

POLICY: 530.00
TITLE: STEMI Triage and Destination

EFFECTIVE: 10/25/2024
REVIEW: 10/2027
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

PAGE: 1 of 4

STEMI TRIAGE AND DESTINATION

- I. AUTHORITY
Division 2.5, California Health and Safety Code, Sections 1797.67, 1798, 1798.101, 1798.105, and 1798.170
- II. DEFINITIONS
 - A. **ST-elevation myocardial infarction STEMI** is a clinical syndrome of an acute myocardial infarction meeting STEMI criteria on a 12-lead ECG.
 - B. **STEMI Alert** is a report from prehospital personnel that notifies a STEMI Receiving Center or STEMI Referral Hospital as early as possible that a patient has a specific computer-interpreted Prehospital 12-lead ECG indicating a STEMI.
 - C. **STEMI Receiving Center** (SRC) is a that has an interventional cardiology lab licensed by the Department of Health Services and approved by the local EMS agency which provides emergent cardiac catheterization 24 hours a day, 7 days a week, 365 days a year, with an established quality assurance program and a written commitment by the hospital administration supporting the center's interventional cardiology mission for STEMI patients.
 - D. **STEMI Referral Hospital (SRH)** is any hospital in the Mountain Counties EMS Agency region that lacks the availability or continuous availability of 24/7/365 cardiac catheterization. These hospitals will have the ability to administer thrombolytics to a STEMI patient. These hospitals will also have written transfer policies for STEMI patients to STEMI Receiving Centers.
 - E. **STEMI Patient** means a patient 18 years of age or greater who has received a 12 lead electrocardiogram in the pre-hospital environment that stipulates ***Acute MI Suspected*** or "ECG Suggestive of Acute MI" or "STEMI" on the computer interpretation on the ECG.
 - F. **Pre-Hospital Care Provider** means the ambulance service provider, fire service agency, or any other emergency service provider authorized by Mountain Counties EMS Agency.
 - G. **ALS** means Advanced Life Support, as defined in Section 1797.52, Division 2.5 of the Health and Safety Code.

III. PURPOSE

To establish guidelines for prehospital personnel to identify and transport patients with acute ST-Elevation Myocardial Infarction (STEMI) who may benefit from the rapid response and specialized services of a STEMI Receiving Center (SRC) without prior base hospital authorization.

IV. POLICY

This policy applies to adult patients with chest pain or symptoms suggestive of Acute Coronary Syndrome (ACS) with a 12-lead ECG demonstrating elevated ST-segments indicating a specific type of myocardial infarction.

V. TRIAGE

- A. All STEMI patients within MCEMSA shall be assessed and treated by pre-hospital personnel in accordance with the Mountain Counties EMS treatment guidelines.
- B. Patients with chest pain or symptoms suggestive of Acute Coronary Syndrome (ACS) shall have a 12-lead ECG performed.
1. 12-lead ECGs showing suspected STEMI will be transmitted to the SRC by pre-hospital care providers 12-lead ECG transmission device if capable..
 2. Exceptions include patients who are not cooperative with the procedure or patients in whom the need for critical resuscitative measures preclude performance of 12-lead ECG.
 3. Paramedic shall review the 12-lead ECG tracing in all instances to assure that little or no artifact exists (steady baseline, lack of other electrical interference, complete complexes present in all 12 leads). Repeat ECG may be necessary to obtain an accurate tracing.
- C. If computerized interpretation of accurately performed 12-lead ECG indicates either ***Acute MI*** or ***Acute MI Suspected*** or ***STEMI***, the patient qualifies as a candidate for transport to a STEMI Receiving Center. Patients without these findings shall be transported per MCEMSA Policy 511.00.

Note: Hypotensive STEMI patients should be transported to the closest ED.

VI. DESTINATION

- A. A patient with an identified STEMI should be transported to the designated STEMI Receiving Center with the quickest ETA if estimated transport time is sixty (60) minutes or less, bypassing all other receiving facilities.
- B. In cases where there is no SRC within 60 minutes, the patient shall be transported to the nearest STEMI Referral Hospital. Paramedics in MCEMSA should exercise their judgment and, in communication with the base hospital, request air medical transport (if available) of STEMI patients to a SRC if air transport improves ETA at the SRC.
- C. If ETA is greater than 60 minutes to a SRC, complete Fibrinolytic Checklist. If patient has contraindications to fibrinolytics, contact base hospital for destination.

- D. Unstable STEMI patients shall be transported to the nearest emergency department. Unstable STEMI patients are defined as any ONE of the following:
1. Patients undergoing CPR or with rapidly deteriorating vital signs that indicate that CPR will likely be initiated during transport.
 2. Inability to ventilate and/or oxygenate the patient via BVM with BLS airway adjunct or advanced airway.
- E. A STEMI Receiving Center may request advisory status for incoming STEMI patients only when:
1. The STEMI Receiving Center is on internal disaster; or
 2. The Cardiac Catheterization laboratory is closed for repair or upgrade.

VII. STEMI ALERT/PATIENT REPORT

- A. The STEMI Alert should contain the following information:
1. Situation:
 - a. Identification of the call as a “STEMI Alert.”
 - b. Estimated time of arrival in _____ minutes for STEMI.
 - c. Patient age and gender
 - d. Confirm ECG states ***Acute MI*** or ***Acute MI Suspected*** or ***STEMI***
 - e. If patient elects to go to a facility that is not a STEMI Receiving Center
 - f. Any urgent patient concerns
 2. Background:
 - a. Patient presenting complaint including any duration and presence/absence of chest pain, pressure, jaw pain, or SOB.
 - b. Pertinent past cardiac history including presence of a pacemaker
 - c. Any contraindications to fibrolytic therapy.
 3. Assessment:
 - a. General Impression
 - b. Patient improved or worse since on scene
 - c. Pertinent vital signs and significant abnormal physical examination findings

4. Treatment:
 - a. Prehospital treatment given and response to treatment.
 - b. If able without creating transportation delay, transmit the ECG to receiving facility as soon as possible.

VIII. DOCUMENTATION

- A. A copy of the 12-lead ECG shall be delivered to the nurse or doctor caring for the patient at arrival in the Emergency Department
- B. A copy of the 12-lead ECG shall be generated for inclusion in the Prehospital Patient Care Report (PCR) or incorporated via electronic means into the record. The finding of STEMI on 12-lead ECG and confirmation of the STEMI Alert shall also be documented on the PCR.