

Southern Illinois Regional EMS System

II-32 12-LEAD ELECTROCARDIOGRAM

ALS / ILS

Indications

- Chest pain / epigastric pain
- Other associated coronary pain complaints
 - Jaw
 - Arm
 - Back
- Shortness of breath (suspected cardiac related)
- Syncope or near syncope
- Cardiogenic shock
- Heart Failure
- Pulmonary edema
- Any non-traumatic complaint above the waist

Procedure

- If patient is unstable, emergency treatment is the priority
 - 12 lead should be obtained within 10 minutes of patient contact
 - Except when patient stabilization takes priority
- Prepare cardiac monitor and cables
- Expose the chest and prep as necessary
 - Consider shaving for electrode placement
 - Respect the modesty of patient during procedure
- Apply chest leads and limb leads appropriately
 - RA- Right arm
 - LA- Left arm
 - RL- Right leg
 - LL- Left leg
 - V1- 4th intercostal space at right sternal border
 - V2- 4th intercostal space at left sternal border
 - V3- Directly between V2 and V4
 - V4- 5th intercostals space at midclavicular line
 - V5- Level with V4 at the left anterior axillary line
 - V6- Level with V5 at left midaxillary line
- Instruct patient to remain still
- Acquire the 12 lead ECG
- Report all findings to Medical Control
 - Including the presence or absence of ST segment abnormalities or LBBB
- Document the procedure, results, and time acquired on the PCR
- Have the receiving ED physician review and sign the 12 lead ECG

Education

- Attend one system approved 12 lead ECG course yearly
- Assessment of ECG knowledge base may be performed by the system at any time