



**REGION 11
CHICAGO EMS SYSTEM
PROCEDURE**

Title: 12 Lead Electrocardiogram (ECG)
Section: Cardiac Management
Approved: EMS Medical Directors Consortium
EMS Level: ALS

12 LEAD ELECTROCARDIOGRAM (ECG)

INDICATIONS

- All patients with suspected **Acute Coronary Syndrome (ACS)** should have an ECG performed in the prehospital setting
- At a minimum, patients with any of the following complaints, signs or symptoms should have an ECG performed:
 - Chest pain
 - Symptomatic heart failure
 - Pulmonary edema
 - Shortness of breath
 - Syncope or presyncope
 - Return of spontaneous circulation after cardiac arrest
 - Tachycardia (>120 bpm) or bradycardia (<50 bpm)
 - Any of the following atypical symptoms of ACS in patients over age 40 (atypical symptoms of ACS are especially common in women, diabetics and the elderly):
 - Generalized weakness
 - Epigastric pain/nausea/vomiting
 - Diaphoresis
 - Shoulder/arm/jaw pain
 - Atraumatic hypotension

EQUIPMENT

- Manual cardiac monitor/defibrillator with 12 lead ECG capability

PROCEDURE

1. See Initiation of Patient Care policy
2. Perform patient assessment and identify patients requiring an ECG based on above criteria
3. Perform 12 lead ECG
4. Transmit to receiving facility
5. Contact online medical control and transport as appropriate
6. Attach ECG to the electronic medical record
7. Repeat ECG after:



**REGION 11
CHICAGO EMS SYSTEM
PROCEDURE**

Title: 12 Lead Electrocardiogram (ECG)
Section: Cardiac Management
Approved: EMS Medical Directors Consortium
EMS Level: ALS

- Any change in patient status
 - Any change in cardiac rhythm
 - Administration of any electrical or medical therapies
8. For patients with very high suspicion for Acute Coronary Syndrome and an initial ECG that does not show STEMI, leave ECG cables in place for continuous ST segment monitoring/repeat ECG.