



# Prehospital Care Policy Change Advisory

**Notice: August 1, 2009**

The EMS Agency is providing notification of two pending EMS policy changes. Policy 408 “STEMI Receiving Center Standards” was developed from existing contract language used to authorized “STEMI” specialty care destinations and operations within Santa Clara County. Policy 610 was opened for stakeholder commentary from April 16<sup>th</sup> to May 22<sup>nd</sup>. The Agency received comments/suggestions from three stakeholders. Those comments are available for review, upon request.

*The policy revisions identified below become effective on September 1, 2009*

<p><b>Policy 408</b> STEMI Receiving Center Standards</p>	<p><b>New Policy</b></p>
<p><b>Policy 610</b> Private EMS Response / Hazardous Materials</p>	<p>Section IV; Added subsection “C” which states:</p> <p><b>“Prior to arrival at the hospital, and in the course of conducting a hospital notification report, the transport crew will provide additional information advising the receiving hospital of the hazmat incident details, including suspected agent, decontamination method used, and then inquire as to the hospital’s instructions for arrival, which will either be:</b></p> <ul style="list-style-type: none"> <li><b>• Standby outside of emergency department to have hospital personnel perform patient decontamination;</b></li> </ul> <p style="text-align: center;"><b>or</b></p> <ul style="list-style-type: none"> <li><b>• Take patient into emergency department.”</b></li> </ul>

A copy of each document has been provided for your review and distribution to all prehospital care providers working for your agency. Additionally, this document and these policies will be posted to our Agency’s website. If you have any questions, please contact John Blain at 408.792.1343 or by email at [john.blain@hhs.sccgov.org](mailto:john.blain@hhs.sccgov.org).



# Emergency Medical Services Agency Prehospital Care Manual **Policy 408**

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## **STEMI RECEIVING CENTER STANDARDS**

**Effective Date**                      September 1, 2009  
**Replaces**                              New

### **Resources**

#### **I. Purpose**

These standards were developed to ensure that patients transported by the 9-1-1 system in Santa Clara County who exhibit an ST segment Elevation Myocardial Infarction (STEMI) pattern on a prehospital obtained 12-Lead electrocardiogram (EKG) are transported to a hospital appropriate to their needs. With the initiation of 12-Lead EKG by paramedics and rapid transport to a STEMI Receiving Center (SRC), patients with STEMI will receive an earlier definitive diagnosis and treatment resulting in improved outcomes.

#### **II. Definitions**

STEMI:

A type of myocardial infarction, acute in nature, that generates an ST segment elevation on the 12-lead EKG.

STEMI Receiving Center (SRC):

A licensed general acute care hospital with a special permit for a cardiac catheterization laboratory and cardiovascular surgery from the California State Department of Health Services, and designated as an SRC by the County of Santa Clara.

Percutaneous Coronary Intervention (PCI):

A broad group of techniques used for the diagnosis and treatment of patients with STEMI.

TIMI Grade III Flow:

Thrombolytics In Myocardial Ischemia (TIMI) Scale which defines flow rate through an opened artery-grade III is unimpeded flow.

### **III. Hospital Licenses Requirements for a SRC**

- A. Currently recognized as a Santa Clara County Receiving Facility
- B. Special permit for a Cardiac Catheterization Laboratory from the California State Department of Health Services (DHS)
- C. Holds a special permit issued by DHS for Cardiovascular Surgery Service or has established current transfer agreements with a hospital or hospitals holding such a special permit.

### **IV. Hospital Capabilities**

- A. An Intra Aortic Balloon Pump shall be available on site 24 hours per day / 7 days per week with a person capable of operating this equipment.
- B. Cardiac Catheterization Laboratory operable 24 hours per day / 7 days per week.

### **V. Personnel**

- A. SRC Medical Director:

The SRC shall designate a medical director for the STEMI program who shall be a physician certified by the American Board of Internal Medicine (ABIM) with current ABIM sub-specialty certification in Cardiovascular Disease, and Interventional Cardiology who will ensure compliance with these SRC standards and perform ongoing Quality Improvement (QI) as part of the hospital QI Program.

The SRC Medical Director must be a credentialed member of the medical staff with PCI privileges.

- B. SRC Program Manager:

The SRC shall designate a program manager for the STEMI program who shall be a registered nurse with experience in Emergency Medicine or Cardiovascular Care, who shall assist the

SRC Medical Director to ensure compliance with these SRC standards and the QI program.

C. Cardiovascular Lab Coordinator:

The SRC shall have a Cardiovascular Lab Coordinator who shall assist the SRC Medical Director and the SRC Program Manager to ensure compliance with these SRC Standards and the QI Program.

D. Physician Consultants:

The SRC shall maintain a daily roster of the following on-call physicians who must be promptly available when a STEMI patient presents to the hospital.

1. Interventional Cardiologists-with privileges for PCI and credentialed by the hospital in accordance with the American College of Cardiology/American Heart Association national standards.

E. The SRC will submit a list of Cardiologists with Active PCI privileges to the EMS Agency annually.

**VI. Clinical Performance Standards**

A. Cardiac Catheterization Laboratory Standards

The SRC Cardiac Catheterization Lab shall demonstrate evidence of performance of 200 PCI procedures annually.

B. Interventional Cardiologist Standards

1. Each interventional cardiologist shall perform a minimum average of 75 or more PCI procedures per year.
2. It is desirable but not required that each interventional cardiologist shall have an average of 11 STEMI cases per year.
3. There shall be a mentorship program available for those individual practitioners who do not meet the performance standard of 75 cases per year.

## **VII. Clinical Process Performance Standard**

- A. Each SRC shall demonstrate Door to Balloon inflation time of 90 minutes or less in 75% of their cases.
- B. The overall goal of the STEMI Care System in Santa Clara County is to achieve first medical contact (Performance of the prehospital 12 Lead EKG) to balloon inflation of <90 minutes in 75% of all cases.

## **VIII. Policies**

Internal policies shall be developed for the following:

- A. Criteria for patients to receive emergent angiography or emergent fibrinolysis based on physician decisions for individual patients.
- B. Goals to Primary PCI (medical contact to balloon inflation time).

## **IX. Data Collection**

- A. The following data shall be collected on an ongoing basis and provided to the Santa Clara County EMS Agency.
  - 1. Number of patients brought in by prehospital personnel who have a STEMI documented on the prehospital 12-Lead EKG.
  - 2. Number of above patients who receive primary PCI.
  - 3. Number of above patients achieving TIMI Grade III flow.
  - 4. Door to balloon inflation time of 9-1-1 transported patients.
  - 5. Total number of STEMI admissions (all patients).
  - 6. Total number of PCI procedures (all patients).
- B. The data shall be submitted to the EMS Agency on a monthly basis using the collection tool provided by the EMS Agency.

## **X. Quality Improvement**

- A. An SRC QI program shall be established to review and collect outcome data for STEMI patients with the following criteria:

1. In-Hospital mortality.
2. Emergency Coronary Artery Bypass rate.
3. Vascular complications (PCI Access site complication, hematoma large enough to require transfusion, or operative intervention required).
4. Cerebrovascular accident rate (peri-procedure).
5. Baseline serum creatinine.

## **XI. Designation Process**

- A. An SRC may be designated following satisfactory review of written documentation and a site survey when deemed necessary, by the Santa Clara County EMS Agency.
- B. An SRC may be re-designated following a satisfactory Santa Clara County EMS Agency review every three (3) years. This review may include a site survey by an independent review team at any time during the three (3) year approval period.
- C. The SRC shall submit a written 180 calendar day notice to the EMS Agency prior to the discontinuation of SRC services.



# County of Santa Clara Emergency Medical Services Agency **Policy 610**

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## **PRIVATE EMS RESPONSE / HAZARDOUS MATERIALS**

**Effective Date**                      September 1, 2009  
**Replaces**                              January 22, 2007

### **Resources**

[Emergency Response Guide \(DOT\)](#)  
[Santa Clara County Multi-Casualty Incident Plan](#)  
[FIRESCOPE](#)

### **I. Purpose**

The purpose of this policy is to provide guidelines for private emergency responders who may respond to HAZMAT incidents. All emergency responders must be alert at HAZMAT incidents because emergency responders, patients, and equipment may become contaminated with Hazardous Materials if proper procedures are not followed.

Governmental agencies charged with the response, mitigation, and management of hazardous materials shall follow appropriate internal policies.

### **II. General Procedures**

#### **A. Initial Actions**

If emergency medical responders arrive on-scene of a HAZMAT incident, implement the following tactical steps:

#### Safety

- Size-up
- Protect yourself, others, and your unit (withdraw if necessary)
- Utilize cautionary approach uphill, upwind, and upstream
- Identify if any rescue is needed
- Account for all personnel

### Isolate the Area and Deny Entry

- Keep everyone at least 100 feet away for small incidents and at least 500 feet away for large incidents
- Position vehicle headed away from incident
- Consider possible crime scene
- Notify/Update additional emergency responders by providing a Report on Conditions.

### B. Secondary Actions

If public safety personnel are have not arrived on the scene, implement the following tactical steps:

#### Command

- Establish Command
- Establish and identify location of Command Post
- Establish Safe Refuge Area
- Attempt to separate symptomatic and asymptomatic patients.
- Safely stage incoming emergency response vehicles

#### Identify Hazardous Materials

- Ask bystanders questions such as what did they see, smell, taste, hear, or feel.
- Ask who, what, where, when, and how related to the incident.
- Use binoculars to maintain a safe distance (if possible)
- Look for labels, placards, and markings, etc.
- Refer to DOT Guidebook

### C. Supportive Actions

1. Private EMS providers shall continue to provide support to on-scene public safety organizations. However, only trained public safety HAZMAT or authorized specialized personnel are allowed to enter the “Hot” Zone (Exclusion Zone) or “Warm” Zone (Contamination-Reduction Zone) of a HAZMAT incident.
2. Work with on-scene Hazardous Materials Technical Specialists to provide receiving hospitals with the following information (this information must come from the on-scene public safety authority and approved by the IC prior to releasing to the hospital):
  - Chemical names
  - Decontamination methods used on-scene
  - DOT reference number
  - Any appropriate treatment information/considerations.

### **III. Decontamination**

- A. Only trained HAZMAT responders are allowed to properly decontaminate potentially contaminated patients and any emergency responders in the “Warm” Zone (Contamination-Reduction Zone).
- B. All potentially contaminated patients must be properly decontaminated by the trained HAZMAT responders before emergency medical responders can administer medical treatment or transport the patients to an emergency medical facility.
- C. Decontamination may include (may or may not involve private ambulance service personnel):
  - Removing clothing and fresh air decontamination (in certain situations oxygen may be administered in the warm zone during fresh air decontamination).
  - Removing clothing and gross water rinse followed by mild soap and another water rinse.
  - Removing clothing and gross water rinse followed by a mild neutralization solution (e.g., sodium bicarbonate, etc.) and another water rinse.
  - Equipment may require different decontamination procedures.
- D. The Incident Commander (IC), or their designee, has the final responsibility and decision-making authority of whether the patients are properly decontaminated prior to loading and transporting the patients to an emergency medical facility (as indicated on the triage tag). IC designees may include the HAZMAT Group Supervisor, Safety Officer, or Decontamination Team Leader.

### **IV. Medical Care**

- A. Once patients have been deemed as being properly decontaminated by the IC (or their designee), they will move the patients to a safe area within the “Cold” Zone for medical treatment by the emergency medical responders.
- B. As an extra precaution, emergency medical responders should avoid direct physical skin contact with the patients.

C. Prior to arrival at the hospital, and in the course of conducting a hospital notification report, the transport crew will provide additional information advising the receiving hospital of the hazmat incident details, including suspected agent, decontamination method used, and then inquire as to the hospital's instructions for arrival, which will either be:

- Standby outside of emergency department to have hospital personnel perform patient decontamination;

or

- Take patient into emergency department.

#### **IV. Accidental Exposure to Emergency Medical Responders**

A. Emergency medical responders who are accidentally contaminated at the HAZMAT incident scene SHALL NOT board the transport rig. They will be thoroughly decontaminated at the scene and be treated as additional patients.

B. Patients and emergency medical responders accidentally contaminated in the transport rigs (e.g. by gastric contents) shall immediately wash off with water and contact the IC for advice on further decontamination.