INSTRUCTOR MANUAL FOR HEALTH CARE PROVIDER BASIC LIFE SUPPORT

CONTENTS

ABOUT THE INSTRUCTOR MANUAL

The success of your course depends on your ability to organize, and communicate class activities, while making the class interesting. This manual describes techniques and activities that have been used by instructors for years and found effective in delivering content and helping course participants achieve the expected course learning outcomes.

Just like instructors have different personalities and styles of teaching, participants also learn in different ways. Participant learning is most effective when instructors combine auditory (hearing), visual (seeing), and kinesthetic (doing) aspects into lesson planning.

This manual is a guide, but not the complete answer to effective teaching. As an instructor, you are expected to use your individual leadership and teaching talents to reach course participants and provide them with the most meaningful learning experience. Your goal as an instructor is to see that all participants understand the concepts and acquire the necessary skills in simulated conditions so that they can ultimately be confident and skilled to perform in a real situation.

Besides providing guidance on effective teaching strategies, course outline, detailed course lesson plans, skill sheets, and evaluation tools, this manual also serves as an official guide for the administrative procedures for the program. All instructors are expected to adhere to these administrative guidelines whenever they teach any courses. In this manner Ellis & Associates Safety and Health programs can maintain a consistently high quality of education and a standardized program worldwide.

PROGRAM ADMINISTRATION GUIDELINES

About Ellis & Associates Safety & Health Services

Ellis & Associates (E&A) aquatic training programs have been recognized and used extensively for over 30 years worldwide by the theme park industry, city, county, and state recreation and park departments, colleges and universities; and fire, EMS agencies. The excellence of E&A's lifeguarding program has been unsurpassed in saving lives. E&A lifeguards and supervisory personnel provide cutting edge lifesaving care. E&A lifeguards are also trained in land-based skills including rescue breathing, CPR, AED use, clearing airway obstructions, providing supplemental oxygen, and administering basic first aid, all in accordance with the most current ILCOR/ECC and OSHA guidelines.

The same high quality educational program that has trained and licensed / certified more than one million lifeguards and other aquatic professionals is also available as individual educational courses leading to national certification that meets regulatory requirements. The courses that E&A's Safety & Health Services offer in addition to the International Lifeguard Training Program™ include:

- Health Care Provider Basic Life Support
- Community CPR &AED
- Standard First Aid
- Bloodborne and Airborne Pathogens: Preventing Disease Transmission
- Supplemental Oxygen Administration
- Active (Shooter) Assailant Safety

E&A's Safety & Health Services programs are designed to deliver the highest quality training to laypeople and professionals worldwide. This is accomplished through a comprehensive instructional program that includes high quality student manuals, as well as instructor resources including PowerPoint presentations, and internet-based administrative and Library Resources tools.

E&A's policies and procedures have been developed to meet federal, state, and local regulatory requirements for courses that satisfy specific job requirements. E&A's courses are appealing because of the quality of the products and the focus given to the skills required to be mastered by all participants to successfully complete courses and earn certifications and continuing education credits.

About the International Association for Continuing Education and Training (IACET)

The International Association for Continuing Education and Training (IACET) is a non-profit association dedicated to quality continuing education and training programs. IACET is the only standard-setting organization approved by the American National Standards Institute (ANSI) for continuing education and training. The ANSI/IACET Standard is the core of thousands of educational programs worldwide.

Ellis & Associates is pleased to be an Accredited Provider of IACET. This prestigious accreditation demonstrates our commitment to high-quality lifelong learning and high standards for all of our programs. We are proud of our education programs which reach thousands of safety, supervisory, and health care professionals each year, helping to broaden their skills so that they remain on the cutting edge of education.

E&A Safety & Health Services Training Centers

A Training Center can be an entity looking to provide training for internal staff or also providing training within local communities. Groups such as an amusement/theme parks, recreation & park districts, hotel resorts, campgrounds, school districts, or other businesses or organizations can conduct training through E&A.

A Training Center requires someone responsible for handling administrative tasks including scheduling courses, securing products from E&A, maintaining course rosters, issuing course completion cards, and otherwise complying with all E&A administrative guidelines for the safe and efficient delivery of courses.

E&A Safety & Health Services Instructors

Courses are delivered by E&A certified Instructors, who comply with E&A policies and procedures, ensuring a successful learning experience for all participants. Instructors must have the proper experience to teach E&A courses. Instructors need to be well versed in the technical content and skills of the course. They also need to be good teachers, capable of delivering any courses they are certified to teach. Instructors are certified to teach courses for 2 years. During this period instructors are required to teach at least 1 course each year. Each course must be documented through the E&A client services administrative website. Instructors are recertified every 2 years if they have met all the requirements.

Becoming an E&A Safety & Health Services Instructor

E&A Instructors are the frontline personnel providing quality educational experiences for all course participants. Instructors must possess the knowledge and skills necessary to teach specific courses. This includes providing a proper learning atmosphere, understanding the course materials, delivering the courses in the manner in which they are designed, and staying abreast of changes to policies or procedures.

Individuals can become E&A Safety & Health Services Instructors in one of two ways:

• *Request instructor reciprocity*

This format involves an orientation to E&A program materials and administrative guidelines. This option applies to those with adequate first aid, CPR/AED content knowledge and teaching experience, such as existing E&A Lifeguarding instructors; instructors with another national training organization (e.g. AHA, ARC, ECSI, HSI, NSC); healthcare and public safety professionals (physicians, nurses, paramedics, EMTs, firefighters, police officers); and professional educators.

• *Complete an Instructor Course (IC)*
This course, conducted by E&A Instructor Trainers, is required for those with little or no teaching experience. It covers topics that include teaching methodologies, remediating skills, following lesson plans, meeting learning outcomes, and complying with E&A administrative guidelines.

E&A Safety & Health Services Instructor Trainers

Instructor Trainers (ITs) are those instructors who are also certified to teach the Instructor Courses (IC). Instructor Trainers are designated by E&A based on their experience and the need of the local Training Center. ITs serve as role models and mentors for instructors.

Program Quality

Instructors are expected to maintain the highest standards of professionalism when teaching Safety & Health Services courses. E&A national staff will periodically monitor courses to ensure instructional quality and compliance with administrative guidelines. Feedback from all course participants is sought prior to receiving course completion credentials and is used as an important part of E&A's continuous quality improvement (CQI). Instructors can have their classes monitored at any time by E&A Instructor Trainers, National Faculty, or National Auditors.

Conducting E&A Safety & Health Services Courses

Regardless of the course being taught, all E&A courses must be structured so that participants can experience a quality educational experience.

Course Learning Outcomes

All courses have defined learning outcomes, also known as objectives, which must be met by participants in order to successfully complete any course. Instructors are expected to follow the course outlines and address the key points of the lesson plans using their own teaching styles to ensure that all learning outcomes are achieved.

Number of Participants Per Course

Course size must be considered in order to meet the learning outcomes. Administrators and Instructors must consider these factors when scheduling a course:

• The size and configuration of the facility.
• The amount of equipment and supplies available.
• The time it will take to complete the course(s).
• The number of instructors available.
• The experience of the instructor(s).

There is no limit to the number of participants who can attend the knowledge (didactic) portions of any course. With a properly configured facility, an experienced instructor can effectively present the knowledge portion of any course to many participants. But skill practice sessions associated with any course require more attention to detail, and personal

remediation of skills. For this reason, it is recommended that new instructors limit skill practice sessions to 10 participants, while experienced instructors can often handle additional participants.

Course Length of Time

Each course has a predetermined approximate length of time required to attain the learning outcomes. Course outlines accompany the detailed lesson plans for each course.

Course Pricing

E&A Safety & Health Administrators and Instructors are free to establish prices for any courses. If course fees are charged, the fees should be based on the local need for courses and prices being charged by others.

Course Participants with Disabilities

The Americans with Disabilities Act (ADA) is a wide-ranging civil rights law that prohibits discrimination of Americans based on mental or physical disability. Specifically, ADA states that Americans cannot be denied full and equal enjoyment of the goods, services, facilities, advantages, or accommodations offered to the public. E&A Safety & Health Instructors are expected to make reasonable accommodations for any disabled course participants, including those who are legally blind, hearing impaired, or those with other physical limitations. Instructors can adapt their teaching methods and utilize alternative techniques for disabled individuals to perform skills. If the disabled individual can meet the learning outcomes of the course, he or she can earn course certification.

Course Equipment and Supplies

The equipment and supplies needed to conduct E&A Safety & Health Services courses includes:

- Registration sign in sheet to verify attendees
- Comfortable seating for course participants
- Audiovisual equipment as needed
- Digital student manual issued to each participant
- Manikins, feedback devices, AED trainers, and first aid supplies are required as listed in the course lesson plans.
- Cleaning supplies
- Course skill sheets
- Course final written Checks (based on the course)
- Course evaluations
- Digital Course Completion Cards issued to participants upon course completion
- Optional Continuing Education Units (CEUs) available upon course completion

e-Learning Courses

E&A has e-learning courses that can be used as part of a blended learning approach to course completion. The e-learning course participant completes the necessary knowledge (didactic) components of the course, including the opportunity to view the required course skills. Once the e-learning course is complete, participants attend a skills practice

session in the same manner as those completing a traditional classroom-based course. Participants demonstrate the same level of knowledge and skill competency as those completing a traditional classroom-based course and earn the same course completion cards.

Successful Course Completion

To earn an official Course Completion Certification, participants must attend the entire course, complete all course activities and demonstrate skills competency. Those completing a professional course, such as Health Care Provider Basic Life Support, must also attain a minimum score of 80% on a final written Check.

Skills are an important part of many courses. Instructors should evaluate skills in a manner that is nonthreatening. Skill performance feedback should involve remediating participant performance in a positive, motivational manner. Skill performance can be evaluated individually or as part of a group.

Once the Course is Completed

Participants who successfully complete an E&A Safety & Health course are eligible to receive official course completion e-credentials and continuing education credits. Once the class ends, the Instructor must use the E&A Client Services System and verify/close the final roster. At that time participants will receive access to a course evaluation form. Following the course evaluation, a digital course completion card and continuing education credits (CEUs) are made available. Participants will be able to download, save, and print out their course completion credential and CEUs. Most E&A Safety & Health cards are valid for 2 years from the date of the course.

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EFFECTIVE TEACHING STRATEGIES

Teaching Styles / Methods

Instructors are not in class to entertain students, but rather to engage them in the learning process. Instructors have teaching styles that reflect their distinct personalities and the content being taught. Unless careful, instructors can get off track by trying to be all things to all students. It is critical that instructors remain focused on the learning outcomes (objectives)and utilize a teaching style(s) appropriate for the topics, the time allocated, the participants, and the outcomes to be achieved. By knowing your own personality and strengths and potential weaknesses as an instructor, you can integrate various teaching styles with effective classroom management skills for a successful course.

There are 5 teaching styles or methods commonly used in the classroom. Each has its own unique strengths and potential weaknesses. These styles are:

- Lecture
- Demonstration
- Facilitation
- Delegation
- Blended

Lecture Style

This is an authoritative, instructor-centered style. It involves mostly one-way communication. Participants are expected to absorb the information provided in the lecture.

Strengths: This style is often used with large groups and is appropriate for topics that involve memorization of key items of importance, performance of select skills, and limited time.

Potential Weakness: Instructors must be aware of the need to pause and clarify and allow for questions, otherwise this style provides limited interaction between participants and instructors.

Demonstration Style

This style is similar to the lecture style in that it is also instructor – centered. But this style also enables instructors to demonstrate their expertise by showing participants what they need to know, similar to how a coach instructs players about specific plays.

Strengths: This style provides opportunities to broaden the classroom experience by including demonstrations.

Potential Weaknesses: It may be difficult to accommodate participant's individual needs in larger classrooms. Instructors must be sure that all participants can clearly see any demonstration.

Facilitation Style

This style promotes self-learning and helps develop critical thinking skills and retain knowledge that leads to self-actualization (achieve self-fulfillment). This style begins the transition from an instructor-centered classroom to a participant-centered one. With this style instructors engage more openly with participants, prompting them toward discovery rather than lecturing them on topics.

Strengths: This style helps develop skills that enable participants to find answers and solutions through exploration and encourages questions.

Potential Weaknesses: Some topics due not lend themselves to this style of teaching due to limited time and particular topics.

Delegation style

The delegation style is best-suited for activities that involve peer feedback, and one in which the participants are fully capable of performing tasks without constant instructor involvement. In this style the instructor organizes group learning, observes participants, provides consultation, and promotes interaction between groups and among individuals to achieve learning outcomes.

Strengths: This style provides an excellent means for guided discovery and inquiry-based learning, since the instructor is now in the role of observer and participants are inspired to work together toward common goals. Participants can work in small "teams" to master content such as perfecting select skills.

Potential Weaknesses: Not all participants are comfortable with this style of learning, in which the instructor is more like a consultant than the authority figure as seen in the lecture style.

Blended Style

Most instructors possess some combination or most of the teaching styles previously discussed. And many instructors will find that different topics allow for different styles. This blending of instructional styles and participant needs and interests can lead to very successful learning.

Strengths: This style enables the instructor to customize lessons with different styles in mind.

Potential Weaknesses: Instructors can get lost trying to incorporate all styles into various lessons or a short course.

Effective Classroom Practices

Teaching styles alone do not make for a successful learning experience. Successful instructors also share three important common characteristics:

- Effective classroom management skills
- Masters of the lesson content
- Positive expectations for participant performance

Positive learner outcomes have been linked to several highly effective classroom practices:

- Clarity of the Instructor - This is as simple as clarifying the purpose of the course, the learning outcomes expected, criteria on how participants can succeed, and the flow of the course.
- Feedback – For participants to know how they are doing, they need individual and group feedback. But feedback is equally important to instructors in order to see patterns in learning, if the class is keeping pace, and to adjust instruction accordingly.
- Discussion – Providing time for and encouraging small group discussions can help participants and instructors determine if new content and concepts are being understood.
- Checks – Whether formal or informal, instructors need to frequently assess where participants are in relation to a topic or lesson.

About Adult Learners

You are likely to have participants in safety and health classes who are adult learners. Adult learners are typically more mature, experienced, self-directed, and confident than younger learners. But they can also be less receptive to change than younger learners. These attributes affect their motivation and ability to learn. By better understanding these attributes instructors can better meet the expectations of the adult participants taking a course.

Expectations

Adult learners have high expectations. They want to learn about things that will be useful to their work, and immediately applicable. They want to feel that the course was worth their time or money.

Self-directed

Adults take responsibility for their lives and actions and this is why it's important for them to have some control over their learning. Forming a peer relationship with the instructor and engaging in self-Check options are desirable.

Results-oriented

Adult learners are practical and want to understand the immediate application of the course content and skills to their professional needs. And they want to be confident in this knowledge and skill.

Resistant to change

To help adult learners get beyond the resistance to change that comes with life experiences and maturity it is important to provide the "why" behind any new concepts. This will help to ease the fear or uncertainty associated with change.

Motivation

Motivation is intrinsic. Learning for adults is often voluntary, unless it is required of a particular job, or professional license. It is important to understand why adults are attending a course. Knowing this can aid instructors in providing some thought-provoking activities and identifying the relevance of the course to a particular job task.

HEALTH CARE PROVIDER BLS
TRADITIONAL CLASSROOM COURSE OUTLINE

Approximate Time: 4 hours

Lesson	Topics	Practical Skills	AV Support	Time
1. You, the Health Care Provider	- Introduction to course - Health Care Providers - A Duty to Respond - Critical Skills of BLS - Diseases of Concern to Health Care Providers - Standard Precautions - Handling an Exposure - Understanding Cardiovascular Disease - The Chain of Survival	Safe glove removal	PPT Lesson 1	15 min
2. Respiratory Emergencies	- The Respiratory System - Causes of Respiratory Emergencies - Respiratory Distress - Respiratory Arrest - Primary Check - Rescue Breathing - Airway Obstruction (Choking)	Primary Check Opening the airway Rescue breathing with barrier device for adult, child, and infant Managing airway obstruction	PPT Lesson 2	75 min
3. Cardiovascular Emergencies	- The Circulatory System - Cardiovascular Disease - Heart Attack - Stroke - Cardiac Arrest - Cardiopulmonary Resuscitation (CPR) - Circulatory Assist Devices	One rescuer CPR for adult, child, and infant Two rescuer CPR for adult, child, and infant	PPT Lesson 3	75 min
4. Automated External Defibrillation	- The Heart's Electrical Conduction System - About AEDs - Using an AED - Special Considerations - Maintenance	AED use for adult, child, and infant	PPT Lesson 4	45 min
5. Special Situations	- Drowning - Hypothermia - Trauma - Electrocution	None	PPT Lesson 5	10 min
Wrap Up	Provide practice Check Provide final written exam Course Completion cards	None	Exam	20 min

HEALTH CARE PROVIDER BLS
BLENDED LEARNING COURSE OUTLINE

Approximate Time: 4 hours

Lesson	Topics	Format	Practical Skills	Time
1 - 5	You, the Health Care Provider Respiratory Emergencies Cardiovascular Emergencies AED Special Situations	Knowledge portion completed online	None	150 min
	Practical skills	Skills portion completed with instructor	Safe glove removal Primary Check Rescue breathing for adult, child, and infant Managing airway obstruction for adult, child, and infant One rescuer CPR for adult, child, and infant Two rescuer CPR for adult, child, and infant AED use for adult, child, and infant	70 min
	Proctored final written exam			20 min

COURSE LESSON PLANS

Lesson 1: You, the Health Care Provider

Learning Outcomes

After completing this lesson, participants will be able to:

- Provide examples of professions that include health care providers.
- Describe legal and ethical concerns that apply to health care providers rendering care.
- Identify diseases that pose a risk of transmission to health care providers and precautions to minimize disease transmission.
- Describe types of cardiovascular disease.
- Identify and describe the links in the Chain of Survival, and the roles of the health care providers within each link.

Lesson Overview

- Critical Skills of Basic Life Support
- Health Care Providers
- Emergency Medical Services
- A Health Care Provider's Duty
- Health Care Provider Protection From Pathogens
- Determining and Maintaining Safety
- The Chain of Survival: Taking Action

Time: 15 minutes

Audiovisual Support

"Lesson 1" PowerPoint slides support this lesson.

Skill Practice Equipment

Medical exam gloves

Course Introduction

- Self- introduction
- Participants introductions and reasons for taking the class
- Course agenda overview
- Expectations for participant success
- Course completion process

Critical Points

Critical Skills of Basic Life Support

- There are 4 critical basic life support (BLS) skills in which health care providers must be proficient:
    - Clearing an Airway Obstruction
    - Providing Rescue Breathing
    - Providing Cardiopulmonary Resuscitation (CPR)
    - Using an Automated External Defibrillator (AED)

Health Care Providers

- Health care providers include physicians, PAs, nurses, EMS personnel, firefighters, law enforcement officers, lifeguards, athletic trainers, ski patrollers, and occupational therapists.

Emergency Medical Services

- Modern Emergency Medical Services (EMS) System was developed in the decades leading up to and following passage of the EMS Systems Act of 1973.
- This act helped formalize the role of pre-hospital care and provided funding for over 300 EMS systems across the nation.
- The system provides the ability to call 911 to get emergency help.
- Various tiers of providers (e.g. Emergency Medical Responders, EMTs, Paramedics) make up the EMS system response.

A Duty to Respond

- Health care providers have a job-related duty to respond to emergencies and provide care.
- There are 10 legal considerations that health care providers must be aware of: Duty to Act, Scope of Practice, Standard of Care, negligence, consent, confidentiality, Advance Directives, documentation, Good Samaritan Laws, and abandonment. Review each of these and provide examples of how they apply.

Health Care Provider Protection From Pathogens

- Health care providers must understand the risks of disease transmission when providing emergency care and take proper precautions at all times.
- Review the diseases of concern to health care providers
- Standard Precautions are measures to reduce the risk of disease transmission. These measures include hygiene practices, engineering controls, and work practice controls.
- Personal protective equipment (PPE) ensure that health care providers have an effective barrier between themselves and an ill or injured person.
- Refer participants to Table 1.1 in the student manual and review the steps for safe glove removal.

Instructor Demonstration: Demonstrate the proper way to remove medical exam gloves.

Participant Practice: Have participants practice the proper way to remove medical exam gloves.

- If you suffer a possible exposure to blood or bodily fluid follow these guidelines:
    - Clean any exposed skin area thoroughly with soap and water.
    - If the exposure involves a splash to areas such as the eyes, flush the area with water or saline.
    - Document the event.
    - Report the event to your supervisor immediately.
    - Follow your employer's written exposure control plan

Determining and Maintaining Scene Safety

- Approach the scene but maintain a safe distance until you can complete your survey.
- Refer participants to Table 1.2 in the student manual regarding how to survey the scene.
- The patient is not normally moved unless done as part of your job to transfer the patient. There are some other situations in which a patient should be moved:
    - The scene is unsafe or you anticipate that it may become unsafe while performing care.
    - The terrain the patient is found in requires evacuation due to safety or to facilitate the start of care.
    - Weather conditions are unsafe, or conditions are complicating or limiting care efforts.
    - The patient is in a confined space making care, such as CPR impossible until moved.

The Chain of Survival: Taking Action

- The Adult Chain of Survival and the Pediatric Chain of Survival refer to a series of actions which have been determined to provide the best care and chance of survival for a person in cardiac arrest.
- There are six links in the Chain of Survival
- Refer participants to Figure 1.7a and 1.7b in the student manual to review the 6 links in each Chain of Survival.

Lesson Application

With this lesson complete, participants should be able to answer the following questions:

- Can you provide examples of professions that include health care providers?
- What basic legal considerations apply to health care providers rendering care?
- Can you name diseases that pose a risk of transmission to health care providers?

- What precautions should be followed to minimize the transmission of the diseases?
- Can you identify how to maintain a safe scene?
- Can you name and describe the 6 links in the Adult and Pediatric Chains of Survival?

Instructor Lesson 1 Notes

Lesson 2: Respiratory Emergencies

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe the components and function of the respiratory system.
- Identify causes of respiratory emergencies.
- Describe how to assess a person experiencing respiratory distress.
- Describe how to care for a person experiencing respiratory distress.
- Demonstrate how to provide rescue breathing for an adult, child, and infant in respiratory arrest.
- Demonstrate how to care for an airway obstruction in a conscious or unconscious adult, child, and infant.

Lesson Overview

- The Respiratory System
- Causes of Respiratory Emergencies
- Respiratory Distress
- Respiratory Arrest
- Primary Check
- Rescue Breathing
- Maintaining an Open Airway with the Recovery Position
- Vomiting
- Airway Obstruction (Choking)

Time: 75 minutes

Audiovisual Support

"Lesson 2" PowerPoint™ slides support this lesson.

Skill Practice Equipment

- Manikins (Adult, child, Infant)
- Barrier devices (face shield, resuscitation mask, BVM)
- Disinfectant

Critical Points

The Respiratory System

- The system responsible for delivering oxygen to the lungs during inhalation and removing waste products, such as carbon dioxide, during exhalation.
- During inhalation air is drawn into the body as the muscles in the chest wall and the diaphragm contract.
- Once past the epiglottis air enters the trachea (windpipe).
- The trachea divides into the two bronchi, and then into smaller tubes, the bronchioles.

- The alveoli are the small air sacs within the capillaries at the end of the bronchioles. This is where oxygen and carbon dioxide are exchanged.

Causes of Respiratory Emergencies

- Respiratory emergencies include respiratory distress and respiratory arrest.
- The causes of respiratory emergencies include:
    - Airway obstruction
    - Smoke inhalation
    - Asthma
    - Lung infections
    - Drowning / Suffocation
    - Chest trauma
    - Narcotic overdose
    - Electrocution
    - Heart attack or cardiac arrest

Respiratory Distress

- Signs and symptoms of respiratory distress include:
    - Breathing that is labored, noisy, unusually fast, slow, irregular, or gasping.
    - Inability to speak in full sentences
    - Restlessness, anxiety, confusion
    - Changes in level of consciousness
    - Flushed, pale, or bluish skin
    - Chest discomfort
    - Tingling sensations
- To care for respiratory distress:
    - Rest in a comfortable position (often seated)
    - Provide comfort and reassurance
    - Summon more advanced care
    - Assist with any prescribed medication for the condition
    - Administer supplemental emergency oxygen
    - Keep the airway clear

Respiratory Arrest

- Occurs when a person is no longer breathing due to the failure of the lungs to function effectively.
- Prevents the delivery of oxygen to the body, most importantly to the brain, causing loss of consciousness.
- Treatment involves rescue breathing

Primary Check

- The primary Check involves checking for responsiveness (consciousness), breathing, and pulse.
- Tap the shoulder of the motionless person, and shout, “Are you OK?” to see if the person awakens.
- Activate your emergency response system if the person is unresponsive.

- Simultaneously –
    - Look for movement (rising and falling) of the chest and listen for sounds that would indicate breathing.
    - Check for a pulse for up to 10 seconds.
        - Carotid pulse in either side of the neck for adults and children
        - Brachial pulse in the inside of the upper arm for infants

Instructor Demonstration: Demonstrate the steps of the Primary Check

Rescue Breathing

- A person who is unresponsive, not breathing (or has only occasional gasps), but has a pulse, needs rescue breathing.
- Use a barrier device, such as a face shield, face mask, or bag-valve mask, to provide ventilations.
- Before effective rescue breathing can be provided, the person's airway must be opened.

Opening the Airway

- Open the person's airway so that the tongue does not restrict the back of the throat.
- Two common maneuvers:
    - Head tilt – chin lift
    - Jaw thrust (with and without head tilt)
- The head tilt-chin lift and jaw thrust with head tilt are done when no spinal injury is suspected.
- The jaw thrust without head-tilt is the preferred method to open the airway when a spinal injury is suspected.

Instructor Demonstration: Demonstrate the three ways to open the airway

Providing Ventilations

- With the airway open, provide effective ventilations:
    - Pinch the nose if using the head tilt-chin lift method to open the airway
    - Cover the mouth and nose with the resuscitation mask
    - Maintain a good mask seal
    - Provide one ventilation about every 6 seconds for an adult, or every 2-3 seconds for a child or infant.
- Refer participants to Table 2.1 in the student manual for an overview of ages for BLS Care.

Instructor Demonstration: Demonstrate rescue breathing using various barrier devices.

Participant Practice: Have participants practice the primary check steps and rescue breathing on adult/child and infant manikins). Refer participants to the skill sheets to aid in performance.

Maintaining the Airway with the Recovery Position

- If you have determined that the patient is breathing but remains unresponsive, you will need to place the patient into the recovery position - lateral recumbent (sidelying).
- With the patient lying flat on their back, position yourself at their side:
    - Bend the patient's leg nearest you at the knee.
    - Place the patient's arm nearest you across the patient's chest.
    - Raise the patient's arm farthest from you.
    - Place your hands on the patient's shoulder and hip nearest you and slowly roll the patient's body as a unit onto the side.
    - Adjust the patient's free arm and top leg to support the body and confirm that the area around the patient's mouth is clear and that the patient continues to breathe normally.

Instructor Demonstration: Demonstrate how to place a person in the recovery position.

Participant Practice: Have participants pair up and practice the recovery position. Refer participants to the skill sheets to aid in performance.

Vomiting

- Monitor the airway for vomitus collecting under the resuscitation mask.
- If a patient begins to vomit while providing care, roll the
- patient onto the side, similar to the recovery position.
- With your gloved hand, finger sweep the patient's mouth clean. Carefully roll the patient back and continue the care that was interrupted.
- If you have access to a manual suction device, this may also be used to clear the airway.

Airway Obstruction (Choking)

- Airway obstruction (choking) in a conscious adult most often results from an object, such as food, becoming lodged in the throat.
- Besides food, children and infants also choke on coins and small toy objects
- If the person cannot cough, speak, cry, or breathe, or is coughing weakly or making high pitched "crowing" sounds, the airway is severely obstructed, and immediate care is needed.
- Use the Heimlich Maneuver to dislodge the obstruction from an adult or child.
    - Place a fist just above the navel
    - Grasp the fist with the other hand and give inward and upward abdominal thrusts until the object is relieved
- If a choking person is too large and you are unable to reach around the person to give effective abdominal thrusts, or if the person is obviously pregnant, give chest thrusts.
- If an infant (birth to one year) is conscious and choking, use a series of 5 back slaps and 5 chest compressions to relieve the obstruction.
- Airway obstruction in an unresponsive person (any age) requires 30 chest compressions, examination of the mouth (and removal of any item), and ventilations. Repeat these steps until the obstruction is relieved.

Instructor Demonstration: Demonstrate the hand position for the Heimlich Maneuver and simulate care; how to relieve airway obstruction in a responsive infant, and how to relieve airway obstruction in any unresponsive adult/child/infant

Participant Practice: Have participants practice determining hand position for the Heimlich Maneuver, how to relieve airway obstruction in a responsive infant, and how to relieve airway obstruction in an unresponsive person (any age). Refer participants to skill sheets to aid in performance.

Lesson Application

With this lesson complete, participants should be able to answer the following questions:

- Can you describe the various components that comprise the respiratory system and how the respiratory system functions?
- What are the causes of respiratory emergencies?
- What are the signs and symptoms of respiratory distress?
- Can you describe how to care for a person experiencing respiratory distress?
- How should you provide rescue breathing for an adult, child, and infant in respiratory arrest?
- How to place a person in the recovery position?
- How should you provide care for an airway obstruction in a conscious or unconscious adult, child, and infant?

With this lesson complete, participants should be able to demonstrate the following skills:

- Rescue breathing for an adult, child, and infant
- Clearing an airway obstruction for a responsive or unresponsive adult, child, and infant.

Instructor Lesson 2 Notes

Lesson 3: Cardiovascular Emergencies

Lesson Learning Outcomes

After completing this lesson, participants will be able to:

- Describe the components and function of the circulatory system.
- Identify the risk factors of cardiovascular disease.
- Describe how to assess a person experiencing a heart attack.
- Describe how to care for a person experiencing a heart attack.
- Describe how to assess a person experiencing a stroke.
- Describe how to care for a person experiencing a stroke.
- Demonstrate how to provide cardiopulmonary resuscitation (CPR) for an adult, child, and infant in cardiac arrest.

Lesson Overview

- The Circulatory System
- Cardiovascular Disease
- Heart Attack
- Stroke
- Cardiac Arrest
- Cardiopulmonary Resuscitation (CPR)
- Circulatory Assist Devices

Time: 75 minutes

Audiovisual Support

"Lesson 3" PowerPoint™ slides support this lesson.

Skill Practice Equipment

- Manikins (Adult, child, Infant)
- Barrier devices (face shield, resuscitation mask, BVM)
- Disinfectant

Critical Points

The Circulatory System

- The system made up of the heart and blood vessels.
- The heart is an organ about the size of a person's fist, with four chambers through which blood moves in and out.
- The two upper chambers are the atria. The two lower chambers are the ventricles.
- The right side chambers (right atria and right ventricle) receive oxygen-poor venous blood from the body and pump it to the lungs to remove waste and pick up oxygen
- The left side chambers (left atria and left ventricle) accept the oxygen-rich blood and pump it out to all parts of the body through the arteries.

- The heart creates its own electrical impulses automatically, that move along an electrical conduction system and triggering contraction of the heart muscle.

Cardiovascular Disease

- Coronary heart disease (CHD) involves the narrowing of the coronary arteries, the blood vessels that supply oxygen and blood to the heart.
- CHD is usually caused by atherosclerosis, plaque (cholesterol substances) that accumulates on the inside walls of the arteries, causing them to narrow.
- There are 8 risk factors commonly associated with cardiovascular disease. Five risk factors can be controlled (Refer participants to the sidebar "Risking Your Life"):
    - High cholesterol
    - High blood pressure
    - Overweight
    - Smoking
    - Diabetes

- Cardiovascular disease (heart disease) involves diseases that affect the heart and blood vessels
- Cardiovascular disease is the number one killer in America, accounting for more than 800,000 deaths each year.
- Atherosclerosis, involves plaque accumulating on the walls of the arteries of the heart, narrowing the arteries and restricting blood flow.
- The Chain of Survival refers to a series of actions that must be linked together to provide the best care and chance of survival for a person in cardiac arrest.
- CPR, is needed when a person's heart stops beating, or is beating inadequately to sustain life.
- Ventricular fibrillation and ventricular tachycardia are frequently associated with persons who suffer sudden cardiac death.

Heart Attack

- A heart attack (myocardial infarction), occurs when portions of heart muscle tissue die as a result of lack of oxygen. This happens when blood flow to part of the heart is blocked by a blood clot.
- The signs and symptoms of a heart attack include:
    - Chest pain or discomfort that lasts longer than 15 minutes, and can radiate to the arms, neck, jaw, or back.
    - Difficulty breathing
    - Profuse sweating
    - Nausea and vomiting
    - Cool, pale skin
    - Unusual weakness / fatigue
    - Dizziness / fainting
    - Irregular heart beat
- More often than men, women do not have chest pressure. It may also be described differently and is located in other areas.

- To care for a heart attack:
    - Call 9-1-1 or summon more advanced medical care.
    - Have the person stop all activity and rest.
    - Loosen any restrictive clothing
    - Assist the person with any prescribed heart medication such as nitroglycerin,
    - Provide aspirin (1 regular or 2 low dose) if the person is not allergic, not on a blood thinner, and does not have stomach disease.
    - Administer supplemental oxygen if available, monitored by a pulse oximeter.
    - Get the AED if available in case the person goes into cardiac arrest.

Stroke

- Also called brain attack, a stroke occurs when a blood vessel in the brain becomes blocked (ischemic) or ruptures (hemorrhagic).
- Stroke and heart disease share many of the same risk factors.
- The signs and symptoms of stroke include:
    - Numbness, weakness, or paralysis of the face, arm, or leg on one side
    - Difficulty speaking
    - Difficulty understanding
    - Dizziness
    - Blurred or decreased vision in one eye
    - Sudden, severe headache
    - Unequal pupils
- Remember the F.A.S.T. acronym to determine the likelihood that the signs and symptoms are stroke related. Refer participants to Table 3.1
- To care for stroke, activate your emergency response system and have the person rest in the most comfortable position, which is often lying on the back with the head and shoulders elevated.

Cardiac Arrest

- An unresponsive, non-breathing (or only gasping), and pulseless person is in cardiac arrest.
- The immediate care for a person in cardiac arrest requires cardiopulmonary resuscitation (CPR) and defibrillation.

Cardiopulmonary Resuscitation

- CPR involves providing chest compressions and ventilations that help circulate blood and oxygen to vital organs throughout the body.
- High quality CPR, require rescuers to:
    - Position the person on the back, on a hard surface.
    - Compress on the center of chest.
    - Push fast, at a rate of approximately 110 compressions per minute (Range 100-120)
    - Push deep (at least 2 inches, but not more 2.4 inches for adults).
    - Push rhythmically.

    - Allow for complete recoil of the chest.
    - Minimize interruptions of chest compressions, from items such as ventilations and movement of the person.
- Continue CPR until a defibrillator is available or the person shows signs of life. Other situations in which CPR may be stopped are:
    - You are too exhausted to continue.
    - You are replaced by another rescuer able to perform CPR.
    - The scene is no longer safe.
    - A physician advises to stop resuscitative efforts.
    - Cardiac arrest lasts longer than 30 minutes, except in situations involving hypothermia or cold-water submersion.
- For the purpose of CPR, an infant is birth to 1 year; child is 1 – onset of puberty; and adults are anything beyond puberty.
- One rescuer adult CPR requires 30 compressions and 2 ventilations, using both hands. Compress the chest at least 2 inches and not more than 2.4 inches
- One - rescuer child CPR requires 30 compressions and 2 ventilations, using one or two hands (based on the size of the person and the rescuer). Compress the chest about 2 inches.
- One - rescuer infant CPR requires 30 compressions and 2 ventilations, using 2 fingers. Compress the chest about 1 ½ inches (1/3 the depth of the chest).
- Two - rescuer CPR for adults uses the same compression to ventilation ratio as one-rescuer adult CPR (30:2).
- Two - rescuer CPR for children or infants uses a compression to ventilation ratio of 15:2.
- When two-rescuers perform CPR on an infant, the rescuer providing compressions should use two thumbs to compress the chest, while encircling the infant's chest with both hands.
- Once an advanced airway is inserted during two-rescuer CPR, rescuers perform compressions and ventilations independent of each other.
- Refer participants to Table 3.2 to compare the steps of CPR for different ages of cardiac arrest victims.

Instructor Demonstration: Demonstrate adult, child, and infant one and two- rescuer CPR. Introduce the use of a metronome to help participants achieve the proper rate. Using manikins with built-in feedback devices for proper compression depth is also recommended.

Participant Practice: Have participants practice adult, child, and infant one and two-rescuer CPR. Refer participants to skill sheets to aid in performance.

Circulatory Assist Devices

- Circulatory assist devices offer alternatives to conventional manual CPR.
- These devices may enhance perfusion during resuscitation and may help reduce the physical stress of performing CPR in some situations.
- There are two types of devices:
    - Mechanical CPR devices
    - Impedance threshold devices (ITD)
- Mechanical CPR devices can promote active compression / decompression (ACD).
- ITDs attach to a face mask or endotracheal tube. The pressure-sensitive valves impede the entry of air during chest wall decompression, improving cardiac output.

Application

With this lesson complete, participants should be able to answer the following questions:

- Can you describe the various components that comprise the circulatory system and how the circulatory system functions?
- What are the risk factors of cardiovascular disease?
- What are the signs and symptoms of a heart attack?
- Can you describe how to care for a person experiencing a heart attack?
- How is CPR performed for an adult, child, and infant in cardiac arrest?
- How does one rescuer CPR differ from two rescuer CPR for children and infant vs adults?
- Can you identify the signs and symptoms of a person experiencing a stroke?
- How should you provide care for a person experiencing a stroke?

With this lesson complete, participants should be able to demonstrate the following skills:

- One and two-person CPR for an adult, child, and infant.

Instructor Lesson 3 Notes

Lesson 4: Automated External Defibrillation (AED)

Learning Outcomes

After completing this lesson, participants will be able to:

- Explain the electrical conduction system of the heart.
- Explain the two abnormal heart rhythms that the AED can correct.
- Identify the elements common to all AEDs.
- Describe how an AED works to help a person in cardiac arrest.
- Describe special considerations when using an AED.
- Describe how to maintain an AED in proper working condition.
- Demonstrate how to use an AED for an adult, child, and infant in cardiac arrest.

Lesson Overview

- The Heart's Electrical Conduction System
- About AEDs
- Using an AED
- Special Considerations
- Maintenance

Time: 45 minutes

Audiovisual Support

"Lesson 4" PowerPoint™ slides support this lesson.

Skill Practice Equipment

- Manikins (Adult, child, Infant)
- Barrier devices (face shield, resuscitation mask, BVM)
- Disinfectant
- AED training devices

Critical Points

The Heart's Electrical Conduction System

- The heart creates its own electrical impulses automatically, that move along an electrical conduction system and triggering contraction of the heart muscle.
- The normal electrical impulse in the heart originates in the sinoatrial (SA) node, found in the upper part of the right atria.
- The impulse moves in a wavelike manner within the atria and then downward, passing through the atrioventricular (AV) node between the atria and ventricles.
- The impulse proceeds down the right and left bundle branches into the ventricles.
- When the electrical impulse reaches the purkinje fibers in the ventricles, the heart muscle contracts, forcing blood to move throughout the body.
- Electrical disturbances (dysrhythmias) can occur. These dysrhythmias are viewed as tracings on an electrocardiogram (ECG).

- Two of the most common life-threatening dysrhythmias seen in the first few minutes of sudden cardiac arrest are ventricular tachycardia (V-tach) and ventricular fibrillation (V-fib).
- Ventricular tachycardia causes the ventricles to beat far too fast. The chambers cannot fill properly or pump blood effectively.
- Ventricular fibrillation is disorganized, chaotic electrical activity that results in quivering of the ventricles. Blood cannot be pumped out of the heart so the person will be pulseless.
- Both V-fib and V-tach respond to defibrillation. But time is critical; the earlier defibrillation occurs, the better the outcome.

About AEDs

- An automated external defibrillator (AED) is a portable electronic device applied to a person in cardiac arrest.
- A fully automated device will analyze the heart rhythm and deliver a shock if needed. A semi-automatic device will alert the rescuer to the need to deliver the shock by pushing the shock button.
- The AED can analyze the heart's rhythm, determine if V-fib or V-tach are present, and provide a shock known as defibrillation to enable the heart to reset and restart normal electrical activity.
- Regardless of the manufacturer, all AEDs have commonalities
    - Battery operated
    - Self – maintained internal diagnostics
    - Power on/off
    - Voice prompts to guide users
    - Cable and electrode pads to attach to the chest
    - ECG Analysis capability
    - Defibrillation capability

Using an AED

- Follow these steps when using an AED:
    - Once an AED is available, turn the device on and follow the prompts.
    - Expose and prepare the person's chest.
    - Peel the protective backing off the electrode pads and place the pads on the chest according to the diagram on the packaging.
    - Stand clear and allow the device to analyze the heart rhythm
    - With everyone clear of the person, provide a shock if indicated (some devices provide the shock automatically. Others require the rescuer to push a button).
    - Regardless of whether a "shock" or a "no shock" advisory is given, follow with 2 minutes of CPR as long as the person is in cardiac arrest.
    - Allow the AED to reanalyze the rhythm and follow its continued prompts.

Special Considerations

- Special considerations for using an AED include:
    - Medication patches

    - Children and infants
    - Water and weather
    - Implanted devices
    - Jewelry and piercings
- If a medication patch is on the chest, in the way of where an electrode pad will be placed, remove the patch and dry off the chest before applying the electrode pad.
- AEDs can be used on anyone. Special pediatric electrode pads or an AED pediatric "key" provide reduced energy for those less than 8 years of age. Pediatric pads are placed in accordance with manufacturer's instructions.
- Common practice is to remove any person from any free-standing water before using an AED. Dry the chest and then attach the pads.
- Implanted devices include internal pacemakers and cardioverter defibrillators (ICD) placed under the skin and attached to the heart in people with specific heart conditions. An ICD provides repeated shocks to the heart directly in an effort to correct the electrical disturbance.
- There is no need to remove body piercings and jewelry as long as the electrode pads are not placed directly over metallic items. This may require you to position the pads slightly different than normal.

Instructor Demonstration: Using an AED training device demonstrate its use on a manikin.

Participant Practice: Have participants practice using an AED training device on a manikin. Refer participants to skill sheets to aid in performance.

Maintenance

- AEDs run their own internal checks to verify proper operation. They have warning lights and sounds that signal users that the device is functioning properly or that it is malfunctioning.
- Maintain your device according to the manufacturer's directions.
- Periodic inspection of the AED will also ensure that the proper supplies, such as unexpired electrode pads are in place, as well as items such as a razor, scissors, and drying cloth.

Application

With this lesson complete, participants should be able to answer the following questions:

- Can you explain the electrical conduction system of the heart?
- What are the two abnormal heart rhythms that an AED can correct?
- What elements are common to all AEDs?
- Can you describe how an AED works?
- What are the special considerations to be aware of when using an AED?

- Can you explain how to use an AED for an adult, child, and infant in cardiac arrest?
- How should an AED be maintained to insure proper working condition?

With this lesson complete, participants should be able to demonstrate the following skills:

- How to use an AED on an adult, child, or infant in conjunction with CPR.

Instructor Lesson 4 Notes

Lesson 5: Special Situations

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe the process of drowning and how to provide resuscitative care for drowning victims.
- Describe the process of hypothermia and how to provide resuscitative care for victims of hypothermia.
- Describe how to provide resuscitative care for victims of trauma, electrocution, opioid overdose, and those in late term pregnancy.

Lesson Overview

- Drowning
- Hypothermia
- Trauma
- Electrocution
- Pregnancy
- Anaphylaxis
- Opioid overdose
- Dentures
- Laryngectomy
- Secondary check

Time: 10 minutes

Audiovisual Support

"Lesson 5" PowerPoint™ slides support this lesson.

Skill Practice Equipment

None

Critical Points

Drowning

- Drowning is the process of experiencing respiratory impairment as a result of immersion (face/airway) or submersion (entire body) in a liquid, commonly water.
- A responsive drowning person will attempt to hold his or her breath while struggling to access air.
- When water enters the lungs, it washes away surfactant, resulting in the collapse of the alveoli in the lungs.
- Time is the big determinant of survival in drowning incidents, as the lack of oxygen and chemical changes in the lungs can cause cardiac arrest.
- To care for a drowning person:
    - Remove the drowning person from the water.

- Conduct a primary Check.
- If the person is in cardiac arrest, provide CPR until a defibrillator is available.
- If the person has a pulse, but is not breathing, provide rescue breathing.
- Remove any debris visible in the airway by sweeping it out or using a suction device if available.

Hypothermia

- A condition occurring when the body loses heat faster than it can produce heat.
- Results in a dangerously low body temperature.
- The signs and symptoms of hypothermia include:
  - Altered levels of consciousness
  - Shivering
  - Core body temperature that falls below 95 degrees
  - Abdomen that is cold to the touch even under clothing
  - Muscle rigidity
- To care for hypothermia:
  - Get the person out of the cold.
  - Handle carefully to avoid the chance of heart dysrhythmias.
  - Remove any cold or wet clothing.
  - Apply warm, dry items such as clothing and blankets.
  - If the person is alert and able to swallow, provide warm fluids.
  - Assess the person frequently.
  - Medications and defibrillation have little effect if the person is in cardiac arrest, until the person can be rewarmed.
  - If an AED advises the need for a shock, deliver the initial shock and resume CPR and continue efforts to rewarm the person.

Trauma

- Trauma is the 4th leading cause of death each year among Americans of all ages, and the leading cause of death among those under 45 years of age.
- If you suspect a person has a head or neck injury, take precautions to keep the head in line with the body. Use the jaw thrust technique without head tilt to open the airway of an unresponsive, non-breathing person.
- A person with severe trauma needs the specialized care that can be provided by a trauma center.
- Trauma centers are classified from Level I (highest level of care) to Level IV.

Electrocution

- Electrocution is a related set of injuries caused by direct contact with live electrical connections.
- The injuries that may be visible include characteristic entry and exit burn wounds. Electrocution can result in loss of consciousness, cessation of breathing, and cardiac arrest.
- Perform a primary Check and care for what you find.

- Conduct a secondary check if possible, and cover any wounds with sterile dressings.
- Refer participants to the "Caution" and "Shocking News" boxes.

Pregnancy

- Women in late stage pregnancy who suffer cardiac arrest can benefit from lateral uterine displacement to enhance blood flow and improve cardiac output. An additional rescuer is needed to move the uterus toward the woman's left side while CPR is being performed.

Anaphylaxis

- Anaphylaxis is shock brought on by a severe allergic reaction, coupled with life threatening respiratory responses, including bronchospasm and obstructive airway edema.
- The condition can quickly deteriorate to respiratory arrest, with cardiac arrest following shortly thereafter.
- The patient's respiratory issues combined with hypotension will complicate prehospital resuscitative efforts.
- Remove the allergen if possible.
- Obtain the patient's epinephrine autoinjector (most commonly an EpiPen® or AuviQ®).
- If the patient is responsive and able to do so, provide the patient the autoinjector to self-administer.
- If the patient is unresponsive or is otherwise unable t o s e l f-administer the injection, you or another available responder should administer the autoinjector
    - Hold the device firmly so that your fingers are not near the needle end of the device and remove the safety cap.
    - Place the patient in a seated position and hold the knee firmly so that the leg does not move during injection.
    - Place the needle end near the outer thigh.
    - Press the device firmly in place (listing for a "click") and hold for the number of seconds indicated for the device being used (EpiPen®, 3 seconds; AuviQ® 2 seconds).
    - Lightly massage the injection area for about 10 seconds.
    - If the patient does not improve in 5 minutes (with sustained
    - improvement for at least 15 minutes) give a second dose if available.
- If the patient is responsive, place in the recovery position and monitor their airway.
- If the patient is unresponsive, place on back and begin the primary check and initiate rescue breathing or CPR care, based on assessment.
-

Instructor Demonstration: Using an epipen training device demonstrate its use.

Opioid Overdose

- Opioid overdose resulting from prescription medications or illegal drugs is a signicant problem in the US.
- Opioid overdose can cause respiratory depression and arrest.
- Naloxone is a medication available in intramuscular and intranasal forms that should be administered to anyone in respiratory arrest expected of having overdosed on an opioid substance.
- Two common emergency forms of Naloxone are intra muscular, used similarly to an epinephrine auto injector; and intranasal spray inserted in the nostril and the plunger depressed.
- If you suspect an opioid overdose administer Naloxone if available to a breathing patient or non breathing or pulseless patient.
    - Avoid delaying care such as rescue breathing or CPR

Instructor Demonstration: Using a naloxone training device demonstrate its use on a manikin.

Laryngectomy

- To provide rescue breathing for a person with a laryngectomy, close the person's mouth and nose, place the resuscitation mask over the stoma, and give ventilations.
-

Dentures

- If you are providing rescue breathing for a guest with dentures, it is not necessary to remove them. Dentures will help maintain a seal with the mask.
- If the dentures are loose they may prevent air from entering freely. If so, carefully remove the dentures with your gloved hand.

Secondary Check

- A secondary check is only performed if there are no life-threatening problems that must be addressed.
- It begins at the patient's head and ends at the feet. It is performed by closely looking at and gently feeling and looking for signs of injury on the body.
- It includes gathering information about the patient, medical conditions, anything leading up to the event.

Application

With this lesson complete, participants should be able to answer the following questions:

- Can you describe how to provide care for patients in these special situations:
    - Drowning

- Hypothermia
- Trauma
- Electrocution
- Pregnancy
- Anaphylaxis
- Opioid overdose
- Dentures
- Laryngectomy

Instructor Lesson 5 Notes

Course Wrap Up

Time: 20 minutes

Critical Points

- Address any final questions from participants.
- Provide the Practice Check. This document can be provided as an entire class review or provided in small groups
- Issue the final written examination (Proctored).
- Explain to participants how they will receive an email requiring them to complete the course evaluation. As soon as the evaluation is completed they will be able to view and download their course completion cards, and also have access to CEUs if they desire.
- Close out course rosters in the client portal, Pectora, and the system will issue the digital course completion cards.

PARTICIPANT SKILL SHEETS

SKILL SHEET: ONE RESCUER ADULT / CHILD / INFANT RESCUE BREATHING

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Person is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and carotid pulse	*Breathing is absent.* *Pulse is present.*		
With the airway open, provide ventilations at a rate of about 1 every 6 seconds for adults; every 2-3 seconds for children and infants.			
Reassess pulse every minute	*Pulse is present. Person begins breathing.*		
If the patient begins breathing place in the Recovery position. If the pulse is no longer present begin CPR			

Notes:

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SKILL SHEET: ONE RESCUER ADULT / CHILD CPR

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Person is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and carotid pulse	*Breathing is absent.* *Pulse is absent.*		
Provide 30 chest compressions at a rate of 100 – 120 per minute, with adequate compression depth and recoil. Use 2 hands for adults; Use 1 or 2 hands for child.			
Open the airway and give 2 ventilations to achieve chest rise.			
Continue CPR until an AED is available.	*It has been 2 minutes. An AED is available.*		
Indicate that the AED would be used			

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SKILL SHEET: ONE RESCUER INFANT CPR

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Infant is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and brachial pulse	*Breathing is absent.* *Pulse is absent.*		
Provide 30 chest compressions at a rate of 100 – 120 per minute, with adequate compression depth and recoil. Use 2 fingers to compress the chest			
Open the airway and give 2 ventilations to achieve chest rise.			
Continue CPR until an AED is available.	*It has been 2 minutes. An AED is available.*		`
Indicate that the AED would be used with pediatric pads			

Notes:

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SKILL SHEET: TWO RESCUER ADULT / CHILD CPR

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Person is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and carotid pulse.	*Breathing is absent.* *Pulse is absent*		
Rescuer #1 provides 30 chest compressions (adult); 15 compressions (child), at a rate of 100-120 per minute, with adequate compression depth and recoil.			
Rescuer #2 opens the airway and gives 2 ventilations to achieve chest rise.			
After 2 minutes (5 cycles), rescuers switch roles.	*It has been 2 minutes.*		
Continue CPR until an AED is available.	*An AED is available.*		
Indicate that the AED would be used			

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SKILL SHEET: TWO RESCUER INFANT CPR

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Person is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and brachial pulse.	*Breathing is absent.* *Pulse is absent*		
Rescuer #1 provides 15 chest compressions (using 2 thumbs) at a rate of 100-120 per minute, with adequate compression depth and recoil.			
Rescuer #2 opens the airway and gives 2 ventilations to achieve chest rise.			
After 2 minutes (5 cycles), rescuers switch roles.	*It has been 2 minutes.*		
Continue CPR until an AED is available.	*An AED is available.*		

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SKILL SHEET: USING AN AED

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Check responsiveness.	*Person is unresponsive.*		
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Simultaneously check breathing and pulse	*Breathing is absent.* *Pulse is absent*		
Provide 30 chest compressions at a rate of least 100 – 120 per minute, with adequate compression depth and recoil.			
Open the airway and give 2 ventilations to achieve chest rise.			
Continue CPR until an AED is available.	*An AED is available.*		
Turn on the Device.	*Device is on.*		
Ensure chest is bare and dry.			
Apply proper electrode pads to chest (Adult pads vs pediatric pads placed per manufacturer direction)	*Pads are applied.*		
Stand clear.			
Initiate analysis.	*Shock advised.*		
Deliver shock.	*Shock delivered.*		
Resume CPR, starting with chest compressions.			
Reanalyze rhythm after 2 minutes.	*No shock advised.*		
Resume CPR if still needed, starting with chest compressions, and reanalyze after 2 minutes.			
If the patient shows signs of life place in the Recovery position.			

Notes:

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SKILL SHEET: ADULT / CHILD AIRWAY OBSTRUCTION

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Responsive Person			
Determine that the person is choking.	*Person is unable to speak, cough, cry.*		
Provide abdominal thrusts (Heimlich Maneuver) until the obstruction is relieved or the person becomes unresponsive.	*Person becomes unresponsive.*		
Unresponsive Person			
Position the person supine on the ground.			
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Provide 30 chest compressions at a rate of 100 – 120 per minute, with adequate compression depth and recoil.			
Open the airway and look in the mouth. Remove any object that is visible.	*No object is visible.*		
Attempt ventilation.	*Ventilation is unsuccessful.*		
If ventilation is unsuccessful, reposition the head and mask, and reattempt ventilation.	*Ventilation is unsuccessful.*		
Repeat chest compressions, check mouth for an object, and attempt ventilations until the obstruction is relieved or EMS / code team arrives.	*Object is visible.*		

Notes:

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SKILL SHEET: INFANT AIRWAY OBSTRUCTION

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Responsive Infant			
Determine that the infant is choking.	*Infant is unable to speak, cough, cry.*		
Provide 5 back slaps and 5 chest compressions. Check mouth for object and remove if visible	*Obstruction is not relieved.*		
Repeat procedures until the obstruction is relieved or the infant becomes unresponsive.	*Infant becomes unresponsive.*		
Unresponsive Infant			
Position the infant supine on a hard, flat surface.			
Have someone activate EMS / Code Team.	*EMS/Code Team is activated.*		
Provide 30 chest compressions at a rate of 100 – 120 per minute, with adequate compression depth and recoil.			
Open the airway and look in the mouth. Remove any object that is visible.	*No object is visible.*		
Attempt ventilation.	*Ventilation is unsuccessful.*		
If ventilation is unsuccessful, reposition the head and mask, and reattempt ventilation.	*Ventilation is unsuccessful.*		
Repeat chest compressions, check mouth for an object, and attempt ventilations until the obstruction is relieved or EMS / code team arrives.	*Object is visible.*		

Notes:

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PRACTICE CHECK

Question 1: After making sure the scene is safe, what three things must you check for as part of the primary Check?
Answer: _____

Question 2: How do you check for responsiveness?
Answer: _____

Question 3: How do you check for breathing?
Answer: _____

Question 4: How do you check for a pulse in an adult or child?
Answer: _____

Question 5: How do you check for a pulse in an infant?
Answer: _____

Question 6: Once 9-1-1 / code team has been called, what care is needed next for an unresponsive, non- breathing child/infant/adult who still has a pulse?
Answer: _____

Question 7: Once 9-1-1 / code team has been called, what care is needed next for an unresponsive, non- breathing, pulseless adult?
Answer: _____

Question 8: How many compressions should be given when performing 1 rescuer CPR for adults, children, or infants?
Answer: _____

Question 9: How deep should the chest of an adult be compressed during CPR?
Answer: _____

Question 10: How deep should the chest of a child or infant be compressed during CPR?
Answer: _____

Question 11: On what type of surface should CPR be performed?
Answer: _____

Question 12: What is the compression / ventilation ratio for two-rescuer CPR on a child or infant?
Answer: _____

Question 13: What should be done immediately after providing chest compressions?
Answer: _____

Question 13. How should the airway of an unresponsive person without neck injury be opened?
Answer: _____

Question 14: How should the airway of an unresponsive person with possible neck injury be opened?
Answer: _____

Question 15: How should you position an unresponsive, breathing person?
Answer: _____

Question 16: What are some signs and symptoms of a heart attack?
Answer: _____

Question 17: What are some signs and symptoms of a stroke?
Answer: _____

Question 18: How should care be provided for a conscious choking adult or child?
Answer: _____

Question 19: How should care be provided for a conscious choking infant?
Answer: _____

Question 20: Where should the electrode pads be placed on the chest of an adult?
Answer: _____

Question 21: Where should the electrode pads be placed on an infant?
Answer: _____

Question 22: What are the steps to follow when arriving on scene with an AED?
Answer: _____

Question 23: What should be done if the AED gives a "No shock" advisory?
Answer: _____

Question 24: What should be done if a medication patch is on the chest, in the way of where an electrode pad will be placed?
Answer: _____

Question 25: What are the two most common life-threatening dysrhythmias seen in the first few minutes of sudden cardiac arrest that can be corrected with an AED?
Answer: _____

Answers:

1. Responsiveness, breathing, and pulse.
2. Tap and shout.
3. Look for the chest to rise and fall.
4. Feel for the pulse in one of the carotid arteries found at the sides of the neck.
5. Feel for the pulse in the inside of the upper arm.
6. Rescue breathing, giving one ventilation every 2-3 seconds for a child/infant; 1 breath every 6 seconds for an adult
7. CPR, beginning with chest compressions.
8. 30
9. One third the depth of the chest (about 2 inches for a child; 1½ inches for an infant)
10. Hard, flat
11. Open the airway and give two ventilations.
12. 15 compressions : 2 ventilations
13. Head tilt – chin lift / Jaw thrust with head tilt
14. Jaw thrust without head tilt
15. On his or her side (recovery position)
16. Chest discomfort, shortness of breath, fatigue, and sweating
17. Weakness, numbness, dizziness, vision problems, speaking problems, and sudden/severe headache
18. Provide abdominal thrusts (Heimlich maneuver)
19. Provide 5 back blows and 5 chest thrusts
20. On the upper right and lower left sides of the person's bare, dry chest
21. On the left side of the bare, dry chest, and on the left side of the back
    Turn on the device (and follow the prompts), prepare the chest and attach the electrode pads, stand clear, analyze, shock if needed, provide 2 minutes of CPR.
23. Provide 2 minutes of CPR
24. Remove the patch and dry off the chest before applying the electrode pad.
25. Ventricular fibrillation (V-fib) and Ventricular tachycardia (V-tach)

ADDITIONAL NOTES