

Procedure: Defibrillation

Background: Defibrillation should be performed when the patient is in cardiac arrest. Rhythms amenable to defibrillation are ventricular fibrillation and pulseless ventricular tachycardia.

Indications:

- Patient in cardiac arrest with a shockable rhythm – ventricular fibrillation, pulseless ventricular tachycardia.

Contraindications:

- Cardiac arrest without a shockable rhythm.

Automated External Defibrillation (AED)*:

Procedure:

1. Power on the AED.
2. Follow the prompts.
 - a. Attach the pads to the patient and ensure they are in firm contact with the patient's bare chest.
 - i. The pads should be placed in the anterior/posterior position, if possible.
 - ii. If the anterior/posterior position is not available, the pads should be placed in the position shown on the pads or as recommended by the manufacturer.
 - b. Stop CPR and clear the patient for analysis of the rhythm.[#]

[#]Note, some new AED models allow for analysis *during* compressions so continuing CPR is possible. Follow the commands on the AED as noted above.
 - c. If shock is indicated, clear the patient prior to delivery of the shock.
 - d. Deliver the defibrillation.
 - e. Immediately resume CPR.
3. Document the procedure, including times, in the ePCR.

Manual Defibrillation:

Procedure:

1. Confirm the rhythm is ventricular fibrillation or pulseless ventricular tachycardia.
2. Ensure the LifePak pads are in firm contact with the patient's bare skin.
 - The pads should be placed in the anterior/posterior positions, if possible.
3. Charge the LifePak to the appropriate discharge (Joules) level.
 - Use the maximum available energy.
4. Clear all personnel from direct patient contact.
5. Push the discharge button until the electrical charge has been delivered.
6. Immediately resume CPR.
7. Document the procedure, including times, in the ePCR.

Notes:

- Dry the chest wall if the patient is wet or diaphoretic.
- Do not place pads over medication patches. Patches should be removed and the skin wiped dry. Do not place pads over nitroglycerin paste. Wipe the skin dry.
- Do not place pads over ICD (implantable cardioverter devices) or pacemakers.
- If the patient has not converted after 2-3 defibrillations, consider moving the pads to another position to change the vector of the electrical discharge. Also consider dual sequential defibrillation (see below).

***EMR, EMT, and AEMT only permitted to perform automated external defibrillation (AED).**