



**DOUGLAS COUNTY COLORADO
OFFICE OF THE COUNTY ADMINISTRATOR
RISK MANAGEMENT**

AUTOMATED EXTERNAL DEFIBRILLATORS (AED)

Purpose: The practices and procedures described in this document comprise the program through which Douglas County Colorado will administer its Automated External Defibrillator Program. This program will be reviewed annually, and revised whenever new, or modified tasks, or procedures are implemented.

Relevant Statute: *Persons rendering emergency assistance through the use of automated external defibrillators – limited immunity.* Colorado Revised Statute 13-21-108.1

13-21-108.1 (4)(a) Any person or entity whose primary duties do not include the provision of health care and who, in good faith and without compensation, renders emergency care or treatment by the use of an AED shall not be liable for any civil damages for acts or omissions made in good faith as a result of such care or treatment or as a result of any act or failure to act in providing or arranging further medical treatment, unless the acts or omissions were grossly negligent or willful and wanton.

(b) The immunity provided in paragraph (a) of this subsection (4) extends to the licensed physician who is involved with AED site placement, the person or entity who provides the CPR and AED site placement, and the person or entity responsible for the site where the AED is located.

Definitions:

- A. **Automated External Defibrillator** “AED” means an emergency medical device that can detect and recognize certain heart arrhythmias and can determine, without intervention by the operator, whether defibrillation should be performed. If defibrillation is appropriate, the AED automatically charges and requests the operator to deliver an electrical impulse to the patient’s heart.
- B. **Trained AED User** “User” means an individual who has successfully completed a course of instruction in the use of an AED in response to a medical emergency.
- C. **Emergency Medical Services System** “EMS” means a professional community responder agency for emergency events, providing medical assistance and/or ambulance transport.

- D. **Defibrillation** means administering an electrical impulse to an individual in order to stop ventricular fibrillation or rapid ventricular tachycardia.
- E. **Sudden Cardiac Arrest** means a significant life-threatening event when a person's heart stops or fails to produce a pulse.

Procedure: The use of an AED is regulated by statute. The statute (CRS 13-21-108.1) specifically requires the following of any entity that acquires an AED:

Users will receive training in CPR and AED use through a course approved by the department of public health and environment. Coordination of training will be performed through Douglas County Risk Management "Risk Management". A list of trained responders will be kept in the office of Risk Management;

The AEDs will be maintained and tested according to the manufacturer's guidelines and written records of this maintenance and testing will be kept. Oversight of AEDs will be performed through Douglas County Emergency Management "Emergency Management";

The medical advisor for the program is Dr. Stephen Heinz. He will ensure that training, notification, and maintenance requirements are complied with;

This plan, approved by Dr. Heinz, has been developed to address the placement of AEDs, training of personnel, pre-planned coordination with the emergency medical services system, medical oversight, AED maintenance, identification of personnel authorized to use AEDs and reporting of AED utilization.

Any person who renders emergency care by use of an AED must contact 911. When contacting 911, please give the operator the following information:

1. Type of emergency
2. Address of facility
3. Location of emergency (what floor and where)
4. Phone number you are calling from (external number – not extension number)
5. Be prepared to give further information if requested from the 911 operator
6. **DO NOT HANG UP UNTIL INSTRUCTED TO DO SO BY THE 911 OPERATOR**

Location of AEDs:

P.S. Miller Building: One located 1st Floor Foyer – By security personnel desk
One located 3rd Floor – middle of the hallway

Wilcox Building: One located 1st Floor Foyer – By reception/information Desk

Human Services: One located 1st Floor Foyer – By reception/information Desk

Events Center: One located vestibule near the restrooms

Public Works Operations: One located in Operations

AED Procedure:

1. Evaluate the scene for safety. The scene or environment around the victim must be made safe prior to attempts to assist.
2. Determine unresponsiveness.
3. Contact 911.
4. Users will evaluate the emergency and, if needed, begin CPR until the AED arrives.
5. Open Airway (A)
6. Check for breathing (B) if not breathing, or if breathing is ineffective, give two slow breaths. Observe universal precautions using gloves, and ventilation mask if available. If breathing, place in recovery position and monitor closely.
7. Check for signs of circulation, such as pulse and coughing or movement.
8. If no signs of circulation, apply AED immediately. If AED is not immediately available, begin chest compressions and breathing (CPR) until AED arrives.
9. Turn on AED.
10. Apply electrode pads (according to diagram on back of electrode pads) to victim's bare chest:
 - a. Peel electrode pads, one at a time, from backing or liner;
 - b. Shave or clip chest hair if it is so excessive it prevents a good seal between electrode pads and skin;
 - c. Wipe chest clean and dry if victim's chest is dirty or wet;
 - d. Press electrode pads firmly to skin.
11. Stand clear of victim while machine evaluates victim's heart rhythm.
12. **DO NOT USE portable radios or cell phones within four feet of victim while AED is evaluating heart rhythm.**

Shock Advised:

1. Clear area, making sure no one is touching the victim.
2. Push SHOCK button when prompted (if AED is a fully automatic unit, the shock occurs without rescuer interaction).
3. Device will analyze the victim's heart rhythm and shock up to three times.
4. After three shocks, device will prompt to check pulse (or breathing and movement) and if absent, start CPR.
5. If pulse or signs of circulation such as normal breathing and movement are absent, perform CPR for one minute.
6. Device will countdown one minute of CPR and will automatically evaluate victim's heart rhythm when CPR time is over.

No shock advised:

1. Device will prompt to check pulse (or breathing and movement) and if absent, start CPR.
2. If pulse or signs of circulation such as normal breathing and movements are absent, perform CPR for one minute.
3. If pulse or signs of circulation are present, check for normal breathing.
4. If victim is not breathing normally, give rescue breaths according to training.
5. AED will automatically evaluate victim's heart rhythm after one minute.
6. If victim regains signs of circulation, such as breathing and movement, place them on their side, in the recovery position, and monitor their breathing closely.
7. Continue cycles of heart rhythm evaluations, shocks (if advised) and CPR until professional help arrives.
8. Victim must be transported to hospital.
9. Leave AED attached to victim until EMS arrives and disconnects AED.
10. Turn over care of victim to EMS personnel. Once they have arrived, follow the directions of EMS personnel for further actions.

Medical Oversight:

The medical advisor to the program is Dr. Stephen Heinz. Medical oversight and responsibility includes:

Providing medical direction for the use of AEDs

Reviewing and approving guidelines for emergency procedures related to use of AEDs and CPR.

Evaluation of post-event review forms and digital files downloaded from the AED. Any written reports of the incident will be forwarded to the Medical Advisor for review.

Authorized AED users :

Users trained in CPR within the last two years and in the use of the AED within the last year are authorized to use an AED.

User's responsibilities:

Contact the EMS (911) and provide prompt basic life support including CPR and AED, according to training and experience.

Understand and compliance with requirements of these guidelines.

Follow the more detailed procedures and guidelines for the AED program.

Initial Training:

Users will complete training adequate to provide CPR and operation of the AED. AED training must be a course approved by the State. Risk Management will maintain records of the trained employees.

Refresher Training:

Users will renew CPR every two years. AED refresher training will be conducted annually.

Equipment:

1. The LIFEPAK Automated External Defibrillator has been approved for this program.
 - i. The AED and resuscitation kit (two pair of latex free gloves, one set of trauma shears, one razor and one facemask barrier device) will be brought to all cardiac medical emergencies.
 - ii. The AED should be used on any person who is at least eight (8) years of age and displays ALL the symptoms of cardiac arrest. The AED will be used only after the following symptoms are confirmed (refer to AED Procedure, Shock Advised, and No Shock Advised sections for detail)
 1. Victim is unresponsive
 2. Victim is not breathing, or is breathing ineffectively
 3. Victim has no signs of circulation such as pulse and coughing, or movement.
2. AEDs will **NOT** be turned on as a daily test of the unit. The units are completely self-contained and perform an internal daily self-test. The unit will indicate if a problem exists.

Equipment maintenance/routine maintenance:

1. All equipment and accessories necessary for support of medical emergency response shall be maintained in a state of readiness. Specific maintenance requirements include:
 - i. Emergency Management shall be responsible for having regular maintenance performed. All maintenance tasks shall be performed according to equipment procedures as outlined in the operating instructions.
 - ii. Following use of emergency response equipment, all equipment shall be cleaned and or decontaminated as required.
 - iii. The AED will perform a self-diagnostic test every 24 hours that includes a check of the battery strength and an evaluation of the internal components.
 - iv. Emergency Management will perform periodic checks of the units and a record of these checks will be maintained.
 - v. If the OK icon is NOT present on the readiness display, contact Emergency Management immediately.
 - a. If the battery icon is visible, the battery of the CHARGE-PAK charging unit needs to be replaced. You may continue to use the AED if needed.
 - b. If the wrench icon is visible, the AED needs service. You may attempt to use the AED if needed. If the message CALL SERVICE appears, the AED is not usable. Continue providing CPR until another AED is brought to the victim or EMS arrives to take over care.
2. If the expiration date on the electrode package is near, notify Emergency Management (303-660-7589) immediately.

AED Response Documentation:

1. It is important to document each use of the AED.
2. Risk Management and Emergency Management must be contacted as soon as possible after the use of an AED.
3. A report will be produced when an AED is activated. Emergency Management will forward a copy of the report and any additional documentation to the medical advisor and will keep and store AED activation records.

Annual Assessment:

Once each calendar year, Emergency Management and Risk Management will conduct and document a system readiness review. This review will include a review of the following elements:

- Training records
- Equipment Operations
- Maintenance Records
- AED Activation Reports

Approvals:

Function	Printed Name	Signature	Date
Medical Advisor	_____	_____	_____
Emergency Management:	_____	_____	_____
Risk Management	_____	_____	_____

