

Cardiac Arrest Adult and Pediatric (Non – Traumatic)

Note:

**Determine if the patient has a Do Not Resuscitate (DNR) order.
Treatment must not be delayed while making this determination.**

Request Advanced Life Support if available. Do not delay transport to the hospital.

- I. Perform initial assessment.
- II. If patient is confirmed to be absent of respirations and pulse, begin Cardiopulmonary Resuscitation as per current AHA/ARC/NSC guidelines.
 - A. Artificial ventilation and/or CPR must not be delayed to attach supplemental oxygen. Initial ventilations without supplemental oxygen should be used until supplemental oxygen can be attached.
 - i. Deliver each breath over 1 second.
 - ii. Give sufficient tidal volume to produce visible chest rise.
 - iii. Avoid rapid or forceful ventilations.
 - iv. When a secure/advance airway is in-place (endotracheal tube, Combitube, or LMA) with 2 – person adult CPR, ventilations are to be given at a rate of 8 – 10 breaths per minute without attempting synchronization between compressions. Do not pause compressions for delivery of ventilations.
 - B. If cardiac arrest was unwitnessed by EMS or EMS arrival to the patient is more than 4 to 5 minutes since the patient went in to cardiac arrest, begin CPR for 2 minutes (5 cycles for adult CPR) prior to defibrillation.
 - i. During this initial administration of CPR, the AED should be attached to the patient.
 - ii. Initial AED analysis of the patient’s rhythm should occur 2 minutes after CPR has been initiated.

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- C. If cardiac arrest was witnessed by EMS or EMS arrival to the patient is less than 4 minutes since the patient went in to cardiac arrest, attach the AED to the patient and check rhythm prior to beginning CPR.
- III. During application of the AED pads:
 - A. Assure proper application and adhesion of the pads to the patient's chest.
 - B. If present, remove Nitroglycerin medication patch from the patient's chest.
 - i. When in doubt of the type of medication patch the patient has on their chest, remove the patch.
 - ii. Assure that patient's medication patch does not come in contact with your skin (wear appropriate PPE).
 - iii. Assure proper disposal of the medication patch at the Emergency Department through use of properly identified biohazard bags.
- IV. Once the AED has analyzed the patient's rhythm, follow the voice prompts to either "check patient" or administer a "shock".
 - A. Pediatric patients under the age of 8 or who are preadolescent (prepubescent) should be defibrillated using an AED equipped for and FDA approved for use on children.
 - i. In an emergency situation where an AED equipped for use on children is unavailable, an adult AED unit can be used.
- V. After the first and all subsequent defibrillations immediately begin CPR for 5 cycles (approximately 2 minutes), without checking for a pulse, before the next rhythm check and/or defibrillation. Do not check for a pulse or rhythm after defibrillation until 5 cycles of CPR has been completed *or* the patient appears to no longer be in cardiac arrest.
- VI. All actions and procedures occurring during a cardiac arrest should be accomplished in a way that minimizes interruptions of chest compressions.
- VII. Transport to the Emergency Department:
 - A. A maximum of 3 defibrillations may be delivered at the scene prior to initiating transport. If transportation is unavailable, continue your AED/CPR sequence until transportation is available.
 - B. If the AED advises that no shock is indicated, initiate transport with rhythm checks by the AED occurring approximately every 2 minutes.
 - C. During transport, the AED should perform rhythm checks approximately every 2 minutes with as few interruptions of chest compressions as possible.

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- VIII. If patient is no longer in cardiac arrest, complete an initial assessment, support airway and breathing, place patient in the recovery position, obtain vital signs, and treat according to appropriate protocol while continuing transport.

- IX. Record all patient care information, including the patient's medical history and all treatment provided (including the total number of defibrillations administered), on a Prehospital Care Report (PCR).