of AED programs through information dissemination and supportive resolutions adopted by the WFCA, state associations and local governments. Copies of suggested resolutions are attached.

Finally, given the WFCA's history in fire and life safety code development, the association supports the long-term goal of amending the code for certain high risk occupancies to include AEDs installations, much the same as fire extinguishers.

Suggested AED Program Components:

The following is an attempt to synthesize myriad suggestions regarding Community-Based AED Programs. Considerable additional information is available by using the resource list below.

- Establish an executive mandate
- Identify high-risk locations but also solicit voluntary participants
- Develop processes that enable easy deployment
- Develop an easily manageable training program
- Integrate program into existing 9-1-1 system: develop an AED response network
- Develop program to encourage/ensure minimal necessary maintenance (working batteries and non-expired pads)

Targeted Locations:

Although difficult at best to predict when and where a cardiac arrest will occur, a number of studies target the following facilities due to large resident or transient adult populations, high-risk activities, high-risk populations, obstacles to prompt EMS response, or a combination:

- Airports
- Businesses
- County jails
- Dialysis centers
- Gaming establishments
- Golf courses
- Large industrial sites
- High-rise complexes
- Homeless shelters
- Nursing homes
- Physician offices
- Shopping malls
- Sports complexes
- Streets and highways
- Trains and ferries
- Urgent care centers
- Gyms/Health Clubs

Limited Resource List:

A search for resource information available to communities and organizations seeking to implement a Community-Based AED program revealed an exhaustive list of research material and articles on the subject. Below are a just a few of the key sites offering helpful information.

National Center for Early Defibrillation	www.early-defib.org *
American College of Emergency Physicians (ACEP)	www.acep.org
AED Risk Insights	www.aedriskinsights.org
American Heart Association	www.americanheart.org

* While the National Center for Early Defibrillation is in a state of transition, their extremely helpful web site remains active.

CITY of (name)

SAMPLE RESOLUTION

TITLE: PUBLIC SAFETY PROVIDER AED PROGRAMS

WHEREAS, the City of (name) serves a diverse population of residents and visitors, and

WHEREAS, sudden cardiac arrest claims the lives of over 225,000 Americans each year, and

WHEREAS, sudden cardiac arrest is a leading cause of death for public safety (firefighter and police officer) personnel, and

WHEREAS, the key to survival of sudden cardiac arrest is rapid defibrillation, and

WHEREAS, ninety percent of sudden cardiac arrest victims who are defibrillated within two minutes of collapse are discharged from the hospital, and

WHEREAS, the availability of Automatic External Defibrillators (AEDs) to all public safety personnel greatly decreases the time from witnessed arrest to defibrillation;

NOW THEREFORE, BE IT RESOLVED, the City of (name) supports the implementation of a Public Safety Provider AED program whereby all public safety personnel are trained in the use of AEDs, AEDs are placed on all public safety vehicles and such vehicles are included in the City's EMS deployment strategy.

APPROVED AND ADOPTED on (date)

(Name), Mayor

ATTEST:

(Name), (Title- Secretary?)

CITY of (name)

SAMPLE RESOLUTION

TITLE: COMMUNITY-BASED AED PROGRAM

WHEREAS, the City of (name) serves a diverse population of residents and visitors, and

WHEREAS, sudden cardiac arrest claims the lives of over 225,000 Americans each year, and

WHEREAS, the key to survival of sudden cardiac arrest is rapid defibrillation, and

WHEREAS, ninety percent of sudden cardiac arrest victims who are defibrillated within two minutes of collapse are discharged from the hospital, and

WHEREAS, the availability of Automatic External Defibrillators (AEDs) to minimally trained lay persons greatly decreases the time from witnessed arrest to defibrillation;

NOW THEREFORE, BE IT RESOLVED, the City of (name) supports the implementation of a Community-Based AED program promoting the training of lay persons and the installation of AEDs in identified high risk locations.

APPROVED AND ADOPTED on (date)

(Name), Mayor

ATTEST:

(Name), (Title- Secretary?)