

MONTGOMERY COUNTY PUBLIC SCHOOLS
Office of the Chief Operating Officer

Automated External Defibrillator (AED) Program Guidelines

Purpose:

To provide guidance in the management and administration of a systemwide Automated External Defibrillator (AED) Program for Montgomery County Public Schools (MCPS) facilities.

AEDs will be available at high schools, middle schools, special schools, schools with swimming pools, and school-sponsored athletic events for use when a person is suspected of experiencing sudden cardiac arrest (SCA).

- SCA is defined as the sudden cessation of cardiac activity such that the victim becomes unresponsive with no normal breathing and has no signs of circulation (i.e., movement, coughing, and pulse). SCA occurs when electrical impulses of the heart malfunction, causing a disturbance in the heart's electrical rhythm called ventricular fibrillation (VF). This erratic and ineffective electrical heart rhythm causes complete cessation of the heart's normal function of pumping blood, often resulting in sudden death. The most effective treatment for this condition is cardiopulmonary resuscitation (CPR) and the administration of an electrical shock to the heart by a defibrillator, delivered within a few minutes of the onset of VF.
- An AED is used to treat victims experiencing SCA. It is to be used only for a victim who is unconscious, not breathing normally, and without signs of circulation (i.e., movement, coughing, and pulse). After the AED pads are applied to the victim's chest, the AED will automatically read his/her heart rhythm. If it detects a shockable rhythm, it will charge to the appropriate energy level and advise everyone to stand clear of the victim. Depending on the model, the AED will either deliver a shock automatically or instruct the AED operator to push a button to deliver a shock. After shocking the victim, the AED will continue to read the heart rhythm and instruct the AED operator to deliver another shock, administer CPR, and/or stand by.

Point of Contact:

Mr. Peter Park, team leader, Systemwide Safety Programs is also MCPS' AED program coordinator and can be reached at 240-314-1070 or via e-mail.

Your school AED contact is your athletic director, security employee, or other designated staff member.

When to Use AEDs:

- The AED should be used on any person who displays all of the symptoms of cardiac arrest. The AED should be turned on and the pads applied to the victim only after the following symptoms are confirmed:
 - Victim is unresponsive.
 - Victim is not breathing or is breathing ineffectively.
 - Victim has no signs of circulation, such as movement, coughing, or having a pulse.

Treatment of Children (1 through 8 Years Old or Weighs Under 55 Pounds):

For victims in these categories, use the AED Infant/Child Reduced Energy Defibrillation Electrode Kit (includes one pair of electrodes, storage pouch, and appropriate safety instructions and labels).

AED Locations:

- High schools have AED cabinets on the hallway wall by the main gymnasium and in the stadium concession booth. High schools have additional AEDs, distributed to the athletic directors, for portable use at school athletic events and practices.
- Middle schools have AED cabinets on the hallway walls by the main gymnasium and the administrative office.
- Special schools have AED cabinets mounted where deemed most appropriate.
- Schools with pools have AED cabinets on the hallway wall outside the pool rooms.
- AED cabinets in school buildings shall never be locked or located in locked rooms, hallways, or other areas that are not readily visible and accessible whenever the school is occupied by school staff, students, or the public. AED cabinets must be accessible to building occupants during and outside of normal school hours.
- To ensure AEDs are readily available for school-sponsored athletic events:
 - High school athletic coaches will be assigned portable AEDs by the athletic director for use at practices and competitions/games.
 - Middle school athletic/intramural coaches should sign-out the AED unit located by the school gymnasium (using the sign-out sheet in the cabinet) for use at practices and competitions/games).

CPR/AED Training:

- School athletic directors, athletic coordinators, intramural coordinators, coaches, school-based security staff, and additional designated staff receive American Heart Association (AHA) Heartsaver CPR/AED (for adult and children) training. Retraining is required every two years in accordance with AHA guidelines.

Treatment of SCA victims can cause exposures to body fluids and bloodborne pathogens. All school-based employees receive training in universal precautions against bloodborne pathogens and are offered a hepatitis B vaccination free of charge.

Program Supervision:

- Supervision of school AED program activities is the responsibility of the principal. Mr. Park is available to provide assistance and will maintain oversight for compliance with MCPS guidelines and legal requirements.
- Athletic directors have been identified as the individual school-based AED contact for high schools with athletic departments. Systemwide Athletics will provide assistance to high school athletic directors and middle school athletic coordinators. Mr. Jeffrey Sullivan, director, Systemwide Athletics, 240-453-2594, will coordinate with athletic directors and athletic coordinators regarding CPR/AED training.
- Security personnel are the school-based AED contacts for middle schools. Department of School Safety and Security, 301-279-3066, will coordinate CPR/AED training for all school-based security employees.
- Special schools and any other schools without athletic departments or security staff will work with Systemwide Safety Programs to designate school-based AED contacts. Systemwide Safety Programs will coordinate CPR/AED training.

Systemwide Athletics Responsibilities:

- Select employees for AED training and distribution of portable AEDs.
- Coordinate CPR/AED training for school-based athletics personnel.
- Assist in ensuring athletics staff comply with AED guidelines.

Systemwide Safety Programs, Department of Facilities Management, Responsibilities:

- Maintain required records.
- Ensure AED program guidelines are consistent with legal requirements.
- Coordinate CPR/AED training and AED/supply servicing and replacement, as needed.
- Monitor program effectiveness and compliance.
- Communicate with the AED program medical director and Montgomery County Fire and Rescue Service (MCFRS) on issues related to medical emergency response, including post-event reviews, as needed.

Department of School Safety and Security Responsibilities:

- Coordinate CPR/AED training for all school-based security personnel.
- Assist in ensuring security staff compliance with AED guidelines.

School Responsibilities:

- The school staff is responsible to—
 - Contact 911 immediately if a medical emergency occurs;
 - Ensure AED-trained employees are available for all school-sponsored athletic events;
 - Assign someone to meet responding public safety/emergency vehicles and direct Emergency Medical Services (EMS) personnel to the site of the medical emergency;
 - Ensure the site is kept clear of bystanders;
 - Complete and maintain the attached [AED Monthly Inspection Form](#)¹—see Page 6, Routine Maintenance, second and third bullets;
 - Report equipment maintenance issues to Mr. Park at 240-314-1070;
 - Ensure CPR/AED training and refresher training is administered; and
 - **Contact Mr. Park immediately after a suspected SCA event occurs at the school or AED pads are applied to anyone (for any reason).**

AED Trained Employee Responsibilities:

- Call 911, or direct someone to call 911, and describe the location of a suspected SCA event.
- Recognize potential unsafe conditions at the location and keep people away until EMS personnel arrive, if prudent.
- Provide prompt basic life support including CPR and AED use, as willing and capable.
- Understand and comply with these guidelines.

Volunteer Responder Responsibilities:

- 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. These responders are encouraged to contribute to emergency response only to the extent they are

¹ The AED Monthly Inspection Form is also available at:

<http://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/062414%20MCPS%20AED%20Monthly%20Inspection%20Form.pdf>

comfortable. The emergency medical response of these individuals may include CPR, AED, or first aid.

AED Users:

- Use of an AED should be limited to a trained individual who has successfully completed an approved CPR/AED training program within the last two years and has a current successful course completion card, if possible. However, it is acceptable for an AED to be used by any individual who wishes to attempt to utilize the equipment when a SCA event occurs and no trained individuals are available.

Medical Control:

- The medical director of the AED program has ongoing responsibility to—
 - Provide medical direction for use of AEDs
 - Write a prescription for AEDs

Equipment:

- Approved Equipment—
 - Physio-Control LIFEPAK CR PLUS and LIFEPAK EXPRESS Automated External Defibrillators (AEDs) are approved for MCPS use.
 - The AED and a first aid emergency care kit, if available, will be brought to all medical emergencies.
 - Each AED will have one set of adult defibrillation electrodes connected to the device and one spare set of adult electrodes with the AED. One resuscitation kit will be connected to the strap of the AED. This kit contains two pairs of latex-free gloves, one razor, one set of trauma shears, and one facemask barrier device. Also connected to the strap is one Infant/Child Reduced Energy Defibrillation Electrode Kit.

Equipment Maintenance:

- All equipment and accessories necessary for support of medical emergency response shall be maintained in a state of readiness. Specific maintenance requirements include:
 - The main school office shall be informed of changes in availability of emergency response equipment. If equipment is withdrawn from service, the main school office shall be informed and then notified when equipment is returned to service.
 - The main school office shall be responsible for informing response teams of changes in availability of emergency medical equipment.
 - The school AED contact shall be responsible for having regular equipment maintenance performed on the AEDs assigned to the school. All equipment maintenance tasks shall be performed according to equipment maintenance procedures, as outlined in the operating instructions.
 - Following use of emergency response equipment, all equipment shall be cleaned and/or decontaminated as needed. If contamination includes body fluids, the equipment shall be disinfected consistent with [MCPS Bloodborne Pathogens Exposure Control Guidelines](#)² using a 1:9 bleach solution.

² MCPS Bloodborne Pathogens Exposure Control Guidelines are available at:
<http://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/BBP%20Exposure%20Control%20Guidelines%20062216.pdf>.

Routine Maintenance:

- The AED will perform a self-diagnostic test every month that includes a check of the battery strength and an evaluation of the internal circuitry.
- For portable AEDs, the athletic director or designee will perform a monthly AED inspection. The attached [AED Monthly Inspection Form](#) will be initialed at the completion of the inspection. This form will be stored with the AED.
- For wall-mounted AED units, school-based security staff (or other designated staff) will perform a monthly AED inspection. The [AED Monthly Inspection Form](#) will be initialed at the completion of the inspection. This form will be stored with the AED.
- If the OK icon is NOT present on the readiness display, please immediately contact Mr. Park at 240-314-1070.
- If the battery icon is visible, this is an indication that the battery or CHARGE-PAK charging unit needs to be replaced. The AED unit can remain in service; however, this should be reported immediately to Mr. Park for a replacement unit.
- If the wrench icon is visible, the AED needs service. When this occurs, attempt to turn on the AED. If the message CALL SERVICE appears, the AED is not usable. This should be reported immediately to Mr. Park at 240-314-1070.
- If an AED fails to operate during an emergency event, continue to provide CPR until another AED is brought to the victim or EMS arrives.

Medical Response Documentation:

- Internal/MCPS Post-Event Documentation: If AED pads are applied to anyone (even for unauthorized use) or a suspected SCA event occurs at a school equipped with an AED, the school must immediately:
 - Call Mr. Park at 301-370-2141 (cellular)
 - Complete and submit a serious incident report to the Office of School Support and Improvement
- External/State Post-Event Documentation: If a suspected cardiac arrest occurs or AED pads are placed on anyone (for any reason), the state requires completion and submission of the medical event form, *Maryland Facility AED Report Form for Cardiac Arrests*, within 48 hours. The form must be completed immediately by employees who first initiate resuscitation efforts and/or employees who operate the AED. The school must immediately send the form to Mr. Park via facsimile at 301-279-3061 or via e-mail. Mr. Park will forward post-event forms to the state.

The FDA and the state require submission of FDA Form 3500A whenever an AED fails to operate properly. Immediately notify Mr. Park if an AED malfunctions or does not appear to operate properly.

Post-Event Review:

- Following each deployment of the response team member, or if a volunteer responder uses an AED, a review shall be conducted to learn from the experience. The school AED contact and key participants in the event shall participate in the review. Included in the review shall be the identification of actions that went well and the collection of opportunities for improvement as well as critical incident stress debriefing. Systemwide Safety Programs shall maintain a summary of the post-event review.

Annual System Assessment:

- Once each calendar year, Mr. Park shall conduct and document a system readiness review. This shall include review of the following elements:
 - Training records
 - Equipment operation and maintenance records

Additional Applicable Documents:

- Maryland COMAR 30.06 and 13A.05.10 and the Good Samaritan immunity law from liability exclusion
- Montgomery County Code, Sec. 51-16A
- [MCPS Bloodborne Pathogens Exposure Control Guidelines](#)

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