

BLS for the Healthcare Provider (Continuing Education)

3.0 Credit Hours

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I. Course Description

This course will train students to respond to, assess and manage cardiac and respiratory emergencies using basic life support skills and automatic external defibrillation based on American Heart Association Guidelines 2005 standards.

II. Course Prerequisite

Students participating in the refresher course must have a current American Heart Association Healthcare Provider Basic Life Support card. A 90-day grace period will be granted if the card is expired.

III. Course Objectives

The student will be able to:

- A. Perform adult and pediatric (infant and child) one and two-rescuer CPR
- B. Perform adult and pediatric (infant and child) foreign body airway obstruction (choking) techniques
- C. Integrate the automatic external defibrillator into resuscitations

IV. Materials (Please have these items before the day of class)

- A. Required materials for lecture
 1. Text: 2005 American Heart Association Basic Life Support for Healthcare Providers (available in bookstore)
- B. Required materials for practice and skills testing:
 1. Barrier device (CPR micro mask) for performing artificial ventilation (available in bookstore)

V. Assignments

- A. Read text before coming to class
- B. Complete the pretest found in this packet
- C. Attend presentation and skills practice

VI. Evaluation

- A. Practical examination: Instructors will assist students in skill practice. Students are welcome to take as much time as they like to practice before demonstrating skill competency. Skills will be evaluated on a pass/needs remediation basis. If skills are not successfully completed, students will be remediated by the instructor(s). Students may practice and be reevaluated. Students are required to pass all skills to successfully complete the course.
- B. Written examination: Consists of 20 multiple choice questions. Students must receive a score of 80% or higher to successfully complete the course. If unsuccessfully completed, students will be remediated by the instructor(s). Students may be asked to complete a second examination or to correct the initial examination, at the instructor's discretion.

VII. Certification

- A. American Heart Association Healthcare Provider Basic Life Support (replacement cards will be issued by request for a fee of \$25/card).

VIII. Additional Information

- A. Students are reminded to dress comfortably, as labs will involve physical activity and movement on the floor. The wearing of skirts is discouraged.
- B. If students have physical challenges that will prevent them from participating in the manner that the course has been designed, please inform the instructor so that modification can be made.
- C. The written exam will be administered in the gym following the demonstration of practical skills proficiencies.

Basic Life Support for the Healthcare Provider

INFORMATION RESOURCES:

2005 Basic Life Support for the Healthcare Provider: American Heart Association

TERMINAL OBJECTIVE

Given a simulated situation, perform artificial ventilation, cardiopulmonary resuscitation (CPR) and obstructed airway procedures on infants, children, and adults; implement the use of barrier devices and Automatic External Defibrillators (AED's) as appropriate.

MICRO-PERFORMANCE OBJECTIVES

A. **Cognitive Objectives for airway and breathing management**

By the end of this lesson, the student should be able to:

- Define clinical death and biological death, stating the approximate time in which brain cells will begin to die if they do not receive oxygen.
- Describe the steps in the head-tilt chin-lift.
- Relate mechanism of injury to opening the airway.
- Describe the steps in the jaw thrust maneuver.
- Describe how to ventilate a patient with a resuscitation mask or barrier device.
- Describe how ventilating an infant or child is different from an adult.
- List the steps in the mouth-to-mouth ventilation technique and explain how that technique differs depending on the size of the patient.
- Give the rate for delivering ventilations to adult, child, and infant patients.
- State what a First Responder may do to prevent air from entering the patient's stomach (gastric distention) during artificial ventilation.
- List three factors that may cause partial or complete airway obstruction.
- List three signs of partial airway obstruction.
- State when you should treat a partial airway obstruction as if it were a complete airway obstruction.
- Describe three things you will commonly notice about a conscious patient with a complete airway obstruction.
- Describe how to clear a foreign body airway obstruction in a responsive adult.
- Describe how to clear a foreign body airway obstruction in a responsive child with complete or partial airway obstruction and poor air exchange.
- Describe how to clear a foreign body airway obstruction in a responsive infant with complete or partial airway obstruction and poor air exchange.
- Describe how to clear a foreign body airway obstruction in an unresponsive adult.
- Describe how to clear a foreign body airway obstruction in an unresponsive child.
- Describe how to clear a foreign body airway obstruction in an unresponsive infant.

B. **Cognitive Objectives for CPR**

By the end of this lesson, the student should be able to:

- Describe the relationship of the heart, lung, and brain activity.
- List the signs of cardiac arrest.
- List the reasons for the heart to stop beating.
- Define the components of cardiopulmonary resuscitation.
- Explain what is happening physiologically in the patient's body during CPR.
- Explain the statistical likelihood of a "successful resuscitation" in a cardiac arrest patient using only CPR.
- Describe each link in the chain of survival and how it relates to the EMS system.
- Define the "ABC's" of resuscitation.
- Locate the CPR compression site on an adult, child, and infant.
- List the rates and depths of compression and ventilations used during CPR on adults, children, and infants.
- List the steps of one-rescuer adult CPR.
- Describe the technique of external cardiac compressions on an adult patient.
- Describe the technique of external cardiac compressions on a child.

- Describe the technique of external cardiac compressions on an infant.
- Explain when the rescuer is able to stop CPR.
- List the steps of two-rescuer adult CPR.
- List the steps of child CPR.
- List the steps of infant CPR.
- Explain how you can determine that CPR is being performed correctly.
- Describe the complications that can occur during CPR.
- State the advantages of two-rescuer CPR over one-rescuer CPR.

C. Cognitive Objectives for Automatic External Defibrillation

By the end of this lesson, the student should be able to:

- Define defibrillation.
- Discuss the importance of early defibrillation in a cardiac arrest patient's chain of survival.
- Describe the different types of AED's.
- List the indication for defibrillating a patient.
- List the contraindications for defibrillating a patient.
- Discuss when it is appropriate to interrupt CPR when using the AED.
- List the operational steps to using AED.
- Describe key steps necessary to ensure that the AED is used safely.
- Describe the correct procedure for reassessing the cardiac arrest patient following defibrillation.

D. Affective Objectives for Basic Life Support

By the end of this lesson, the student should be able to:

- Respond to the feelings that the family or friends of a patient may be having during a cardiac emergency or obstructed airway event.
- Demonstrate a caring attitude towards patients experiencing a cardiac emergency or obstructed airway event that are in need of emergency medical services.
- Place the interests of the patient experiencing a cardiac emergency or obstructed airway event as the foremost consideration when making any and all patient care decisions.
- Communicate with empathy with family members and friends of the patient experiencing a cardiac emergency or obstructed airway event.

E. Psychomotor Objective of Airway and Breathing management

By the end of this lesson, the student should be able to demonstrate the following:

- Determine if a patient has an airway obstruction and if there is adequate breathing.
- Recognize upper airway obstruction on infants, children, and adults, and apply the proper techniques in the correct sequence necessary to correct such an airway obstruction.
- Correctly treat an airway obstruction on the patient who is standing, sitting or lying.
- Properly employ the head-tilt, chin-lift maneuver or the jaw-thrust technique to open the airway.
- Determine respiratory arrest.
- Correctly perform mouth-to-mouth and mouth-to-mask ventilations.
- Correctly perform artificial ventilation techniques on infants, children, and adults.
- Provide airway care and resuscitation for patients with possible neck and spinal injuries.

F. Psychomotor Objectives for CPR

By the end of this lesson, the student should be able to demonstrate the following:

- Correctly evaluate a patient to detect cardiac arrest.
- Perform one-rescuer CPR on adult patients, children, and infants.
- Perform two-rescuer CPR, including breaking in on one-rescuer CPR in progress and the proper change of positions.

G. Psychomotor Objectives for Automatic External Defibrillation

By the end of this lesson, the student should be able to demonstrate the following:

- Demonstrate the application and operation of the automatic external defibrillator.
- Demonstrate the maintenance of an AED.

- Demonstrate assessment and documentation of patient response to the automatic external defibrillator.
- Demonstrate the skills necessary to complete an Operator's Shift Checklist for an AED.