

## Automated External Defibrillator Management Plan

This plan is a blueprint for making your Automated External Defibrillator (AED) program successful. This document was written jointly by *(add your organizational name here)* and the Allina Health Heart Safe Communities Program. The Allina Health Heart Safe Communities program is designed to increase survival rates of out-of-hospital sudden cardiac arrests by building the infrastructure for communities to be *Heart Safe*. Any agency may freely use and modify this document to implement an AED program.

### Hazard Identification

Statistics from the American Heart Association show that approximately 350,000 adult Americans die each year from sudden cardiac arrest. Many of these deaths are the result of out-of-hospital sudden cardiac arrest brought on by ventricular fibrillation (VF). VF is a dangerous arrhythmia in which the heart quivers chaotically instead of beating in a normal rhythm resulting in death. The only effective treatment for ventricular fibrillation is the delivery of an electric shock by a defibrillator. An AED is a simple, easy to use device that analyzes the heart's rhythm and tells the user to deliver a lifesaving shock if necessary.

Early defibrillation (within 3-5 minutes of the cardiac arrest) is critical to survival. Every minute defibrillation is delayed, survival rates plunge 10 percent. When a medical emergency occurs, the immediate reaction is to dial 911, but in the case of a cardiac arrest, EMS may not be enough to save a victim's life. On average, EMS teams in the U.S. take 6-12 minutes to respond to medical emergencies. The solution is the deployment of AEDs in key locations where people congregate: health clubs, stadiums, airports, businesses, churches and schools.

The American Heart Association's Chain of Survival links the level of care required for treatment of sudden cardiac arrest: early access to EMS or 911, early CPR, early defibrillation, and early advanced emergency treatment. AEDs make early defibrillation a viable option. In addition, AEDs are easy to use, even for lay people with minimal training.

The national average is less than 5%. Studies have shown that early defibrillation and CPR can increase the chance of survival two or three fold.

### Contact Information

Program Coordinator

*(Add your own description of the person in charge of the program)*

### Medical Directorship

Dr. Charles Lick is the Medical Director for this program. He is currently the Medical Director of Allina Medical Transportation and is an Emergency Room Physician at Mercy Hospital. He works diligently to save lives; whether it is through placing AEDs in the community, finding ways to reach more people with CPR training, or promoting new science in the area of heart disease. Charles.Lick@Allina.com see appendix A for standing orders.

## Training

*(Please add a description of the training standards you will have at your site please see below paragraph for more information)*

Key to the success of Public Access Defibrillation (PAD) programs is raising public awareness of AEDs and their life saving power. The Allina Health Heart Safe program recommends CPR/AED training every 2 years for people who will be direct contact with the AED or have a chance of responding to a person in Cardiac Arrest. Training can take place in as little as 30 minutes and Allina Health Heart Safe can work with you to find the most effective and cost effective way to provide training. Allina Health Heart Safe uses American Heart Association curriculums but Red Cross classes, or other national recognized training programs can be used as well.

The Program Coordinator is responsible for maintaining training records. These records must be available should Allina Health Heart Safe require documentation to continue program oversight.

Every year, drills should be done to maintain skills and familiarity with notification of 911 during an emergency. Drills should be planned and acted out according to the Emergency Response plan.

## Device Locations

*(This area is to document where AEDs were placed and why a particular location was chosen)*

location	Type of device	Battery expiration	Pad expiration	Contact person	email

Locations should be determined by:

- visibility with preference to high traffic areas
- accessibility for after hour events and organizations
- distance of less than 3 minutes from all areas on the property

Most devices will be located in the main entrance of the building. There is a two-fold reason for this. First, in the event of a cardiac arrest, most people entering the building will be able to see the AED at the entrance and remember its location. Second, placing the AED in a high traffic area will cause the general public to see the AED and will generate questions. This will help educate the public about the importance of AEDs and early defibrillation.

## Equipment

AED: *(list the type(s) of AED you have at your site and the maintenance or operation requirement per that manufacture. This will depend on device; but can include but is not limited to: pediatric equipment, extra sets of electrodes and expirations, and extra batteries and expirations)*

*Cabinet: (List the types of cabinets that you will have any maintenance involved with the cabinet. Allina Health Heart Safe has several cabinet options, from aluminum alarmed wall units, outdoor/warming units, and wall brackets. The door of the alarmed cabinet rests on a pressure sensitive button that sets off an 85-decibel alarm when opened. The alarm serves to discourage opening of the cabinet and also serves to alert building occupants of the emergency. The alarm can be turned off with a key that is provided with the cabinet. The alarms in the storage cabinets operate on 9-volt batteries and are to be changed every 12 months)*

*Personal Protective Equipment (PPE): (List the types of PPE that each AED will have with it. Each Allina Health Heart Safe AED includes a First Response/Personal Protective Equipment kit containing a micro-shield (or similar product), trauma scissors, a razor, and gloves for Personal Protection when responding to a cardiac arrest situation. Gloves should always be worn when there is a potential for exposure to body fluids (i.e. blood). This equipment should be visualized every month)*

## **Recordkeeping**

*(List the person responsible for record keeping along with an outline of what and how they will maintain those records; see below paragraph for more information)*

The Program Coordinator is responsible for maintaining training records, as well as the maintenance, inspection, and personal protective equipment (PPE) records for all of the AEDs throughout the organization. The folder you receive at the delivery of your AED will include monthly checklist that can be utilized, also see appendix C. The equipment should be visualized each month, but there is no need to turn devices on unnecessarily.

*Inspection: (list out the inspection process that you will have at your organization)*

The AEDs, storage cabinets, and personal protective equipment are to be inspected and documented every month by the program coordinator or designated appointee to ensure that all components are accounted for and functioning properly. The indicator on the AED must be visually inspected for the “OK/ready to use” indicator; this will depend on your device. Your Allina Health Heart Safe coordinator will go over the specifics of your device upon delivery. Each unit conducts a self-check on a daily/weekly/monthly basis. If the AED will give a visual display or an audible chirp similar to a smoke detector something needs to be checked on the device. Please refer to your owner’s manual or contact Allina Health Heart Safe to let us know you are experiencing technical problems with your device. You may just need to order new equipment (batteries or electrodes), or your device may need service from the manufacture.

*Reporting: (List out the reporting process that you will use at your organization)*

In the event of a cardiac arrest in which the AED is used, you will be required to contact Allina Health Heart Safe to assist you in getting your AED back in working order and to have the information from the AED downloaded. Please refer to your owner’s manual to the memory capabilities of your device. When you contact Allina Health Heart Safe, a designated appointee can download the information from the AED and pass it on to the receiving hospital. The designated appointee will also assist in restoring the AED to a

functional status by replacing the AED pads and restocking the personal protective equipment (PPE). Either way, after each use new pads and possible a battery should be ordered for future needs.

*Critical Incident Stress Debriefing Services: (Please list out the resources available for your organization)*

In the event that The AED is used we understand that it can be stressful and that members of your organization may wish to talk about what happened. Some option for debriefing or going over the events might include but are not limited to: Have a meeting with the Allina Health Heart Safe Medical Director or Coordinator. Please know that HIPPA does not allow us to share any patient information with you, so we would not be able to tell you the outcome of the patient, but it can be helpful to talk about what happened during the call and answer any questions that you might have. Another option can be to contact your organizations Employee Assistance Program. They might have additional resources for staff to talk to someone over the phone or to come in for an in person meeting. Lastly an option that is available for first responders but may also be available to your organization is the Critical Incident Stress Debriefing team. Critical Incident Stress Debriefing Services information can be obtained through the Metro CISM Team [www.metrocism.org](http://www.metrocism.org) 612-347-5710.

## PAD - Automatic External Defibrillator Standing Orders

Individuals operating under the medical direction of Dr. Charles Lick with Allina Health Emergency Medical Services shall follow the following procedures with the Automatic External Defibrillator.

**Indications:** For use on all patients who progress into cardiac arrest not due to trauma.  
(Special Consideration: Pediatric pads should be used for children ages 1-8 if available.)

### Procedure:

#### 1. Assessment

- A. Determine unresponsiveness – seizure like activity or irregular respirations mean the person is unresponsive
  - Call 911 and get an AED
- B. If no breathing or irregular breathing,
  - Begin chest compression at a rate of at least 100 per minute until additional help arrives.

#### 2. Chest Compressions and AED Use

1. Perform CPR; 2 minutes of chest compressions or for 5 - 30:2 cycles if trained
2. As soon as AED arrives, turn on AED
3. Attach electrodes to bare chest; shave chest if needed; if the chest is wet due to water as in a drowning or due to sweatiness, dry it off prior to application of the patches.
4. Instruct person providing CPR to stop and assure no one is touching the patient

##### a. If shock is indicated:

- Follow the prompts of the AED
- Push shock button if instructed to do so - make sure no one is touching the patient
- Immediately begin CPR and **FOLLOW AED PROMPTS**

##### b. If shock is not indicated:

- Check for responsiveness
- If unresponsive, start CPR

#### 3. Ongoing care:

- Continue CPR and AED assessment until additional help arrives.
- If the patient becomes responsive and oxygen is available, treat with oxygenated ventilation. If oxygen is not available, continue to ventilate ensuring patient has an adequate airway. Be prepared for patient to vomit. Constantly reassess the return of respiratory effort.

## Appendix B

### **Minnesota Good Samaritan Law**

#### 604A.01 Good Samaritan law.

Subdivision 1. Duty to assist. A person at the scene of an emergency who knows that another person is exposed to or has suffered grave physical harm shall, to the extent that the person can do so without danger or peril to self or others, give reasonable assistance to the exposed person. Reasonable assistance may include obtaining or attempting to obtain aid from law enforcement or medical personnel. A person who violates this subdivision is guilty of a petty misdemeanor.

Subdivision 2. General immunity from liability.

(a) A person who, without compensation or the expectation of compensation, renders emergency care, advice, or assistance at the scene of an emergency or during transit to a location where professional medical care can be rendered, is not liable for any civil damages as a result of acts or omissions by that person in rendering the emergency care, advice, or assistance, unless the person acts in a willful and wanton or reckless manner in providing the care, advice, or assistance. This subdivision does not apply to a person rendering emergency care, advice, or assistance during the course of regular employment, and receiving compensation or expecting to receive compensation for rendering the care, advice, or assistance.

(b) For the purposes of this section, the scene of an emergency is an area outside the confines of a hospital or other institution that has hospital facilities, or an office of a person licensed to practice one or more of the healing arts under chapter 147, 147A, 148, 150A, or 153. The scene of an emergency includes areas threatened by or exposed to spillage, seepage, fire, explosion, or other release of hazardous materials, and includes ski areas and trails.

(c) For the purposes of this section, "person" includes a public or private nonprofit volunteer firefighter, volunteer police officer, volunteer ambulance attendant, volunteer first provider of emergency medical services, volunteer ski patroller, and any partnership, corporation, association, or other entity.

(d) For the purposes of this section, "compensation" does not include payments, reimbursement for expenses, or pension benefits paid to members of volunteer organizations.

(e) For purposes of this section, "emergency care" includes providing emergency medical care by using or providing an automatic external defibrillator, unless the person on whom the device is to be used objects. "Automatic external defibrillator" means a medical device heart monitor and defibrillator that: (1) has received approval of its premarket notification, filed pursuant to United States Code, title 21, section 360(k), from the United States Food and Drug Administration; (2) is capable of recognizing the presence or absence of ventricular fibrillation or rapid ventricular tachycardia, and is capable of determining, without intervention by an operator, whether defibrillation should be performed; and (3) upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to an individual's heart.

Presented to the governor March 20, 1998 Signed by the governor March 23, 1998, 10:58 a.m.

HIST: 1994 c 623 art 2 s 1; 1995 c 205 art 2 s 8

## Appendix C

### AED Checklist

Month	AED "OK"	Personal Protection kit intact	Misc
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24			Change 9-volt Battery in the cabinet if needed