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### **UNIT TERMINAL OBJECTIVE**

- 5-2 At the completion of this unit, the EMT-Intermediate student will be able to utilize the assessment findings to formulate a field impression, implement and evaluate the management plan for the patient experiencing a cardiac emergency.

### **COGNITIVE OBJECTIVES**

At the completion to this unit, the EMT-Intermediate student will be able to:

- 5-2.1 Describe the incidence, morbidity, and mortality of cardiovascular disease. (C-1)
- 5-2.2 Review cardiovascular anatomy and physiology. (C-1)
- 5-2.3 Discuss prevention strategies that may reduce morbidity and mortality of cardiovascular disease. (C-1)
- 5-2.4 Identify the risk factors most predisposing to coronary artery disease. (C-1)
- 5-2.5 Identify and describe the components of assessment as it relates to the patient with cardiovascular compromise. (C-1)
- 5-2.6 Describe how ECG wave forms are produced. (C-1)
- 5-2.7 Correlate the electrophysiological and hemodynamic events occurring throughout the entire cardiac cycle with the various ECG wave forms, segments and intervals. (C-2)
- 5-2.8 Identify how heart rates may be determined from ECG recordings. (C-1)
- 5-2.9 List the limitations to the ECG. (C-1)
- 5-2.10 Describe a systematic approach to the analysis and interpretation of cardiac arrhythmias. (C-2)
- 5-2.11 Explain how to confirm asystole using more than one lead. (C-1)
- 5-2.12 List the clinical indications for defibrillation. (C-1)
- 5-2.13 Identify the specific mechanical, pharmacological and electrical therapeutic interventions for patients with arrhythmias causing compromise. (C-1)
- 5-2.14 List the clinical indications for an implanted defibrillation device. (C-1)
- 5-2.15 Define angina pectoris and myocardial infarction (MI). (C-1)
- 5-2.16 List other clinical conditions that may mimic signs and symptoms of angina pectoris and myocardial infarction. (C-1)
- 5-2.17 List the mechanisms by which an MI may be produced by traumatic and non-traumatic events. (C-2)
- 5-2.18 List and describe the assessment parameters to be evaluated in a patient with chest pain. (C-1)
- 5-2.19 Identify what is meant by the OPQRST of chest pain assessment. (C-1)
- 5-2.20 List and describe the initial assessment parameters to be evaluated in a patient with chest pain that may be myocardial in origin. (C-1)
- 5-2.21 Identify the anticipated clinical presentation of a patient with chest pain that may be angina pectoris or myocardial infarction. (C-3)
- 5-2.22 Describe the pharmacological agents available to the EMT-Intermediate for use in the management of arrhythmias and cardiovascular emergencies. (C-2)
- 5-2.23 Develop, execute, and evaluate a treatment plan based on the field impression for the patient with chest pain that may be indicative of angina or myocardial infarction. (C-3)
- 5-2.24 Define the terms “congestive heart failure” and “pulmonary edema.” (C-1)

- 5-2.25 Define the cardiac and non-cardiac causes and terminology associated with pulmonary edema and pulmonary edema. (C-2)
- 5-2.26 Describe the early and late signs and symptoms of pulmonary edema. (C-1)
- 5-2.27 Explain the clinical significance of paroxysmal nocturnal dyspnea. (C-1)
- 5-2.28 List and describe the pharmacological agents available to the EMT-Intermediate for use in the management of a patient with cardiac compromise. (C-1)
- 5-2.29 Define the term "hypertensive emergency." (C-1)
- 5-2.30 Describe the clinical features of the patient in a hypertensive emergency. (C-3)
- 5-2.31 List the interventions prescribed for the patient with a hypertensive emergency. (C-1)
- 5-2.32 Define the term "cardiogenic shock." (C-1)
- 5-2.33 Identify the clinical criteria for cardiogenic shock. (C-1)
- 5-2.34 Define the term "cardiac arrest." (C-1)
- 5-2.35 Define the term "resuscitation." (C-1)
- 5-2.36 Identify local protocol dictating circumstances and situations where resuscitation efforts would not be initiated. (C-1)
- 5-2.37 Identify local protocol dictating circumstances and situations where resuscitation efforts would be discontinued. (C-1)
- 5-2.38 Identify the critical actions necessary in caring for the patient in cardiac arrest. (C-2)
- 5-2.39 Synthesize patient history, assessment findings to form a field impression for the patient with chest pain and cardiac arrhythmias that may be indicative of a cardiac emergency. (C-3)

### **AFFECTIVE OBJECTIVES**

At the completion of this unit the EMT-Intermediate will be able to:

- 5-2.40 Value the sense of urgency for initial assessment and intervention as it contributes to the treatment plan for the patient experiencing a cardiac emergency. (A-3)
- 5-2.41 Defend patient situations where ECG rhythm analysis is indicated. (A-3)
- 5-2.42 Value and defend the sense of urgency necessary to protect the window of opportunity for reperfusion in the patient with chest pain and arrhythmias that may be indicative of angina or myocardial infarction. (A-3)
- 5-2.43 Value and defend the urgency in rapid determination and rapid intervention of patients in cardiac arrest. (A-3)

### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit the EMT-Intermediate will be able to:

- 5-2.44 Demonstrate a working knowledge of various ECG lead systems. (P-3)
- 5-2.45 Set up and apply a transcutaneous pacing system. (P-3)
- 5-2.46 Given the model of a patient with signs and symptoms of pulmonary edema, position the patient to afford comfort and relief. (P-2)