LLE INSTRUCTION 6060E

SUBJECT: PUBLIC ACCESS DEFIBRILLATION (PAD) PROTOCOLS

b. University of Rochester Statement of Safety Policy
c. LLE Instruction 6550
d. American Heart Association, Heartsaver First Aid CPR AED Student Workbook

ENCLOSURES: (1) Notice of Intent to Provide Public Access Defibrillation
(2) Public Access Defibrillator Medical Director Contract
(3) Map of 1st Floor AED Locations
(4) Map of 2nd Floor AED Locations
(5) Public Access Defibrillator Event Form

1. **Purpose:** To establish a public access defibrillation (PAD) program at LLE. This program institutes protocols used to operate automated external defibrillators and establishes an internal program to train and certify personnel in their use.

2. **Definitions:**

   a. **Automated External Defibrillator (AED):** A machine that automatically recognizes shockable chaotic heart rhythms and can deliver a shock to the outside of the patient’s chest.

   b. **American Heart Association (AHA):** The organization responsible for establishing policy and maintaining certification programs dealing with the training of individuals in administering cardiopulmonary resuscitation and using AED’s.

   c. **Cardiopulmonary Resuscitation (CPR):** Artificial support of circulation and breathing using chest compressions and providing breaths.

   d. **Defibrillation:** An emergency medical procedure that requires delivering electrical energy to the outside of a patient’s chest, using a defibrillator (AED) and hands-free electrodes, to stop all irregular electrical activity, often enabling the heart to restart in a coordinated fashion. Defibrillation is also used to resuscitate patients whose hearts have stopped altogether as in sudden cardiac arrest.

   e. **Emergency Health Care Provider (EHCP):** An individual or hospital knowledgeable and experienced in emergency cardiac care to participate in a collaborative agreement.

   f. **Emergency Medical Services (EMS) System:** The complete chain of human and physical resources that provides patient care in cases of sudden illness or injury.
g. **Emergency Medical Technician (EMT):** A person trained and certified by the state to provide health care through basic emergency medical services before and during transportation to a hospital.

h. **Medical Emergency Response Team (MERT):** Those who have acquired certification through outside agencies recognized by New York State (NYS). These individuals are ordinarily fully protected through certification procedures. This includes personnel with CPR, AED, First-Aid, First-Responder, and EMT qualifications.

i. **Public Access Defibrillation (PAD):** Authorized by provisions of NYS law, this is a program designed to encourage greater acquisition, deployment, and use of automated external defibrillators in public areas to reduce the numbers of deaths associated with sudden cardiac arrest.

j. **Qualified AED Operator:** A user of AED’s who has CPR certification and has completed the additional qualification of AED instruction.

k. **Sudden Cardiac Arrest (SCA):** When the heart suddenly ceases circulating blood or stops beating entirely. It is a clinical diagnosis, confirmed by unresponsiveness and the absence of detectable pulse and respirations.

3. **Background:** Heart disease remains the number one killer in America. Early defibrillation saves lives. The primary obstacle for early defibrillation is getting the defibrillator and an operator to the victim within a few minutes.

Most sudden cardiac arrest victims are in ventricular fibrillation (VF). VF is an abnormal, chaotic heart rhythm that prevents the heart from pumping blood. VF causes more cardiac arrests than any other rhythm (about 80% to 90% of cases). Defibrillation of a victim must start immediately to stop VF and allow a normal heart rhythm to resume. The sooner defibrillation is provided with the AED, the better the victim’s chances of survival. If defibrillation is provided within the first five minutes of a cardiac arrest, the odds are about 50% that you can save the victim’s life. But with each passing minute during a cardiac arrest, the chance of successful resuscitation is reduced by 7% to 10%. After 10 minutes there is very little chance of successful rescue.

The LLE program, with regards to emergency medical responses, relies on several, basic-life-support qualified individuals in-house. Situations deemed serious enough to require hospital care must utilize outside agencies such as ambulance support through Monroe County 911 initiation.

This instruction formalizes protocol procedures as required by Reference (a).

4. **Procedures and Protocols:**

   a. **General:** After appropriate protocol, an AED is attached to the patient with two adhesive pads (electrodes) and connecting cables. These adhesive pads have two functions: to capture and transmit the rhythm to the microprocessor and to deliver the electric shock. LLE’s defibrillators consist of five Cardiac Science Powerheart G3 Automated External Defibrillators (two units, model 9300E, installed March 2005; three units, model 9390E, installed 23 December 2010).
b. **Organization:** The Notice of Intent to Provide PAD, Enclosure (1), has been completed and has been forwarded to the Regional EMS Council. Through the completion of the Public Access Defibrillator Medical Director Contract, Enclosure (2), LLE has enrolled in a Public Access Defibrillation Program in the Monroe–Livingston region under the medical direction of the EMS Medical Director for the region. The Office of Prehospital Care located at Strong Memorial Hospital, Rochester, NY, is a collaborator in this program.

c. **Training:** LLE personnel who receive in-house training for CPR also will be trained and certified to use AED’s. The training and certification will be conducted by the American Heart Association (AHA) through an agency that utilizes NYS- and AHA-certified personnel. The LLE AED contact will schedule the training and certification. Certification must be completed every two years and in-house training will be completed biannually.

d. **Locations:** AED’s are located in the LLE West Lobby, the LLE East Lobby, outside the second floor freight elevator entrance, outside the OMEGA EP Control Room anteroom entrance, and off the first-floor OMEGA EP hallway near the entrance to LLE’s Shipping and Receiving. See Enclosures (3) and (4) for the 1st and 2nd floor AED map locations. AED locations may also be found on the LLE website, http://www.lle.rochester.edu/about/buildingmap.php and typing in “AED” in the search box.

e. **AED Application Procedures:**

1. When a victim is found to be unconscious, LLE’s medical emergency procedures will be initiated; the receptionist will contact the LLE MERT members, 911 will be called immediately, and the AED will be brought to the patient while the trained responder checks for breathing and pulse.

2. If the victim is unconscious, not breathing, has no pulse, but has an open airway, CPR will be performed until the AED is turned on and the pads installed on the victim’s chest. NOTE: the victim must be at least 12 years of age and weigh at least 90 pounds to use the AED.

3. Qualified individuals performing CPR and utilizing the AED shall not relinquish their duty to unqualified individuals. The AED-qualified individual will continue to perform CPR and defibrillation until relieved by a similarly qualified individual or relieved by ambulance personnel. CPR and defibrillation cessation can occur in order to monitor the patient when prompted by the AED to analyze the cardiac rhythm, to move the patient if the environment becomes hazardous to the provider, when extreme fatigue sets in for the provider, or the patient resumes unassisted respiration.

4. Following the use of the AED, a Public Access Defibrillation Event Form [Enclosure (5)], and the AED electronic data will be sent to the Monroe–Livingston QA/QI (Quality Assurance/Quality Improvement) Coordinator located in the Office of Prehospital Care at the University of Rochester Medical Center.
(5) Persons providing first aid assistance may find the experience traumatizing. In such cases, they are urged to contact the 24-hour University Counseling Center (http://www.rochester.edu/ucc/) emergency hotline at (585) 275-3113 or contact their personal physician to discuss their concerns.

f. **Maintenance:** Since the AED electrodes have expiration dates, an extra pair is kept in each AED carrying case. AED’s will be maintained in accordance with the manufacturer’s requirements by the LLE AED contact. Inspections of each AED, its audible response, and the containment cabinet security will be performed monthly by the LLE AED contact and documented on the check-off list, posted on the side of or in the cabinet, by the inspector.

5. **Responsibilities & Organization:**

   a. **LLE Safety Officer:**
      
      (1) Provide overall direction of the PAD program.

   b. **LLE AED Contact:**
      
      (1) Provide safety training and procedural guidance.
      
      (2) Perform monthly maintenance inspections.
      
      (3) Interface with the University’s MERT.
      
      (4) Prepare and maintain a list of qualified AED operators.
      
      (5) Maintain a list of area collaborators involved in the LLE program.

   c. **Qualified AED Users:**
      
      (1) Ensure that AED’s are operated in accordance with the above procedures.
      
      (2) Maintain qualification through biennial training.

6. **Approval:**

   [Signature]

   Robert L. McCrory
   Director
NEW YORK STATE DEPARTMENT OF HEALTH
bureau of Emergency Medical Services

Name of Entity Providing PAD: Laboratory for Laser Energetics
University of Rochester

Business Address: 250 East River Road
Rochester, NY 14623

City: Rochester
State: NY
Zip: 14623

Type: Corporation

Business Phone: 275-1002
Fax No.: 275-5960

Location: Business Office

Name of Emergency Health Care Provider (MD or Hospital): Dr. Eric Davis

If a Hospital
Provide Name of Contact: Dr. Eric Davis
Address: 601 Elmwood Avenue, Box 4-9200
Rochester, NY 14642

City: Rochester
State: NY
Zip: 14642

Name of 911 or Emergency
Ambulance Dispatch Agency: Monroe County 911

Name of PAD Training Course: American Hospital Association

No. of AED Units: 3
No. of PAD AED Providers in Organization: 1

Authorization Names & Signatures:

Steven J. Loeb Date: 2014
Signature: Steven J. Loeb

Dr. Eric Davis Date: 2014
Signature: Eric Davis

Send this Form and Your Collaborative Agreement to the Regional EMS Council listed in the attachment.

DOH: 4135/90689
Distribution: REMSCO & HPD/EM

Notice of Intent to Provide Public Access Defibrillation (PAD):
The following organization, Laboratory for Laser Energetics, wishes to be included in the Public Access Defibrillation Program in the Monroe-Livingston region, under the medical direction of Dr. Eric Davis, who is the EMS Medical Director for the region. The organization is complying with all NYS regulations, as listed in Policy 98-10 of the Department of Health as follows:

- All potential users have attended an approved PAD (Public Access Defibrillation) training course.

- A set of written protocols has been developed including the following elements:
  - training requirements for all users of the AED within the organization
  - procedures to be used for notification of 911 for ambulance dispatch
  - location of AED(s)
  - maintenance and regular checking of equipment
  - documentation, requirements for each AED use - including completion of written PAD event form to be faxed or mailed to the Medical Director's office. Also data from the AED's memory should be sent to the Medical Director's office within 48 hours of AED use. This may be done by downloading through use of a phone modem or by delivery of the datacard for incorporation into the regional database, depending on the capabilities of the AED device being used by the organization.

A copy of the above protocol must be on file at the Medical Director's office.

- Agreement has been made to participate in the regional quality improvement program, including the forwarding of above required information to the Medical Director's office, and compliance with recommendations made by the Medical Director or his staff.

- Written notice to the local 911 center has been made concerning availability of an AED (Automatic External Defibrillator) at the above organization. In addition, the Medical Director has approved the type of AED device that the organization will be using.

- A copy of the application and any other required paperwork has been submitted to the Medical Director's office for forwarding to the Regional EMS Council.

In return, Dr. Davis and his staff will provide oversight, review and guidance as needed in the PAD program.

Eugene Kowaluk
Name of Contact Person

250 East River Road (Brighton), Rochester, New York 14623-1299
Organization Address

275-5101
Organization Phone Number

Medical Director Signature

Date

Enclosure: Policy 98-10
LLE AED AND FIRST-AID KIT LOCATIONS - 1ST FLOOR

Legend:
- FAK = First Aid Kit
- #### = Room/Lab # with FAK
- AED = AED + First Aid Kit
- MR = Men's Rm
- UNX = Unisex Rm
- WR = Women's Rm
- VEST = Vestibule

Enclosure (3)
LLEINST 6060E
19 May 2014

(KCera 2012.04.18)
Legend:

- **FAK** = First Aid Kit
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- **AED** = AED + First Aid Kit
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Enclosure (4)
LLEINST 6060E
19 May 2014

(KCera 2012.04.18)
Enclosure (5)
LLEINST 6060E
19 May 2014

Public Access Defibrillation Event Form

Organization Name - please use all capital letters

Patient Name (First Name Last Name) - please use all capital letters

Event Date (mm/dd/yy) Patient's Age

Was Patient's Collapse Witnessed?  [ ] Yes  [ ] No

Was CPR started by others prior to AED?  [ ] Yes  [ ] No

Was AED applied to patient?  [ ] Yes  [ ] No

Was there an attempt to breathe for patient?  [ ] Yes  [ ] No

Did AED deliver shocks?  [ ] Yes  [ ] No

Were there any problems with the AED?  [ ] Yes  [ ] No

Time Collapse (approximate)

Time from collapse until CPR started

[ ] Min

Time from collapse until AED applied

[ ] Min

Time from collapse until 911 called

[ ] Min

If so, how many shocks given by this AED?

[ ]

Did patient regain pulse?  [ ] Yes  [ ] No

Was AED downloaded by Fasmode in Medical Director's office?  [ ] Yes  [ ] No

Did patient begin breathing on own?  [ ] Yes  [ ] No

or

Was AED data card sent to Medical Director's office?  [ ] Yes  [ ] No

Did patient regain consciousness?  [ ] Yes  [ ] No

Transporting Ambulance - all capitals please

Comments:

(02380)