



# CITY OF GRAND RAPIDS ADMINISTRATIVE POLICY

NUMBER: 16-01	DATE: January 15, 2016
REVISIONS:	
ISSUED BY: City Manager	SIGNED: <i>Gregory A. Anderson</i>

**SUBJECT:** AUTOMATED EXTERNAL DEFIBRILLATOR (AED) PROGRAM

**PURPOSE:** To increase the rate of survival for people within City facilities who may suffer from sudden cardiac arrest. This will be done by establishing an Automated External Defibrillator (AED) Program and instituting protocols for the use of an AED by City of Grand Rapids employees.

**POLICY:**

**A. SCOPE:** This program applies to all persons working at facilities under City of Grand Rapids responsibility where an AED is present. This policy does not apply to the uniformed members of the Grand Rapids Fire Department (GFRD) as they maintain current AHA Health Care Provider CPR certification. Additionally the GRFD has department policies and procedures addressing CPR and AED applications. The policies and procedures contained in this section are intended to assist in identifying and complying with regulations and rules set forth by the Michigan Public Act 17 of 1963 Liability of Certain Persons for Emergency Care, Automated External Defibrillators; use; requirements; Civil liability; limited immunity and good Samaritan, and the Michigan Occupational Safety and Health Act of 1974 (MIOSHA). In all cases where there is a difference between specific standards and polices set forth in this procedure, the stricter of the two shall prevail.

**B. DEFINITIONS**

1. **AHA**-American Heart Association.
2. **Automated External Defibrillator (AED)** – means a medical device heart monitor and defibrillator that:

- a. is approved for premarket modification by the United States Food and Drug Administration.
  - b. is capable of recognizing the presence or absence of ventricular fibrillations or rapid ventricular tachycardia and is capable of determining, without intervention by an operator, if defibrillation should be performed.
  - c. automatically charges and delivers an electrical impulse to a person's heart to restore a viable cardiac rhythm.
3. **CPR-Cardio Pulmonary Resuscitation** (AHA HeartSaver CPR education or approved course).
  4. **Defibrillation**-means the administration of a controlled electrical charge to the heart to restore a viable rhythm.
  5. **EMS**-Emergency Medical Services, i.e. City of Grand Rapids Fire Department.
  6. **Lay Person**-someone who is not an expert in or does not have a detailed knowledge of a particular subject.
  7. **Medical Director**-means a physician who is licensed pursuant to Michigan Public act 237 of 1899 and directs the Kent County Emergency Medical Services, Inc. (KCEMS).
  8. **Sudden Cardiac Arrest (SCA)**—When the electrical impulses of the human heart malfunction causing ventricular fibrillation, an erratic and ineffective rhythm, characterized by the absence of a pulse and respirations.

## **C. RESPONSIBILITY**

### **1. Risk Management**

- a. Risk Management will be responsible for overseeing the AED Program in coordination with a representative from the Grand Rapids Fire Department and the Medical Director. Risk Management will assist the Medical Director in coordinating the program with the local EMS (Emergency Medical Services).
- b. The Risk Manager or designee shall:
  - i. Establish quality assurance guidelines that include a review of each use of the AED by a Lay Person to evaluate performance.
  - ii. Be proficient in EMS protocols, CPR and the use of AEDs.
  - iii. Ensure that Lay Persons are provided an opportunity to receive training in CPR and the use of an AED at least every 2 years.

- iv. Ensure that the AED is maintained and tested according to the manufacturer's guidelines.
  
- c. Risk Management in conjunction with Human Resources will coordinate training in the specific use of an approved CPR technique by providing a CPR/AED course or an equivalent course that meets or exceeds the same objectives as outlined by the AHA for potential Lay Persons. Training in the use of the equipment and preventative maintenance will also be provided during the CPR/AED Course. Summary of Lay Person CPR for adults, children and infants are found in **Appendix A**.
  
- d. Risk Management will provide AED Use Forms (**Appendix B**) to departments to furnish to Lay Persons who shall complete the form after the operation of an AED.
  
- e. Risk Management will be responsible for notifying the Fire Department Emergency Medical Services Coordinator within 24 hours of an AED being used.
  
- f. Risk Management, with information from and in coordination with the City of Grand Rapids Fire Department, and the City of Grand Rapids Facilities Management, shall be responsible for determining the placement of AED units in city facilities. Departments may choose to procure additional AED units (at Department expense), however the units must be approved by Risk Management to insure compatibility with the City of Grand Rapids Fire Department's equipment and the AED training program. Each AED shall be mounted in accordance with the American with Disabilities Act (ADA) guidelines.
  
- g. If individual departmental purchases are made, Risk Management shall be notified and will consult with the City of Grand Rapids Fire Department and Facilities Management to determine the placement of the AEDs in the facility. This will be communicated back to the department for implementation. The department should have at least one Lay Person at the facility where the AED is to be located, and comply with all terms and conditions of AED usage. Each AED shall be mounted in accordance with the American with Disabilities Act (ADA) guidelines.
  
- h. Risk Management shall oversee purchases and installation of refill batteries, pads, and replacement parts for AED units.

2. **Facilities Management**

- a. Facilities Management shall participate with the Risk Management Office and the City of Grand Rapids Fire Department to determine the placement of AED units to achieve a balance of security and accessibility of the devices.
- b. Facilities Management shall oversee signage calling attention to the presence of the AED unit in the City buildings.

3. **Fire Department**

- a. The City of Grand Rapids Fire Department shall participate with the Risk Management Office and Facilities Management to determine the placement of AED units as indicated above.
- b. The Fire department may provide contracted training in the specific use of an approved CPR technique by providing a CPR/AED Course or an equivalent course that meets or exceeds the same objectives as outlined by the AHA. Training in the use of the equipment and preventative maintenance will also be provided during the CPR/AED Course. Summary of Lay Person CPR for adults, children and infants are found in **Appendix A**.
- c. The City of Grand Rapids Fire Department shall notify Risk Management of any change in training protocols for CPR and or AED's

4. **Medical Director**

- a. The Medical Director for our program is the current director of Kent County Emergency Medical Services Inc. Letter included in the file in Risk Management.

5. **Departments**

- a. Departments are encouraged to identify personnel who are willing to be trained in CPR and in the use of AEDs. The Lay Person should be required to undergo CPR training and use of AEDs. This training must be conducted every 2 years.
- b. Departments are assigned the responsibility of inspecting the AEDs located at their facilities or departments on a monthly basis to ensure they are working properly (**Appendix C**).
- c. If any service or low battery indicators are shown in the handle, the department will notify the Risk Management Office immediately to have the AED serviced.
- d. When an incident occurs, the department will be responsible for ensuring that the care of the patient is transferred to EMS

personnel and that the AED unit is retrieved from EMS. **NOTE: Disposable pads and wires may be transferred with the patient at EMS request.**

- e. The department shall assure that the AED unit is restored after incident use with all necessary items.

## 6. **Employees**

- a. Lay Persons using an AED on a person in cardiac arrest are required to:
  - i. Call 911 to activate Emergency Medical Services as soon as possible (If calling from a city phone dial 911 or 9-911).
  - ii. Retrieve and be ready to deploy the AED during a suspected Cardiac Event.
  - iii. Notify Risk Management of the use of an AED after the care of the patient has been transferred to EMS. Risk Management can be contacted during normal business hours or by cell phone after normal business hours.
  - iv. Complete an AED Use Form and send electronically to the Risk Management Office within 24 hours. (Appendix B)

## D. **Education and Training**

- 1. Lay Persons should receive and complete a CPR/AED course or an equivalent course that meets or exceeds the same objectives as outlined by the AHA.
- 2. Lay Persons should re-certify every 2 years in a CPR/AED course or an equivalent course that meets or exceeds the same objectives as outlined by the AHA.

## E. **General**

### 1. **Liability**

- a. Lay Persons, without a duty to act, are generally protected from liability under Michigan Public Act 17 of 1963, **LIABILITY OF CERTAIN PERSONS FOR EMERGENCY CARE** except when they perform an act or omission that constitutes gross negligence or willful and wanton misconduct.

## Appendix A:

### Summary of Current Lay Person CPR for Adults, Children and Infants

Step/Action	Adult:8 years and older	Child:1 to 8 years	Infant: Under 1 year
<b>Airway</b>	Head tilt-chin lift		
<b>Breaths</b> Initial	2 breaths at 1 second/breath		
Foreign-body airway obstruction	Abdominal thrust	Back slaps and chest thrusts	
<b>Compressions</b>			
Compression landmarks	In the center of the chest, between nipples	Just below nipple line	
Compression method Push hard and fast Allow complete recoil	<b>2 Hands:</b> Heel of 1 hand, second hand on top	<b>2 Hands: Heel of 1 hand with second on top or 1 Hand: Heel of 1 hand only</b>	2 fingers
Compression depth	1 ½ to 2 inches	About 1/3 to ½ the depth of the chest	
Compression rate	About 100/min		
Compression-ventilations ratio	30:2		
<b>Defibrillation</b>			
AED	Use adult pads. Do not use child pads/child system.	Use after 5 cycles of CPR. Use child pads/system for child 1 to 8 years if available. If not, use adult AED and pads.	No recommendations for infants <1year of age

**APPENDIX B:**

**Program AED use Data Form**

**This form is to be completed immediately after a cardiac arrest occurs at your facility or the AED is used on a patient, and the emergency has been stabilized. The main Lay Person at the scene shall immediately contact Risk Management:**

**City of Grand Rapids/Risk Management Office**

Property/Business/Individual Name: \_\_\_\_\_

Incident Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Estimated Time of Collapse: \_\_\_\_\_

Patient Name: \_\_\_\_\_

Gender: Male  Female  DOB: \_\_\_\_\_

Relationship: Employee  Customer  Guest  Employee Family

Other, please specify: \_\_\_\_\_

1. Where on your property did this incident occur? \_\_\_\_\_

\_\_\_\_\_  
(I.e. kitchen, lobby, single office, outdoor grounds, restroom, 6th hole, club house,)

2. Was this incident witnessed by anyone? YES  NO

3. Who witnessed? Employee/Co-worker  Friend  Family  Stranger

Doctor/Nurse/Paramedic  Other: \_\_\_\_\_

4. Was conventional CPR or Hands-Only (Compression-Only) CPR performed before the AED was connected to the patient? Conventional CPR  Hands-Only

5. Did the AED instruct you to shock? YES  NO

If yes, number of shocks \_\_\_\_\_

6. Was the patient transported from your property by ambulance? YES  NO

If yes, which Fire Department or Ambulance Company: \_\_\_\_\_

7. Name of destination hospital, if known: \_\_\_\_\_

8. Did the patient exhibit any of the following after collapse and prior to departure from your property?

Pulse  Breathing on own  Talking  Confusion/combativeness   
Vomiting  Moving arms/legs  Eye opening

9. Do you have any questions or would you like to review this AED use? YES  NO

Person completing form: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Best time to call you: \_\_\_\_\_

**Appendix C:**

**AED Inspection Form**

**MONTHLY MAINTENANCE CHECKLIST**

**Department:** \_\_\_\_\_

**Building Name:** \_\_\_\_\_

**Departmental Coordinator/Inspector:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Unit Serial #** \_\_\_\_\_ **Completion Date:** \_\_\_\_\_

**Email** \_\_\_\_\_

**Unit Location:** \_\_\_\_\_

<b>Check the following:</b>	<b>Pass</b>	<b>Fail</b>
Is the unit clean, undamaged, and free of excessive wear?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any cracks or loose parts in the housing?	<input type="checkbox"/>	<input type="checkbox"/>
Verify pads are within expiration date. Replace if expired.	<input type="checkbox"/>	<input type="checkbox"/>
Is the instruction manual available? If not acquire manual from the Risk Management Department.	<input type="checkbox"/>	<input type="checkbox"/>
Batteries within expiration date. Replace if expired or if 1 bar of battery life is showing.	<input type="checkbox"/>	<input type="checkbox"/>
Check for adequate supplies. (pads, gloves, CPR mask, and towel)	<input type="checkbox"/>	<input type="checkbox"/>
Missing supplies replaced?	<input type="checkbox"/>	<input type="checkbox"/>
Perform Manual Self-Test, per instruction manual.	<input type="checkbox"/>	<input type="checkbox"/>

**IMMEDIATELY REPORT ANY FAILURE ISSUES TO RISK MANAGEMENT**