



# Carroll County Department of Fire & EMS

<b>Standard Operating Procedure: 3.40</b>	<b>Effective Date: July 10, 2024</b>
<b>Subject: BLS 12-Lead Acquisition Program</b>	<b>Section: Emergency Medical Services</b>
<b>Authorized: Eric Zaney, Assistant Chief of EMS</b>	<b>Revision Date: N/A</b>

## I. PURPOSE

The Carroll County Department of Fire and EMS (CCDFEMS) has chosen to participate in the Maryland Institute for Emergency Medical Services Systems (MIEMSS) optional BLS 12-Lead Acquisition program. This optional program allows CCDFEMS to train BLS clinicians already certified in Maryland as EMT-Basic in the skills necessary to acquire and transmit pre-hospital 12-lead ECG's.

## II. APPLICABILITY

This policy applies to Carroll County Department of Fire and EMS career and volunteer personnel.

## III. DEFINITIONS

MIEMSS - Maryland Institute of Emergency Medical Services Systems  
EMT-B - Emergency Medical Technician Basic

## IV. PROCEDURES

### A. Requirements

1. Hold an active, unrestricted certification as an Emergency Medical Technician Basic in the state of Maryland as outlined in COMAR 30.02.02 Licensure and Certification.
2. Maintain active EMS affiliation with CCDFEMS.
3. Have a minimum 1-year of experience providing direct patient care.
4. Complete the CCDFEMS approved BLS 12-Lead Acquisition training program which meets or exceeds the following requirements:
  - i. BLS clinicians shall complete a course in the BLS acquisition and transmission of 12-Lead course developed by CCDFEMS.

- ii. BLS clinicians shall complete an orientation for the acquisition and transmission of 12-Lead ECG's specific to the device used by CCDFEMS.
  - iii. BLS clinicians will demonstrate competency in the acquisition and transmission of 12-Lead ECG's specific to the device used by CCDFEMS.
5. Upon completion of the BLS 12-Lead acquisition training program CCDFEMS will maintain a master list of all BLS clinicians who are permitted to perform BLS 12-Leads.

B. Maryland state protocol must be followed. Below is additional indications.

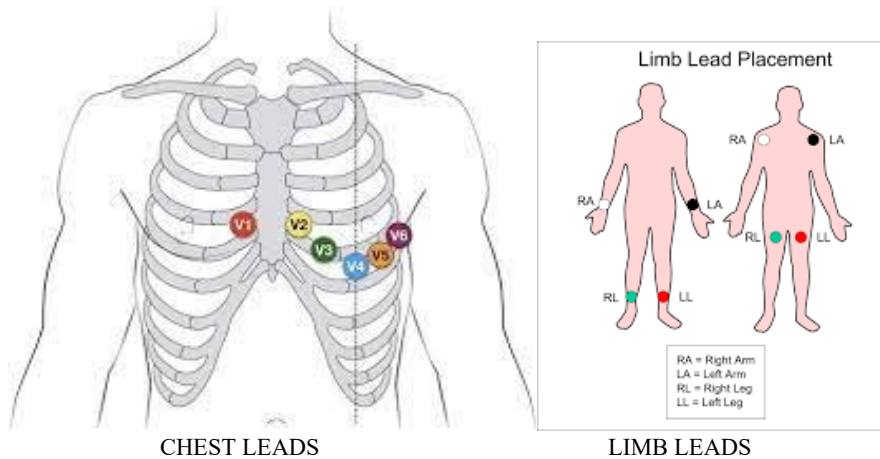
Indications for the implementation of a BLS 12-Lead:

1. Chest pain or discomfort that may radiate to the arm, shoulders, jaw or back generally described as a crushing pain or toothache. May be accompanied by shortness of breath, sweating, nausea, and vomiting.
2. Discomfort in other areas of the upper body – Symptoms can include discomfort in one or both arms or in the back, neck, jaw, or stomach. following:
3. Shortness of Breath – Symptom often accompanied by chest discomfort however, it can also occur prior to chest discomfort.
4. Other Signs – ay include breaking out in a cold sweat, nausea, light headedness, or a sense of impending doom. Syncope episodes.
5. Post Cardiac Arrest with ROSC.
6. Medical History and Contributing Factors:
  - i. Previous heart attack or procedure to open coronary arteries
  - ii. Family history of heart disease
  - iii. Diabetes Mellitis
  - iv. High Blood Pressure
  - v. High Blood Cholesterol
  - vi. Obesity
  - vii. Physical inactivity
  - viii. Cigarette smoking

C. Obtaining a BLS 12-Lead:

1. Initiate General Patient Care per the Maryland Medical Protocol
2. Position Patient in Recumbent position.
  - i. Maintain patient dignity to start – Unrestricted access to the skin of the chest area, arms and lower legs is required to permit the correct placement of electrodes. Once electrodes are positioned and connecting leads appropriately attached, the patient should be covered with a sheet to preserve dignity during the procedure.
  - ii. If unable to place the patient in a recumbent position, this information should be included in your hospital consult and note it in the written narrative of your patient care report.
3. Place limb and chest leads.
  - i. When placing electrodes on female patients, always place leads V3-V6

under the breast rather than on the breast.



4. Turn on the Monitor
5. Set Patient age and sex identifiers – include the patient last name
6. Acquire the 12-lead
  - i. Acquisition of the 12-lead ECG should take no more than 5- minutes.
7. Consult with the anticipated receiving facility
8. Transmit the 12-lead ECG to the anticipated receiving facility
9. Continue general patient care activities
10. All BLS 12-leads shall be transmitted to and included in the patient care report.

Note: Acquisition of a BLS 12-lead ECG should not take precedence over required life saving measures (e.g., CPR, assisting ventilations, clearing of airway, checking blood glucose, extrication, etc.)

#### D. Quality Assurance

1. All BLS acquired 12-Leads shall be reviewed by the Carroll County QA Committee.

#### E. Recertification

1. Clinicians must maintain an active and unrestricted Maryland EMT-B certification.
2. Clinicians must complete all Maryland recertification requirements for Emergency Medical Technician – Basic.
3. Clinicians must successfully complete an approved annual CCDFEMS BLS 12-Lead recertification module.

## IV. REVISION

This Standard Operating Procedure rescinds all directives regarding BLS 12-Lead Acquisition Program or similar content previously issued for personnel of the Carroll County Department of Fire & EMS.