

Revised 08/2016, 06/19, 01/22, 12/23

STEMI Activation Protocol

Goal: To identify patients with active ST-segment elevation MI as early as possible and to allow pre-hospital activation of the cardiac catheterization lab

Criteria: To qualify for EMS STEMI Alert the patient must meet **ALL** of the following criteria

- Active chest pain and/or dyspnea at the time of EMS primary assessment OR exhibit signs and symptoms suggestive of cardiac ischemia (nausea/vomiting, diaphoresis, dizziness, near syncope, pain suggestive of cardiac ischemia)
- Age of 35 or greater
- 12 lead ECG demonstrating ST segment elevations of at least 1mm in 2 or more contiguous limb leads or 2mm in 2 or more contiguous precordial leads (V1-V6).
 - Monitor quality (i.e. 3 or 4 lead ECGs) exhibiting ST elevations are unreliable and must not be considered diagnostic.
- **NO EVIDENCE** of paced rhythm or Left Bundle Branch Block (QRS duration of more than 3 small blocks or 120ms)

Supporting Criteria:

- Reciprocal changes, defined as ST segment depression in opposing leads
- Machine diagnosis of “ACUTE MI SUSPECTED”

ECG machine diagnosis of “Acute MI” may be considered as supportive of STEMI. However, a computer interpretation of “Acute MI” is NOT required to declare a STEMI alert. Furthermore, even with a computer interpretation of “Acute MI”, the above criteria must be met.

Twiage Notification:

- **Agencies with Twiage capabilities must attach and transmit a clear photograph of the DIAGNOSTIC ECG via the Twiage application along with the STEMI alert notification.**
- **Early Notification is essential to timely cardiac care. Bedside activation is preferred.**
- **Only ECGs meeting STEMI alert criteria should be transmitted.**

Action: For patients meeting the above criteria, the paramedic will advise CMED they have a “STEMI Alert”. The paramedic will request an “early STEMI alert notification from the bedside as soon as possible. Once transporting, the paramedic may either patch into the receiving facility via radio or the Twiage application.

If unsure the criteria has been met contact Medical Control for Guidance.

Receiving hospitals will make every effort to give a room assignment at the time of patch. The receiving facility will activate its STEMI team in accordance with its own internal policies.

STEMI Activation Protocol Cont.

EMS crews should treat the patient based on existing protocols and be ready to present the diagnostic 12 lead ECG to RN or MD immediately on arrival.

This protocol is being enacted 24 hours a day, 7 days a week.

Suggestions:

- Patients exhibiting ST segment elevations in the inferior leads should have a right-sided V4R performed to determine any right ventricular involvement prior to administration of nitroglycerin.
- Patients exhibiting isolated ST depression in leads V1-V4 should have posterior leads V7 - V9 completed for any posterior wall involvement.
- Patients exhibiting isolated ST elevations in lead V6 should have posterior leads V7 - V9 completed to identify any posterior wall involvement