Early Defibrillation Program

Introduction
An External Automated Defibrillator (AED) in the workplace can greatly increase a person’s chance of survival in the event of sudden cardiac arrest. Statics show that survival rates increase from about 5% without AED to as high as 74% with an AED. A successful AED program must consist of:

- Choosing a program coordinator
- Designating a medical director for the coordination of the program
- Choosing an AED
- Determining AED placement within a facility
- Receiving appropriate training
- Registering AED’s with the WV Office of Emergency Medical Services
- Notifying WV EMS TSN Regional Office 6/7 of the AED program
- Maintaining and testing the AED
- Activating the EMS system as soon as possible when rendering care
- Complying with the WV Office of Emergency Medical Services (EMS data collection and reporting guidelines)

This will meet the requirements of the Chapter 16 Article 4C of the West Virginia State Code. This code also limits the liability of a person using an AED in good faith. A copy of the West Virginia State Code can be found at http://www.legis.state.wv.us/WVCODE/code.cfm?chap=16&art=4D#04d.

AED’s are only one component of the Cardiac Chain of Survival. The four links in this chain are:
1. Early access to care (calling 911)
2. Early cardiopulmonary resuscitation (CPR)
3. Early defibrillation
4. Early advance care

Areas of Responsibilities
The early defibrillation program requires a cooperative effort from a diverse group of people and organizations. Everyone must fulfill their obligations of the program in order for it to be successful. The duties of the people and the organizations involved are explained in the following paragraphs.

Medical Director
Medical oversight is an important part of the AED program. Dr. Dean Steinman will serve as medical director of the Early Defibrillator Program. Dr. Dean Steinman is responsible for signing the Office of EMS registration application and reviewing each AED patient contact. Dr. Steinman will work closely with the Director of Safety.

Department of Safety
The Department of Safety acts as a liaison between the groups within the institution and the outside agencies involved in the program. Groups within the institution include the Department of Safety and departments with AEDs. Outside agencies include the WV EMS TSN Regional Office 6/7.

The duties of the Department of Safety include:

- Assist with the AED selection and placement
- Notify the Department of EMS of program changes
- Notify WV EMS TSN Regional Office 6/7 of all AED locations on campus
- Coordinate CPR/AED training
- Track recordkeeping data
- Notify medical director of all AED usage
- Update medical director annually of status of program
**Program Coordinator**

The program coordinator is someone on-site who can be responsible for overseeing the day-to-day activities of the program. Possible program coordinators are building supervisors or chemical hygiene officers.

The duties of the program coordinator include:
- Purchase AED
- Place the AED in an accessible location
- Coordinate training with the WV Department of EMS
- Perform maintenance checks as recommended by the AED manufacturer
- Transfer maintenance records to the Department of Safety
- Notify the Department of Safety of AED use as soon as possible

**An Example**

The Department of Nursing wants an AED in Colebank Hall. The department selects a program coordinator to oversee the AED program.

The program coordinator contacts the Department of Safety for advice on the type of AED to purchase and where to locate it.

The Department of Safety will notify the necessary outside agencies of the existence of the AED is appropriate locations. This includes WV EMS TSM Regional Office 6/7 and the WV Department of EMS. The Department of Safety will also notify the Medical Director.

The Department of Safety will coordinate training with the WV Office of EMS. All anticipated operators will be trained in CPR and AED usage. The training records will be kept on the file at the Department of Safety.

The program coordinator will conduct periodic inspections and maintenance checks of the AED as recommended by the manufacturer.

In the event of a cardiac emergency, the responder will call 911 and provide the appropriate care. If the AED is used, the program coordinator will notify the Department of Safety as soon as possible following the incident. The Department of Safety will contact the Medical Director for a written review of the operation of the AED. The Department of Safety will send this review to the WV Department of EMS.

**Items for Consideration when Choosing an AED**

There are many readily available types of AEDs that are suitable for workplace use. Key features should include:
- Lightweight and portable
- Easy to use, safe and effective
- Automatically analyzes heart rhythms
- Determines whether defibrillation is advised
- Guides the user through defibrillation
- Self-checking protocols and prompts the rescuer to begin CPR

The Department of Safety can assist in choosing the AED. The American Heart Association and American Red Cross can also offer assistance.

**AED Placement**

AEDs are most effective when they can deliver a shock within 3 to 5 minutes after a person collapses. When deciding where to place an AED, use a 3 minute response time as a guide. AEDs should be visible. No one is going to use an AED or ask for it if they do not know it exists. Alarmed AED cabinets can be used to deter theft. Reception areas, walls of main corridors, cafeterias and near elevators could be ideal places for AEDs.
Training

The West Virginia State Code requires that anticipated operators complete training in cardiopulmonary resuscitation (CPR) and in the operation of an AED. Training must come from a nationally recognized program approved by the WV Office of EMS such as American Red Cross or American Heart Association. Contact the Department of Safety at 304-365-4985 to schedule training. Everyone in charge of AED usage must have training on AED every 2 years.

Registration and Notifications

The Early Defibrillation Program is registered with the WV Office of EMS. All AEDs must be inventoried by the Department of Safety. The Department of Safety will notify Marion County EMS TSN Regional Office 6/7 with the location of the AEDs.

MECCA is an important part of the cardiac chain of survival. The four lines in this chain are:

1. Early access to care (calling 911)
2. Early cardiopulmonary resuscitation (CPR)
3. Early defibrillation
4. Early advance care

NOTICE: Call 911 immediately if someone is experiencing a cardiac emergency.

Maintaining and Testing AEDs

AEDs must be maintained and tested in accordance with the manufacturer’s guidelines. Written records maintenance and testing must be kept. This will be done by the program coordinator or another designated person.

A checklist must be developed to assess the readiness of AEDs and their supplies. A sample checklist can be found at http://www.aednow.com/AHA AEDChecklist.pdf. Completed maintenance checks will be sent to the Department of Safety for recordkeeping.

Data College and Reporting

West Virginia State Law requires AED use to be reported to the WV Office of EMS. Contact the Department of Safety as soon as possible after an AED incident. The Department of Safety will notify the medical director of the incident. They will also complete the appropriate paperwork and deliver it to the regional WV Office of EMS.