



## EDUCATION

**PATHWAY:** Early Childhood Education

**COURSE:** Health, Safety & Nutrition

**UNIT:** 3 – CPR/First Aid



## INTRODUCTION

### Annotation:

In this unit students will acquire skills for managing cardiopulmonary emergencies through the American Heart Association or American Red Cross Adult CPR training. The skills will include assessing the victim, and managing foreign body airway obstruction for conscious and unconscious victim. The student will also learn how to administer CPR.

### Grade(s):

X	9 <sup>th</sup>
X	10 <sup>th</sup>
X	11 <sup>th</sup>
X	12 <sup>th</sup>

**Time:** 14 hours

**Author:** Amy Bergman

**Additional Author(s):** Sandra Cook

**Academic Review:** Sharon Bickford

**Special Education Review:** Holley Spivey

**Resources Used:** American Red Cross Instructor's Manual and Instruction DVD

### Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



## FOCUS STANDARDS

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### **GPS Focus Standards:**

**EDU- HSN 3 – Students will provide a safe environment for children.**

- b. Obtain CPR, First Aid, and Fire Safety certification.

### **GPS Academic Standards:**

**SCSh2.** Students will use standard safety practices for all classroom laboratory and field investigations.



## UNDERSTANDINGS & GOALS

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### **Enduring Understandings:**

- “Chain of Survival” and activation of the EMS system
- Signs and symptoms of respiratory and/or cardiac distress
- Identify emergency situations regarding the cardiopulmonary system
- Prioritize care for multiple victims based on assessment results
- Identify equipment/devices used for personal protection during first aid treatment according to OSHA regulatory guidelines

### **Essential Questions:**

- How do I know if a child/infant is choking and needs assistance?
- How do I determine whether a victim is an infant or a child and which guidelines do I follow?
- What is “Chain of Survival” and how is the EMS system activated?
- What are signs and symptoms of adult choking, respiratory and/or cardiac distress?

### **Knowledge from this Unit:**

- How to access the EMS system
- Basic CPR guidelines for adults
- When it is appropriate to use an AED
- How to observe standard precautions in performing CPR

### **Skills from this Unit:** Identify emergency situations

- Demonstrate CPR technique for an adult and use of an AED
- Apply standard precautions in practicing and performing CPR



## ASSESSMENT(S)

**Assessment Method Type:** Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☐ Pre-test
- ☒ Objective assessment - multiple-choice, true- false, etc.
  - ☐ Quizzes/Tests
  - ☒ Unit test
- ☐ Group project
- ☐ Individual project
- ☒ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
  - ☐ Self-check rubrics
  - ☐ Self-check during writing/planning process
  - ☐ Journal reflections on concepts, personal experiences and impact on one's life
  - ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
  - ☐ Academic prompts
  - ☒ Practice oral quizzes/tests
- ☒ Subjective assessment/Informal observations
  - ☐ Essay tests
  - ☒ Observe students working with partners
  - ☐ Observe students role playing
- ☒ Peer-assessment
  - ☐ Peer editing & commentary of products/projects/presentations using rubrics
  - ☒ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
  - ☐ Student/teacher conferences
  - ☒ Partner and small group discussions
  - ☒ Whole group discussions
  - ☐ Interaction with/feedback from community members/speakers and business partners
- ☐ Constructed Responses
  - ☐ Chart good reading/writing/listening/speaking habits
  - ☐ Application of skills to real-life situations/scenarios
- ☐ Post-test

### Assessment(s) Title:

- CPR Competency Exam (practical and written test)

### Assessment(s) Description/Directions:

- Follow directions on the written test and submit test to instructor. Students will be given a scenario and must demonstrate appropriate CPR techniques as indicated for the victim.

### Attachments for Assessment(s):



## LEARNING EXPERIENCES

**Instructional planning:** Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

### Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

EDU- HSN 3 - **Students will provide a safe environment for children.**

b. Obtain CPR, First Aid, and Fire Safety certification.

2. Review Essential Questions.

3. Identify and review the unit vocabulary.

First responder	Cardio Pulmonary Resuscitation (CPR)	First aid	Good Samaritan Law
EMS	Abdominal thrusts/ Back blows	Check, Call, Care	Recovery position
Shock	Respiratory distress	Hyperventilation	Rescue breathing
Biohazard	ABC (Airway, Breathing, Circulation)	Fire escape route	Cardiac chain of survival
Finger sweep	Automated external defibrillator (AED)	Injury prevention	Cardiac emergencies
Tetanus	Soft tissue injuries	Burn care	Controlling bleeding
Splints	FAST (Face, Arm, Speech, Time)	Stroke	Diabetes
Poisoning	Epinephrine Auto-Injectors	Asthma	Heat related illness
Anaphylaxis	RICE (Rest, Immobilize, Cold, Elevate)	Seizures	Lyme Disease

### Lesson 1

1. Print off the vocabulary above, cut into strips and place into a basket. Play “Win, Lose or Draw”
2. Divide class into 2 teams. Have a white board and markers available.
3. Have a member of each team come up to the board and “draw” one vocabulary term from the basket.
4. One member from each team will try to “draw” a picture so their team can guess the term. (It’s very important that you’ve reviewed/introduced the vocabulary before this game)!

### Lesson 2

1. You will need to secure a certified instructor if you will be certifying your students as the standard indicates. Usually the school nurse is certified. But it is easiest if you obtain instructor certification from the Red Cross <http://www.redcross.org/en/contactus> . It is fairly inexpensive, and it’s a one-time cost. Also, you will not have to work around someone else’s busy schedule.

2. Using the First Aid/CPR/AED for Schools and the Community Participant's Manual, or the equivalent from the American Heart Association, discuss what it means to be a "first responder".
3. Emergency Action Steps – Check, Call, Care.
4. View the Instruction video that correlates with each section.
5. Read through the First Aid Challenges (page 23 – 3<sup>rd</sup> edition) and discuss each scenario.
6. Checking an injured person (adult – Head to toe; child – Toe to head)
7. ABC – Airway, Breathing, Circulation
8. Signals of shock and care.
9. Partner students up and run through a scenario of checking a conscious person.
10. Continue to view corresponding video segments.
11. With partner, have students run through a scenario of checking an unconscious person and recovery position.
12. Discuss choking and ways to help.
13. Demonstrate (watch video) the proper way to administer the care for a choking person (requesting permission to help and then a combination of 5 back blows and 5 abdominal thrusts).

### **Lesson 3**

1. View video on Rescue breathing.
2. Review standard precautions for the use of mannequins. Each student should be issued a face shield and non latex gloves.
3. Demonstrate proper glove use and removal.
4. Read information in chapter/unit related to Rescue Breathing.
5. Partner students up no more than 4 to a mannequin. Have each student run through the proper method of checking the scene, checking the victim, identifying someone to call 911, position the head, look down the body (look, listen and feel) as they count to 10 (10 seconds), position the head for 2 rescue breaths, look, listen and feel again.

### **Lesson 4**

1. Discuss Cardiac emergencies. Show corresponding videos from either the ARC or AHA.
2. Read section in participant's manual for CPR. (30 compressions/2 breaths; 5 cycles every 2 minutes)
3. Complete workbook pages related to CPR.
4. Demonstrate CPR techniques to students.
5. Students will practice CPR on mannequins. No more than 4 participants to one mannequin.

6. Students will role-play resuscitation on a mannequin while instructor monitors student progress.
7. Allow additional class time the following day for students to practice one and two rescuer CPR.

#### **Lesson 5**

1. Discuss the Chain of Survival (Early recognition, Early CPR, Early Defibrillation, Early Advanced Medical Care)
2. Review CPR
3. Introduce the AED and watch corresponding video.
4. Demonstrate proper use of an AED.

#### **Lesson 6**

1. Discuss CPR for unconscious choking person.
2. Explain finger sweep of mouth.
3. Have students role-play unconscious choking scenarios (found in instructor manual)

#### **Lesson 7**

1. Injury prevention is easier than treatment. Discuss numerous ways to decrease your risk factor.
2. Soft Tissue Injuries (Closed Wounds, open wounds – abrasions, lacerations, avulsions, punctures) and proper care for each.
3. Discuss burns and the 3 types (1<sup>st</sup> degree – superficial; 2<sup>nd</sup> degree – partial thickness; 3<sup>rd</sup> degree – full thickness)
4. Chemical Burns, Electrical Burns, Radiation burns
5. Show corresponding video.
6. Injuries to Muscles, bones and joints
7. Types of injuries (fractures, dislocations, sprains, strains)
8. RICE (Rest, Immobilization, Cold, Elevate)
9. Types of splints – Demonstrate each type of splint for the students. Then break them into groups and have them practice the splinting techniques.

#### **Lesson 8**

1. Show the video segment on sudden illness and strokes
2. Diabetes, Fainting, seizures and other chronic conditions should be discussed.
3. Explain the signs of a stroke and what it does to the body.
4. Factors that increase risk of a stroke (high blood pressure, cigarette smoking, diet, diabetes)
5. Take note of FAST (Face, Arm, Speech, Time) – helps the EMS assist the stroke victim better.

#### **Lesson 9**

1. View video segment on poisoning.
2. Discuss the different types of poisoning (swallowed, inhaled, absorbed, injected) and many of their sources.

#### **Lesson 10**

1. View video segment on Temperature related emergencies
2. Heat cramps, heat exhaustion, heat stroke – warning signs and care
3. Frostbite, hypothermia – warning signs and care

#### **Lesson 11**

1. Invite the school nurse in to speak about Anaphylaxis.
2. Discuss causes and treatments – Epinephrine (Epi-Pen®)

Administer written test for the topics covered. Grade and allow students one make-up test.

Submit the appropriate paperwork to the certifying organization for student certification.

\*\* Wrap up each class with discussion over the Essential Questions. Ensure students have the knowledge and skills taught in this unit.

\*Additional Ideas for CPR assessment of skills – Coordinate with the drama department to create a “live” scenario.

Assign each drama student a role (choking, unconscious, etc.) to cover all the skills your students were supposed to acquire in the lessons above. Give the drama students a checklist for what their first responder is supposed to do so that you may better assess the skills used.

Inform your students that there has been an incident and they will use the skills they learned in this unit to assess the situation. Have your students “arrive on the scene”. The instructor should stand back and write down observations so you could discuss them after the scenario.

#### **Attachments for Learning Experiences:**

#### **Notes & Reflections:**

**\*For the purpose of this unit plan, the American Red Cross is the provider mentioned most.**

**\*It would be most helpful for the instructor to obtain their Red Cross or American Heart CPR/1<sup>st</sup> Aid Instructor certification in order to train their students rather than scheduling another certified instructor.**

\*Teachers should be instructors with the American Red Cross and or American Heart Association. The materials supplied by these organizations must be followed in your classroom. These materials must be used from your handbook and not utilized from this lesson plan. Supplemental Check off is included in this plan.

\*For teachers who are not yet trained as a CPR instructor for the American Heart Association or American Red Cross, an additional resource so that students may receive credentials may be to contact your local fire department or healthcare facility who may have trained instructors willing to help provide instruction.

\* Text readings, study guides, and supplemental lectures are not listed.

\*It is recommended that every teacher use techniques and learning activities in each class that support multiple learning styles.



## CULMINATING PERFORMANCE TASK (Optional)

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### **Culminating Unit Performance Task Title:**

- CPR and AED Procedures
- Role-playing the appropriate response for a victim requiring CPR

### **Culminating Unit Performance Task Description/Directions/Differentiated Instruction:**

- Students will perform CPR and AED Procedures on a mannequin based on American Heart Association or American red Cross Guidelines; they will also manage foreign body airway obstruction on a conscious and unconscious adult
- Divide students into small groups and provide a mannequin and a specific victim scenario to respond to.
- Students will role-play appropriate response.



## UNIT RESOURCES

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### **Web Resources:**

- <http://www.redcross.org/en/contactus> - locate your local Red Cross chapter
- [www.americanheart.org](http://www.americanheart.org) – obtain information
- <http://www.emssafetyservices.com/> - supplies and materials for CPR/1<sup>st</sup> Aid
- <http://www.cprsim.com> – computer simulation of CPR

### **Attachment(s):**

### **Materials & Equipment:**

- 1<sup>st</sup> Aid/CPR student manuals(3<sup>rd</sup> Edition)
- Instruction DVD for American Red Cross or American Heart
- Computer/internet access



- TV/DVD player
- Skills checklist rubrics in instructor manual
- AED simulator
- Adult CPR mannequins and replacement lungs (suggested no more than 4 students per mannequin)
- Face shields and non-latex gloves per student
- White board and markers

**Videos:**

- **American Red Cross Trainer Manual & DVD**
- **Infant and Toddler Emergency First Aid ©1994 – Volumes I & II (Apogee Productions Ltd. Ptr. III; 1-800-210-5700)**
- **“Health, Safety & Nutrition for the Young Child” eResource CD** (includes basic PowerPoint for each chapter and test-bank) – <http://www.earlychilded.delmar.cengage.com/>

**What 21st Century Technology was used in this unit?:**

<input checked="" type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input checked="" type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input type="checkbox"/>	Website		