

EL DORADO COUNTY EMS AGENCY

PREHOSPITAL PROTOCOLS

Effective: January 1, 2017



EMS Agency Medical Director

BLS Cardiac Arrest

PURPOSE: To provide direction for BLS providers for resuscitation of patients in cardiopulmonary arrest.

DEFINITIONS:

- A. "MICR"- Minimally Interrupted Cardiac Resuscitation that focuses upon maintaining high quality chest compressions with both depth and rate.
- B. "EMS Crew"- the configuration of EMS responders and their defined roles to resuscitate a patient in cardiopulmonary arrest.

POLICY:

- I. Medical Cardiac Arrest for patients > 8 years old.
 - a. Information needed:
 - i. Estimated down time.
 - ii. Circumstances surrounding arrest.
 - iii. Onset (witnessed or un-witnessed).
 - iv. Preceding symptoms
 - v. Bystander CPR
 - vi. Duration of CPR
 - vii. Medications
 - viii. Environmental factors (hypothermia, inhalation, asphyxiation)
 - b. Contraindications for use of MICR include:
 - i. Traumatic arrest
 - ii. Patients with Ventricular Assistive Devices
 - c. Treatment
 - i. Conduct resuscitation using MICR for eight (8) minutes with the goal of preserving cerebral function.
 - 1. Provide high quality chest compressions at a rate of at least 100/min with minimal interruptions.
 - 2. Compression to breath ration of 30:2 using a BVM if available.
 - 3. Apply ECG or AED for analysis and defibrillation

4. Follow AED prompts
 5. Alternate provision of compressions between EMS crew every 2 minutes.
- ii. If no return of spontaneous circulation (ROSC) following eight (8) minutes of MICR, continue resuscitation efforts until ALS arrives. If an ALS airway is provided, give ventilations at a rate of 10 per minute. DO NOT HYPERVENTILATE. If an ALS airway is not available give compressions in a ratio of 30 compressions : 2 breaths
 - iii. For return of spontaneous circulation continue to monitor the patient and assist respirations only as needed, and prepare for transport.
- II. Traumatic Cardiac Arrest:
- a. Information Needed:
 - i. Patient down time
 - ii. Prior treatments
 - iii. Whether blunt or penetrating mechanism of injury
 - b. Document Findings if Found:
 - i. Unconscious with ineffective or absent respirations
 - ii. Absence of pulse
 - iii. Signs of trauma or blood loss
 - iv. Air and skin temperature
 - v. If signs of obvious death refer to **(Determination of Death Policy)**
 - c. Treatment:
 - i. Initiate chest compressions at a rate of 100/min
 - ii. Insert OPA or NPA followed by 100% oxygen via BVM and give compressions to ventilations in a ratio of 30:2
 - iii. Apply AED and follow prompts.