


Sierra – Sacramento Valley EMS Agency Program Policy

12-Lead EKG Procedure

	Effective: 06/01/2021	Next Review: 05/2024	1107
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PURPOSE

To establish indications and requirements for performing 12-lead electrocardiogram (EKG) procedures in the prehospital setting.

AUTHORITY

- A. HSC, Division 2.5, § 1791.220.
- B. CCR, Title 22, Division 9, Chapters 3 & 4.

POLICY

12-lead EKG procedures shall be performed on patients who present with one or more of the following:

- A. Signs/symptoms suggestive of acute coronary syndrome (ACS) such as:
 - 1. Non-traumatic chest or upper abdominal discomfort.
 - 2. Syncope or near-syncope.
 - 3. Acute generalized weakness.
 - 4. Dyspnea.
- B. Cardiac dysrhythmias on 4-lead EKG.
- C. ROSC following cardiac arrest.

PROCEDURE

- A. Packaged electrodes designed for single patient use (not bulk) shall be utilized for 12-lead EKG procedures.
- B. The patient’s skin shall be adequately prepared (wiped utilizing a 4x4 gauze pad and shaved if required) prior to electrode placement.

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- C. A minimum of the patient's age, gender, last name and first initial shall be entered into the cardiac monitor prior to 12-lead EKG acquisition.
 - D. Obtain an initial 12-lead EKG as soon as possible/practical, and prior to EMS nitroglycerin administration.
 - E. 12-lead EKG criteria for ST Elevation Myocardial Infarction (STEMI) includes either of the following:
 - 5. Machine read out indicating *****Meets ST Elevation MI Criteria*****, *****Acute MI*****, *****STEMI***** (or equivalent).
 - 6. EMS personnel interpretation consistent with a STEMI (e.g. ST segment elevation in two or more contiguous leads).
 - F. Bundle branch blocks, atrial fibrillation, artifact, poor lead placement and/or poor skin preparation can result in STEMI false positive 12-lead EKGs. Consider 12-lead re-acquisition if significant artifact is observed or 12-lead EKG machine read out indicates "poor data quality" (or equivalent).
 - G. Any 12-lead EKG meeting STEMI criteria shall be transmitted to the appropriate facility (closest hospital or STEMI Receiving Center depending on incident specific circumstances) as soon as possible if transmission capabilities are available.
 - H. For patients with suspected acute coronary syndromes (ACS), serial 12-lead EKGs should be obtained if the patient's clinical status changes or if EKG changes are noted on the cardiac monitor, and every 15 minutes if transport times are long.
 - I. Copies of prehospital 12-lead EKGs shall be provided to the receiving hospital physician upon EMS arrival, left at the receiving hospital at time of patient delivery and attached to the EMS patient care report.