



**Superintendent's
Circular**

School Year 2011-2012

**NUMBER:
FMT=16**

**DATE:
September 1, 2011**

**RESPONSE TO CARDIAC ARREST IN SCHOOLS AND SCHOOL PROPERTY
AUTOMATIC EXTERNAL DEFIBRILLATOR USE AND ACCESS POLICY**

Policy Statement

The Boston Public Schools recognizes that an Emergency Medical Response Plan is multifaceted and is designed to respond to life threatening medical emergencies in the first minutes before emergency medical services arrives.. The elements of the policy include: effective communication throughout the individual school and the district, a coordinated and practiced response plan, risk reduction , training and equipment for first aid and CPR and a lay rescuer AED program

This Policy addresses the Cardiac Arrest Plan and focuses on CPR and AED use. It interfaces with Superintendent Circulars: Medical Emergencies, FSE 5, the .School Safety and Contingency Plans, FSE 1, and Life Threatening allergies,SHS11. It is also coordinates with the City of Boston Public Access Defibrillator Program (PAD). Detailed procedure and Protocols, including Memorandum of Agreement between BPS and Boston EMS, are available through BPS Health Services, Facilities Management and the Boston Public Health Commission..

Background

Sudden cardiac arrest (SCA) presents a potential life-threatening situation to students, staff and visitors and quick response actions and interventions like cardio-pulmonary resuscitation (CPR) and proper use of an automatic external defibrillator (AED) within the first two (2) minutes significantly increases the chance of SCA survival.

Implementation Plan

Protocol District Wide Responsibilities

The City of Boston's Public Access Defibrillator Program (PAD) requires that a system-wide policy be established that interfaces with the districts School Safety and Contingency Plans. These plans are submitted each year. In BPS the AED/CPR policy is directed by an AED/CPR committee. This system-wide AED committee includes but not limited to representation from Health Services (Health Services), Facilities Management (Environmental and Safety), BPS Operations and City of Boston's Emergency Management Services (BEMS). The responsibility of this team is to oversee the AED and CPR program, including quality assurance, data review of critical incidents, equipment maintenance and inventory management, coordinated and practiced response exercises and lay CPR and AED training. The Assistant Director of Health Services is the district wide BPS CPR/AED coordinator.

CPR (cardio-pulmonary resuscitation) and AED staff training is required for AED placement. The Boston Public Health Commission and the city of Boston EMS require a minimum of ten (10) CPR trained staff in each school building. Verification of CPR and AED training must be provided with the list of your school's trained persons as part of your school's plan. One person on the list shall be designated as your plan's coordinator.

To supplement the current BPS CPR/AED training and provide community outreach; BPS along with BEMS will conduct CPR Anytime training of selected ninth-graders (Freshmen class) at all BPS high school programs annually. The principal, headmaster or building administrator shall have contacted Health Services by November 1st to schedule the CPR Anytime training. This training shall be completed by May 1st.

The scheduling will be directed by the AED committee in conjunction with the building administrators at each school.

All school buildings have been provided AEDs. All BPS schools buildings with an AED will need to register their individual plans with BPS Health Services (BPS HS) and along with their annual safety contingency plans..

AEDs have been provided to the BPS Athletics program for selected coaches to have in their possession during any athletic event or practice. The BPS Athletic Program shall meet the same requirements and intent of the AED/CPR program for school buildings, including providing an inventory of the AEDs and their designated coaches (those coaches who are responsible for the AED during their sport's season)

Protocol for Individual School Responsibilities

Principal

-Ensures that there is an appropriately trained AED/CPR Coordinator at their school.
-Ensures that there is the required number of CPR trained personnel in the school
-Includes the AED/CPR plan in the annual safety and contingency plan submission to the Director of Fire Safety and Emergency Preparedness

- reviews and submits the annual AED/CPR plan to the principal for submission to safety (safety and contingency plan)
- forwards a copy of the plan to health services
- oversees the placement of AED's
- ensures that the required staff are appropriately trained in CPR and AED use
- ensures periodic checks are done to better ensure safe and continuous operability and access to the AED. These checks shall include but not be limited to the following:
 - Daily check of AED indicator light: check the active status indicator light on your AED . It varies depending on the brand. If any problems contact Arlene Swan-Mahony, BPS HS at 635-6788 immediately
 - Weekly check: check the condition of the AED and accessories (including but not limited to the AED, the pads (infant and adult) and the AED alarmed metal cabinet.
 - Monthly check: check pads and battery pack for expiration dates and AED signage throughout building.
 - Quarterly submission of logs to the AED/CPR committee.

* The school's nurse or a member of your school site safety team is strongly recommended

School Nurse

- reviews plans with the AED/CPR coordinator
- is up to date in CPR/AED training
- ensures that substitute nurses are aware of AED/CPR plan
- ensures that coaches identified with the school are in compliance with the individual school AED/CPR guidelines

Coaches

- Participates in training in CPR/AED
- Ensures that protocols are in place
- reviews plans with the school nurse

Trained Staff

- reviews CPR/AED plan for individual school
- reviews Safety and contingency plans for school
- participates in training

Detailed information on protocols and training are available in Health Services

| Date | Activity |
|-------------|--|
| October 1 | Annual Review of AED Program. This will be part of the school's Building Safety and Fire Safety Plans. If there are any changes, you will submit a copy to BPS HS. |
| October 15 | Distribute and collect CPR training to school staff and provide copies to BPS HS. |
| September 1 | BPS Athletics shall provide list of coaches with AEDS and training verifications ito BPS HS. |
| November 1 | Principal, headmaster and building administrator shall have contacted Health Services to schedule CPR Anytime training of selected ninth-graders. |
| May 1 | Complete CPR Anytime Training of Selected Ninth-Graders. |
| June 1 | Annual Review of AED Policy by AED Committee and City of Boston EMS. |

For more information about this circular, contact:

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|-------------------------|--|
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Carol R. Johnson, Superintendent

Boston Public Schools
Memorandum of Agreement
Automatic External Defibrillation Program

THIS AGREEMENT is made and entered into on _____ and is between the Boston Public Schools (BPS) and Boston Emergency Medical Services (EMS).

The purpose of this agreement is to establish training, and quality assurance programs for the utilization of automatic external defibrillators (AED) by volunteer, trained Boston Public Schools personnel. Those trained personnel will function under the medical supervision of the BPS medical director, and the Assistant Director of Health Services in collaboration with EMS Medical Director.

The Parties now mutually agree to the following:

The Boston Public Schools (BPS) agrees:

1. To identify an AED/CPR Coordinator (assistant Director of Health Services) within Health Services to assume responsibility for coordinating the AED/CPR committee and monthly meetings. This committee will include representation from EMS and oversee aspects of the Public Access Defibrillation program in BPS.
2. To conduct CPR/AED training programs that are approved by the American Heart Association, American Red Cross or American Safety and Health Institute, or BPS approved equivalent.
3. To establish a quality assurance program that reviews all AED response events with the EMS Medical Director, BPS Medical Director, Assistant Director of Health Services, EMS liaison and BPS responders.
4. To maintain a database for AED training programs and share trained personnel information rosters with the EMS.
5. To notify EMS annually of the types of AED's and location of units in each building.
6. To maintain database information regarding the AED daily checks and maintenance information for each unit.
7. To follow the Protocols approved by Boston Public Schools for AED use in BPS.
8. To notify EMS of any program changes, location or equipment type changes.
9. In case of an incident, provide EMS with cardiac event data card for evaluation and feedback.
10. Work collaboratively with the EMS on student CPR training programs

Boston EMS agrees to:

1. Identify the Medical Director of EMS as the overall Medical Director of the BPS AED program.
2. Identify an EMS liaison who will collaborate with BPS on AED implementation in the schools.
3. Maintain records of location/types of machines, trained personnel sent by BPS program coordinator.
4. Provide feedback, after a response incident, from the cardiac event data card to BPS CPR/AED Coordinator and BPS Medical Director and other members of the AED/CPR committee for review.
5. Provide "Train the Trainer" CPR/AED programs to BPS designated, volunteer employees.

This memorandum will be reviewed on an annual basis.

In witness whereof, the parties hereto execute this Agreement through their duly authorized representatives as of _____ day of _____, 20__.

BOSTON EMERGENCY MEDICAL SERVICES

By: _____

Date: _____

Its: _____

BOSTON PUBLIC SCHOOLS

Carol Johnson
Superintendent

Date: _____

Boston Public Schools

Public Access Defibrillation Program and CPR Guidelines

PURPOSE: The purpose of the Boston Public Schools Public Access Defibrillation (PAD) Program guidelines is to assist employees of the Boston Public Schools who are trained and willing to do CPR, including use of an Automatic External Defibrillator (AED) in the event such use is necessary. These guidelines do not create an obligation to do CPR and use the AEDs, nor to create any expectation that either an AED or trained employee will be present at every event. The guidelines should make clear that by increasing the availability of AED's, and increasing the number of persons trained to use them, that both the school and larger community may be aided. Evidence shows that time is a significant factor in victim survival rate and on-site responders are more likely to arrive faster than EMS to begin aid to incidents of "sudden death". By equipping and training voluntary employees in the use of AED's, we will increase the potential to save lives through AED intervention.

DEFINITION: The condition "sudden death" occurs when the electrical impulses of the human 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 oxygenated blood, resulting in "sudden death". The most effective treatment for this condition is the administration of an electrical current to the heart by a defibrillator, within the shortest time possible of VF onset. **Each minute of delay in defibrillator use, decreases the survival rate by 10%.**

PROGRAM PROCEDURES: The Boston Public Schools anticipates that where reasonably possible, employees who have been trained and who are present when an incident occurs will react by activating the EMS system (calling 9-1-1 or 9-9-1-1), begin CPR and utilize the AED available to them according to the guidelines of the American Heart Association.

PROGRAM OVERSIGHT: The City of Boston's Public Access Defibrillator Program (PAD) requires that a system-wide policy be established. This system-wide AED committee includes but not limited to representation from Health Services (Health Services), Facilities Management (Environmental and Safety), BPS Operations and City of Boston's Emergency Management Services (BEMS). This committee meets on a monthly basis and guides the program implementation and quality assurance..

The EMS medical director agrees to act as the medical director for the BPS PAD Program, ensuring its consistency with the Community AED public Access program and review each deployment of the AED with the BPS team.

The Boston Public School Physician / Medical Director is responsible for: writing prescriptions for purchase of AED's; reviewing and approving guidelines for emergency procedures related to the use of AED's; reviewing all AED deployments; and coordination with the local EMS Medical Director for consistency of operation.

The BPS Assistant Director of Health Services (Nursing Director) will be the overall AED coordinator of the program, chairing the CPR/AED committee. This system-wide AED committee includes but is not limited to representation from Health Services (Health Services), Facilities Management (Environmental and Safety), BPS Operations and City of Boston's Emergency Management Services (BEMS). The responsibility of this team is to oversee the AED and CPR program, including quality assurance, data review of critical incidents, equipment maintenance and inventory management, coordinated, procurement of funding, practiced response exercises and lay CPR and AED training.

PRE-PROGRAM EVALUATION AND AED SELECTION

Only US FDA approved AED's will be provided for this program. The Program Manager and Facilities Management Department will maintain the specification/technical information sheet for each approved AED on file assigned and/or donated to the PAD program.
All BPS schools have at least one AED.

AEDs have been provided to the BPS Athletics program for selected coaches to have in their possession during any athletic event or practice. The BPS Athletic Program shall meet the same requirements and intent of the AED program for school buildings.

TRAINING

All volunteering employees and coaches will participate in a recognized CPR/AED initial training course which will include the following content:

- Proper use, maintenance, and periodic inspection of AED.
- Assessment of an unconscious person to determine if a cardiac arrest has occurred and the appropriateness of applying the AED.
- Defibrillator safety precaution to enable the user to administer a shock without jeopardizing the safety of the victim, the user or other persons on the scene.
- Rapid accurate assessment of the victim's post – shock status to determine if further activation of AED is necessary.
- The role of the initial rescuer in the coordination of care for the cardiac arrest victim on arrival of EMS personnel.
- Scenario based practice consistent with common scenarios that rescuers may face.
- Routine AED maintenance, trouble shooting options and special situations that initial rescuers may encounter.

Employees will only be held to the standards of "Good Samaritan" status and shall only be expected to use an AED if they have successfully completed the CPR/AED training and feel confident using the device.

SKILLS REVIEW AND PROFICIENCY DEMONSTRATION

The AED team candidate will need to demonstrate proficiency in adult CPR and the following:

- Safe and effective use of the AED Training device that conforms to the unit assigned to that location or building.
- Perform a single or multi-shock practical exam conducted by a qualified AHA or ARC Instructor.
- Demonstrate common trouble-shooting techniques used with the AED.
- All AED team members will participate in a CPR/AED skills proficiency review annually. The PAD Program Manager will maintain the proper training and review documentation.

LOCATION OF AED's

All BPS schools buildings with an AED will need to register their plan with BPS Health Services (BPS HS). All school buildings have been provided AEDs. If additional AEDs are to be purchased, it must be done through BPS HS or with the approval of BPS HS. AED will be numbered for internal identification and inventory. These records shall be kept and maintained under BPS HS.

All AEDs shall be located immediately outside the main administrative office unless a written exemption with stated reasons for another location is provided. All AEDs are placed in an alarmed metal cabinet with an identifying AED location sign above it. Other signs identifying AED location will be placed in common

areas throughout the school building. For additional signage or if there are any missing or broken signs, please contact Facilities Management – Environmental Section at 617-635-8300.

AEDs are located outside the main administrative office because it is a well-identified location with continued access during school occupancy and operating hours. In cases of BPS school buildings sharing the building complex with another BPS school program or DYFS Community School or Center, if possible a location may be chosen that would allow access to both programs' operating hours. All AEDs shall be kept in the alarmed metal cabinet, with the exception of AEDs provided specifically for BPS Athletics Department

MAINTENANCE AND TESTING

Maintenance and testing will be conducted according to the requirements of the FDA and the AED manufacturer. Documentation of maintenance and testing will be maintained in the PAD Program Managers Office (Nursing Coordinator) for a period of two years. Documentation will record the date of testing and the signature of the person performing the testing. If a problem with the AED is identified, the AED Coordinator must be notified immediately.

Responsibility for overall maintenance check assignments in each location will be with the BPS AED/CPR coordinator in coordination with a designated person in each building. A person in each building will be responsible for:

- the daily visual checks and documentation during the actual contracted school year; (Summer locations and checks will be determined by summer program use of the buildings, and Boston EMS will be notified of the Summer Plan)
- prompt notification of PAD Program Manager for any equipment or supply needs. The designated building coordinator will be responsible for scheduling AED training course in their building. Authorized AHA Instructors will assist with training on AED use.

USE OF THE AED

General

- **Scene safety is vital. Rescuers are volunteers and are not expected to place themselves at risk in order to provide aid to other. To assess for scene safety:**
 - Verify that victim is not in contact with any live electrical connections.
 - Remove the victim from any exposure to water to a dry surface.
 - Refrain from use of any portable radios near the victim while AED is analyzing.
- During school hours, the building program coordinator will be notified of any event occurring that may require the use of an AED.
- During after school hours, a trained athletic coach or their designee may move the AED from the its' current location to support athletic department activities. A visible notice must be clearly stating the location of the AED as well as the location of the nearest AED, if another one exists.
- Contracted and community activities are *not guaranteed* access to the AED nor a trained AED operator as part of standard school facility rental contracts.

Actual use of AED in a cardiac event

- Determine unresponsiveness of the victim and activate the Emergency Response Plan (Call 9-1-1)
 - If a victim is unresponsive, call 9-1-1 (or 9-9-1-1) and get AED.
 - Assess victim (airway, breathing circulation)
 - Initiate CPR, if required, while AED is brought to victim's side.
 - Designate a person to wait a facility entry to direct EMS to location.
 - Notify Nursing Coordinator of use to assign backup AED unit, if available

- Upon arrival of AED, place AED next to head of victim, close to AED operator.
- Prepare to use the AED
 - Turn power ON
 - Bare and prepare chest for AED use
 - Attach AED to victim (picture guides on each pad for proper placement location)
 - Stop CPR while the AED device analyzes the heart rhythm.
 - Follow the machine prompts for further action. If a shock is indicated, be sure **all rescuers** are "**Clear**" before shock is administered.
- Upon arrival, EMS shall take charge of the victim
 - Provide victim information (name, age, known medical history, time of incident)
 - Provide information as to current condition and number of shocks delivered.
 - Defibrillator pads and electrodes shall remain in place on the victim. EMS will utilize BPS AED through transport of victim to hospital to maintain continuity of event recording.

AFTER USE OF AED

- ***First responders will notify the Program Coordinator by phone of the incident, complete an incident report and fax to the Program Coordinator.***

- ***A Critical Incident Debriefing session will be held or scheduled within 24 hours for initial responders. (Boston EMS may not be immediately available)***
- ***The Medical Directors (BPS and EMS) will be notified by the Nursing Coordinator of AED use and***
 - Complete follow-up report for Medical Directors
 - Arrange for quality improvement meeting of AED responders.
- The AED will be checked and put back in readiness state.
 - Restock AED inventory
 - Clean AED if needed according to manufacture recommendations
 - Document AED return readiness.

Boston Public Schools

- III. Automated External Defibrillator Program
- IV. Participation Request Form

_____ (Name of Person Requesting) requests
implementation of the AED Program for

_____ (Name of School / Site).

I understand that to be eligible for the AED Program, the following requirements must be met:

- 1) Funding / Resources have been identified for the purchase and maintenance of an "APPROVED" AED (Please consult Program Manager for list of qualifications for approved AED's.)

List funding source: _____

- 2) At least 2 staff have been identified to be trained in CPR and AED

List Staff Members: _____

- 3) At least 1 primary staff member and 1 back-up (in case of absence) has been identified to be the building coordinator

List Staff Member and Back-up: _____ **(Primary)**

_____ **(Back-up)**

Planned location of the AED in the building: _____