



AEMT 12-Lead ECG Acquisition & Transmission

KBEMS E-29

Kentucky Ambulance Service Specific Supplemental Curriculum

AEMT using a noninvasive monitoring device- Application of 12 lead electrocardiogram electrodes and monitor.

Cognitive Objectives

1	Describe the incidence, morbidity, and mortality of cardiovascular disease.
2	Discuss prevention strategies that may reduce the morbidity and mortality of cardiovascular disease.
3	Identify the risk factors most predisposing to coronary artery disease.
4	Describe the anatomy of the heart: a) Including the position in the thoracic cavity, b) Layers of the heart, c) Chambers of the heart, d) Location and function of cardiac valves.
5	Identify the structure and course of all divisions and subdivisions of the cardiac conduction system.
6	Explain the purpose of 12-Lead EKG monitoring and its limitations.
7	Define the following clinical terms: a) Ischemia b) Injury c) Infarct
8	Identify patient situations where 12-Lead EKG interpretation is indicated.
9	List and describe the assessment parameters to be evaluated in a patient with a suspected myocardial infarction.
10	Identify the anticipated clinical presentation of a patient with a suspected acute myocardial infarction.
11	Describe the time window as it pertains to reperfusion of a myocardial injury or infarction.
12	Identify those situations that adversely affect the proper acquisition of a 12-lead EKG
13	List the methods to deliver the 12-lead EKG to the receiving facility.

Psychomotor Objectives

1	Demonstrate proficiency with the 12 lead monitor being used by the TEI.
2	Demonstrate proficiency in the correct and accurate placement of leads in preparation to acquire a 12 lead.
3	Demonstrate proficiency in the transmission of the 12 lead ECG.
4	Demonstrate proficiency in the trouble shooting of the following problems: a) Failure to acquire b) Failure to transmit c) Interference

Affective Objectives

	NONE for this Module.
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References

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-American Heart Association: BLS for Healthcare Providers, 2006 American Heart Association.

-Braunwald, et al: Heart Disease, A Textbook of Cardiovascular Medicine. 5th edition. W. B. Saunders Company Philadelphia, PA.

-Berne, et al: Physiology. 5th edition 2004. C.V. Mosby. Baltimore, MD.

-Textbook of Advanced Cardiac Life Support. 2010, American Heart Association.

-Cummins, Richard O: Advanced Cardiac Life Support: Principles and Practice. 2009, American Heart Association.

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