

# Southern Illinois Regional EMS System

## CC-15 FIELD PROTOCOLS FOR AED

### BLS

Southern Illinois Regional EMS System utilizes guidelines and recommendations from the American Heart Association for the use of the Automated External Defibrillator. EMS providers trained to defibrillate with an AED in the System shall follow these recommendations and System protocols.

- Standard Operating Procedures:
  - The AED shall be used only in situations of apparent cardiac arrest, or when the patient presents unresponsive and has no detectable pulse.
  - The AED is not to be applied as an ECG monitoring device.
  - Only providers trained and System approved to defibrillate shall operate the AED.
  - The responder trained to defibrillate should follow the current AHA algorithm and the System's protocol, EXCEPT:
    - If the AED available is programmed to previous AHA algorithms, **FOLLOW THE PROMPTS FROM THE AED BEING USED.**
  - Medical Control does not need to be contacted prior to defibrillation but the responder may contact Medical Control for direction when needed.
- Documentation:
  - The EMS patient care report will be completed and left at the receiving facility before the crew departs from the facility.
  - Any event that delayed patient treatment, unusual occurrences, or contact with Medical Control for direction must be documented.
- Pediatrics:
  - Use pediatric electrode pads with dose attenuator on patients up to 8 years of age and 25kg. (refer to manufacturer's recommendations)
  - You can use adult electrode pads if pediatric electrode pads are not available.
    - When applying the electrode pads using the traditional anterior/apex placement, make sure the pads are not touching.
  - Anterior-posterior placement of the electrode pads may be necessary on small children, especially when adult electrode pads are being used. Refer to diagram.
- Interruption of CPR:
  - AHA guidelines for CPR and AED use recommend that interruptions in chest compressions be limited as much as possible to increase efficacy of CPR.
  - CPR must be stopped for the AED to analyze the rhythm. The maximum time CPR can be interrupted for analysis is 10-15 seconds.
- Electrode Pad Placement:
  - Proper electrode placement is the anterior-apex position.
    - The anterior electrode should be to the right of the upper sternum below the clavicle.
    - The apex electrode should be placed to the left of the nipple with the center of the electrode in the midaxillary line.

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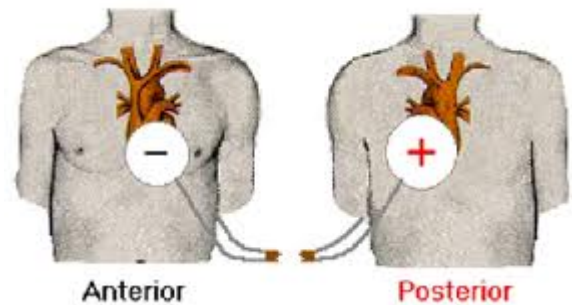
## CC-15 FIELD PROTOCOLS FOR AED (continued)

- An acceptable alternate placement of electrodes is the anterior-posterior placement.
  - The anterior pad is placed on the left side of the sternum and
  - The posterior pad is placed on the posterior back below the anterior pad.
    - Refer to diagram.
- When placing electrode pads on a patient with an implanted pacemaker or AICD, make sure the pad is not placed over the implanted pacemaker/AICD.

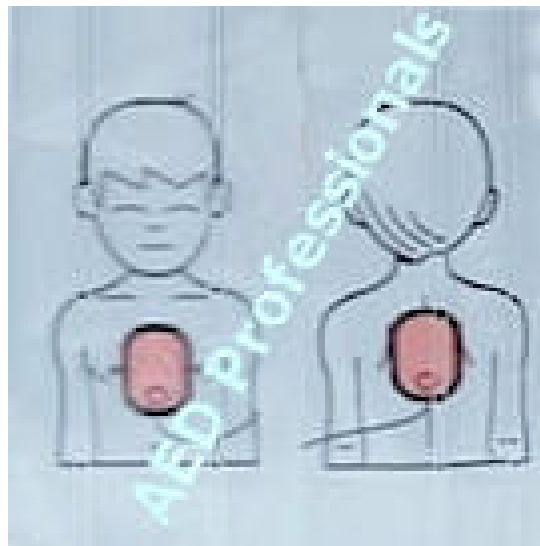
*Normal Pad Placement*



*Alternate Pad Placement*



*Alternate Infant/Child Pad Placement*



# Southern Illinois Regional EMS System

## CC-15 FIELD PROTOCOLS FOR AED (continued)

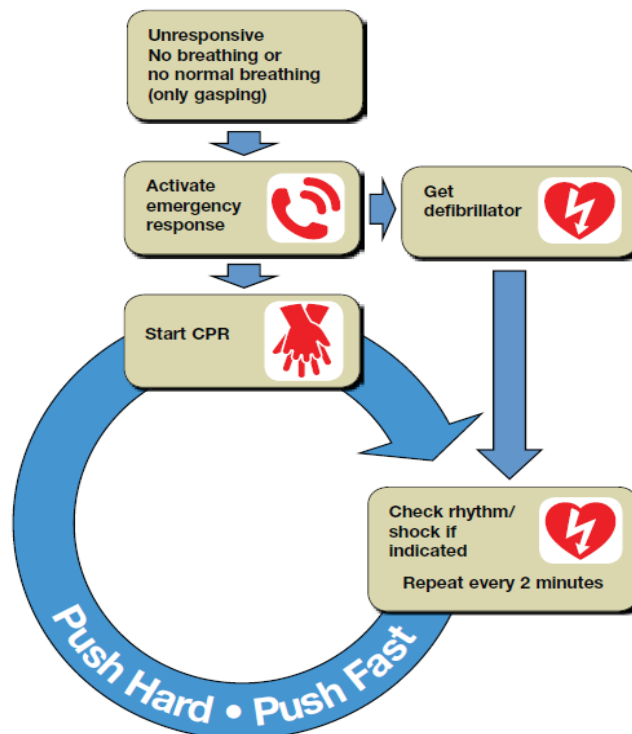
- Vibration/Motion:
  - For proper interpretation, the patient should be free of motion – moving elevators, environments with high vibrations and moving vehicles.
  - This means the ambulance must come to a complete stop for the AED to analyze and/or deliver a shock.
  
- Team Approach:
  - One crew member shall assume the leadership role of the resuscitation and be in charge of operating the AED.
  - The rescuer in charge is responsible for “clearing” the patient before pressing the SHOCK button and delivering the defibrillator shock.
  
- Request for Advanced Life Support Backup:
  - A BLS unit will initiate ALS backup, if available, to meet them enroute to the receiving facility.
    - The BLS unit is not required to wait for the ALS unit to arrive at the scene before transporting.
  - Initiating a request for ALS backup does not ensure the availability of an ALS ambulance to respond.
  
- Hypothermia:
  - No more than one shock should be delivered on a hypothermic patient presenting with a shockable rhythm (shock advised message from AED).
    - Severe hypothermia = < 86 degrees F
  - . If the rhythm does not convert after delivery of 1 shock, continue CPR and transport. **DO NOT CONTINUE TO DEFIBRILLATE!**
  - Attempt defibrillation again after the core body temperature exceeds 86 degrees F.
  
- Guidelines for Interface with ALS Personnel:
  - Refer to the ALS Interface with BLS-AED Units protocol.
  
- Continuing Education:
  - All responders trained to use an AED will maintain proficiency by reviewing skills every 90 days.
  - The training shall be conducted by a System approved instructor/trainer.
  - A training roster will be completed by the agency provider and a copy submitted to the EMS office.
  
- Equipment Maintenance:
  - The provider agency is responsible for appropriate maintenance of the AED according to the manufacturer’s recommendations, including the utilization of checklists.

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## CC-15 FIELD PROTOCOLS FOR AED (continued)

- Responsibilities:
  - Proper and current certification
  - Maintenance of skills
  - Performance according to EMS System protocols
  - Proper equipment maintenance
  - Proper control of scene SAFETY
  - Written and verbal documentation of events
- Medical Control:
  - The EMS Medical Director must approve all providers to operate at the AED level.
  - Medical Control / EMS Office will review every incident when the AED is used and maintain quality assurance records.
  - The EMS Medical Director has the authority to suspend/reprimand providers who do not comply with System standards and protocols for education, training, and field treatment.
- AED Algorithm:
  - FOLLOW THE PROMPTS ON YOUR AED.
    - There are currently AED units in service that do not operate at the current AHA guidelines. To eliminate confusion, follow the instructions given from the AED.

### Simplified Adult BLS Algorithm



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- Notes
  - The defibrillator will be immediately available or within 1-2 minutes.
  - Consider contacting Medical Control after 3 shocks have been administered.
  - For transport times greater than 15 minutes to the hospital:
    - The ambulance may pull over 1 time to analyze the rhythm and deliver the recommended shocks.