

	EMERGENCY MEDICAL SERVICES AGENCY	POLICY NUMBER	702
	A Division of the Merced County Department of Public Health	Effective Date	11/2025
Authority: Health and Safety Code, Division 2.5, and California Code of Regulations, Title 22, Division 9, Chapter 4, 1797.220		Initial Date:	07/2022
		Review Date:	10/2028

CARDIAC ARREST	
ADULT	PEDIATRIC
BLS	
Provide High Performance CPR (with BVM and 100% oxygen). Apply AED as soon as possible, Analyze rhythm/check pulse every two (2) minutes. Apply Mechanical CPR if applicable after 2 manual cycles, Minimize CPR pauses to less than 10 seconds. Switch compressors every 2 minutes if not using a mechanical compression device. Secure Airway: Refer to EMS Policy #760 – Airway Management	
ALS	
Follow BLS procedures if applicable. Apply Cardiac Monitor: Defibrillation Pads (Less than 2 minutes from patient contact). Apply Waveform EtCO ₂ (Less than 2 minutes from patient contact). Vascular Access: Obtain IO access if IV access is not noticeable after a quick look. <ul style="list-style-type: none"> May bolus up to 1 L (Adult) and 20 ml/kg (Pediatric) High Performance CPR: Pre-charge the Cardiac Monitor 15 seconds before pulse check every 2 minutes.	
Asystole / PEA	
Epinephrine 1:10,000 - 1 mg IV/IO <ul style="list-style-type: none"> Repeat every 3 – 5 minutes 	Epinephrine 1:10,000 - 0.01 mg/kg IV/IO <ul style="list-style-type: none"> Repeat every 3 – 5 minutes
Ventricular Fibrillation (VF) / Pulseless Ventricular Tachycardia (VT)	
Defibrillate as needed every 2 minutes per manufacturer's recommendation.	
Epinephrine 1:10,000 - 1 mg IV/IO <ul style="list-style-type: none"> Repeat every 3 – 5 minutes 	Epinephrine 1:10,000 - 0.01 mg/kg IV/IO <ul style="list-style-type: none"> Repeat every 3 – 5 minutes
For recurrent VF / VT – Amiodarone OR Lidocaine: Amiodarone - 300 mg IV/IO <ul style="list-style-type: none"> 2nd dose after 4 – 6 minutes: 150 mg IV/IO Lidocaine - 1.5 mg/kg <ul style="list-style-type: none"> Repeat once after 4 – 6 minutes Max dose 3 mg/kg 	For recurrent VF / VT – Amiodarone OR Lidocaine: Amiodarone - 5 mg/kg IV/IO <ul style="list-style-type: none"> Repeat once after 4 – 6 minutes Max dose 300 mg Lidocaine - 1 mg/kg <ul style="list-style-type: none"> Repeat once after 4 – 6 minutes

Signatures on File

Approved By: Tim Williams
EMS Administrator

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EMS Medical Director

Renal Failure / Suspected Hyperkalemia

Do Not Use for Prolonged Downtime.

Administer **both** Calcium Chloride and Sodium Bicarb:

Calcium Chloride - 1 gm over 2 minutes

- Single dose

Sodium Bicarb - 1 mEq/kg

- Max dose 50 mEq
- Flush IV line or start 2nd IV/IO prior to use

NO STANDING ORDERS

Special Considerations

Consider Reversible Causes.

Persistent VF / VT

- Consider change of Defibrillation Pad placement
- If Mechanical CPR Device applied, transport to closest ER

Perform a minimum of 10 minutes of CPR before considering transport.

Consider Reversible Causes.

Contraindications

Mechanical CPR Device

- Traumatic Cardiac Arrest
- 3rd Trimester Pregnancy
- If patient has a Ventricular Assist Device (VAD / LVAD) inserted
- If unable to correctly position the device due to size of the patient's chest

- **Mechanical CPR Device**

Termination of ALS Resuscitation

- Asystole or PEA Rhythm with EtCO₂ of 10 mmHg or less and no improvement - **10 minutes of ALS treatment must be performed**
- Asystole or PEA Rhythm with EtCO₂ of 11 mmHg or greater and no improvement – **20 minutes of ALS treatment must be performed**
- VF / VT or patients who received defibrillation from an AED at any time – **30 minutes of ALS treatment must be performed**

- If no reversible causes are identified and ALS treatment have been performed for 30 minutes