

## 12 Lead ECG



## **Clinical Indications:**

- Suspected cardiac patient
- Patient with a cardiac history
- Suspected tricyclic overdose
- Electrical injuries
- Syncope/near syncope
- Respiratory difficulty
- Elderly patients where complaint can not be attributed elsewhere

## Procedure:

- 1. Assess patient and monitor cardiac status.
- 2. Administer oxygen as patient condition warrants.
- 3. If patient is unstable, definitive treatment is the priority. If patient is stable or stabilized after treatment, perform a 12 Lead ECG.
- 4. Prepare ECG monitor and connect patient cable with electrodes.
- 5. Enter the required patient information (patient name, age, etc.) into the 12 lead ECG device.
- 6. Expose chest and prep as necessary. Modesty of the patient should be respected.
- 7. Position patient as flat as can be tolerated.
- 8. Apply chest leads and extremity leads using the following landmarks:
- 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 intercostal space at midclavicular line
- V5 -Level with V4 at left anterior axillary line
- V6 -Level with V5 at left midaxillary line
- 9. Instruct patient to remain still.
- 10. Press the appropriate button to acquire the 12 Lead ECG.
- 11. If the monitor detects signal noise (such as patient motion or a disconnected electrode), the lead acquisition will be interrupted until the noise is removed.
- 12. Contact the receiving hospital to notify them that a 12 Lead ECG has been sent.
- 13. Monitor the patient while continuing with the treatment protocol.
- 14. Upload data to the PCR as per guidelines.
- 15. Document the procedure, time, and results on the patient care report (PCR).
- 16. Consider 15 lead ECG (V4R, V8, & V9) on any patient with Inferior Wall involvement.

## **Certification Requirements:**

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

