

**MOUNTAIN-VALLEY EMS AGENCY
POLICIES AND PROCEDURES**

**POLICY: 520.00
TITLE: EMS STEMI RECEIVING
CENTER DESIGNATION**

APPROVED: Signature On File In EMS Office
Executive Director

Signature On File In EMS Office
Medical Director

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EMS STEMI RECEIVING CENTER DESIGNATION

I. AUTHORITY

Division 2.5, California Health and Safety Code, Sections 1797.67, 1798, 1798.101, 1798.105, and 1798.170

II. DEFINITIONS

- A. “Percutaneous Coronary Intervention (PCI)” refers to a procedure, commonly referred to as angioplasty, which is used to open narrowed or blocked coronary arteries.
- B. “STEMI” means an acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- C. “STEMI Alert” is a report from Pre hospital personnel that notifies a STEMI Receiving Center or STEMI Referral Hospital as early as possible that a patient has a STEMI, allowing the hospital to initiate internal procedures to provide appropriate and rapid treatment.
- D. “STEMI Receiving Center (SRC)” is a hospital in the Mountain-Valley EMS Agency region that has an interventional cardiology catheterization lab licensed by the Department of Health Services which provides emergent primary interventional cardiac catheterization services 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
- E. “STEMI Referral Hospital (SRH)” is any hospital in the Mountain-Valley EMS Agency region that lacks the availability or continuous availability of 24/7/365 primary PCI. These hospitals 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.

III. PURPOSE

To define requirements for designation as a STEMI Receiving Center (SRC) within Mountain-Valley EMS Agency region for patients transported via the 911 system with ST-Elevation Myocardial Infarction (STEMI) who may benefit by rapid assessment and percutaneous coronary intervention (PCI).

IV. POLICY

- A. To be designated an SRC in the Mountain-Valley EMS Agency region; a hospital must meet the following requirements:
 - 1. Possess current California licensure as an acute care facility providing Basic Emergency Medical Services.
 - 2. Hold current status as a Base Hospital in the Mountain-Valley EMS Agency region.

3. Enter into a written agreement with the Mountain-Valley EMS Agency identifying SRC and MVEMSA roles and responsibilities
4. Agree to accept all EMS patients meeting STEMI patient triage criteria and all “STEMI Alert” patients transferred from other hospitals within the Mountain-Valley EMS Region (except when on diversion due to a declared hospital in-house internal disaster), and provide a plan for the triage and treatment of simultaneously presenting STEMI patients regardless of ICU/CCU or ED saturation status.
5. Meet STEMI Receiving Center Designation Requirements as defined in the Mountain-Valley EMS Agency STEMI Receiving Center Designation Criteria Application and Evaluation Matrix. The criteria includes:

a. Hospital Services Including:

- i. Special permit for cardiac catheterization laboratory pursuant to the provisions of Title 22, Division 5, of the California Code of Regulations.
- ii. Intra-aortic balloon pump capability with necessary staff available 24 hours a day 7 days a week 365 days a year.
- iii. California permit for cardiovascular surgery or a written plan for emergency transport to a facility with cardiovascular surgery available with timely (within 1 hour) transfer steps and agreements.
- iv. Continuous availability of PCI resources 24 hours a day 7 days a week 365 days a year.
- v. Med-net radio or recorded phone line available 24 hours a day 7 days a week 365 days a year to be used for pre-hospital communication regarding “STEMI Alert” patients and for notifications of “STEMI Alert” transfers from other hospitals.

b. Hospital Personnel Including:

- i. STEMI Receiving Center Medical Director who must be board-certified in Internal Medicine with a sub-specialty in cardiovascular disease.
- ii. STEMI Receiving Center Program Manager who must be an RN.
- iii. Cardiac Catheterization Lab Manager/Coordinator who must be an RN if not directly reporting to the STEMI Receiving Center Program Manager
- iv. A daily roster of interventional cardiologists who must:
 - a) Be available and present in the SRC within 30 minutes of the activation of the SRC’s internal STEMI/PCI system
 - b) Have privileges in percutaneous coronary interventions (PCI).
- v. A daily roster of cardiovascular surgeons who must be available and present in the SRC within 30 minutes of documented request, or SRC’s without cardiovascular surgery capability shall have written transfer guidelines and a plan for emergency transfer within 1 hour if medically necessary.

c. Clinical Requirements Including:

- i. ACC/AHA guidelines for activity levels of facilities and practitioners for both primary PCI and total PCI events are adopted herein and may require periodic updating:
 - a) Interventionalist shall perform a minimum of 11 primary (emergency) PCI procedures and 75 total (emergency plus elective) procedures per year.
 - b) SRC shall perform a minimum of 36 primary (emergency) PCI procedures and 200 total (emergency plus elective) PCI procedures annually.
- ii. Performance and outcome measures will be assessed initially in the survey process, and will be monitored closely on an ongoing basis.

d. SRC Internal Hospital Policies/Plans

- i. Base Hospital STEMI medical control and quality improvement plan
- ii. ED STEMI patient management plan
- iii. Cardiac Interventionalist activation plan
- iv. Cardiac Catheterization Lab team activation plan
- v. STEMI contingency plans for personnel and equipment
- vi. Coronary angiography policy
- vii. PCI and use of Fibrinolytic policy
- viii. Interfacility transfer STEMI policies/protocols
- ix. Transfer agreements for cardiac surgery, as appropriate
- x. STEMI patient triage

e. Performance Improvement Program for EMS Patients including:

- i. Participation in Mountain-Valley EMS SRC QI Committee, whose membership includes:
 - a) EMS Medical Director
 - b) EMS Quality Improvement Coordinator
 - c) Designated Cardiologist from each SRC
 - d) Designated quality improvement representative from each SRC
- ii. Meetings to be held on a quarterly basis and in accordance with California Evidence Code 1157 (Regarding Confidentiality).
 - a) *The proceedings and records of this committee are confidential and are protected under section 1157 and 1157.5 of the Evidence Code, State of California. Members and invited guests of the SRC QI Committee are required to sign a Confidentiality Agreement, which is maintained on file at the EMS agency, as a condition of attendance.*
- iii. Written internal quality improvement plan/program description for STEMI patients shall include appropriate evidence of an internal review process that includes:
 - a) Mortality Rate (within 30 days, related to procedure regardless of mechanism)
 - b) Emergency CABG rate (result of procedure failure or complication)
 - c) Vascular complications (access site, transfusion, or operative intervention required)

- d) Cerebrovascular accident rate (peri-procedure)
- e) Post-procedure nephrotoxicity (increase in serum creatinine of > 0.5)
- f) Sentinel event, system and organization issue review and resolution processes

iv. Participation in Prehospital STEMI related educational activities

f. Data Collection, Submission and Analysis

- i. Participation in National Cardiac Data Registry
- ii. Participation in Mountain-Valley EMS Agency data collection as defined by Data Requirements for STEMI Centers document (Attachment A).

B. Designation

1. The STEMI Site Review Team, which reviews the written proposal and conducts site visits, will include an interventional cardiologist, emergency physician, nurse coordinator, and/or hospital administrator(s), EMS agency administrator(s), and/or similar experts as necessary.
2. Based on the recommendation(s) of the STEMI Site Review Team, the MVEMSA Board of Directors will designate the STEMI center(s).
3. SRC designation shall be awarded to a hospital following satisfactory review of written documentation and initial site visit and an agreement between the hospital and Mountain-Valley EMS Agency.
4. SRC designation shall be for a period of 2 years initially, then every three years thereafter, contingent on satisfactory reviews and payment of appropriate fees.
5. Basis for loss of designation
 - a. Inability to meet and maintain STEMI Receiving Center Designation Criteria
 - b. Failure to provided required data
 - c. Failure to participate in STEMI system QI activities
 - d. Other criteria defined and reviewed by the SRC QI Committee