	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8827. <mark>13</mark>
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	12-Lead ECG	Last Approval Date:	06/13/24
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Signature on File	Signature on File
EMS Medical Director	EMS Administrator

## Purpose:

A. To establish an advanced life support skill guideline for utilizing 12-Lead Electrocardiogram (ECG).

## **Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

## Indications:

- A. Discomfort/Pain of Suspected Cardiac Origin per Policy PD# 8030 in stable adult patients.
- B. Consider obtaining a 12-lead ECG for patients over forty (40) years of age with the following symptoms:
  - 1. Symptomatic Bradycardia per PD# 8024 Cardiac Dysrhythmias.
  - 2. Symptomatic Tachycardia per PD# 8024 Cardiac Dysrhythmias.
  - 3. Diabetic >30 years old with typical or atypical symptoms of acute coronary syndrome (ACS)
  - 4. Syncope
  - 5. Post ROSC
- C. Patients over seventy-five (75) years or Women ≥ forty (40) with atypical\* signs or symptoms of ACS.

\*Atypical ACS signs and symptoms include Atypical chest pain, shortness of breath, nausea, hypotension, brady/tachy dysrhythmias, or syncope.

## **Special Considerations:**

- A. Patients should not have transport unduly delayed by attempts to obtain a 12-lead ECG.
- B. Obtaining 1 high-quality EKG within ten (10) minutes of patient contact is important to patient care and accurate diagnosis.
- C. Repeat EKGs can be performed if there is a change in the patient's clinical presentation, Serial EKGs are particularly useful after obtaining ROSC following a cardiac arrest as the immediate EKG can reveal STEMI, but subsequent EKGs may normalize. but otherwise, prehospital serial EKGs are not indicated due to the high instances of false alerts.
- D. 12 Lead ECG computer interpretations reading "Acute MI," "Acute MI Suspected," "ST Elevation Criteria Met," or "STEMI" are accepted as consistent with acute myocardial infarction.
- E. All 12-lead ECGs consistent with an acute STEMI shall be transmitted to the STEMI receiving facility. If the 12 lead is not transmitted, the reason must be documented in the ePCR.
- F. A copy of all 12 leads obtained during prehospital care shall be delivered to the receiving facility with the patient.

G. 12-Lead ECGs may be transmitted to an ALS Base Hospital when requesting a medical consult for interpretation.

Cross References: PD# 2060 – Hospital Services

PD# 8024 – Cardiac Dysrhythmias

PD# 8030 – Discomfort/Pain of Suspected Cardiac Origin

PD# 8031 – Medical Cardiac Arrest

