

**COUNTY OF SACRAMENTO
EMERGENCY MEDICAL SERVICES AGENCY**



Program Document: **12-Lead ECG**

Policy Number: 8827.13

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Signature on File

EMS Medical Director

Signature on File

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 Cardiac Dysrhythmias Policy PD #8024
 - 2. Symptomatic Tachycardia per Cardiac Dysrhythmias Policy PD #8024
 - 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 $\geq$ 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 ECG within ten (10) minutes of patient contact is important to patient care and accurate diagnosis.
- C. Repeat ECGs should be performed if there is a change in the patient's status or clinical presentation. Prehospital serial ECGs are not indicated due to the high instance of false alerts.
 - 1. In the setting of ROSC: Repeat ECGs are most accurate seven (7) minutes after obtaining ROSC, as the initial ECG can reveal STEMI, but subsequent ECGs may normalize.
- 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 Reference:

PD# 2060 – Hospital Services

PD# 8024 – Cardiac Dysrhythmias

PD# 8030 – Discomfort/Pain of Suspected Cardiac Origin

PD# 8031 – Medical Cardiac Arrest