



ELECTRIC WATER SEWER STORMWATER

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POLICY:	<u>Automated External Defibrillator</u>	DEPARTMENT:	<u>All</u>
APPROVED:	<u>Robert W Stinson</u>	REVIEWED / REVISED:	<u>08/01/17</u>

Description:

In keeping with the Hannibal Board of Public Works (BPW) responsibility to make reasonable and acceptable efforts to ensure a safe and healthy environment for its employees, an **Automated External Defibrillator Policy** is hereby implemented.

A copy of the **Missouri Revised Statutes, Chapter 190, Emergency Services, Section 190.092**, dated August 28, 2005, is attached for reference and is incorporated into this policy.

Definitions:

1. AED - Automated External Defibrillator

Automated external defibrillators (AED's) are prescription devices indicated for use on patients in cardiac arrest. AED's have adhesive electrode pads that deliver brief, but powerful electrical stimulation to the chest, interrupting the abnormal rhythm and helping to restore the heart's natural rhythm. The devices are pre-programmed with the expertise needed to analyze the heart's electrical function. They also use voice prompts and screen displays to instruct the user on how to operate the device.

2. BPW – Board of Public Works

3. CPR - Cardiopulmonary Resuscitation

CPR stands for **cardiopulmonary resuscitation**, a combination of rescue breathing (mouth-to-mouth resuscitation) and chest compressions. CPR can restore circulation of oxygen-rich blood to the brain. Without oxygen, permanent brain damage or death can occur in less than 8 minutes.

4. EAP – Employee Assistance Program

A program designed to restore and strengthen the health of employees and their families, as well as the productivity of employees and the workplace, by providing confidential, accessible services. This resource is staffed by professionals trained in the areas of counseling psychology, social work, organization development, chemical dependency, and marriage and family, therapy to employees and their families. The program seeks concrete, practical solutions to employees' personal, family and workplace problems. Doing so improves productivity and reduces poor quality, absenteeism, and morale problems. (See HBPW EAP policy and program for full benefits).

5. EMS – Emergency Medical Services

Emergency Medical Services (EMS) extends emergency medical care from the emergency room of a hospital into the community. The EMS system is developed to provide professional care to ill and injured people as quickly as possible.

6. SCA – Sudden Cardiac Arrest

Sudden cardiac arrest involves problems with the heart's electrical system, which can cause it to stop beating entirely. When that happens, blood flow to the rest of the body is interrupted, and the victim passes out. Defibrillation is the only known treatment for this condition, and AED's are the quickest and most efficient way to reach individuals with this life-saving therapy.

Purpose:

The purpose of this procedure is to make early defibrillation immediately available in cardiac emergencies. AED's are designed to allow minimally trained laypersons to respond to cardiac emergencies, particularly sudden cardiac arrest (SCA).

Scope:

Anyone can, at their discretion, provide voluntary assistance to victims of medical emergencies. The extent to which these individuals respond shall be appropriate to their training and experience. Responders are encouraged to contribute to emergency response only to the extent that they are comfortable. The emergency medical response of these individuals may include CPR, AED or medical first aid. The volunteer responder's involvement shall continue and only cease upon arrival, involvement, and instruction of a higher level of emergency response.

Guidelines:

Requirements:

Use of the BPW provided AED is authorized for personnel trained in CPR and the use of the AED device within the last two years. Upon new hire, or transferred employee to an area providing an AED, education and training will be provided as soon as practical.

Refresher training will be provided minimally every two years per the **Missouri Revised Statutes, Section 190.092**. Training may consist of videotapes, written materials, etc. Training shall be done with current information and focus on updating employees on the use of the AED.

The expertise needed to analyze the heart's electrical function is programmed into the device. It provides clear voice prompts that instruct the user to attach the electrodes and then stay clear while the device automatically analyzes the patient's heart rhythm. If needed, the user is prompted to remain clear and deliver a defibrillation shock according to instruction. This action enables ordinary people to provide treatment to victims of SCA. Should blood or any bodily fluid be a factor in the medical emergency, the appropriate bloodborne pathogen precautions should be adhered to (See HBPW Bloodborne Pathogen Policy).

The AED and first aid emergency care kit will be brought to all medical emergencies. The AED should be used on any person who is at least 8 years of age and displays ALL the symptoms of SCA. The AED will be placed only after the following symptoms are confirmed:

1. Victim is unconscious
2. Victim is not breathing
3. Victim has no pulse and/or shows no signs of circulation such as normal breathing, coughing or movement.

Location of AED's:

1. **SCADA Office & Business Office**
2. **Water Treatment Plant**
3. **Wastewater Treatment Facility**
4. **All Electric Department Trucks**
5. **All Electric Maintenance Department Trucks**

Each AED will have one set of defibrillation electrodes connected to the device, and one spare set of electrodes with the AED.

One resuscitation kit will be connected to the handle of the AED. This kit contains:

1. Two pair of latex-free gloves
2. One razor
3. One set of trauma shears
4. One facemask barrier device.

Procedure:

1. Assess scene for safety
2. Determine unresponsiveness
3. Activate emergency response (Dial 911)
 - a. **OR** Contact Company Dispatch

With all medical emergencies, the first action is to ensure that a call is placed to 911 requesting and directing the emergency response personnel to the site of the medical emergency. If that call cannot be made directly, the company radio dispatch can be contacted to make the call. The initial caller must be prepared to continue to communicate with the dispatch operator as he relates the needed information to the 911 Operator. The 911 Operator has an emergency checklist questionnaire that they must follow to assist in the preparation of the professional emergency responders.
4. Open airway (A)
5. Check for Breathing (B)
6. If not breathing, or if breathing is ineffective, give two slow breaths.
7. Check for signs of circulation, such as pulse and coughing, or movement (C)
8. If no signs of circulation, apply AED immediately
9. **Press the LID RELEASE/ON-OFF button** to open the lid; this turns on the AED. Follow voice prompts. Do not touch the victim unless instructed to do so.
10. Follow the voice prompts to **apply electrode pads**. Shave chest hair (if it is so excessive it prevents a good seal between electrodes and skin). If the victim's chest is dirty or wet, wipe the chest clean and dry.

11. Stand clear of the victim while machine evaluates victim's heart rhythm.

AED Device Shows:

1. **Shock Advisory:** Clear area. Make sure no one is touching the victim.
2. **Push SHOCK button when instructed.** Device will evaluate the victim's heart rhythm and shock up to three times.
3. After three shocks device will prompt to check pulse (or for breathing or signs of circulation) and if absent, **start CPR.**
4. **No Shock Advised:** Device will prompt to check pulse (or for breathing or signs of circulation) 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. If pulse or signs of circulation such as breathing and movement are **present**, check for normal breathing. IF victim is not breathing normally, **give rescue breaths** at a rate of 12 per minute. AED will automatically evaluate victim's heart rhythm after one minute.
7. **Continue cycles of heart rhythm evaluations, shocks (if advised) and CPR** until professional help arrives. Victim must be transported to hospital. Leave AED attached to victim until EMS arrives and disconnects AED.

Responses:

A supervisor should be informed as immediately as possible after the victim has been given the appropriate care and the situation is stable.

AED After Use:

1. Once used the AED shall be returned to the inventory manager as soon as practical for the coordination of device file downloading, processing and forwarding all the recorded information in a timely manner, to the Safety Coordinator.
2. Medical emergencies involving the use of an AED require special documentation. The Safety Coordinator shall ensure that all patient information generated during AED be collected and sent to the patient's confidential file. A copy of this information shall be presented to the company medical director (company doctor) and other appropriate participating emergency providers.
3. The Inventory manager shall also perform the appropriate inspection, re-evaluation, and maintenance of the AED device, as per operating manual including replacement of the electrode packet and the battery charger.
4. Contents of the attached resuscitation kit must be replaced if used.
5. Once the appropriate maintenance has been accomplished, the AED will be returned to the former location.

All other workers that participated and/or were witnesses to the event must complete an **Accident / Incident Report** form, as soon as practical. Once completed the forms must be submitted to the department supervisor.

The department supervisor shall complete a **Supervisor's Investigation Report** form and route both completed forms, per the signature blocks at the bottom.

Routine Maintenance:

1. Each AED device shall be inspected no less than quarterly. The Service Center Quarterly Inspection form shall be used to document this task. Upon each AED inspection the AED device shall be viewed to ensure that an **OK** symbol is visible in the readiness display.
2. Should the display window read **Charge-Pak, Attention** or display a **Wrench** symbol, immediately take the AED device to the SCADA office for maintenance.
3. Check the **Use-By** date on the electrode packet (visible through the clear plastic lid in the upper right-hand corner.) **IF** the date has passed, immediately take the AED device to the SCADA office for maintenance.
4. Check the other emergency supplies that may be stored with the defibrillator to ensure readiness.

Medical Advisor:

The formal medical advisor for AED issues is the BPW company doctor, **Lent Johnson M.D.** His office is located in the **Hannibal Clinic, 100 Medical Drive, (573) 221-5250, Hannibal MO. 63401** He shall evaluate, or coordinate the evaluation, of post-event review forms and digital files that may be downloaded from the AED.

1. **Hero Program.** A cardiac emergency is stressful for those involved, whatever the outcome. You can request a post event stress debriefing, conducted by a professional counselor through the company's EAP program. For arrangements contact the human resources department.

Department Supervisor Date: _____

Director of Operations Date: _____

Safety Coordinator Date: _____

General Manager Date: _____

Authorizing Physician Date: _____
Signature

Physician's Name Date: _____
Printed

Reviewed / Revised History

Original Draft and Approval – 01/24/06

Revised and Approved – 08/01/17

Missouri Revised Statutes
Chapter 190
Emergency Services
Section 190.092

August 28, 2005

Defibrillators, use authorized when, conditions, notice--good faith immunity from civil liability, when.

190.092. 1. A person or entity that acquires an automated external defibrillator shall ensure that:

(1) Expected defibrillator users receive training by the American Red Cross or American Heart Association in cardiopulmonary resuscitation and the use of automated external defibrillators, or an equivalent nationally recognized course in defibrillator use and cardiopulmonary resuscitation:

(2) The defibrillator is maintained and tested according to the manufacturer's operational guidelines:

(3) Any person who renders emergency care or treatment on a person in cardiac arrest by using an automated external defibrillator activates the emergency medical services system as soon as possible; and

(4) Any person or entity that owns an automated external defibrillator that is for use outside of a health care facility shall have a physician review and approve the clinical protocol for the use of the defibrillator, review and advise regarding the training and skill maintenance of the intended users of the defibrillator and assure proper review of all situations when the defibrillator is used to render emergency care.

2. Any person or entity that acquires an automated external defibrillator shall notify the emergency communications district or the ambulance dispatch center of the primary provider of emergency medical services where the automated external defibrillator is to be located.

3. Any person who has had appropriate training, including a course in cardiopulmonary resuscitation, has demonstrated a proficiency in the use of an automated external defibrillator, and who gratuitously and in good faith renders emergency care when medically appropriate by use of or provision of an automated external defibrillator, without objection of the injured victim or victims thereof, shall not be held liable for any civil damages as a result of such care or treatment, where the person acts as an ordinarily reasonable, prudent person would have acted under the same or similar circumstances. The person or entity who provides appropriate training to the person using an automated external defibrillator, the person or entity responsible for the site where the automated external defibrillator is located, and the licensed physician who reviews and approves the clinical protocol shall likewise not be held liable for civil damages resulting from the use of an automated external defibrillator, provided that all other requirements of this section have been met. Nothing in this section shall affect any claims brought pursuant to chapter 537 or 538, RSMo.

4. The provisions of this section shall apply in all counties within the state and any city not within a county. (L. 1998 H.B. 1668 § 190.375, A.L. 2002 S.B. 1107, A.L. 2004 H.B. 1195)