

PEORIA AREA EMS SYSTEM
PREHOSPITAL CARE MANUAL

**Manual 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. Turn on the monitor/defibrillator.
3. 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.
4. 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).
5. For adults, **defibrillate per manufacturer's recommendations** for biphasic monitors (or **360 Joules** for monophasic monitors). *If using paddles instead of pads, 25 pounds of pressure must be applied to each paddle when defibrillating.*
6. Make sure no personnel are directly or indirectly in contact with the patient. Emphasize your intention to defibrillate by loudly stating "CLEAR!" and then deliver the shock.
7. **Immediately perform 2 minutes of CPR** and re-evaluate patient/rhythm.
8. If patient remains in V-fib or pulseless V-tach, **defibrillate per manufacturer's recommendations** for biphasic monitors (or **360 Joules** for monophasic monitors).
9. **Immediately perform 2 minutes of CPR** and re-evaluate patient/rhythm every 2 minutes.
10. Follow appropriate protocols for rhythm changes.

Critical Thinking Elements

- **Patients with AICDs or pacemakers are treated the same as any other patient. However, do not place the electrodes (defibrillation pads) over the AICD or pacemaker site.**
- **Adjust the pads as necessary. Anterior-posterior placement may be necessary. Position the positive pad on the anterior chest just to the left of the sternum and place the negative pad posteriorly just to the left of the spinal column.**
- **Shocks delivered to the patient prior to arrival should be taken into consideration during the transition of care. Crews may want to utilize the AED equipment and personnel for subsequent defibrillation.**
- **If the cardiac arrest is witnessed by EMS personnel, start CPR and defibrillate immediately after Fast Patches or Quick Combos are placed.**