

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES
Policy Title 12 Lead ECG		Policy Number: 726
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- I. Purpose: To define the indications, procedure and documentation for obtaining 12-lead ECGs.
- II. Authority: California Health and Safety Code, Sections 1797.220 and 1798, California Code of Regulations, Title 22, Section 100175.
- III. Policy: Paramedics will obtain 12-lead ECGs in patients with the indications listed in this policy. EMTs who are specially trained may be authorized to set up the 12-lead.
- IV. Procedure:
 - A. Indications for a 12-lead ECG:
 1. History of present illness consistent with an acute coronary syndrome.
 - a. Chest, upper back or upper abdominal discomfort
 - b. Generalized weakness
 - c. Dyspnea
 2. Cardiac Dysrhythmia
 - a. Symptomatic bradycardia
 - b. Inappropriate Tachycardia
 - c. After successful cardioversion/defibrillation
 3. Post ROSC
 4. Paramedic Discretion
 - B. Contraindications (Do NOT perform an ECG on these patients):
 1. Critical Trauma: There must be no delay in transport.
 2. Cardiac Arrest: unless return of spontaneous circulation (ROSC).

C. ECG Procedure:

1. Attempt to obtain an ECG during initial patient evaluation. If the patient is not in severe distress, ECG should be completed as soon as possible and prior to medication administration.
2. The ECG should be done prior to transport.
3. If the ECG is of poor quality (artifact or wandering baseline), troubleshoot with focus on obtaining a clean tracing.
4. If patient condition worsens at any time, repeat the ECG. This is not needed if the patient has already been identified as a positive STEMI.

D. Base Hospital Communication/Destination:

1. If the interpretation from the monitor meets the manufacturer guidelines for a positive STEMI ECG, patients should be transported to the closest and most appropriate STEMI Receiving Center (SRC).
2. Manufacturer guidelines for a positive STEMI ECG
 - a. Lifepak 15: ***Meets ST Elevation MI Criteria***
 - b. Lifepak 35: ***ACUTE STEMI***
 - c. Zoll: ***STEMI***
3. Send a STEMI Alert through Pulsara containing a picture of the positive STEMI ECG within 10 minutes of interpretation.
4. Follow-up the Pulsara STEMI Alert with Base Hospital contact.
5. Cath lab activation will be at the discretion of the physician reviewing the Pulsara Alert. If no image is available, cath lab activation is not recommended if:
 - a. The ECG is poor quality
 - b. The patient has a pacemaker
 - c. The underlying rhythm is Atrial Flutter
 - d. The heart rate is above 140
6. Paramedics are to ask the patient if they have a cardiologist and report the information to the base hospital.
7. Positive STEMI ECGs will be handed to the receiving care team.

E. Other ECGs

1. If an ECG is obtained by a physician and the interpretation on the ECG is positive for STEMI, the patient will be treated as a positive STEMI.
2. If the ECG is obtained by a physician and the interpretation on the ECG is not positive for STEMI, but the physician is stating **it is** a STEMI:

- a. Send Pulsara Alert for review and transport to an SRC. Cath lab activation will be at the discretion of the physician reviewing the Pulsara Alert.
 3. The original ECG shall be obtained and accompany the patient.
 4. The original ECG will be scanned, or a picture will be obtained and added as an attachment to the Ventura County electronic Patient Care Report (VCePCR), in addition to being hand delivered to the receiving care team.
- G. Documentation
1. VCePCR and cardiac monitor data transfer will be completed per VCEMS policy 1000.

INTERPRETATION FROM THE MONITOR MEETS THE MANUFACTURER GUIDELINES FOR A POSITIVE STEMI ECG

