

SECTION: C-04

PROTOCOL TITLE: S.T.E.M.I. Protocol

REVISED: May 01, 2022

**GENERAL COMMENTS:**

The 911 response to STEMI is to reduce time from the door at the Emergency Department (ED) and the Coronary Cath Lab. This protocol directly supplements the *Adult General Cardiac Care/ACS Protocol C-3*

**BLS SPECIFIC CARE:** *See Adult General Cardiac Care/ACS Protocol C-3*

Obtain or assist with acquisition of 12 lead ECG if feasible.

- Obtain the following information for data input to 12 lead monitor
  - Age
  - Birth gender
- Obtain patients PMH including but not limited to:
  - Meds/Allergies
  - POST/DNR/DNI status

**AEMT/O.M. SPECIFIC CARE:** *See Adult General Cardiac Care/ACS Protocol C-3*

**ALS SPECIFIC CARE:** *See Adult General Cardiac Care/ACS Protocol C-3*

- Refer to General Cardiac/ACS protocols C-3
- Confirm STEMI with 12-lead and transmit
  - Contact receiving hospital with “CODE STEMI” alert
  - Unit ID
  - Stable vs Unstable (hemodynamic)
  - Age
  - Gender
  - Name of Cardiologist (if available)
  - STEMI confirmed in leads:\_\_\_\_\_ (Confirm 12-lead transmissions)
  - Other information as appropriate
  - ETA
  - Stay on Hospital frequency
  - POST/DNR/DNI
- Apply defib pads prophylactically.

# Protocol C-04

## S.T.E.M.I. PROTOCOL

### PHYSICIAN PEARLS:

**Transmission of the 12 lead to a STEMI center will precipitate activation of the STEMI program. If a 12 lead is to be transmitted for other purposes (such as medical control consult) , prompt notification to the receiving hospital should be made BEFORE transmission to prevent inappropriate activation.**

In the ACCESS system, rapid and accurate prehospital interpretation of the 12 lead ECG is the cornerstone of STEMI detection. To that end, the expectation is:

- Scene times will be kept to a minimum, ideally less than 10 minutes.
- Initial 12 lead should be done on scene within the above 10 minute parameter.
- Digital transmission with secondary verbal notification and confirmation is the default method of activating the STEMI system.
- Primary verbal notification is permissible when the ability to transmit is delayed, has failed, or is otherwise impractical. Verbal notification will include the same information as required for transmission of the EKG (Name, DOB, Cardiologist, etc.).
- **STEMI patients are inherently unstable.** Therefore, providers should apply defib pads prophylactically. In addition, the patients should remain on the EKG monitor as well to the ER bedside, and resuscitation equipment kept ready *and nearby* when the patient is being transferred from the cot to the ER or cath lab.

The ACCESS system uses the 2013 European Society of Cardiology /ACCF /AHA / World Heart Federation's *Task Force for the Universal Definition of Myocardial Infarction* criteria for STEMI:

*Clinical presentation suggestive of ACS AND:*

- New ST elevation at the J point in at least 2 contiguous leads of:
  - >2mm *in men* leads V2-V3 or
  - > 1.5 mm *in women* in leads V2-V3 and/or
  - > 1 mm in *other contiguous chest leads* or the limb leads
- New or presumed new Left Bundle Branch Block; or
- ST Depression in > 2 precordial leads V1-V4 may indicate transmural posterior injury/infarction
- **Right sided EKG:** ST elevation from the J Point of approximately 1/3 QRS height measured from the J point in V4R alone, or in two contiguous leads.

Citations:

O'Gara PT, Kushner FG, Ascheim DD, Casey DE Jr, Chung MK, de Lemos JA, Ettinger SM, Fang JC, Fesmire FM, Franklin BA, Granger CB, Krumholz HM, Linderbaum JA, Morrow DA, Newby LK, Ornato JP, Ou N, Radford MJ, Tamis-Holland JE, Tommaso CL, Tracy CM, Woo YJ, Zhao DX. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2013;61:xxx-xxx, doi:10.1016/j.jacc.2012.11.019.