PURPOSE: To ensure that 9-1-1 patients with ST-elevation myocardial infarction (STEMI) are transported to the most appropriate facility that is staffed, equipped and prepared to administer emergency and/or definitive care appropriate to the needs of a STEMI patient.

AUTHORITY: Health & Safety Code, Division 2.5, Sections, 1798

DEFINITIONS:

**ST-Elevation Myocardial Infarction (STEMI):** An acute myocardial infarction that generates ST-segment elevation on the prehospital 12-lead electrocardiogram (ECG).

**STEMI Receiving Center (SRC):** A facility licensed for a cardiac catheterization laboratory and cardiovascular surgery by the Department of Public Health, Health Facilities Inspection Division, and approved by the Los Angeles County EMS Agency as a SRC.

**PRINCIPLES:**

1. The 12-lead ECG in the prehospital care setting plays a key role in determining the most appropriate treatment and destination for patients with suspected cardiac symptoms.

2. In all cases, the health and wellbeing of the patient is the overriding consideration in determining patient destination. Factors to be considered include: clinical presentation, severity and stability of the patient’s condition; current status of the SRC; anticipation of transport time; and request by the patient, family, guardian or physician.

3. Prehospital identification and communication of STEMI can reduce critical “door-to-intervention” times for STEMI patients.

**POLICY:**

I. A prehospital 12-lead ECG should be performed in accordance with the Ref. No. 1308, Cardiac Monitoring/12-lead ECG Medical Control Guideline.

II. If the 12-lead ECG demonstrates STEMI (or manufacturer’s equivalent), transmit the 12-lead ECG to the receiving SRC.

III. For any patient with a software interpretation of STEMI on the 12-lead ECG where the paramedic provider impression differs, Base Contact should be established to clarify the provider impression and to determine the destination.
V. Paramedics shall notify the receiving SRC and discuss cath lab activation criteria for all patients with a provider impression of Chest Pain – STEMI, including 9-1-1 interfacility transports of patients with a STEMI 12-lead ECG from a non-SRC ED to a SRC.

VI. In general, patients with a STEMI 12-lead ECG, (including hypotensive patients with signs and symptoms consistent with cardiogenic shock) shall be transported to the most accessible open SRC if ground transport is 30 minutes or less regardless of service area boundaries.

III. Provide properly labeled, at a minimum patient name and sequence number, 12-lead ECGs to the receiving facility (in either paper or electronic format) as part of the patient’s prehospital medical record.

IV. Document the findings of the 12-lead ECG on the Patient Care Record.

VII. If ground transport time to a SRC is greater than 30 minutes, the patient shall be transported to the most accessible receiving facility.

VIII. Interfacility Transfer of STEMI patients from a STEMI Referral Facility (SRF) Emergency Department to a SRC via the 9-1-1 system. SRFs are strongly encourage to enter into interfacility transfer agreements with the most accessible SRC.

A. Patients are to be transported to the SRC as directed by the SRF physician (base hospital contact/notification guidelines apply).

B. Transport units may bypass the most accessible SRC to the prearranged receiving SRC within 30 minutes, if the EMS provider resources at the time of transport allow.

IX. The SRC may request diversion of STEMI patients for any of the following conditions:

A. The hospital is unable to perform emergent percutaneous coronary intervention because the cardiac cath staff is already fully committed to caring for STEMI patients in the catheterization laboratory. STEMI patients should be transported to the most accessible open SRC regardless of ED diversion status.

B. The SRC experiences critical mechanical failure of essential cath lab equipment. SRCs must notify the EMS Agency’s SRC Program Manager directly at (562) 378-1656 as to the nature of the mechanical failure or equipment issue and the estimated time of the diversion.

A. The SRC is on diversion due to internal disaster.

CROSS REFERENCE:

Prehospital Care Manual:
Ref. No. 501, Hospital Directory
Ref. No. 502, Patient Destination
Ref. No. 503, Guidelines for Hospitals Requesting Diversion of ALS Units
Ref. No. 506, Trauma Triage
Ref. No. 513.1, Interfacility Transport of the ST-Elevation Myocardial Infarction Patient
Ref. No. 516,  Return of Spontaneous Circulation (ROSC) Patient Destination
Ref. No. 517,  Private Provider Agency Transport/Response Guidelines
Ref. No. 1210,  Cardiac Arrest
Ref. No. 1211,  Cardiac Chest Pain
Ref. No. 1212,  Cardiac Dysrhythmia – Bradycardia
Ref. No. 1213,  Cardiac Dysrhythmia – Tachycardia
Ref. No. 1303,  Cath Lab Activation Algorithm
Ref. No. 1308,  Cardiac Monitoring/12-Lead ECG