

# 12-LEAD ECG PROCEDURE

ALWAYS USE STANDARD PRECAUTIONS

## INDICATION

- Patients with a medical history and/ or presenting complaints consistent with Acute Coronary Syndrome (ACS). Indications for the procedure may include one or more of the following:
  - Chest or upper abdominal pain, described as pressure or tightness
  - Nausea or vomiting
  - Diaphoresis
  - Shortness of breath and/ or difficulty with ventilation
  - Anxiety, feeling of “doom”
  - Syncope or dizziness
  - Other signs or symptoms suggestive of ACS

## PHYSICIAN CONSULT

- If interpretation of ECG is inconclusive and ST segment elevation is present, seek immediate consultation with STEMI Receiving Center (SRC)

## EQUIPMENT

- ECG machine and leads

## PROCEDURE

- Attach ECG limb leads to arms and legs.
- Attach ECG chest leads as follows:
  - V1: right of sternum, 4<sup>th</sup> intercostal space
  - V2: left of sternum, 4<sup>th</sup> intercostal space
  - V3: halfway between V2 and V4
  - V4: left 5<sup>th</sup> intercostal space, mid-clavicular line
  - V5: horizontal to V4, anterior axillary line
  - V6: horizontal to V5, mid- axillary line
  - V4R- V6R: right 5<sup>th</sup> intercostal space, mid-clavicular line to mid axillary line (for suspected right ventricular infarction (RVI) and/ or physician request). Lead V4R must be obtained whenever ST segment elevation is noted in leads II, III, and AVF

## SPECIAL CONSIDERATIONS

- If the 12-lead ECG demonstrates ST elevation and an acute ST elevation Myocardial Infarct is suspected refer to STEMI Policy C 9
- Infarctions may be present with a normal 12-lead ECG. Consider taking a 15-lead ECG.

## RELATED POLICIES/ PROCEDURES

- Chest Pain/ Acute Coronary Syndrome C 8
- STEMI Policy C 9