

CITY AND COUNTY OF DENVER

Public Access Automated External Defibrillator (AED) Policy		
Occupational Safety Policy No. 65.7.2 This policy has been developed and shall be implemented under authority of Risk Management Office.	January 2008	Prepared / Revised By: Risk Management – Safety Unit

1.0 Introduction

An Automated External Defibrillator (AED) is a medical device used to treat a victim who suddenly becomes unresponsive, pulseless, and is experiencing sudden cardiac arrest. Use of AEDs has been scientifically proven to save lives when combined with cardiopulmonary resuscitation (CPR) and early advanced medical care. The AED analyzes the heart rhythm and advises the operator if a shockable rhythm is detected. If a shockable rhythm is detected, the AED will charge to the appropriate energy level and deliver a shock. According to the American Heart Association, the use of CPR and an AED within the first 3–5 minutes of cardiac arrest, followed by advanced medical care within 8-10 minutes, can result in greater than 50 percent long-term survival rates for witnessed cardiac arrest victims.¹

Therefore, the City and County of Denver encourages City departments and agencies to offer such devices at various city locations under the guidelines of this policy. The purpose of this policy is to define the training, maintenance, medical oversight, and administration of a Public Access Automated External Defibrillator Program for City and County of Denver departments / agencies.

2.0 Definitions

Automated External Defibrillator (AED). An automatic medical device capable of cardiac rhythm analysis and defibrillation after electronically detecting the presence of ventricular fibrillation or ventricular tachycardia.

AED Program. A department’s / agency’s written plan in which people, equipment, and actions are configured to prepare and respond to a suspected victim of sudden cardiac arrest utilizing an AED. State approved AED Programs include plans of placement, training of personnel, preplanned coordination with the emergency medical services systems, medical oversight, AED maintenance, identification of personnel authorized to use AEDs, and reporting of AED utilization.

Defibrillation. The discharge of an electrical current through the heart muscle for the purpose of restoring a blood circulating cardiac rhythm.

AED Formal Training. AED training that complies with the intent of applicable state and local AED training requirements.

¹<http://www.americanheart.org>

Sudden Cardiac Arrest. The sudden, abrupt loss of heart function. Most sudden cardiac arrests occur when the electrical impulses in the heart become rapid (ventricular tachycardia) or chaotic, ventricular fibrillation or both. This irregular heart rhythm (arrhythmia) causes the heart to stop beating in a synchronized format producing blood flow.

3.0 **Scope**

This policy applies to all city department / agencies that have identified the need for or benefit of offering Public Access AEDs. This policy does not apply to AEDs that are operated under a state approved Emergency Medical Response System (i.e. units of Fire Department apparatus for 911 response).

In determining the need for or benefit of offering an AED, the department or agency head should review the types of facilities and activities within their respective department / agency to determine whether or not it may be beneficial or feasible to purchase AEDs and make them available. It is the department's / agency's responsibility to fund AED purchases, installments, and required ongoing maintenance costs. AEDs purchased shall comply with Federal and state medical device regulation and oversight including FDA device clearance requirements.

While there is no single "formula" to determine the appropriate number, placement, and access system for AEDs, there are several major elements that should be considered. The U.S. Department of Health and Human Services has developed basic factors that should be contemplated. They include:

Response Time: The optimal response time is 3 minutes or less from when the victim is unconscious, not breathing normally and showing no signs of circulation such as normal breathing, coughing, or movement. Survival rates decrease by 7 to 10 percent for every minute that defibrillation is delayed. Therefore it is recommended that City departments and agencies provide for and train as many employees as possible on the use of AEDs.

Demographics of the Facility's Workforce: Department Heads and AED Coordinators should examine the makeup of the facility's workforce. Because the likelihood of an event occurring increases with age, consideration should be given to the age profile of the workforce.

Visitors: Facilities (including theaters, recreation centers, airports) that host large numbers of visitors are more likely to experience an event, and an appraisal of the demographics of visitors should be included in an assessment.

Specialty Areas: Facilities where strenuous work is conducted are more likely to experience an event. Additionally, specialty areas within facilities such as exercise and work out rooms should be considered to have a higher risk of an event than areas where there is minimal physical activity.

Physical Layout of Facility: Response time should be calculated based upon how long it will take for an individual with an AED walking at a rapid pace to reach a victim. Large facilities and buildings with unusual designs, elevators, campuses with several separate buildings, and physical impediments all present unique challenges. In some larger facilities, it may be necessary to incorporate the use of "golf cart" style conveyances to accommodate time and distance conditions.

4.0 **Responsibilities**

Risk Management shall:

- a) Develop a city-wide Automated External Defibrillator Policy compliant to Federal, State, and local mandates.
- b) When requested provide technical guidance to departments / agencies in the procurement and placement of AED equipment, and development of an approved AED program.

Department Heads shall:

- a) Assign an employee as AED Coordinator and be responsible for ensuring compliance to this policy.

AED Coordinators shall:

- a) Assist Department Heads with ensuring compliance with the program components outlined within this policy.
- b) Coordinate activities between the AED program and the AED Program Medical Director.

AED Program Medical Director:

- a) Review and approve the medical components of the AED Program design.
- b) Determine additional training requirements as necessary.
- c) Coordinate AED program to the Emergency Medical Services System.
- d) Review AED usage reports.

5.0 **Program Components**

5.1 **Training**

Department / agencies that acquire AEDs shall make available AED formal training in cardiopulmonary resuscitation (CPR) and AEDs for those employees who will be authorized to use the device. Courses must be approved by the Colorado Department of Public Health and Environment for AED training.

Listed below are some organizations that provide state approved CPR and AED training in the Denver area:

American Red Cross - Mile High Chapter
444 Sherman St.
Denver, CO 80203
(303) 722-7474
www.denver-redcross.org

Colorado Safety Association
4730 Oakland St.
Denver, CO 80239
(303) 373-1937
www.coloradosafety.org

American Heart Association - Denver
1280 South Parker Road
Denver, CO 80231
(303) 369-5433
www.americanheart.org

5.2 **Maintenance & Testing**

All AEDs under this policy shall be properly maintained and tested in accordance to the manufacture's instructions with written records maintained by the department / agency's AED coordinator. All records of maintenance and testing shall be preserved for minimum of 3 years.

5.3 **Medical Oversight**

Each AED program shall have the involvement of a licensed physician overseeing the program to ensure compliance with State of Colorado requirements for pre-planned coordination with the emergency medical service system, training requirements for approved users, and to receipt notification subsequent to each incident of AED use.

In order to ensure city-wide collaboration between city department / agency AED programs, all programs should utilize the Associate Director of Emergency Services at Denver Health Medical Center as their AED Program Medical Director.

5.4 **Written Program**

Each program shall have a written AED program as required by the Colorado Department of Public Health and Environment. The document shall contain the placement of the AEDs, the training required for AED use, notification processes with pre-planned coordination of the emergency medical services system, identification and approval of the AED program medical director, and the reporting process of AED use. A sample written plan for public access AEDs is included as Attachment 1.

(Department / Agency Name)
Public Access AED Program

1. **Purpose**

The purpose of this program is to identify the procedures, maintenance, and administration of the Public Access Automated External Defibrillator Program for the (department / agency name). This program has been adopted to comply with C.R.S. 13-21-108.1, Executive Order 65, and the Public Access Automated External Defibrillator (AED) Policy 65.7.2.

2. **Liability and Good Samaritan Laws**

C.R.S. 13-21-108.1 allows for the use of an AED during an emergency for the purpose of attempting to save the life of another person who is, or who appears to be, in cardiac arrest. C.R.S. 13-21-108.1 grants immunity from civil liability for those who obtain and maintain AEDs, and for those who use such devices to attempt to save a life provided that the program components found in section 5 of Occupational Safety Policy No. 65.7.2 are in place.

C.R.S. 13-21-108.1 the “Good Samaritan Statute” states that a person who in good faith renders emergency care and assistance, without compensation, shall not be civilly liable for any good faith acts or omissions in rendering care except if such acts were grossly negligent or willful and wanton. A person acting as a Good Samaritan may be immune from civil liability arising from use of an AED even if the person had not undergone the training required in Section 5 of Occupational Safety Policy No 65.7.2 are in place.

3. **Program Medical Director**

The (department / agency name) Public Access AED Program has been approved and is under supervision by Dr. Chris Colwell, Director of Emergency Medical Services, Denver Health Medical Center.

3. **AED Program Coordinator**

The (department / agency name) has identified (name & contact information of AED Coordinator) as the department / agency’s AED coordinator who assumes the responsibilities outlined in the City’s Occupational Safety Policy 65.7.2.

4. **AED Placement**

AEDs shall be located in areas that are readily accessible, unobstructed, and highly visible to the workforce and the public. The (department / agency name) has identified the following locations for placement of Public Access AED(s): (For guidance on location selection please see section 3 of the AED City-wide policy.)

5. **Training**

City approved AED users are city employees working in city owned or operated buildings/vehicles that have received formal AED training and are certified in Cardiopulmonary Resuscitation (CPR) and the use of AEDs. (For a list of available training sources please see section 5.1 of the AED City-wide policy.) The general public who has received formal AED training is also welcomed to utilize these devices.

6. **Reporting when an AED is used in an Emergency Medical Situation**

Any person who renders care or treatment to a person in cardiac arrest by using an AED or a person acting under his or her direction must dial 911 as soon as possible from the nearest telephone and inform the emergency operator that an AED has been used. Additional information that needs to be provided to the emergency operator includes your name, location, and additional efforts that are being performed to aid the victim(s). After use and transfer of victim to advanced medical services, the AED program medical director shall be notified of the use of the AED.

7. **AED Maintenance and Testing**

All AEDs shall be properly maintained and tested in accordance with the manufactures guidelines. Written records of maintenance and testing activities shall be kept by the department / agency's AED Coordinator.