

Princeton University

Automatic External Defibrillator Program

Contents

Introduction..... 3
Purpose..... 3
Program Responsibilities 3
Criteria for Placement of AEDs and Supplies 5
Departmental AED Protocols 5
Training..... 5
Authorized Equipment 6
Reporting Requirements and Procedures 6
Records Retention..... 6
Annual Program Review 6
Appendix A- Defibrillation Patient Report..... 8

Introduction

Heart disease is a significant health problem that, according to the American Heart Association, affects nearly 8 percent of all Americans and results in nearly 350,000 deaths each year. While several electrical abnormalities can result in sudden cardiac arrest, the majority begin with ventricular fibrillation. Rapid treatment of ventricular fibrillation, through the application of a controlled electrical shock, is essential to the victim's survival. The American College of Occupational and Environmental Medicine (ACOEM) recommends placement, when practical, of Automated External Defibrillators (AEDs) in sufficient workplace locations to allow initiation of resuscitation and use of the AED (the so-called "drop to shock" interval) within 5 minutes of recognized cardiac arrest.

Purpose

To ensure that the University AED Program meets appropriate portions of ACOEM's *Guidelines for the Use of Automatic External Defibrillators (AEDs) in Workplace Setting* and the Department of Health and Human Services (HHS) *Guidelines for Public Access Defibrillation Programs in Federal Facilities*, and satisfies New Jersey state laws pertaining to AED acquisition and use.

Program Responsibilities

The **University AED Program Administrator**, Kelly M. States, Environmental Health & Safety, is responsible for administrative oversight of the University's AED Program, in consultation with the University AED Program Medical Advisor. Responsibilities include:

- Develop and maintain a written program for the University AED program,
- Liaison with AED manufacturers and suppliers,
- Assist Departmental AED Program Coordinators in development and maintenance of departmental written records and establishment of protocols necessary for an effective AED program,
- Provide timely written notification to PFARS about the acquisition of AED units, the type acquired, and location,
- Identify and communicate relevant federal and state laws and regulations
- Conduct annual reviews of departmental AED programs,
- Approve purchase of newly authorized or replacement AED units,
- Annually and upon request, provide program updates and status reports to the ESRM committee.

The **University AED Program Medical Advisor**, Nara Shin, M.D., Coordinator of Outpatient Medical Services, Princeton University Health Services, is responsible for medical direction and control for the University's AED program. Responsibilities include:

- Develop and/or approve all medical aspects of the program,
- Approve for use at the University type(s) of AED unit(s) that satisfy New Jersey state law,

- Select and/or approve ancillary medical equipment and supplies for the University's AED program,
- Provide written medical authorization for acquisition of each AED unit,
- Approve type(s) and frequency of AED training provided to University personnel that will satisfy New Jersey state law and ACOEM guidelines,
- Perform a medical review each time an AED unit is used at the University,
- Act as medical liaison with local emergency medical services (EMS), such as Princeton First Aid and Rescue (PFARS), and coordinate EMS response protocols that satisfy New Jersey state law.

The **Departmental AED Program Coordinator** is responsible for the day-to-day management of her/his department's AED program. Responsibilities include:

- Maintain a copy of this written program for Department's AED program, which satisfies New Jersey state law and appropriate portions of ACOEM guidelines,
- Maintain a copy of manufacturer's equipment and/or user manual for each type of AED in their inventory,
- Ensure AED units are properly maintained and tested in accordance with manufacturer's guidelines,
- Ensure department personnel receive and maintain training in accordance with guidelines established by the University AED Program Medical Advisor,
- Ensure that adequate AED-related supplies and recommended ancillary medical equipment are kept on-hand,
- Maintain required personnel training and unit inventory, maintenance, and testing records,
- Ensure that the University AED Program Medical Advisor and AED Program Administrator are notified of any use of the department's AED unit,
- Promptly notify the University AED Program Administrator of any maintenance issues, unit failures, or missing units by phone message or e-mail,
- Participate in annual program reviews.

Following is a list of Departmental AED Program Coordinators. This list, along with contact information and AED locations, is available on the EHS website at <http://ehs.princeton.edu>

- Public Safety – Thomas Glospie, Scott Loh
- UHS – Brenda Como
- Art Museum – Julia Davila
- Firestone Library – Stanley Cheek
- CoGeneration Plant – Eric Wachtman
- Athletics Department – Sara Ciccone, Kaitlin Dobiesz, Matt Brzycki, Mitchell Reum
- Frist Campus Center – Vincent Stanley
- MacMillan Building – Bob Allen
- Physics Research Site (South America) – Geoff Gettelfinger
- Chemistry Department – Alice Monachello, Kevin Wilkes
- School of Engineering and Applied Science – Kaitlin Lutz, William Gervasi

Criteria for Placement of AEDs and Supplies

The ACOEM recommends placement, when practical, of AEDs in sufficient workplace locations to allow initiation of resuscitation and use of the AED (the so-called “drop to shock” interval) within 5 minutes of recognized cardiac arrest.

Written requests for AED units must be submitted for approval to the University AED Program Medical Advisor, who will consider such requests in consultation with the Directors of Environmental Health and Safety, Public Safety, and Risk Management and the University AED Program Administrator. Placement of AEDs and supplies will be considered by utilizing, in part, the following criteria:

- Departments or other functional areas that are staffed with trained and certified first responders, such as security officers in the Art Museum or Firestone Library, or athletic trainers, or
- Locations considered to present a higher than normal risk for occupants to suffer sudden cardiac arrest, such as athletic facilities, or
- Departments or other functional areas where students, faculty, or staff are anticipated to work on or near exposed electrical circuits as part of their study, research, or job responsibilities, or
- Wherever mandated by regulatory requirements.

Departmental AED Protocols

Each AED-user department must establish appropriate written protocols and recordkeeping to address the following components:

- Identification of authorized AED and ancillary equipment,
- Location and/or assignment of AED units,
- Training and/or certification requirements for personnel,
- Procedures for
 - maintenance and replacement of AED and ancillary equipment,
 - monthly visual inspections of all AED units, in accordance with the manufacturer’s recommendations,
 - reporting and replacement of missing/stolen AED units
 - use of AEDs,
 - contacting Public Safety in the event of an emergency

Training

Departmental personnel must receive and maintain training in

- CPR/AED in accordance with the requirements of a nationally recognized organization, such as the American Heart Association (AHA) or American Red Cross,
- The process for summoning Department of Public Safety personnel at 911 from any campus phone or 609-258-3333 from any cell phone,
- The location(s) of AED unit(s) within their department,
- The inspection, maintenance, and operation of AED units assigned to their department,

- Reporting requirements that apply after an AED has been used to treat an individual and completion of Patient Report in Appendix A.
- The requirements of this written program.

Authorized Equipment

Only equipment recommended by the University AED Program Medical Advisor and approved by the AED Working Group may be used. The approved equipment consists of:

- Medtronic Physio-Control CRPlus units
- Two sets of defibrillation pads compatible with these units and designed for use on adult patients. Pediatric electrodes are **not approved** and must not be kept in the department's inventory.
- Responder kit

Reporting Requirements and Procedures

- A Defibrillation Patient Report must be completed on every patient to whom the AED Unit is applied, regardless of whether shocks were actually performed. All reports are to be completed by the Departmental AED Program Coordinator and the first responder immediately following the incident.
- The AED unit will be turned over to Public Safety, the Princeton First Aid and Rescue Squad, or the Mercer County Intensive Care Unit who will provide the printout for the event. The printout will generate an "AED Event Report" that will include an Event Log, Event Summary and Test Log.
- Public Safety's Report, the AED Event Report, and the Defibrillation Patient Report must be provided to the AED Program Medical Advisor, Janet A. Neglia, M.D. and the University AED Program Administrator, Gregory Cantrell.
- The AED Unit will be taken "out of service" until the Departmental AED Coordinator can complete an inspection of the unit and ensure it is working properly.

Records Retention

Departments must maintain inventory, maintenance and testing records for a period of two years (e.g., current year and immediate past year). Records that reflect the current status of employee training should be maintained until the next training cycle is complete. All other records, including those associated with AED use or post event debriefings, should be maintained indefinitely.

Annual Program Review

The University AED Program Administrator will annually conduct a review of all components of the University's AED program and make appropriate recommendations for improvement or remediation. The annual review will include at least the following components:

- Review of the University AED written program,
- Review of New Jersey state laws and ACOEM and HHS guidelines related to AED use,
- Review of written communications with PFARS or other EMS,
- Discussion and review of University AED Program Medical Advisor's responsibilities and activities,
- Discussion and review of each Departmental AED Program Coordinator's responsibilities and activities,
- Review of all departmental records related to personnel training and AED locations, use, service, and testing,
- Discussion of program review results with the AED Working Group,
- Report to the ESRM committee.

Appendix A- Defibrillation Patient Report

- Name of Victim: _____
- Address of Victim: _____
- Sex: Male _____ Female _____
- Race: _____
- Weight: _____ pounds
- Date of Birth: ___ / ___ / ___ = AGE _____

Location of Incident: _____

Status of Victim Upon Arrival: _____

Conscious _____ Unconscious _____ Semiconscious _____
Oriented _____ Confused _____ Resp.Arrest _____ Cardiac
Arrest _____

Nature of Call: Cardiac Problem _____ Respiratory _____
Trama / Accident _____ Drowning _____
Electrocution: _____ Poisoning _____

Onset of Symptoms: Date: ___ / ___ / ___ Time: _____

C.P.R. Started On: ___ / ___ / ___ at _____ hours; _____ sets _____

By whom: Lay Person _____
Public Safety _____
Police Dept. _____
Princeton First Aid _____
MICU _____

Defibrillation: _____ times By whom: _____
LRR _____
Public Safety _____
PBPD or PTPD _____
Princeton First Aid _____
MICU _____

List of Personnel on Scene

- Healthcare provider _____
- First Responder _____
- Department of Public Safety: _____
- Local Police Department: _____
- Princeton First Aid and Rescue: _____
- Mercer County Intensive Care Unit (MICU) _____