

CENTRAL CALIFORNIA
EMERGENCY MEDICAL SERVICES
A Division of the Fresno County Department of Public Health

Manual:	Emergency Medical Services Administrative Policies and Procedures	Policy Number: 510.08
Subject:	Basic Life Support (BLS) Protocols CARDIAC ARREST - MEDICAL	Page: 1 of 3
References:	California Administrative Code, Title 22, Division 9, Chapter 2	Effective: 11/15/83

I. TREATMENT

A. ABCs

1. Airway – Open airway
2. Breathing – Assess breathing status
3. Circulation – Assess circulation status

B. CPR

1. If patient has a pulse but is not breathing, provide rescue breathing.

C. AED Placement (for AED service providers only)

1. AED is only used in the following circumstances:
 - a. Unconscious, pulseless, with agonal or absent respiration's; and,
 - b. Non-trauma; and,
 - c. Non-hypothermia; and,
 - d. Patients older than 1 year of age. Pediatric patients 1 to 8 years old, use the AED child pads. If the AED does not have child pads use the adult pads. Place the adult pads anterior and posterior.
2. If EMS providers witness the cardiac arrest, immediately place the AED on the patient, analyze and defibrillate if indicated.
3. If the EMS providers arrive on scene and the patient has an unwitnessed arrest by the EMS providers, perform two (2) minutes of CPR before analyzing with the AED.

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4. After the AED is applied, have the machine analyze rhythm.
 - a. If machine determines that shock is necessary, check that all personnel are clear, and press button to shock patient. Perform CPR for two (2) minutes, then reevaluate.
 - b. Check carotid pulse. If pulseless, have the machine analyze rhythm. If machine determines that shock is necessary, check that all personnel are clear, and press button to shock patient. Perform CPR for two (2) minutes, then reevaluate. Continue sequence as needed.

NOTE: All monophasic AED's may follow old shock protocols. If so follow AED prompts.

5. If the initial rhythm is not shockable and no pulse palpable:
 - a. Do CPR for two (2) minutes and reevaluate.
 - b. Check pulse and have machine analyze rhythm if pulseless.
 - c. If unshockable rhythm remains without pulse, perform CPR for two (2) minutes, analyze rhythm, deliver one shock if indicated, repeating this sequence until the ALS unit arrives.
 - d. If shockable, follow shock series as above.
 - e. If pulse returns, maintain airway and breathing, check blood pressure.
 - f. If the transport unit is an Advanced Life Support unit, the care of the patient will be turned over to the Paramedic. The AED may accompany the patient to the hospital.
 - g. If the transport unit is a Basic Life Support unit, CPR shall be continued and the patient transported to the nearest hospital.

- (1) The AED shall accompany the patient in the BLS unit.

If the patient has transiently regained palpable pulses as a result of previous defibrillations and the patient loses pulses, the unit should pull over, press analyze, and if the machine recognizes a shockable rhythm, the AED will deliver one shock and continue transport. If no palpable pulses, continue CPR during transport.

D. Oxygen

1. 100% oxygen by bag-valve-mask or oxygen powered breathing device.
2. Should not use oxygen powered breathing device on patients 5 years old or less.

E. Transport

1. If patient is transported, transport Code 3, to closest appropriate hospital.
2. Consider a prehospital ALS rendezvous.

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II. SPECIAL CONSIDERATIONS

A. Determine if rescue efforts are appropriate.

1. Initiation/termination of CPR (refer to EMS Policy #549)
2. Do not resuscitate (DNR) documentation (refer to EMS Policy #564)
3. BLS personnel may apply an AED when treating hangings as medical (refer to EMS Policy 510.09)

B. History

1. Down time without CPR
2. Down time with CPR
3. Transport time to hospital.
4. Symptoms prior to collapse

NOTE: It is very difficult to conduct a resuscitation attempt and obtain a history from bystanders at the same time. Resuscitation efforts should take precedence over history.

C. Drowning

1. Resuscitate all cold water victims (water temperature less than 70°) with less than one hour submersion.
2. Resuscitate all warm water victims (water temperature greater than 70°) with less than 30 minutes submersion.

NOTE: All lakes, canals, ponding basins, and rivers should be considered cold water.

D. Hypothermia

1. These victims often look deceased and are often salvageable. CPR and gradual warming should be initiated as soon as possible.

E. AED

1. Unconscious, pulseless patients who have agonal, gasping respirations are to be considered apneic for defibrillation purposes.
2. Patients with pacemakers and automated internal cardiac defibrillator (AICD) implanted on the right side should have the right defibrillator pad placed on the right posterior shoulder over the scapula (this does not pertain to Laerdal Heartstream AED). (Follow directions of AED).
3. When an ALS unit arrives simultaneously with the AED unit, the ALS unit shall use their equipment, and the AED unit will assist the ALS unit.
4. AED information from the documentation device on the defibrillator and written documentation shall be submitted within 72 hours of the defibrillation to the appropriate person for data collection purposes.