

AUTOMATIC EXTERNAL DEFIBRILLATOR (AED) USE AND MAINTENANCE

Purpose/Objective

To ensure proper use and maintenance of an automated external defibrillator (AED).

Policy:

An AED is used to administer an electric shock through the chest wall to the heart. Built in computers assess the patient's heart rhythm and determine if the defibrillation is needed, and then direct administration of the shock. Audible and/or visual prompts guide the user through this process. The responder/user should be trained in BLS and AED use.

Procedure:

- I. All victims must be pulseless and breathless.
- II. All victims must be 8 years of age **or** 55 pounds in weight.
- III. Check the victim's airway, breathing, and circulation. (Signs of circulation include coughing, breathing, or movement.)
- IV. If cardiac arrest is confirmed, yell for help, get the AED, and call 9-1-1.
- V. Perform CPR until the AED is attached.
- VI. If necessary, prep chest, by shaving chest hair or drying the chest if it is wet.
- VII. Turn on the AED.
- VIII. Attach chest electrodes per package directions.
- IX. Stop CPR, no one touches or moves the victim.
- X. Press the analyze button.
 - A. Shock advised:
 1. Defibrillate. (1st shock) Observe victim's movement during shock.
 2. Analyze rhythm.
 3. Shock advised.
 4. Defibrillate. (2nd shock)
 5. Analyze rhythm.
 6. Shock advised.
 7. Defibrillate. (3rd shock)
 8. Check for signs of circulation – if absent, perform CPR for 1 minute.
 9. Check for signs of circulation – if absent, repeat steps 1-7.
 10. If no signs of circulation after 6 shocks – resume CPR.
 11. Prepare victim for transport.

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Revised: _____

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- B. No shock advised:
1. Check for signs of circulation.
 - a. If present, monitor victim.
 - b. Maintain airway, breathing and circulation.
 - c. Prepare for transport.
 2. No signs of circulation.
 3. Perform CPR for 1 minute.
 4. Check for signs of circulation.
 5. Analyze rhythm.
 6. No shock advised.
 7. Check for signs of circulation.
 8. No signs of circulation.
 9. Perform CPR for 1 minute.
 10. Check for signs of circulation.
 11. If no signs of circulation – repeat steps 3-6.
 12. After 3 consecutive “no shock advised” voice prompts, resume CPR and prepare the victim for transport.

Unit Maintenance:

- I. Responsibility of the unit owner to ensure unit is properly maintained.
- II. Placement of this unit should be in a safe secure place that is readily accessible by trained staff in such example locations as principal’s office, nurse’s office, athletic director’s office, for in-building events and press box for football games and track meets.
- III. Battery – 5-year lithium battery used in the unit.
- IV. Cleaning of the unit – maintain a clean unit; unit is protected by a case.
- V. Monthly preventive maintenance checks. (See attached sheet, Operator’s Checklist)
- VI. Annual preventive maintenance checks will be performed at Jefferson County Hospital.

Documentation:

The following information is to be documented for permanent record up to 7 years after an event if the AED is used: date, time, who witnessed the event, the care that was provided to the victim during and after the use of the AED, and time of ambulance arrival.

Additional information:

- If the victim is wet or sweaty, his/her chest must be dried off.
- If the victim is wearing a medication patch, it must be removed.
- If the victim has a pacemaker, adjust pad placement accordingly to avoid direct pad placement on the pacemaker device.

Related forms:

Preventative Monthly Maintenance Form