

## Automated Defibrillation Procedure

Electrical defibrillation is recognized as the most effective method of terminating ventricular fibrillation. It is a vital link in the chain of survival in the case of sudden death. Defibrillation is accomplished by passage of an appropriate electrical current through the heart, sufficient to depolarize a critical mass of the left ventricle.

1. **Two (2) minutes of CPR** should be performed prior to defibrillation attempts.
2. The AED should be applied using adult pads if the patient has no pulse, is breathless and is at least 8 years of age or older. *Pediatric pads should be used on children between ages 1-8 (or adult pads in the anterior/posterior position if pediatric pads are unavailable). Refer to the Peoria Area EMS System Pediatric Protocol Manual for guidelines.*
3. Turn the AED on.
4. Apply the Quick Combo pads or Fast Patches with cables as soon as possible. The pads must be attached to the defibrillator cables prior to placement on the patient's chest.
5. The negative electrode should be placed to the right of the upper sternum just below the right clavicle and the positive electrode should be placed laterally to the left nipple in the midaxillary line (approximately 2-3 inches below the left armpit).
6. Make sure no personnel are directly or indirectly in contact with the patient when the AED is analyzing. Emphasize your intention to analyze by loudly stating, "CLEAR! ANALYZING!" and analyze in accordance with product specifications.
7. If the AED indicates "*SHOCK ADVISED*", call out "CLEAR!" check for the safety of others and push the shock button.
8. **Immediately perform 2 minutes of CPR** and re-evaluate patient/rhythm.
9. If patient remains in V-fib or pulseless V-tach, **defibrillate per manufacturer's recommendations** for a biphasic AED (or **360 Joules** for a monophasic AED).
10. **Immediately perform 2 minutes of CPR** and re-evaluate patient/rhythm every 2 minutes.
11. If the patient regains a pulse at any time during resuscitation, then maintain the airway and assist ventilations.
12. Re-analyze the patient's rhythm with the AED if the patient returns to a pulseless state. Shock if indicated.
13. Immediately turn care over to the transporting provider or ALS intercept crew upon their arrival.
14. Complete all necessary documentation.

PEORIA AREA EMS SYSTEM  
PREHOSPITAL CARE MANUAL

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Procedure**

**Critical Thinking Elements**

- **If the cardiac arrest is witnessed by EMS personnel, start CPR and defibrillate immediately after Fast Patches or Quick Combos are placed.**
- The AED is not intended for use on children < 1 year of age.
- Initiate ALS response as soon as possible.
- If a pulse is felt at any time, transport the patient without delay.
- Maintain frequent pulse checks. If at any time you cannot find a pulse, push “ANALYZE” and/or repeat the AED procedure for analyzing.
- If only 1 rescuer is available with an AED: verify unresponsiveness, open the airway, give 2 breaths & check pulse. If cardiac arrest is confirmed, attach the AED and proceed with the algorithm.
- **DO NOT analyze or shock in a moving ambulance!**
- Manual modes shall be password protected.