

	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	
<p>Provide High Performance CPR (with BVM and 100% oxygen).</p> <p>Apply AED as soon as possible, Analyze rhythm/check pulse every two (2) minutes.</p> <p>Apply Mechanical CPR if applicable after 2 manual cycles, Minimize CPR pauses to less than 10 seconds.</p> <p>Switch compressors every 2 minutes if not using a mechanical compression device.</p> <p>Secure Airway: Refer to EMS Policy #760 – Airway Management</p>	
ALS	
<p>Follow BLS procedures if applicable.</p> <p>Apply Cardiac Monitor: Defibrillation Pads (Less than 2 minutes from patient contact).</p> <p>Apply Waveform EtCO₂ (Less than 2 minutes from patient contact).</p> <p>Vascular Access: Obtain IO access if IV access is not noticeable after a quick look.</p> <ul style="list-style-type: none"> • May bolus up to 1 L (Adult) and 20 ml/kg (Pediatric) <p>High Performance CPR: Pre-charge the Cardiac Monitor 15 seconds before pulse check every 2 minutes.</p>	
Asystole / PEA	
Epinephrine 1:10,000 - 1 mg IV/IO	Epinephrine 1:10,000 - 0.01 mg/kg IV/IO
<ul style="list-style-type: none"> • Repeat every 3 – 5 minutes 	<ul style="list-style-type: none"> • Repeat every 3 – 5 minutes
Ventricular Fibrillation (VF) / Pulseless Ventricular Tachycardia (VT)	
<p>Defibrillate as needed every 2 minutes per manufacturer's recommendation.</p>	
Epinephrine 1:10,000 - 1 mg IV/IO	Epinephrine 1:10,000 - 0.01 mg/kg IV/IO
<ul style="list-style-type: none"> • Repeat every 3 – 5 minutes 	<ul style="list-style-type: none"> • Repeat every 3 – 5 minutes
For recurrent VF / VT – Amiodarone <u>OR</u> Lidocaine: Amiodarone - 300 mg IV/IO	For recurrent VF / VT – Amiodarone <u>OR</u> Lidocaine: Amiodarone - 5 mg/kg IV/IO
<ul style="list-style-type: none"> • 2nd dose after 4 – 6 minutes: 150 mg IV/IO 	<ul style="list-style-type: none"> • Repeat once after 4 – 6 minutes
Lidocaine - 1.5 mg/kg	Lidocaine - 1 mg/kg
<ul style="list-style-type: none"> • Repeat once after 4 – 6 minutes 	<ul style="list-style-type: none"> • Max dose 300 mg
<ul style="list-style-type: none"> • Max dose 3 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	
<p>Do Not Use for Prolonged Downtime.</p> <p>Administer both Calcium Chloride and Sodium Bicarb:</p> <p>Calcium Chloride - 1 gm over 2 minutes</p> <ul style="list-style-type: none"> • Single dose <p>Sodium Bicarb - 1 mEq/kg</p> <ul style="list-style-type: none"> • Max dose 50 mEq • Flush IV line or start 2nd IV/IO prior to use 	<p>NO STANDING ORDERS</p>
Special Considerations	
<p>Consider Reversible Causes.</p> <p>Persistent VF / VT</p> <ul style="list-style-type: none"> • Consider change of Defibrillation Pad placement • If Mechanical CPR Device applied, transport to closest ER 	<p>Perform a minimum of 10 minutes of CPR before considering transport.</p> <p>Consider Reversible Causes.</p>
Contraindications	
<p>Mechanical CPR Device</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Mechanical CPR Device
Termination of ALS Resuscitation	
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • If no reversible causes are identified and ALS treatment have been performed for 30 minutes