

Resources to Complete Basic First-Aid Certification

Unit: General Skills

Problem Area: Certifications

Lesson: Resources to Complete Basic First-Aid Certification

- **Student Learning Objectives.** Instruction in this lesson should result in students achieving the following objectives:

- 1 Describe preparations and precautions associated with first aid.**
- 2 List the required supplies for first-aid kits.**
- 3 Explain basic life-saving techniques.**

- **Resources.** The following resources may be useful in teaching this lesson:

Aronson, Susan, ed. *Pediatric First Aid for Caregivers and Teachers*. American Academy of Pediatrics, 2005.

“Best Practices Guide: Fundamentals of a Workplace First-Aid Program,” *Occupational Safety and Health Administration*. Accessed Dec. 22, 2008. <<http://www.osha.gov/Publications/OSHA3317first-aid.pdf>>.

“Emergencies and First Aid,” *Harvard Medical School Family Health Guide*. Accessed Dec. 15, 2008. <<http://www.health.harvard.edu/fhg/firstaid/firstaid.shtml>>.



“Emergency First-Aid Chart,” *Iowa Methodist Medical Center and Iowa Lutheran Hospital*. Accessed Dec. 28, 2008.

<http://www.ihsdesmoines.org/documents/Documents/emergency_aid_guide.pdf>.

“First Aid,” *Mayo Clinic*. Accessed Dec. 1, 2008.

<<http://www.mayoclinic.com/health/FirstAidIndex/FirstAidIndex>>.

Salamon, Maureen. “First Aid for Heart Attack Victims: From 911 to CPR and More,” *About.com*. Accessed Dec. 30, 2008.

<<http://heartdisease.about.com/lw/Health-Medicine/Conditions-and-diseases/First-Aid-for-Heart-Attack-Victims-.16d.htm>>.

Thygerson, Alton. *First Aid, CPR, and AED Standard*, 5th ed. Jones & Bartlett, 2006.

■ **Equipment, Tools, Supplies, and Facilities.**

- ✓ Bedsheet
- ✓ Classroom resource and reference materials
- ✓ Computers with printers and Internet access
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)

■ **Key Terms.** The following terms are presented in this lesson (shown in bold italics):

- ▶ chain of survival
- ▶ first aid
- ▶ first-aid kits
- ▶ first responder
- ▶ Good Samaritan Law
- ▶ medical emergencies
- ▶ medical identification tags
- ▶ responsive
- ▶ unresponsive

■ **Interest Approach.** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situation. A possible approach is included here.

Show a video clip from the Internet of an accident scene with first responders. Ask the students what they noticed the first responders doing upon arrival. Then ask the students if any of them have been in or witnessed accidents and if they remember what the first responders did to assist the victims.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

Objective 1: Describe preparations and precautions associated with first aid.

Anticipated Problem: What preparations and precautions are associated with emergency first aid?

- I. First-aid preparations and precautions
 - A. Goals of first aid
 1. Prevent further harm
 2. Preserve life
 3. Promote recovery
 - B. Preparation
 1. It is important to have a list of emergency phone numbers for emergency responders.
 - a. Local police
 - b. Local fire department
 - c. Primary care physicians and specialists (for each family member)
 - d. Ambulance
 - e. Poison control
 - f. Gas and electric companies
 - g. Pharmacies
 - h. Family and friends
 - i. Home health nurses
 - j. Schools
 2. It is necessary to have a health history of each family member.
 - a. Medications
 - b. Medical conditions
 - c. Allergies
 - d. **Medical identification tags** (e.g., bracelets or necklaces) alert emergency responders to pertinent information about a family member's medical condition, disease, or allergy. Creating a health history listing is a proactive stance in the event the identification tag is ignored.
 - C. Accident scene first responders must take certain precautions.
 1. The accident scene must be evaluated.
 - a. This action helps to prevent injury to the first responder and additional injuries to the victims.

- b. Barrier devices should be used when feasible.
 - (1) Gloves
 - (2) Airway barriers (to avoid contamination and airborne pathogens)
- c. Obvious dangers should be avoided.
 - (1) Fire
 - (2) Downed electrical lines
 - (3) Fallen debris
2. A first responder must be confident in his or her actions and choices. Panic can affect others and the first responder's actions, directions, and ability to keep the situation under control.
3. It is essential to identify victims in immediate danger.
 - a. Victims are in immediate danger if they need to be moved to avoid further injuries (e.g., fire or flood).
 - b. Victims are in immediate danger if they need to be immobilized due to spinal injuries.
 - (1) No lower body movement is observed.
 - (2) No extremity movement is observed.
 - (3) Bruising of spinal vertebra is observed.
 - (4) The arms, legs, head, or neck are disfigured.
4. Responsive victims
 - a. Any bleeding should be treated first.
 - b. Shock symptoms (if present) should be treated next.
5. Unresponsive victims
 - a. It is essential to call 911 immediately when a victim has life-threatening injuries or is unresponsive.
 - b. Bystanders can be directed to call 911 and to provide the victim's location, allowing the first responder to focus on assessment and treatment.
 - c. The first responder should assess breathing, circulation, and the airway. Then he or she should treat the victim accordingly.

Use VM–A to illustrate medical identification bracelet tags (e.g., seafood, nut, or fruit allergies). Use VM–B to illustrate and reinforce the way in which medical personnel transport victims with suspected spinal injuries. Provide several student volunteers with a scenario to role play. Then discuss what was correct or incorrect in terms of treatment.

Objective 2: List the required supplies for first-aid kits.

Anticipated Problem: What supplies should be included in a first-aid kit?

- II. **First aid** is the earliest care victims receive for the treatment of injuries, illness, and ailments.
- A. A well-stocked first-aid kit is essential to a responder. The kit needs to be prepared for a multitude of accident situations. Essential supplies include:
1. Absorbent cloth
 2. Antihistamine
 3. Antimicrobial solution and ointment
 4. Antiseptic solution or iodine
 5. Aspirin
 6. Bacitracin
 7. Bandages (general and butterfly)
 8. Bandages (triangular)
 9. Calamine lotion
 10. Cold pack
 11. Disinfectant
 12. Elastic wrap
 13. Eye drops
 14. Eyedropper
 15. Flashlight
 16. Gauze pads (large)
 17. Gloves
 18. Hot pack
 19. Matches
 20. Mouthpiece
 21. Safety pins
 22. Scissors
 23. Sewing needle
 24. Sugar packets
 25. Swabs, cotton tipped
 26. Splints
 27. Tape, adhesive
 28. Tweezers
- B. Specialized or advanced first-aid kits are carried by trained professionals and may include:
1. Automatic external defibrillators (AEDs)
 2. Intravenous fluid

3. Head and neck back-boards
 4. Portable oxygen
- C. **First-aid kits** are bags or boxes containing medical devices (e.g., medications, bandages, and other medical-related equipment) used to treat common ailments. The kits come in various sizes for different tasks.
1. Pocket kits contain a limited number of items, such as:
 - a. Band-Aids
 - b. Neosporin
 - c. Tape
 2. Medium kits are similar to back, shoulder, or hip packs and contain more items, such as:
 - a. Items from the pocket-sized kit
 - b. Splints
 - c. Ointments and creams
 - d. Elastic bandages
 3. Large kits are similar to tackle boxes or duffle bags, are more specialized, are usually carried by a medical professional, and would include supplies such as:
 - a. Items from a responder kit
 - b. AEDs
 - c. Oxygen tanks
 - d. Fluid bags

Use VM-C to help students visualize the contents of a first-aid kit. Use VM-D to illustrate a medical professional's first-aid bags. From memory, have the students create their own lists of supplies to place in a first-aid kit in their cars. Assign LS-A.

Objective 3: Explain basic life-saving techniques.

Anticipated Problem: What basic life-saving techniques would a responder perform?

- III. Basic life-saving techniques and first aid can prevent life-threatening injuries and hospital stays. However, the most important life-saving tool used by any first responder is common sense.
 - A. Bystanders can help by:
 1. Evaluating an accident scene and thus helping to save lives
 2. Turning off the engine of an automobile following an accident to prevent explosions or fires
 3. Removing victims from dangerous areas
 4. Calling 911 to get help to the scene as soon as possible

- B. Responsive or unresponsive
1. **Responsive** victims are people who are injured and conscious; they respond to questions. These victims are usually able to move and may suffer from:
 - a. Active choking
 - b. Bleeding
 - c. Non-life-threatening wounds
 - d. Shock
 2. **Unresponsive** victims are injured and unconscious; they do not respond to questions and may have life-threatening injuries that are not visible and need to be evaluated, including:
 - a. Head injuries
 - b. Cardiac arrest
 - c. Choking
- C. A **first responder** is a medically trained person who acts within his or her own scope of practice. For instance, when CPR-certified people assist with CPR, they are acting within their scope of practice.
- D. Crowds of bystanders at an accident scene may need to be dispersed by the first responder to alleviate the following issues that hamper rescues or make first-aid administration more difficult.
1. Obstructing the ability of a first responder or paramedic to provide necessary and timely care to a victim
 2. Causing additional stress and shock to victims
 3. Causing others in the crowd to panic, thereby making first aid for victims more difficult
- E. The U.S. **Good Samaritan Law** protects civilians from medical lawsuits by allowing people to act within their own scope of practice. The law:
1. Protects civilian responders from liability in emergency situations
 2. Allows quicker initial care to occur without the threat of a lawsuit
 3. Provides that once victim care has begun, it does not cease until someone of an equal or higher training level replaces the Good Samaritan
 4. Provides that care may be stopped before someone of equal or higher training level replaces the Good Samaritan if the situation becomes unsafe or if the civilian becomes exhausted or unable to continue
 5. Has varied versions among the states
- F. **Medical emergencies** are injuries or illnesses that pose immediate risks to a victim's long- or short-term health.
1. The **chain of survival** is a sequence of events followed in medical emergencies when a victim does not have a heartbeat or is not breathing. The four stages of the chain of survival are:
 - a. Early access to the patient
 - b. Early cardiopulmonary resuscitation (CPR)
 - c. Early defibrillation

- d. Early advanced life support
2. The purpose of the chain of survival is to provide life-saving support for victims who do not have an active heartbeat or are not breathing. The importance of early assistance, no matter the severity of the injury, is to improve the victim's outcome.

Facilitate a discussion of the ways in which bystanders can crowd an accident scene. The discussion should stress that even a few bystanders can postpone medical care. Also, large crowds can actually interfere with care and increase the distress of the victim. Ask the students to explain, on paper, how or why bystanders are a problem at an accident scene.

- **Review/Summary.** Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle.
- **Application.** Use the included visual masters and lab sheet to apply the information presented in the lesson.
- **Evaluation.** Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

■ **Answers to Sample Test:**

Part One: Matching

1. h
2. a
3. g
4. f
5. i
6. c
7. b
8. d
9. e

Part Two: Short Answer

1. a. Early access to the patient
b. Early cardiopulmonary resuscitation (CPR)
c. Early defibrillation
d. Early advanced life support

2. Answers will vary but should include two of the following ways crowds of bystanders can hamper rescue efforts or make the administration of first aid more difficult:
 - a. Obstructing the ability of a first responder or paramedic to provide necessary and timely care to a victim
 - b. Causing additional stress and shock to victims
 - c. Causing others in the crowd to panic
3. Answers will vary but should include at least 12 of the responder's first-aid kit supplies listed in the "Summary of Content": II.A.

Part Three: Completion

1. common
2. 911
3. scope
4. emergency
5. conditions
6. specialized

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► Part One: Matching

Instructions: Match the term with the correct definition.

- | | |
|-----------------------|--------------------------------|
| a. chain of survival | f. medical emergencies |
| b. first aid | g. medical identification tags |
| c. first-aid kits | h. unresponsive |
| d. first responder | i. responsive |
| e. Good Samaritan Law | |

- ____ 1. A person who is injured and unconscious
- ____ 2. A sequence of events followed when a victim does not have a heartbeat or is not breathing
- ____ 3. Items that alert emergency first responders to pertinent information about a medical condition, disease, or allergy
- ____ 4. Injuries or illnesses that pose an immediate risk to a victim's long- or short-term health
- ____ 5. A person who is injured, conscious, and active
- ____ 6. Bags or boxes containing medical devices (e.g., medications, bandages, and other medical-related equipment) used to treat common ailments
- ____ 7. The earliest care victims receive for the treatment of injuries, illness, and ailments
- ____ 8. A medically trained person who acts within his or her own scope of practice
- ____ 9. A law that protects civilians from medical lawsuits when they act within their scope of practice



▶ Part Two: Short Answer

Instructions: Answer the following.

1. List the four parts of the chain of survival.
2. List and describe two ways in which crowds of bystanders may hamper a rescue or make the administration of first aid more difficult.
3. List 12 supplies found in a first responder's first-aid kit.

▶ Part Three: Completion

Instructions: Provide the word or words to complete the following statements.

1. The best advice for administering basic first aid is to use _____ sense.
2. When a victim is unresponsive, a rescuer should call _____ to provide advanced help as soon as possible.
3. The Good Samaritan Law protects civilians who provide first aid within their own _____ of practice.
4. A medical _____ is declared when a victim is not breathing and has no heartbeat.
5. Medical identification tags identify medical _____, such as diseases or allergies.
6. Portable oxygen may be found in a(n) _____ first-aid kit.

MEDICAL ALERT BRACELET



SPINAL INJURY IMMOBILIZATION



FIRST-AID KIT



MEDICAL PERSONNEL FIRST-AID BAG



The Contents of a First-Aid Kit

Purpose

The purpose of this activity is to increase familiarity with first-aid kits.

Objectives

1. Identify first-aid kit supplies.
2. Use teamwork in a friendly atmosphere.
3. Use good communication skills and memory skills to complete a timed activity.

Materials

- ◆ first-aid kit supplies
- ◆ writing utensil
- ◆ scratch paper

Procedure

1. Work in pairs or groups of three.
2. Review the first-aid kit supplies your instructor has scattered over a tabletop.
3. Your instructor will cover the first-aid kit items with a bedsheet.
4. Select one member who will write and speak for the team.
5. Each team will be allowed to view the first-aid items again with the task of memorizing the supplies while the other teams remain quiet and distant. Each team will have 1 minute and 30 seconds to memorize the supplies.
6. After your team has viewed the first-aid kit supplies, return to a quiet area. Then the selected team member should record the supplies.
7. When requested by your instructor, record your team's list of first-aid kit supplies in a space designated on the board.
8. Review the lists made by the other teams.
9. Review the first-aid kit supplies under the bedsheet, and discuss any supplies not listed.

