

12-LEAD ECG PROCEDURE

ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION

- Patients with a medical history and/ or presenting complaints consistent with Acute Coronary Syndrome (ACS); 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)

CONTRAINDICATIONS

- Life threatening conditions including ventricular tachycardia, ventricular fibrillation, or 3rd degree AV block
- Uncooperative patients
- Any situation in which a delay to obtain ECG would compromise care of the patient

EQUIPMENT

- ECG machine and leads if available

PROCEDURE

- Attach ECG limb leads to arms and legs
- Attach ECG chest leads as follows:
 - V1: right of sternum, 4th intercostal space
 - V2: left of sternum, 4th intercostal space
 - V3: halfway between V2 and V4
 - V4: left 5th intercostal space, mid-clavicular line
 - V5: horizontal to V4, anterior axillary line
 - V6: horizontal to V5, mid- axillary line
 - V4R- V6R: right 5th 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