

MONTGOMERY COUNTY PUBLIC SCHOOLS
Systemwide Safety Programs
Department of Systemwide Safety and Emergency Management

Automated External Defibrillator (AED) Guidelines

<https://www.montgomeryschoolsmd.org/departments/facilities/safety/aed.aspx>

PURPOSE

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

AED OPERATION

AEDs shall be available at all MCPS schools 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 (movement, coughing, and pulse). SCA can occur 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, which can result in death. The most effective treatment for this condition is cardiopulmonary resuscitation (CPR) and the administration of an electrical shock to the heart by an AED.
- AEDs are portable devices designed to treat people experiencing sudden cardiac arrest. They analyze the victim's heart rhythm and can deliver an electrical shock (defibrillation) to restore a normal heart rhythm. AEDs are designed to be safe and easy to use by bystanders.
- An AED should be retrieved whenever any person displays symptoms indicating possible sudden cardiac arrest. Whenever responding to an unresponsive or injured person, the scene should first be evaluated for potential hazards to ensure it is safe to provide assistance. Hazards can include:
 - Exposed, energized electrical equipment and/or wet surfaces that are potentially energized by exposed electrical equipment.
 - Slippery or unstable walking surfaces.
 - Hazardous chemicals or drugs.
 - Hazardous environmental conditions, including extreme temperatures or hazardous air contaminants (such as sewer gas, carbon monoxide, or leaking refrigerant gases that can cause suffocation).
 - Uncontrolled machinery or vehicles.
 - Workplace violence, which might involve bystanders at the scene.
- The AED should be turned on and the pads applied to the victim if the following symptoms are observed:
 - Victim is unresponsive.
 - Victim is not breathing, is gasping, or is breathing ineffectively.
 - Victim has no signs of circulation, such as movement, coughing, or having a pulse.

- After the AED pads are applied to the chest, the AED will automatically read the victim's heart rhythm. If it detects a shockable rhythm, the AED will charge to the appropriate energy level and provide a voice prompt advising everyone to stand clear of the victim. The AED will 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.
- 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. Notify [Systemwide Safety Programs](#) immediately following the event.

Treatment of Children (1 to 8 Years Old or Weight Under 55 Pounds):

For victims in these categories, adjust AED use according to the information below:

- **LifePak Express AED:** replace the adult electrodes (chest pads) with the AED Infant/Child Reduced Energy Defibrillation Electrodes (chest pads), which are in a pouch attached to the AED case.
- **LifePak CR2 AED:** press the child mode button on the AED, which reduces defibrillation energy.

POINT OF CONTACT

Peter Park, team leader, Systemwide Safety Programs is the MCPS AED Program coordinator and can be reached at 240-314-1070 or via e-mail at Peter_Park@mcpsmd.org.

The school-based AED contact is the athletics specialist, security employee, principal, or other designated staff member. The AED contact for non-school facilities is designated by the facility administrator.

AED LOCATIONS

All MCPS schools have at least two AEDs. Most AEDs are located in hallway wall-mounted cabinets. AED cabinets may not be locked or obstructed. They must be readily visible and accessible whenever the building is occupied by school staff, students, or the public.

- High schools have AEDs in wall-mounted cabinets in the halls by the main office; the main gymnasium; and at a location near the stadium, such as the ticket stand or concession booth. High schools have additional AEDs distributed to the athletics specialists for use at athletics games and practices.
- Middle schools and elementary schools have AEDs in wall-mounted cabinets in the halls by the main office and the main gymnasium.
- For schools where the main office and main gymnasium are in close proximity, the AED that would typically be located by the main gymnasium is relocated to a secondary location for better distribution of the AEDs. Secondary locations can include the halls by the media center, auxiliary gymnasium, health office, or cafeteria.
- Special schools and alternative program facilities have AEDs in wall-mounted cabinets located where deemed most appropriate, typically in the hall by the main office or health office.
- Schools with swimming pools have an AED in a wall-mounted cabinet in the hall outside the pool room.
- Some schools have additional wall-mounted AEDs in locations deemed most appropriate.

- Non-school facilities in the MCPS AED Program have AEDs in wall-mounted cabinets located where deemed most appropriate.

TRAINING

In order to meet state-mandated training requirements, designated staff receive American Heart Association (AHA) Heartsaver CPR/AED training. Retraining is required every two years to maintain certification.

Treatment of SCA victims can cause exposures to body fluids and bloodborne pathogens. All school-based employees, and designated central office and operations employees, are required to complete annual online bloodborne pathogens training. All employees required to complete bloodborne pathogen training are also offered hepatitis B vaccination free of charge.

RESPONSIBILITIES

Principals/Administrators for Schools and Non-School Facilities in the MCPS AED Program:

- Ensure school/facility staff are aware of the AEDs and their locations.
- Ensure school/facility staff conduct and record monthly AED inspections. For secondary schools, security staff are responsible for inspecting wall-mounted AEDs and athletics staff are responsible for inspecting AEDs issued for athletics use.
- Ensure at least two school/facility employees (not including health room staff) are certified in CPR/AED and first aid. At least one certified individual must be available onsite during the school or work day. At least one certified individual must also be available at all school-sponsored athletics and intramural practices and games.
- Promptly notify Systemwide Safety Programs of any suspected cardiac arrest event at the school/facility, even if an AED was not used.
- Promptly notify Systemwide Safety Programs whenever AED pads are placed on anyone for any reason.
- Promptly contact Systemwide Safety Programs if an AED is missing, damaged, or appears to require service.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

School Security:

- Complete CPR/AED/first aid/bleeding control training and maintain training certifications.
- Secondary school security staff are responsible for conducting and recording monthly inspections for wall-mounted AEDs.
- Promptly notify Systemwide Safety Programs of any suspected cardiac arrest event at the school, even if an AED was not used.
- Promptly notify Systemwide Safety Programs whenever AED pads are placed on anyone for any reason.

- Promptly contact Systemwide Safety Programs if an AED is missing, damaged, or appears to require service.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

High School Athletics Specialists and Middle School Athletic Coordinators:

- Ensure athletics staff conduct and record monthly inspections for all AEDs issued for athletics use. Athletics specialists may designate coaches or trainers to perform AED inspections during the school year, but they must ensure inspections are also conducted during summer months.
- Ensure all athletics personnel complete CPR/AED training and hold current training certifications prior to participating in athletics games or practices.
- Ensure athletics AEDs are secured during off seasons when they are not assigned for athletics events.
- Promptly notify Systemwide Safety Programs of any suspected cardiac arrest event associated with an athletics game or practice, even if an AED was not used.
- Promptly notify Systemwide Safety Programs whenever an athletics AED is used or the pads are placed on anyone for any reason.
- Promptly contact Systemwide Safety Programs if an athletics AED is missing, damaged, or appears to require service.
- Ensure athletics AEDs are made available for annual inspection and servicing by MCPS' AED vendor, upon notification by Systemwide Safety Programs.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

Intramural Coordinators:

- Ensure all intramural personnel complete CPR/AED training and hold current training certifications prior to participating in intramural events.
- Promptly notify Systemwide Safety Programs of any suspected cardiac arrest event associated with intramural activities, even if an AED was not used.
- Promptly notify Systemwide Safety Programs if aware that an AED has been used or the pads have been placed on anyone for any reason.
- Promptly contact Systemwide Safety Programs if aware of an AED that is missing, damaged, or appears to require service.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

Athletics Unit, Office of School Support and Well-Being:

- Work with athletics specialists and athletic coordinators to ensure athletics staff complete required CPR/AED training and are familiar with MCPS AED Program guidelines and requirements.
- Work with athletics specialists and athletic coordinators to ensure athletics staff conduct and record monthly inspections for athletics AEDs.

- Work with athletics specialists and athletic coordinators to ensure CPR/AED-trained athletics staff and an AED are available for all school-sponsored athletics practices and games.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

Health Education, Office of Curriculum and Instructional Programs

- Work with intramural coordinators to ensure intramural staff complete required CPR/AED training and are familiar with MCPS AED Program guidelines and requirements.
- Work with intramural coordinators to ensure CPR/AED-trained intramural staff and an AED are available for all intramural events.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

Dept. of Systemwide Safety and Emergency Management (DSSEM), Office of District Operations:

- Ensure security staff complete required CPR/AED/first aid/bleeding control training and maintain current training certifications.
- Ensure security staff are familiar with MCPS AED Program guidelines and requirements.
- Ensure security staff conduct and record monthly inspections for wall-mounted AEDs at secondary schools.
- Contact Systemwide Safety Programs if information or assistance is needed related to the AED program.

Systemwide Safety Programs, DSSEM, Office of District Operations:

- Manage and oversee the MCPS AED Program. Ensure compliance with state public access defibrillator program requirements, including recordkeeping and mandatory reporting of all AED uses and suspected cardiac events.
- Work with the Athletics Unit, Health Education, Dept. of Systemwide Safety and Emergency Management, and individual schools/facilities to coordinate staff CPR/AED and first aid training.
- Coordinate annual AED inspections and servicing by the MCPS AED contractor.
- Coordinate AED repairs and replacement, as needed.
- Maintain an inventory of MCPS AEDs and issue additional AEDs, as needed.

EQUIPMENT

- Physio-Control LIFEPAK CR2¹, LIFEPAK EXPRESS², and LIFEPAK CR Plus AEDs are approved for MCPS use.

¹ Lifepak CR2 operator manual is available at:
<https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/Lifepak%20CR2%20AED%20Manual.pdf>

² Lifepak Express operator manual is available at:
<https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/050616%20AED%20Manual%20from%20RescueOne.pdf>

- The AED should be brought to all medical emergencies involving an unresponsive person or a serious injury.
- Each AED has one set of defibrillation electrodes (chest pads) connected to the device and one spare set of electrodes with the AED.
- LIFEPAK EXPRESS and LIFEPAK CR Plus AEDs have a reduced energy infant/child electrode kit.
- One resuscitation kit is included with each AED. This kit contains two pairs of latex-free nitrile gloves, one razor, one set of trauma shears, and one facemask barrier device. One pediatric CPR mask, in a separate pouch, is also provided with each AED.



Lifepak Express AED



Lifepak CR2 AED

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:
 - School/facility administration shall be informed of changes in availability of emergency response equipment. If equipment is temporarily withdrawn from service, school/facility administration shall be informed and notified when equipment will be returned to service.
 - School/facility administration is responsible for informing OSET members and other affected employees of changes in availability of emergency medical equipment.
 - School/facility administration is responsible for ensuring AEDs are inspected monthly and AED-related issues are reported to Systemwide Safety Programs in a timely manner.
 - Following use of emergency response equipment, all equipment shall be discarded or cleaned and/or decontaminated as needed. If contamination potentially includes body fluids, the equipment shall be disinfected consistent with [MCPS Bloodborne Pathogens Exposure Control Guidelines](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/BBP%20Exposure%20Control%20Guidelines%20062216.pdf)³.
- Systemwide Safety Programs will coordinate annual service and inspection for all MCPS AEDs by the district's AED vendor. Systemwide Safety Programs will notify school/facility administration,

³ MCPS Bloodborne Pathogens Exposure Control Guidelines are available at: <https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/BBP%20Exposure%20Control%20Guidelines%20062216.pdf>.

athletics specialists, athletic coordinators, security team leaders, and middle school security assistants of upcoming AED service and inspection visits. The AED vendor or Systemwide Safety Programs will contact schools/facilities to schedule the visits.

Routine Maintenance:

- For athletics AEDs, the athletics specialist, athletic coordinator, or designee shall perform a monthly AED inspection. The inspection shall be recorded on the [AED Monthly Inspection Form](#) and the form shall be stored with the AED.
- For wall-mounted AEDs at secondary schools, school-based security staff shall perform monthly AED inspections. The inspection shall be recorded on the [AED Monthly Inspection Form](#) and the form shall be stored with the AED.
- Inspection instructions can be found at the Systemwide Safety Programs website for:
 - LIFEPAK EXPRESS AEDs:
<https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/AED%20Monthly%20Inspection%20Tips%20-%20Lifepak%20Express%20current.pdf>
 - LIFEPAK CR2 AEDs:
[https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/AED%20Monthly%20Inspection%20Tips%20-%20Lifepak%20CR2%20current\(1\).pdf](https://www.montgomeryschoolsmd.org/uploadedFiles/departments/facilities/safety/AED%20Monthly%20Inspection%20Tips%20-%20Lifepak%20CR2%20current(1).pdf)
- If an AED's readiness indicator does not indicate the AED is ready to use, the school/facility AED contact or school/facility administration must promptly contact Peter Park, team leader, Systemwide Safety Programs, at 240-314-1070 or Peter_Park@mcpsmd.org.
 - The readiness indicator for LIFEPAK EXPRESS and LIFEPAK CR Plus AEDs is an LCD display that will show 'OK' when the AED is ready to use. If a battery or wrench icon is visible, service is required.
 - The readiness indicator for LIFEPAK CR2 AEDs is a green LED in the front cover that flashes every six seconds.

MEDICAL EVENT REPORTING and POST-EVENT REVIEW

- **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/facility equipped with an MCPS AED, the school/facility must immediately:
 - Call or email Peter Park, team leader, Systemwide Safety Programs, at 301-370-2141 (cell) or Peter_Park@mcpsmd.org.
 - Submit a serious incident report to the Office of School Support and Well-Being or notify the Office of District Operations.
 - Contact [CorVel](#) if the incident appears to be a work-related injury.
- **External/State Post-Event Documentation:** If a SCA event occurs or AED pads are placed on anyone (for any reason), the state requires:
 - Completion and submission of the [Maryland Facility AED Report Form for Cardiac Arrests](#), within 48 hours. The form must be completed immediately by the person who first initiated resuscitation efforts and/or operated the AED.

- The school/facility must immediately send the form to Systemwide Safety Programs via facsimile at 301-279-3061 or via e-mail. Systemwide Safety Programs will assist with form completion and will forward post-event forms to the state.
- Positive actions and deficiencies associated with an emergency response event will be identified and evaluated. Systemwide Safety Programs will re-evaluate and modify procedures and guidelines, as needed. Systemwide Safety Programs will maintain records for each event.

ADDITIONAL INFORMATION

- 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 Guidance and Requirements](#)

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