INSTRUCTOR MANUAL FOR STANDARD FIRST AID

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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.

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

- Health Care Provider Basic Life Support
- Community CPR &AED
- Standard First Aid
- Preventing Bloodborne Pathogens

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 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 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, and first aid supplies as listed in the course lesson plans. Manikins are a required part of all CPR/AED courses, and feedback devices including those capable of maintaining compression rate and measuring depth and recoil are strongly recommended.
- Cleaning supplies
- Course skill sheets
- Practice Assessment
- Course final written assessments (based on the course)
- Course evaluations and Course Completion Cards are digital items issued to participants upon completion of any course.

e-Learning Courses
E&A is developing e-learning courses that can be used as part of a blended learning approach to course completion. The e-learning course a participant completes covers 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 assessment.

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.
- Assessments – 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-assessment 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 of 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.

COURSE OUTLINE – STANDARD FIRST AID

Approximate Time: 2 hours

NOTE: If teaching this first aid course in conjunction with a CPR/AED course, skip lessons 1 and 2 as they would be redundant. Additional time can be added to other lessons if needed.

Lesson	Topics	Practical Skills	AV Support	Time
1. Introduction to Emergency Care	- Knowing What to Do Matters - Basic Life Support - Emergency Care & the Law - Recognizing an Emergency - Taking Action - Staying Safe from Disease	None	PPT Lesson 1	10 min
2. Assessing the Scene and the Victim	- Scene Check - Primary Check - Secondary Check	Primary check Secondary check	PPT Lesson 2	15 min
3. Wounds and Bleeding Control	- Types of bleeding - Open wounds - Dressings and Bandages - Care for External Bleeding - Infected Wounds - Closed Wounds - Care for Internal Bleeding	Direct pressure Pressure bandage	PPT Lesson 3	15 min
4. Burns	- Types of Burns - Burn Classifications - Assessing the Extent of Burns - Caring for Burns	None	PPT Lesson 4	5 min
5. Head, Spine, and Pelvic Injuries	- Head Injuries - Spinal Injuries - Pelvic and Hip Injuries	None	PPT Lesson 5	10 min
6. Chest and Abdomen Injuries	- Chest Injuries - Abdomen Injuries - Impaled Objects	None	PPT Lesson 6	5 min
7.	- Muscle Injuries - Bone Injuries	Arm Splinting	PPT Lesson 7	15 min

Muscle, Bone, and Joint Injuries	- Joint Injuries			
8 Shock	- Types of Shock - Recognizing Shock - Care for Shock - Allergic Reaction and Anaphylactic Shock	Epinephrine auto-injector	PPT Lesson 8	10 min
9 Medical Emergencies	- Medical Emergencies - Breathing Problems - Chest Discomfort - Diabetic Conditions - Fainting - Pregnancy Complications - Seizure - Stroke	None	PPT Lesson 9	15 min
10 Poisoning	- Poisoning - Ingested Poisons - Alcohol Intoxication and Other Drug Misuse - Inhaled Poisons - Absorbed Poisons - Injected Poisons	None	PPT Lesson 10	10 min
11 Temperature Extremes	- Heat Injuries - Cold Injuries	None	PPT Lesson 11	5 min
12 Rescue, Triage, Emergency Moves	- Rescues - Triage - Emergency Moves	None	PPT Lesson 12	5 min
Wrap Up	Provide end of class group assessment Close class roster Issue electronic course completion cards	None		5 min

COURSE LESSON PLANS

Lesson 1: Introduction to Emergency Care

Learning Outcomes
After completing this lesson, participants will be able to:
- Recognize the significance of injuries and medical emergencies.
- Define first aid.
- Describe basic life support.
- Identify legal considerations when providing emergency care.
- Provide examples of conditions when emergency medical services (EMS) should be called.
- Identify questions a dispatcher is likely to ask when you call 9-1-1.
- Describe steps you can take to prevent disease transmission during first aid.

Lesson Overview
- Knowing What to do Matters
- Emergency Care and the Law
- Recognizing an Emergency
- Taking Action
- Staying Safe from Disease

Time: 10 minutes

Audiovisual Support
"Lesson 1" PowerPoint™ slides support this lesson.

Skill Practice Equipment
None

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

Critical Points

Knowing What to do Matters

- Knowing what to do can save lives and reduce the consequences of injuries and medical emergencies.
- First aid is the immediate care provided to an ill or injured victim.
- Serious situations require you to know how to summon more advance medical personnel, what care to give immediately, and how to provide continued care until more qualified help arrives.

Emergency Care and the Law

- There are several legal considerations to be aware of when providing care: Duty to Act, Good Samaritan Laws, consent, abandonment, and negligence. Review each of these with the participants and provide examples of how they apply.

Recognizing an Emergency

- The EMS system is a network of local public safety professionals and community resources, accessed most often through a call to 9-1-1.
- Situations indicating possible emergencies include
    - Smoke/fire
    - Screaming
    - Screeching tires
    - Sounds of collision
    - Collapsing structure
    - Downed electrical wires
    - Strong / Unusual odors
    - Victim collapsing

Taking Action

- Everyone acts differently when confronted with an emergency, and training helps individuals act more appropriately.
- Common factors that keep people from acting include:
    - Assuming others will act
    - Fear of making a mistake / lawsuit
    - Fear of disease transmission
    - Uncertainty about the care to provide or need to call for help
- Do not assume that other bystanders will help.
- Do not fear helping.
- If you are uncertain about the need for EMS or about the care to provide, it is still better to call. Dispatchers will provide you with instructions for care.

When to Call for Medical Help

- 9-1-1 is the number to call in most parts of the United States.

- Ask participants to identify conditions for which calling 9-1-1 would be warranted. These should include:
    - Loss of conscious
    - Difficulty breathing
    - Seizure
    - Chest or abdominal pain/pressure
    - Serious bleeding
    - Serious burns
    - Vomiting blood
    - Serious head, neck, back injury
    - Stroke
    - Broken bones
- Be prepared to answer these questions from the dispatcher when you call 9-1-1:
    - Your name and phone number
    - Location of the victim
    - What happened
    - How many people need help
    - Victim's condition
    - What care is being provided

Staying Safe from Disease

- The risk of disease transmission when providing first aid is very low.
- Follow Standard Precautions at all times to further reduce the risk.
- Refer participants to Table 1.1 in the student manual and review each of the diseases of concern.
- Diseases of concern include hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV) , transmitted through bodily fluids, and tuberculosis and measles transmitted through the air.
- Standard Precautions are measures that include hygiene practices (e.g. hand washing), engineering controls (e.g. workplace eye wash stations), and work practice controls (e.g. clean up procedures).
- The use of personal protective equipment (PPE) ensures an effective barrier is maintained between the first aider and an ill or injured person (e.g. wearing medical exam gloves before contacting blood). Review the examples of PPE listed in the chapter.
- Stay safe when rendering first aid by:
    - Use barriers to avoid blood
    - Use breathing masks
    - Do not eat or drink while rendering care
    - Avoid touching your mouth, nose, or eyes while rendering care
    - Wash thoroughly after care
    - Do not touch items soiled with bodily fluids
    - Clean surfaces properly with a mixture of 1 part bleach and 9 parts water
    - Dispose of all soiled items properly.
- If you suffer a possible exposure to blood or bodily fluid while at work 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 workplace supervisor immediately
- Follow your employer's written exposure control plan

Lesson Application

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

- Can you provide examples of emergency situations?
- Can you list some conditions that would require a call to 9-1-1?
- What are some basic legal considerations that apply to emergency care?
- Can you name several diseases that pose a risk of transmission during first aid?
- What precautions can you take to help prevent disease transmission during first aid?

Instructor Lesson 1 Notes

Lesson 2: Assessing the Scene and the Victim

Learning Outcomes

After completing this lesson, participants will be able to:

- Identify dangers at the scene of an emergency.
- Describe the purpose of the primary check when assessing a victim.
- Describe the purpose of the secondary check when assessing a victim.
- Demonstrate how to assess a responsive and unresponsive victim using the primary and secondary check.

Lesson Overview

- Scene Check
- Primary Check
- Secondary Check

Time: 15 minutes

Audiovisual Support

"Lesson 2" PowerPoint™ slides support this lesson.
"Lesson 2" video clips support this lesson.

Skill Practice Equipment

- Manikins (Adult)
- Disinfectant

Critical Points

Scene Check

- Make sure the scene is safe before you approach the victim.
- Unsafe scenes can include:
    - Traffic
    - Fire/Smoke
    - Downed electrical wires
    - Unsafe structures
    - Chemical spills / Poisonous gas
    - Active assailant

Primary Check

- The primary check determines if the victim has any immediate life threats. It involves checking for responsiveness (consciousness), breathing and severe bleeding.
- For an obviously responsive victim, ask what is wrong. If the victim can speak normally he or she is not having any serious breathing problem including choking. Look quickly over the body to determine that there is no severe (spurting/ heavily flowing) bleeding.

- For a victim found motionless, tap the shoulder of the motionless victim and shout, “Are you OK?” to see if the he or she awakens.
- Call 9-1-1 if the person is unresponsive.
- Check breathing by looking for movement (rising and falling) of the chest and listen for sounds that would indicate normal vs. abnormal (occasional gasping) breathing.
- If unresponsive, but breathing normally, check for any severe bleeding and monitor the victim’s condition.
- If an unresponsive victim begins vomiting, roll the victim onto his or her side.
- If unresponsive and not breathing normally, begin CPR. This is covered in the next lesson.

Instructor Demonstration: Demonstrate the primary check.

Secondary Check

- A secondary check should only be done once the primary check is completed and any immediate life-threatening conditions are cared for.
- A secondary check has 2 parts:
    - Gathering information about the victim’s condition.
    - Performing a quick physical exam for conditions that could need care or become more serious if left uncared for.
- Look for signs (what you can see), and symptoms (what a victim can tell you).
- Use SAMPLE to gather information about the victim. Have participants review Table 2.1.
- Use DOTS when conducting the quick physical check: Deformity, Open Wound, Tenderness, Swelling
- If you are uncertain of the extent of possible problems, conduct a head –to – toe physical check.
- While conducting the physical check, consider skin condition (temperature and moisture), and any medical identification bracelet that could help determine the problem.

Instructor Demonstration: Demonstrate the secondary check.

Participant Practice: Have participants practice conducting a primary and secondary check, using manikins and/or pairing with partners.

Lesson Application

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

- Can you describe situations that would make a scene unsafe to provide care?
- What is the purpose of the primary check?
- How do you conduct a primary check?
- When is the secondary check performed?
- What are the steps of the secondary check?
- What is the difference between a sign and a symptom?
- What do the mnemonics SAMPLE and DOTS stand for?

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

- Perform a primary and secondary check.

Instructor Lesson 2 Notes

Lesson 3: Wounds and Bleeding Control

Learning Outcomes

After completing this lesson, participants will be able to:

- Recognize soft tissue injuries that commonly occur in home, workplace, and recreation settings.
- Describe examples of open and closed wounds.
- Describe how to care for a wound that involves an impaled object or amputation.
- Recognize external and internal bleeding.
- Describe how to provide care for internal bleeding.
- Explain how to recognize and care for an infected wound.
- Demonstrate how to provide care for a victim who has external bleeding.

Lesson Overview

- Types of Bleeding
- Open Wounds
- Dressings and Bandages
- Care for External Bleeding
- Infected Wounds
- Closed Wounds
- Care for Internal Bleeding

Time: 15 minutes

Audiovisual Support

"Lesson 3" PowerPoint™ slides support this lesson.
"Lesson 3" video clips support this lesson.

Skill Practice Equipment

- Gauze pads
- Roller gauze

Critical Points

Types of bleeding

- There are 3 types of bleeding: capillary (minor), venous (steady), arterial (spurting).

Open Wounds

- Open wounds include abrasions (scrapes), incision (smooth edge cut), laceration (jagged edge cut), puncture, avulsion (tearing), amputation (removal), impaled object (embedded).

Dressings and Bandages

- Dressings are often sterile gauze pads that are placed over an open wound to help prevent infection and absorb blood.
- Bandages are often roller gauze that cover and hold a dressing in place, while maintaining pressure over the wound.

Care for External Bleeding

- Care for an open wound by protecting against disease transmission, stopping the bleeding, and reducing the chance of infection:
    - Use Standard Precautions.
    - Clean and cover shallow wounds (e.g. adhesive bandage)
    - For deeper wounds, cover with dressing, apply direct pressure, apply pressure bandage, and seek medical care.
    - Call 9-1-1 for severe or uncontrolled bleeding
    - Stop any bleeding from amputations; retrieve the severed part and keep it dry and cool; call 9-1-1
    - Keep impaled objects from moving. Hold still or stabilize with bandage.

Instructor Demonstration: Demonstrate how to apply direct pressure and pressure bandage.

Participant Practice: Have participants practice how to apply direct pressure and pressure bandage.

    - Hemostatic gauze is coated with agents that help to quickly promote clot formation.
    - Tourniquets are commercial or self-made devices that are used for life-threatening bleeding from limbs. Tourniquets are placed inches above the wound, and when tightened, apply circumferential pressure around the limb to stop bleeding.

Instructor Demonstration: Demonstrate how to apply a commercial (e.g. C-A-T tourniquet) if available. If a commercial device is not available, a self-made tourniquet can be used. Fold a triangle bandage into a 3-4" binder and wrap it once, tightly around the limb, and tie a knot. Place a windlass (e.g. strong rod-like device such as a dowel, screwdriver, butter knife, etc… about 6 inches long) on the knot, and tie a knot over the windlass. Begin twisting the windlass to constrict the binder until blood stops. Secure the ends of the windlass with the ends of the binder, tied around the arm. **CAUTION** – When demonstrating this technique, DO NOT tighten the windlass fully.

Infected Wounds

- Common signs and symptoms of wound infection include:
    - Warm, red, painful, swollen wound
    - Pus discharge from the wound
    - Foul odor from the wound
- Care includes applying moist, warm compresses; cleaning with soap and water; applying an antibiotic ointment and new bandage; and seeking medical care if the condition does not improve.

Closed Wounds

- Closed wounds involve internal bleeding, and result from blunt injury that does not break the skin.
- Bruises and tenderness are the most common signs and symptoms.
- More severe internal bleeding involving organ injury can include coughing up or vomiting blood, and black or bloody stool.

Care for Internal Bleeding

- For injured limbs, use the mnemonic RICE: Rest, Ice, Compression, Elevation.
- Call 9-1-1 for more serious internal bleeding such as a severe abdominal closed wound, and care for shock.

Lesson Application

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

- Can you describe the three types of bleeding?
- Can you describe seven open wounds?
- Can you describe how to care for a victim with external bleeding?
- What are several signs and symptoms of an infected wound?
- What are the signs and symptoms of internal bleeding?
- How should you care for a victim of internal bleeding?

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

- Controlling external bleeding.

Instructor Lesson 3 Notes

Lesson 4: Burns

Lesson Learning Outcomes

After completing this lesson, participants will be able to:

- Identify the three types of burns and provide examples of each.
- Determine the depth and extent of a burn.
- Recognize when to seek medical care for burns.
- Describe how to care for heat, chemical, and electrical burns.

Lesson Overview

- Types of Burns
- Burn Classifications
- Assessing the Extent of Burns
- Caring for Burns

Time: 5 minutes

Audiovisual Support

"Lesson 4" PowerPoint™ slides support this lesson.
"Lesson 4" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Types of Burns

- There are 4 types of burns: thermal, chemical, electrical, and radiation

Burn classification

- Burns are classified according to the depth or severity of tissue damage that occurs.
    - 1st degree (Superficial) – Affecting outer layers of the skin. Red coloration
    - 2nd degree (Partial thickness) – Affecting deeper layers of skin. Blistering
    - 3rd degree (Full thickness) - Affecting all layers of the skin and underlying fat. Nerves, blood vessels, and muscles can also be affected. Charring / leathery appearance

Assessing the extent of Burns

- Besides the depth of the burn it is helpful to know the extent of surface area that has been affected. Use the rule of the hand:
    - The size of the victim's hand is equal to approximately 1% of the total surface area of the victim's body.

- Estimate the extent of damage by counting the approximate number of hands it would take to cover the burned area.

Caring for Burns

- Burns are more serious on certain parts of the body, such as the head, neck, chest, genitals, hands, and feet.
- Burns are also more serious for young children and the elderly.
- Care for any burn based on the type of burn, the highest level of severity, and the extent of the burn.
- Care involves stopping the burning process, minimizing further injury, and determining the need for more advanced care.
- For 1st degree thermal burns:
  - Stop the burning process and reduce the pain with cool water for several minutes
  - Apply aloe vera gel or a skin moisturizer.
  - Control pain and swelling with an over-the-counter medication such as ibuprofen
- For minor (< 10% of the body) 2nd degree thermal burns:
  - Stop the burning process and reduce the pain by applying cool water for several minutes.
  - Cover the burn loosely with a nonstick dressing and bandage
  - Control pain and swelling with an over-the-counter medication such as ibuprofen
  - Seek medical care
- For serious 2nd degree burns (>10% of the body) and 3rd degree thermal burns:
  - Do not attempt to remove any clothing stuck to the skin
  - Cover the burn with a cool, moist dressing and bandage loosely.
  - Care for shock
  - Call 9-1-1
- For chemical burns:
  - Flush the chemical from the skin using large amounts of running water for 20 minutes, or until EMS personnel arrive
  - If the chemical is a dry powder and no water is available, brush the powder from the skin
  - If your job involves working with chemicals, follow the instructions provided on your Material Safety Data Sheets (MSDS) for the proper care of burns from the chemicals at your worksite.
- For electrical burns:
  - Make certain any power source is turned off or disconnect before touching the victim.
  - Check responsiveness and breathing, and provide CPR/AED if needed
  - Cover any wounds with dry, nonstick gauze pads and bandage loosely
  - Call 9-1-1

Application

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

- Can you describe the four types of burns?
- Can you differentiate the three classifications of burns?
- Can you describe how to determine the extent of a burn?
- What are the general steps of burn care?
- How should you care for a victim suffering a thermal burn, chemical burn, or electrical burn?

Instructor Lesson 4 Notes

Lesson 5: Head, Spine, and Pelvic Injuries

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe how to recognize head, spinal, pelvic and hip injuries.
- Identify signs of concussion.
- Describe how to care for head injuries including injuries to the skull, eyes, nose, cheeks, and mouth.
- Describe how to care for spinal injuries.
- Describe how to care for pelvic and hip injuries.

Lesson Overview

- Head Injuries
- Spinal Injuries
- Pelvic and Hip Injuries

Time: 10 minutes

Audiovisual Support

"Lesson 5" PowerPoint™ slides support this lesson.
"Lesson 5" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Head Injuries

- Head injuries can include damage to the skull and face, and involve external or internal bleeding and injury that affect the brain.
- A skull fracture is a break of part of the skull as a result of significant force.
- Signs and symptoms of skull fracture can include:
    - Loss of consciousness
    - Pain
    - Deformity of the skull, including sunken area or bone fragments
    - Clear or bloody fluid from the ears or nose
    - Heavy bleeding
    - Exposed brain matter
    - Penetrating injury from a gunshot or other significant force
- Care for skull fracture:
    - Check responsiveness and breathing and provide care as needed.
    - Place a sterile dressing (gauze pad or other clean item) over the wound
    - Apply pressure along the edges of the dressing, not directly over any weak area of the skull
    - Restrict movement of the victim's head

    - Call 9-1-1
- Concussion is a brain injury, often caused by a blow to the head that changes the way the brain functions.
- Signs and symptoms of concussion can include:
    - Loss of consciousness
    - Loss of memory
    - Headache, dizziness, or nausea
    - Problems with vision or balance
    - Ringing in the ears
- Care for concussion involves initially positioning the victim on his or her back and restricting movement of the head and neck and verifying no additional injuries. Call 9-1-1.
- Scalp wounds can produce the appearance of severe bleeding. Care for a scalp wound as you would other external bleeding (pressure and bandage). Position the victim on the back with the head and shoulders slightly elevated. Call 9-1-1 if bleeding cannot be controlled or the wound is large or deep.
- If a loose object is in an eye, hold the eye open and rinse with water. Seek medical care if the object does not come out.
- If a chemical gets in an eye, have someone call 9-1-1. Hold the affected eye open (close the other eye) and rinse with water until EMS personnel arrive.
- For a blow to the eye, apply ice or a cold pack to a closed eye to reduce pain and swelling. Seek medical care if there is significant pain, vision problems, or discoloration of the eyeball.
- If an eyeball is knocked from its socket, do not attempt to replace it. Cover the injured eye loosely with a moist sterile dressing (gauze pad or other clean dressing). A paper cup could be placed over the dressing and held gently in place to further protect the eye. Close the uninjured eye. Call 9-1-1.
- An impaled object in the eye should be kept still until EMS personnel can take over.
- For a cut to the eye or eyelid, apply pressure to the area, but not the eyeball. Close the unaffected eye. Call 9-1-1.
- For penetrating cheek injuries, with bleeding into the mouth, place a dressing and pressure inside and outside the cheek.
- For a nosebleed, have the victim sit and lean forward and pinch the nostrils together. Call 9-1-1 for uncontrolled bleeding.
- For a closed wound to the lips or tongue, apply a cold pack. For an open wound apply pressure to control bleeding.
- For a knocked out tooth, control any bleeding from the socket. Locate and handle the missing tooth by the crown and care for the injury using one of these options:
    - Reinsert the tooth
    - If reinsertion is not possible, place the tooth in Hanks Balanced Salt Solution, as found in Save-a-Tooth®, or coconut water, milk, a saltwater solution (1 teaspoon salt in 1 quart of water), or the victim's saliva.

Spinal Injuries

- Spinal injuries can involve the spinal column (vertebrae) or the bundle of spinal nerves known as the spinal cord.
- Signs and symptoms of spinal injuries can include:
    - Loss of consciousness
    - Neck or back pain or tenderness
    - Neck deformity
    - Limb weakness, numbness, or tingling
- Care for spinal injuries:
    - Tell the victim not to attempt to move.
    - Restrict movement of the head and neck (Spinal Motion Restriction). This only requires holding the head still.
    - Call 9-1-1

Pelvic and Hip Injuries

- Pelvic fractures have the potential for severe bleeding from blood vessels within the pelvis.
- The hip joints are at the lower areas of the pelvis. These areas are susceptible to hip dislocation if the head of the femur is displaced out of the joint. This can compromise the sciatic nerve, the most important nerve in the lower limbs.
- Signs and symptoms of pelvic and hip injuries can include:
    - Inability to stand or walk
    - Hip or groin pain or tenderness
    - Loss of feeling in the injured limb
    - Knee drawn toward the chest and thigh rotated inward, or the leg extended and rotated outward.
    - Shock
- Care for pelvic and hip injuries by supporting the victim in the most comfortable position. Do not attempt to move the legs. Call 9-1-1

Application

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

- How should you care for a skull fracture?
- What are the signs and symptoms of a concussion?
- How should you care for loses objects or chemicals in the eyes?
- Can you describe how to care for eye injuries from blows and penetrating injuries?
- How should you care for penetrating cheek injuries?
- How should you care for a victim with a nosebleed?
- Can you explain how to care for a victim who has just lost a permanent tooth?
- What are the signs and symptoms of possible spinal injury?
- What is spinal motion restriction?

Instructor Lesson 5 Notes

Lesson 6: Chest and Abdomen Injuries

Learning Outcomes

After completing this lesson, participants will be able to:

- Recognize the signs and symptoms of chest and abdomen injuries.
- Identify when to seek medical care for chest and abdomen injuries.
- Describe how to care for open and closed injuries to the chest and abdomen.

Lesson Overview

- Chest Injuries
- Abdomen Injuries
- Impaled Objects

Time: 5 minutes

Audiovisual Support

"Lesson 6" PowerPoint™ slides support this lesson.
"Lesson 6" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Chest Injuries

- Common closed chest injuries involve bruising, caused by blunt force trauma. More serious closed chest injuries can involve rib fractures and open chest injury.
- Rib fractures can involve an individual rib or multiple ribs. A flail chest is when multiple ribs in the same area are each broken in multiple places.
- Signs and symptoms of rib fractures include:
    - Chest pain/tenderness, especially when breathing or coughing
    - Difficulty breathing, including the inability to take a deep breath
- To care for closed chest injuries, such as rib fracture:
    - Place the victim in the most comfortable position for breathing and pain relief. This is often a seated position.
    - Stabilize the ribs by placing a folded towel, blanket, or pillow against the injured side and have the victim hold it in place with his or her arm
    - Call 9-1-1
- A chest injury that allows air to pass into and out of the chest cavity is a sucking chest wound.
- To care for open chest injuries:
    - Control any significant bleeding present
    - If a sucking chest wound is present with little bleeding, it is acceptable to leave this open chest wound exposed. If more serious bleeding is present, control bleeding with direct pressure.

- Call 9-1-1.

Abdomen Injuries

- Signs and symptoms of closed abdomen injuries include bruising, painful, tender or tight areas of the abdomen.
- To care for closed abdomen injuries place the victim in a comfortable position (often on the back or side, with the knees bent). Care for shock. Seek medical care. Call 9-1-1 for incapacitating injuries.
- An open abdomen injury can result in organs protruding from the abdomen, known as an evisceration.
- To care for abdominal evisceration:
  - Place the victim on his or her back, with the knees bent
  - Gently cover the protruding organs with a moist, sterile dressing. Avoid pressure and do not try to reinsert the organs
  - Care for shock by keeping the victim warm
  - Call 9-1-1

Impaled Objects

- To care for an object impaled (embedded) in the chest or abdomen:
  - Do not attempt to move the victim, remove the object, or apply any pressure to the object as additional injury could result.
  - Keep the object from moving – Hold the object still or place bulky dressings, such as rolls of gauze around the object and bandage in place if possible.

Application

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

- Can you identify signs and symptoms of rib fractures?
- Can you differentiate between a flail chest and sucking chest wound?
- Can you describe how to care for closed chest injuries such as a rib fracture?
- How should you care for a victim experiencing a sucking chest wound?
- How should you care for a victim with an open abdomen wound?
- What are the general steps of care for an impaled object in the chest or abdomen?

Instructor Lesson 6 Notes

Lesson 7: Muscle, Bone, and Joint Injuries

Learning Outcomes

After completing this lesson, participants will be able to:

- Recognize the signs and symptoms of muscle, bone, and joint injuries.
- Describe how to care for muscle injuries, joint injuries, and open and closed fractures.
- Demonstrate how to splint a fractured limb.

Lesson Overview

- Muscle Injuries
- Bone Injuries
- Joint Injuries

Time: 15 minutes

Audiovisual Support

"Lesson 7" PowerPoint™ slides support this lesson.
"Lesson 7" video clips support this lesson.

Skill Practice Equipment

- Triangle bandages for anatomic splinting and slings.
- Towels and rolls of gauze for soft splinting.

Critical Points

Muscle Injuries

- There are three common muscle injuries:
    - Strain - overstretched or partially torn muscle
    - Contusion – bruise from direct blow
    - Cramp – uncontrolled, painful muscle spasm
- Follow the RICE approach for all muscle injuries:
    - Rest – Ice – Compression – Elevation

Bone Injuries

- Bones can be bruised or broken (fracture).
- A fracture can be closed (most common) or open, where the bone can extend through the skin.
- Signs and symptoms of a fracture include:
    - Inability to use the injured area
    - Hearing the bone snap
    - Grating sensation
    - DOTS – Deformity, Open Wound, Tenderness, Swelling
- Care for fractures includes reducing the anxiety that victims commonly experience, and keeping the victim from moving the injured area. This can be

done by applying a splint to prevent further damage to muscles, nerves, and blood vessels.

- Splint the injured area using one of three types of splints:
    - Anatomic (Self) Splint- Secure the injured limb to an uninjured part of the body
    - Soft splint – Secure the injured limb with bulky material such as a rolled towel, blanket, or coat
    - Rigid splint – Secure the limb with a hard object such as rolled magazine or board
- Apply a cold pack if possible to help reduce the swelling and pain.
- If an open fracture is present, do not apply pressure to any protruding bone. Cover the area with a dressing and bandage loosely.
- Call 9-1-1 for any open fractures or large bone fractures (such as the thigh), or when transporting the victim would be difficult or would aggravate the injury.

Instructor Demonstration: Using two triangular bandages demonstrate how to apply an anatomic (self) splint to a simulated closed fracture of the arm. Use one triangular bandage to form a sling. Use the 2nd triangular bandage to further limit movement by binding the arm to the chest.

Using a towel, demonstrate how to roll it around a simulated closed fracture of the arm. Using a roll of gauze, wrap the towel securely. Apply a sling and binder using two triangular bandages.

Participant Practice: Have participants work in pairs to practice how to apply an anatomic (self) splint and a soft splint to a simulated closed fracture of the arm.

Joint Injuries

- Injuries to joints, such as the shoulders, elbows, knees, ankles, and fingers/toes include sprains and dislocations.
- Sprains involve the stretching or tearing of ligaments.
- Dislocations are more serious, involving the bone end coming out of the joint socket.
- Joint injuries have signs and symptoms similar to fractures, and are similarly cared for using RICE and splinting if the area is dislocated.

Application

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

- Can you describe the signs and symptoms of muscle, bone, and joint injuries?
- Can you differentiate between closed and open fractures?
- How should you care for a victim with a muscle injury?
- How should you care for a victim with a fracture or dislocation?

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

- Arm splinting

Instructor Lesson 7 Notes

Lesson 8: Shock

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe types of shock.
- Recognize the signs and symptoms of shock.
- Describe how to care for a victim in shock.
- Identify signs and symptoms of allergic reaction and anaphylactic shock
- Describe how to care for allergic reaction and anaphylactic shock

Lesson Overview

- Types of Shock
- Recognizing Shock
- Care for Shock
- Allergic Reaction and Anaphylactic Shock

Time: 15 minutes

Audiovisual Support

"Lesson 8" PowerPoint™ slides support this lesson.
"Lesson 8" video clips support this lesson.

Skill Practice Equipment

- Epinephrine auto injector training devices.

Critical Points

Types of Shock

- Shock is a medical emergency in which the organs and tissues of the body are not receiving an adequate flow of blood, depriving organs and tissues of necessary oxygen and nutrients.
- Types of shock include:
    - Anaphylactic shock – severe allergic reaction
    - Cardiogenic shock – Heart damage so severe it cannot pump effectively
    - Hypovolemic shock – Severe blood loss from external or internal bleeding, or loss of body fluid from burns and dehydration
    - Metabolic shock – When fluids and electrolytes are impaired, such as with diabetic emergency
    - Neurogenic shock – injury to the nervous system (spinal cord, brain)
    - Psychogenic shock – Shock resulting from overwhelming emotional factors; fainting
    - Septic shock - An acute infection that overwhelms the body resulting in poisonous substances accumulating in the blood

Recognizing Shock

- Signs and symptoms of shock can include:
    - Altered consciousness / confusion
    - Anxiety and restlessness
    - Pale, bluish, cool, moist skin. But skin can be
    - Nausea or vomiting
    - Rapid breathing and heart rate.
    - In neurogenic shock the heart rate can be slow, and the skin warm, dry, and flushed.

Care for Shock

- To care for shock:
    - Position the victim on his or her back whenever possible. If breathing problems exist, the victim will likely need to be supported in a seated or slightly reclined position to make breathing easier.
    - Keep the victim warm.
    - Call 9-1-1

Allergic Reactions and Anaphylactic Shock

- Food allergies are the most common cause of allergic reactions. Foods most commonly associated with severe allergic reactions include milk, eggs, nuts, soy, wheat, fish, and shellfish.
- Besides food, allergic reactions can also be caused by:
    - Insect bites and stings
    - Medications such as antibiotics and pain medications
    - Poisonous plants
    - Latex
    - Dyes from medical procedures
- Antibodies are protective proteins produced by the immune system.
- An allergen is a type of antigen that produces an abnormally vigorous response from the immune system, causing it to fight off a perceived threat that would otherwise be harmless.
- While antibodies are doing their job to remove unwanted foreign substances, they also bind to specialized cells that release inflammatory chemicals that include histamine, causing:
    - Constriction of smooth muscle, causing breathing difficulty
    - Dilation of blood vessels, causing skin flushing
    - Inflammation, causing swelling
    - Movement of plasma from inside blood vessels to spacing outside blood vessels, causing a decrease in blood volume and pressure.
- Anaphylactic shock is the most serious form of allergic reaction.
- Common, less serious signs of allergic reaction are:
    - Rash
    - Itching
    - Red, watery eyes
    - Runny nose

    - Sneezing
- Serious signs and symptoms of severe allergic reaction (anaphylaxis) are:
    - Difficulty breathing
    - Difficulty swallowing
    - Swelling of the face, throat, tongue
    - Rapid heart beat
    - Dizziness / loss of consciousness
- To care for mild allergic reactions consider an antihistamine (e.g. Benadryl).
- For anaphylaxis:
    - Place victim in most comfortable breathing position (e.g. seated)
    - Remove any restrictive clothing
    - Call 9-1-1
    - Assist the victim with his/her prescribed epinephrine auto injector.

Epinephrine Auto Injectors

- Epinephrine is a hormone that dilates bronchial tubes to make breathing easier and increases the heart rate and force of contraction of the heart to help maintain normal blood pressure.
- Epinephrine auto injectors are prescribed medications to be used to care for anaphylaxis until EMS personnel can arrive.
- The medication is often provided in a twin pack, so that a second dose of the medication can be given if the first is ineffective or if serious signs and symptoms return after use and EMS personnel still have not arrived.
- The auto-injector is a single dose, disposal unit that provides an intramuscular injection of epinephrine into the thigh.
- The injection takes a few minutes to begin to work, and provides temporary relief for about 20 minutes.
- Because of the seriousness of the signs and symptoms, and the possible rapid onset, the victim may not be able to administer the injection him/herself.
- To use the auto injector:
    - Use the proper dose for the proper person. As long as the medication was prescribed for the person using it, you will not need to worry about this.
    - Make sure the expiration date is current and the medication is not discolored. Color is checked in the viewing window on the device.
    - Hold the device firmly so that your fingers are not near the needle end of the device.
    - Remove the safety cap
    - Place the victim in a seated or lying position and hold the knee firmly so that the leg does not move during injection.
    - Place the needle end near the outer thigh. The device will work through clothing, but it is best to administer it into the bare skin whenever possible.
    - Press the device firmly in place and hold for 10 seconds
    - Massage the injected area for several seconds.
    - Provide EMS personnel with the used device for proper disposal

Instructor Note: At the time of this publication, the talking epinephrine injector, Auvi-Q, had been voluntarily recalled by Sanofi US. This applied to all devices sold in the USA (approximately 400,000 devices). There is no indication if this product will return to the US market.

Instructor Demonstration: Using an epinephrine auto injector training device, demonstrate the self - use of the device, and then demonstrate how to use the device on a simulated victim experiencing anaphylaxis.

Participant Practice: Have participants work in pairs to practice how to use the epinephrine auto injector training device on themselves and on each other.

Note: Inhalers and Anaphylaxis
A person experiencing wheezing might benefit from the use of his or her medication inhaler. Wheezing often indicates constriction of the lower airways, commonly seen with asthma. But anaphylaxis is a systemic problem, not a local problem like asthma. Inhalers work locally and will have no effect on the systemic response. Since one of the most dangerous problems associated with anaphylaxis is constriction of the upper airway, an inhaler will not be useful to counteract this condition.

Application

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

- Can you describe several types of shock?
- What are the signs and symptoms of shock?
- How should you care for a victim experiencing shock?
- What are the signs and symptoms of allergic reaction?
- How should you care for allergic reactions? (Pg x)
- How do you administer an epinephrine auto injector for anaphylaxis?

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

- Use of an epinephrine auto-injector

Instructor Lesson 8 Notes

Lesson 9: Medical Emergencies

Learning Outcomes

After completing this lesson, participants will be able to:

- Recognize the signs of symptoms associated with medical emergencies including breathing problems, chest discomfort, diabetic conditions, fainting, pregnancy complications, seizure, and stroke.
- Describe how to care for medical emergencies that include breathing problems, chest discomfort, diabetic conditions, fainting, pregnancy complications, seizure, and stroke.

Lesson Overview

- Breathing Problems
- Chest Discomfort
- Diabetic Conditions
- Fainting
- Pregnancy Complications
- Seizure
- Stroke

Time: 15 minutes

Audiovisual Support

"Lesson 9" PowerPoint™ slides support this lesson.
"Lesson 9" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Breathing Problems

- A person can experience breathing problems caused by respiratory infections, chest or head injury, heart attack, or asthma.
- The signs and symptoms of breathing problems include:
    - Struggling to breathe
    - Unusually fast (hyperventilation) or slow breathing
    - Extensive coughing
    - Noisy breathing, including gasping and wheezing
    - Bluish lips
    - Need to pause while speaking
    - Fatigue
- To care for breathing problems:
    - Help the victim into the most comfortable position. This is often seated upright.

    - Assist the victim with his / her prescribed inhaler
    - Call 9-1-1 if the condition does not improve in a few minutes
    - If the condition involves hyperventilating as a result of anxiety, attempt to calm the victim. Have the victim hold his or her breath for several seconds and exhale slowly
- Asthma is a chronic condition in which passageways to the lungs narrow and airway tissues produce excessive amounts of thick mucus and result in breathing difficulty
- Common causes of asthma attacks include:
    - Infections
    - Excessive exercise (exercise – induced asthma)
    - Allergies
    - Drug sensitivity
    - Cold weather
    - Secondhand smoke
    - Stress
- Signs and symptoms of asthma attacks include:
    - Difficulty breathing
    - Rapid, shallow breathing
    - Coughing
    - Whistling or wheezing
    - Fatigue
- To care for asthmatic emergencies:
    - Help the victim move into an upright position.
    - Assist the victim in using his or her prescribed medication or inhaler if available
    - Call 9-1-1 if necessary.

Instructor Note:
When using an inhaler, make sure the victim exhales forcefully first, and then inhales deeply while depressing the medication button, and holds the medication in the lungs for several seconds. This can be repeated if no improvement occurs in a few minutes.

Chest Discomfort

- Chest discomfort can occur from a variety of reasons including injury to the chest, lung infections, but the most serious is heart attack.
- A heart attack occurs when the blood supply to the heart is severely reduced or stopped and the heart muscle tissue dies.
- If the heart stops beating, it is known as cardiac arrest
- The signs and symptoms of a heart attack include:
    - Chest pressure or pain that lasts for more than a few minutes and that may spread to the shoulders, neck, jaw, or arms.
    - Breathing difficulty
    - Dizziness

    - Sweating
    - Nausea
    - Fatigue
- To care for a victim having a heart attack:
    - Call 9-1-1
    - Have the victim rest in the most comfortable position, often seated or reclined
    - If the victim has a prescribed heart medication, such as nitroglycerin, assist with its use.
    - Provide 1 regular or 2 low dose aspirin if available

Diabetic Emergencies

- A person with diabetes must carefully regulate blood sugar and insulin levels through a combination of medication, diet, and exercise.
- Any significant imbalance between blood sugar and insulin levels can result in one of two types of diabetic emergencies: hypoglycemia or hyperglycemia.
- Hypoglycemia - low blood sugar level and high insulin level.
- Hyperglycemia - high blood sugar level and low insulin level.
- Signs and symptoms of diabetic emergencies include:
    - Diminished level of consciousness
    - Weakness
    - Hunger or thirst
    - Vision difficulty
    - Breathing difficulty
    - fruity breath odor
- A victim with hypoglycemia needs to get sugar into the bloodstream quickly to balance the effects of high insulin.
- To care for diabetic emergencies:
    - Have the victim rest in a comfortable position.
    - For a conscious victim who is able to swallow, ask the victim to describe any specific treatment needs. Diabetics often carry glucose tablets or gel. If these are not available, candies with sugar or fruit juice can be used.
    - If the condition is hypoglycemia, the victim's condition should improve rapidly.
    - Call 9-1-1 f the victim's condition does not improve rapidly.

Fainting

- Fainting occurs when the flow of oxygen to the brain is temporarily disrupted.
- Early warning signs or symptoms of an impending fainting episode can include nausea, weakness, chills, abdominal pain, dizziness, or headache.
- Causes of fainting include:
    - Hyperventilation (rapid breathing)
    - Hypoglycemia (low blood sugar)
    - Heart problems
    - Heat /Dehydration
    - Blood loss

    - Psychological stress
- To care for fainting:
    - Assist the victim to lie down on a flat surface. If a victim has already fainted, look for signs of injury from a fall
    - Check responsiveness and breathing
    - If the victim vomits, roll the victim into the recovery position.
    - Loosen any restrictive clothing
    - Call 9-1-1 if the victim's condition does not improve shortly

Pregnancy Complications

- Pregnancy complications requiring immediate medical care.
- Complications include victims experiencing:
    - Abdominal pain / Severe cramps
    - Heavy vaginal bleeding
    - Severe nausea and vomiting
    - Significant decline in the activity of the baby
    - Persistent, severe headache
    - Visual disturbances
- Pregnancy complications require the attention of medical professionals.
    - Call 9-1-1
    - For vaginal bleeding or severe abdominal pain or cramps, place the victim on her left side.
    - If vaginal bleeding is present, have the victim place a sanitary napkin or other sterile dressing over the opening of the vagina. Provide any blood soaked dressings or tissue that is passed to EMS personnel to take with the victim to the hospital for further evaluation.

Seizures

- Seizures are sudden, involuntary changes in a person's brain cell activity due to a massive electrical charge.
- Some seizures can have significant muscle rigidity and convulsions, while others are more like day dreaming.
- Common causes of seizures include:
    - Drug overdose
    - Hypoglycemia (low blood sugar)
    - Fever
    - Head injury
    - Infection
- To care for seizures:
    - Protect the victim from injury. Move any items away that might cause injury (e.g. sharp objects).
    - Roll the victim onto one side to help keep the airway clear.
    - Place a thin, soft object (such as a folded towel) between the victim's head and the ground.
    - Call 9-1-1

Stroke

- A stroke occurs when blood flow to part of the brain is disrupted due to blocked or ruptured arteries in the brain.
- The signs and symptoms of stroke include:
    - Weakness or numbness on one side of the body,
    - Vision problems
    - Problems speaking
    - Dizziness or loss of balance
    - Confusion
    - Sudden severe headache
- To care for a victim having a stroke:
    - Call 9-1-1
    - Have the victim rest in the most comfortable position, often on the back with head and shoulders elevated
    - If vomiting occurs, roll the victim onto his or her side (recovery position) to keep the airway clear

Application

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

- Can you describe causes of chest discomfort?
- How would you care for a victim having a heart attack?
- What are the signs and symptoms of breathing problems?
- How should you care for a victim having difficulty breathing?
- What are the two diabetic conditions and how do you provide care for these?
- What signs and symptoms suggest pregnancy complications that require immediate medical care?
- How would you care for a victim experiencing a seizure?
- What are the signs and symptoms of stroke?
- How should you care for a stroke victim?

Instructor Lesson 9 Notes

Lesson 10: Poisoning

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe the 4 methods by which someone can be poisoned.
- Identify information that is helpful to provide to Poison Centers.
- Recognize signs and symptoms of different poisoning emergencies.
- Describe how to provide care for specific poisons resulting from alcohol or other drug misuse, chemicals, insect bites and stings, human and animal bites, snakebite, scorpion sting, marine animal bites and stings, poisonous plants.
- Discuss the purpose of Material Safety Data Sheets (MSDS) relative to poisoning prevention and care.

Lesson Overview

- Poisoning
- Ingested Poisons
- Alcohol Intoxication and Other Drug Misuse
- Inhaled Poisons
- Absorbed Poisons
- Injected Poisons

Time: 10 minutes

Audiovisual Support

"Lesson 10" PowerPoint™ slides support this lesson.
"Lesson 10-" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Poisoning

- Poisoning occurs when any substance interferes with normal body functions after it enters the body.
- A poison can be ingested, inhaled, injected, or absorbed.
- Poisoning can interfere with metabolism, destroy organs such as the liver or kidneys, and depress the nervous system, which can lead to loss of consciousness, breathing difficulty, and cardiac arrest.
- Poison Centers help prevent and care for poisoning incidents, and reduce costly hospital visits through proper in-home care.
- The Poison Help line at 800-222-1222 is available 24 hours a day, 7 days a week.
- Be prepared to answer these questions when you call:
    - What poison was the victim exposed to?
    - How much poison was the victim exposed to?

- How was the victim poisoned?
- What is the age and approximate weight of the victim?
- What care has been provided?

Ingested Poisons

- Commonly ingested poisons include:
  - Pain medications such as acetaminophen (Tylenol) and ibuprofen (Advil or Motrin)
  - Home cleaning products such as dishwashing liquids and drain openers
  - Personal care products such as hand sanitizer, shampoo, and nail polish
  - Laundry detergents
  - Pesticides
  - Plants
  - Alcohol and other drugs
- The signs and symptoms of ingested poisons can include:
  - Nausea and vomiting
  - Abdominal cramps and pain
  - Burns of the moth, lips, tongue, and throat
  - Diminished consciousness
  - Seizures
- To care for ingested poisons:
  - Call the Poison Help line if the victim is conscious.
  - Advice may include diluting the ingested poison with milk or water, or inducing vomiting.
  - Advice may also include providing activated charcoal to absorb ingested poisons in the stomach before they can begin being absorbed in the digestive system.
- Call 9-1-1 if the victim is unresponsive or having difficulty breathing.

Instructor Note: Activate Charcoal does not absorb all substances. Acids, alkalis, alcohol, and gasoline are examples of some products for which different care is needed.

Alcohol Intoxication and Other Drug Misuse

- Alcohol depresses the nervous system.
- Those at highest risk of alcohol poisoning are college students, chronic alcoholics, those taking medications that should not be combined with alcohol, and children curious about the effects.
- The signs and symptoms of alcohol intoxication include:
  - Odor of alcohol
  - Slurred / slow / incomprehensible speech
  - Confusion
  - Dizziness / loss of consciousness
  - Slowed actions
  - Staggering gait / collapsing
  - Nausea or vomiting

- To care for alcohol intoxication call the Poison Help line for advice. Have victim the sleep on his/her side. Monitor the victim. Call 9-1-1 if the victim becomes unresponsive.
- Opioid substances include powerful legally prescribed pain medications such as morphine, hydrocodone, and oxycodone, and illegal substances such as heroin.
- Opioid overdose has reached epidemic proportion.
- To counteract this epidemic, public efforts are underway to provide education to prevent overdoses, and train anyone in the use of the medication naloxone to reverse opioid overdose.
- Naloxone can be given through an auto-injector similar to the one used to deliver epinephrine for anaphylaxis, or through a nasal spray device.
- Statewide laws are being enacted to make this medication available without prescription.

Instructor Note: Check your state laws regarding the use of Naloxone.
Naloxone training devices are available for purchase in intramuscular injection trainers (Evzio) and intranasal injection trainers. Demonstrate the use of either training device to the class if you have either of these.

Inhaled Poisons

- Inhaled poisons include:
  - Carbon monoxide
  - Insecticides
  - Gasoline
  - Paint thinner
  - Insect repellent
- The signs and symptoms associated with inhaled poisons include:
  - Headache
  - Dizziness
  - Altered consciousness
  - Breathing difficulty
- To care for inhaled poisons:
  - Remove the victim from a toxic environment if it is safe for you to enter.
  - Check responsiveness and breathing
  - Provide CPR if the victim is unresponsive and not breathing normally
  - Call 9-1-1.

Absorbed Poisons

- Poisons that can be absorbed through the skin include chemicals such as cleaning solutions like bleach, as well as poisonous plants like poison ivy, oak, and sumac.
- Signs and symptoms include:
  - Dermatitis (swollen red skin with an itchy rash)
  - Blisters

    - Difficulty breathing, if the smoke from burning poison ivy has been inhaled
- To care for plant poisons upon initial contact:
    - Wash the affected area with soap and water. Apply a commercial product such as Cortaid™ or Technu™
- To care for plant poisons once dermatitis is present:
    - Apply a corticosteroid cream, calamine lotion, or commercial product such as Zanfel™
    - Use oral antihistamines, such as diphenhydramine (Benadryl)
    - Soak in a cool-water bath containing an oatmeal-based bath product (Aveeno).
    - Place cool, wet compresses on the affected area for 15 to 30 minutes several times a day.
    - Seek medical care if dermatitis is widespread, affects areas such as face, neck, or genitals, or appears to be infected.

Chemical Poisons and Material Safety Data Sheets (MSDS)

- MSDS document the presence of, and care for, any hazardous materials in the workplace, and are required by law to be present.
- Employees must be trained on the safe handling of the chemicals, and proper chemical safety labeling.
- Consult your MSDS for poisoning resulting from these chemicals.

Injected Poisons

- Injected poisons can result from needle injection, but most commonly occur as a result of bites or stings from insects, ticks, spiders, scorpions, marine life, animals, and humans.
- To care for insect bites and stings:
    - For a bee sting, remove the stinger as quickly as possible, using a fingernail or the edge of a card.
    - Wash the affected area with soap and water.
    - Apply a cold pack to reduce pain and swelling.
    - Provide an over-the-counter pain reliever such as ibuprofen.
    - Use topical hydrocortisone cream or an oral antihistamine to help relieve itching and swelling.
    - Monitor the victim for signs of any severe allergic reaction.
    - Call 9-1-1 at the first sign of anaphylaxis, and assist the victim with his or her prescribed epinephrine auto injector if available.
- To care for a black widow or brown recluse spider bite:
    - Wash the site with soap and water and disinfect with an alcohol swab.
    - Apply ice to control swelling and provide some relief from the pain.
    - Provide an over-the-counter pain medication.
    - Call 9-1-1 or go to your local hospital emergency department promptly.
- To care for an embedded tick:
    - Use tweezers and grasp the tick as close to the skin as possible. Lift gently and hold with the skin tented until the tick releases.

    - Wash the area with soap and water and disinfect with an alcohol swab.
    - Apply an ice pack for any swelling or pain.
    - Hydrocortisone cream can be applied to aid with any itching.
    - Advise the victim to be alert to any rashes, flulike symptoms, or joint discomfort over the next 30 days If these or other signs and symptoms are present, seek medical care. Antibiotics are prescribed for tick diseases
- Scorpion stings are painful, and can occasionally be fatal, particularly to children.
- To care for a scorpion sting:
    - Wash the site with soap and water, apply a cold pack, and seek medical care.
- Human bite wounds can have high levels of bacteria, different types of viruses, and can get infected.
- To care for human bites:
    - If the area is NOT bleeding severely, wash the wound with soap and water and cover the bite with a clean dressing.
    - If the area is bleeding heavily, apply direct pressure with a clean dressing until the bleeding is controlled.
    - Seek medical attention for any deep bites. Antibiotics may be prescribed to prevent infection.
- Animal bites can be serious wounds requiring EMS and hospital care.
- Rabies is a virus transmitted from the saliva of an infected animal through a bite or scrape. Most rabies cases occur in wild animals like raccoons, skunks, bats, and foxes.
- Care for animal bites in the same manner as human bites. Seek medical care for any serious wounds and any animal that could be rabid.
- Among marine life, jellyfish and Portuguese man-of-wars account for the greatest number of injuries from their stings each year.
- The signs and symptoms of these stinging marine animals include redness, swelling, burning pain. In some cases more severe allergic reactions can occur.
- Most stings can be cared for by:
    - Rinsing the area initially with sea water,
    - Carefully removing any remaining tentacles
    - Applying vinegar
    - Taking a pain reliever.
    - Calling 9-1-1 at the first signs of anaphylaxis.
- A stingray flicks its barbed tail, often inflicting wounds to the feet and ankles of victims.
- To care for injuries cause by stingrays:
    - Immediately immerse the injured part in hot water to neutralize the venom.
    - Flush the injured area to help remove any debris and toxin.
    - Seek medical care since the wound of a stingray can become infected and pieces of barb can be embedded in the skin.
- There are 4 venomous snakes in the United States, and many more worldwide. Those in the US are:
    - Rattlesnake

    - Copperhead
    - Water moccasin
    - Coral snake
- To care for venomous snakebites:
    - Get the victim away from the snake. Do not try to capture or kill the snake.
    - Limit movement of the victim
    - Wash the wound
    - Splint any bitten limb
    - Applying an elastic bandage over the affected limb may help slow the spread of the venom.
    - Call 9-1-1

Application

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

- Can you describe the 4 ways a person can become poisoned?
- What information is helpful to provide to Poison Centers?
- What are the signs and symptoms of ingested poisons?
- What are the signs and symptoms of inhaled poisons?
- What is the purpose of Material Safety Data Sheets (MSDS)?
- How would you provide care for exposure to poisonous plants?
- Can you describe the care for injected poisons including insect bites and stings, human and animal bites, scorpion sting, marine animal bites and stings, and snakebite?

Instructor Lesson 10 Notes

Lesson 11: Temperature Extremes

Learning Outcomes

After completing this lesson, participants will be able to:

- Recognize the signs and symptoms of heat cramps, heat exhaustion, and heat stroke.
- Describe how to care for heat cramps, heat exhaustion, and heat stroke.
- Recognize the signs and symptoms of hypothermia and frostbite.
- Describe how to care for hypothermia and frostbite.

Lesson Overview

- Heat Emergencies
- Cold Emergencies

Time: 5 minutes

Audiovisual Support

"Lesson 11" PowerPoint™ slides support this lesson.
"Lesson 11" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Heat Emergencies

- There are three heat emergencies: Heat cramps, heat exhaustion, and heat stroke.
- Heat cramps are the least serious, and involve painful muscle cramps, often in the legs.
- To care for heat cramps, have the victim stop any strenuous activity and stretch the affected muscle. Provide water or an electrolyte drink.
- Heat exhaustion can occur when heavy sweating results in a loss of salt and water.
- The signs and symptoms of heat exhaustion include:
    - Heavy sweating
    - Fatigue
    - Thirst
    - Weakness
    - Dizziness
    - Nausea and vomiting
    - Headache
- To care for heat exhaustion:
    - Have the victim rest in a cool environment
    - Provide water or commercial sports drink if the victim is not nauseated
    - Cool the victim by spraying with water or applying water soaked towels
    - Call 9-1-1 if the victim's condition does not improve

- Heatstroke occurs when the sweat mechanism of the body fails and the body becomes dangerously overheated.
- The signs and symptoms of heatstroke include:
    - Very high temperature (104ºF or higher).
    - Hot, flushed (red) skin
    - Little or no sweating
    - Confusion
    - Seizures
    - Loss of consciousness
    - Cardiac arrest
- To care for heatstroke:
- Rapidly cool the victim by any means possible.
- Call 9-1-1
- Begin CPR if the victim is unresponsive and not breathing (or only occasionally gasping).

Cold Emergencies

- Hypothermia is a condition of abnormally low body temperature. It occurs when the body loses heat faster than it can be produced.
- The signs and symptoms of hypothermia include:
    - Shivering
    - Confusion
    - Drowsiness
    - Exhaustion
    - Cold skin, even under clothing
- To care for hypothermia:
    - Warm the victim gradually, replacing any wet, cold clothing with dry clothing and insulation, such as a blanket.
    - If the victim is alert, provide a sugary, non-alcoholic beverage to help increase the body temperature.
    - Call 9-1-1 if the victim's condition does not improve.
- Frostbite occurs when skin freezes and ice crystals cause damage at the cellular level.
- Frostbite commonly affects areas that are exposed or under protected, such as the ears, nose, fingers, and toes.
- The signs and symptoms of frostbite include:
    - Skin appears white, gray, and waxy.
    - Swelling can occur
    - Affected part is cold, painful, or becomes numb
- To care for frostbite:
    - Get the victim out of the cold
    - Remove any cold or wet clothing, as well as any jewelry from the affected part, such as the hand.
    - Call 9-1-1. Frostbitten parts are best cared for when rewarmed under a controlled environment in a hospital

- If the victim is more than 1 hour from medical care, rewarm the frostbitten part in water of about 100^{o} F for about 30 minutes. After thawing, do not let the parts refreeze. Place soft dry items such as gauze pads, between any fingers or toes. Provide a medication to help with the pain and swelling, such as ibuprofen.

Application

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

- Can you describe the 3 types of heat emergencies?
- Can you describe the 2 types of cold emergencies?
- What are the signs and symptoms of heat exhaustion and heat stroke?
- How should you care for a victim experiencing any of the three types of heat emergencies?
- How would you differentiate hypothermia from frostbite?
- How do you care for hypothermia?
- How do you care for frostbite?

Instructor Lesson 11 Notes

Lesson 12: Rescue, Triage, and Emergency Moves

Learning Outcomes

After completing this lesson, participants will be able to:

- Describe how to safely rescue a victim from dangerous environments involving confined space, hazardous materials, electricity, smoke, fire, water, and ice.
- Describe how to prioritize care when there are more victims than rescuers.
- Describe how to safely move victims in emergency situations.

Lesson Overview

- Rescues
- Triage
- Emergency Moves

Time: 5 minutes

Audiovisual Support

"Lesson 12" PowerPoint™ slides support this lesson.
"Lesson 12" video clips support this lesson.

Skill Practice Equipment

- None

Critical Points

Rescues

- Emergency situations that can involve rescues can include confined space, hazardous materials, motor vehicle collision, water, ice, and electrical dangers
- Regardless of the situation, follow these general safety guidelines:
    - Do not put yourself at risk trying to rescue a victim
    - Do not attempt any rescue technique for which you have not been trained
    - Try to make the surrounding area safe for others
- Confined space is an area that has restricted openings and an atmosphere that may be dangerous to those who enter, such as wells, mines, caves, manholes, storage tanks and farm silos.
- If someone is in trouble within a confined space:
    - Call 9-1-1
    - Enter the area only if you have the proper respiratory protective equipment and the training to do so safely
    - Remove the victim from the area and provide care whenever it is safe to do so
- Hazardous materials include those that are flammable, explosive, corrosive, radioactive, and biological.
- If hazardous materials are released:

    - Remain at a distance approximately half a mile away, and upwind from any hazardous materials incident
    - Attempt to keep others away from the danger as well
    - Call 9-1-1
- For situations involving electricity, be cautious before making contact with an electrocuted victim. Unplug, disconnect, or shut off any power to the area.
    - If you are unable or uncertain of how to make the area safe, stay at a safe distance, call 9-1-1
- For smoke/fire in a structure, shout to notify others, exit quickly, and call 9-1-1.
    - If the fire is small and you have a fire extinguisher, aim at the base of the flames and expel the contents of the extinguisher in a sweeping motion
- For rescues involving water or ice, remember "reach, throw, row, go," in that order of preference.
- make sure 9-1-1 has been called and then follow these steps:
- If you are in a vehicle, park your vehicle well off the roadway, with your hazard flashers on to help alert oncoming traffic of a problem.
- Do not attempt to enter an unstable car or truck to check on victims. A vehicle on its side or on an embankment needs to be stabilized before safe entry can occur.
- Turn off the ignition of the damaged vehicle if not already done.
- Place roadside reflectors or flares at least 250 feet from the crash site. Do not ignite flares around leaking fuel.
- Assess the victim(s) and provide care until EMS personnel arrive. Only attempt to remove a victim from a vehicle if there is an immediate life threat, such as a vehicle fire, or if the victim is unresponsive and not breathing (or only gasping occasionally) and needs CPR.
- If you are help a victim of a motor vehicle crash, follow these steps:
    - Make sure 9-1-1 has been called
    - Park your vehicle well off the roadway, with your hazard flashers on
    - Do not attempt to enter an unstable car or truck to check on victims
    - Turn off the ignition of the damaged vehicle
    - Place roadside reflectors or flares at least 250 feet from the crash site.
    - Assess the victim(s) and provide care until EMS personnel arrive.
    - Only attempt to remove a victim from a vehicle if there is an immediate life threat, such as a vehicle fire, or if the victim needs CPR

Triage

- In emergency situations triage is the process of determining the care priority of victims based on the severity of their conditions.
- Triage is needed when resources, such as rescuers, are insufficient for all victims to be cared for immediately.
- The goal of triage is to save those that can be saved.
- Follow these steps as part of triage:
    - Ask all who can walk to come to your voice and exit the unsafe area and move to a safe zone where these "walking wounded" can provide help to each other until help arrives.

    - Move to the victim closest to you and quickly assess his or her condition. Instruct on self-care and move on to assess the others.
    - Return to care for the most serious first.
- Victims in need of immediate care include breathing difficulty, severe bleeding, severe burns, shock, or who are unresponsive.
- Victims for which care can be delayed up to an hour include those with bone injuries such as a broken lower leg that has not broken through the skin, lesser burns, or back injury without suspected spinal cord damage.
- Victims for which care can be delayed for up to 3 hours include those with minor wounds or minor fractures.
- Victims with injuries that are incompatible with life are the lowest priority. This includes those found unresponsive and not breathing.

Emergency Moves

- Before moving a victim, consider these factors:
    - Possible condition of the victim, such as back or neck injury
    - Size and weight of the victim
    - Your size and strength
    - The surface upon which you must move the victim
    - Whether other bystanders can assist
- There are three categories of emergency moves: drags, assists, and carries

Note:
Refer students to the pictures showing the various types of emergency moves, and consider which would be appropriate for various scenarios.

Application

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

- Can you describe how to safely rescue a victim from dangerous environments?
- Can you describe the process of triage?
- Can you give examples of victims who would be placed in various triage categories?
- Can you describe the three types of emergency moves and provide examples of when each might be best used?

Instructor Lesson 12 Notes

Course Wrap Up

Time: 5 minutes

Critical Points

- Address any final questions from participants.
- Provide the Group Assessment. This 20 question group activity provides a review of the key points of the course. It is provided in a group setting, in a non-threatening manner, and has no minimum score to attain.
- 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, including continuing education units (CEUs) if they desire.
- Close out course rosters via the administrative website and issue digital course completion cards and CEUs.

PARTICIPANT SKILL SHEETS

SKILL SHEET: CONTROLLING EXTERNAL BLEEDING FROM A LIMB

Name:

Task	*Practice Prompts*	Satisfactory	Unsatisfactory
Follow "Standard Precautions" to prevent an exposure	*Medical exam gloves are on.*		
Uncover the wound so it can be completely viewed	*The wound is visible*		
Apply direct pressure with a gauze pad or other clean item	*Pressure has been applied and bleeding is slowing*		
Apply a pressure bandage using a roll of gauze	*The bandage has been applied*		
If bleeding in uncontrollable, apply a commercial or homemade tourniquet-	*Bleeding is not able to be controlled with a pressure bandage*		

Notes:

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_____
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_____

SKILL SHEET: SPLINTING AN INJURED LOWER ARM

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Support the injured arm			
Soft Splint – Place a folded soft object (e.g. thick towel) under and alongside the arm. Rigid Splint – Place a rigid object under the arm	*Select one method to splint the arm*		
Apply roller gauze to hold the object to the arm, securing the splint	*The splint is secure*		
Use a triangle bandage to create a sling, supporting the arm with 90^0 bend.	*The sling is applied*		
Fold a second triangle bandage to create a binder and bind the arm in the sling to the chest.	*The binder is applied and the arm is secure*		

Notes:

_____
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_____

SKILL SHEET: USING AN EPINEPHRINE AUTO INJECTOR (Training Device)

Name:

Task	***Practice Prompts***	**Satisfactory**	**Unsatisfactory**
Verify the device expiration date.	*Medication expiration date is current.*		
Hold the device firmly in the middle, keeping fingers away from ends.	*Device is positioned properly*		
Remove safety cap	*Safety cap has been removed*		
Hold knee still and place needle end of device near outer thigh.	*Device is properly positioned*		
Press firmly until "click" is heard and hold for 10 seconds.	*Injection has been given*		
Remove the injector to verify the device has discharged			

Notes:

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GROUP ASSESSMENT

Question 1: How is external bleeding normally controlled?
Answer: _____

Question 2: What is the purpose of a splint?
Answer: _____

Question 3: How is an amputation cared for?
Answer: _____

Question 4: How do you care for an impaled object?
Answer: _____

Question 5: How are heat burns generally cared for?
Answer: _____

Question 6: How are dry chemical burns cared for?
Answer: _____

Question 7: What does the mnemonic RICE stand for and how is this used?
Answer: _____

Question 8: How do you provide care for someone with a possible spinal injury?
Answer: _____

Question 9: How do care for someone in shock?
Answer: _____

Question 10: How do you care for a person experiencing anaphylaxis?
Answer: _____

Question 11. How do you care for someone experiencing a diabetic emergency?
Answer: _____

Question 12: How do you care for heat exhaustion?
Answer: _____

Question 13: How do heart attack and stroke signs and symptoms differ?
Answer: _____

Question 14: How do you care for a knocked out tooth?
Answer: _____

Question 15: What is the phone number for the Poison Help line?
Answer: _____

Question 16: How do you care for hypothermia?
Answer: _____

Question 17: What is the purpose of triage?
Answer: _____

Question 18: What are Material Safety Data Sheets used for?
Answer: _____

Question 19: How would you care for a fractured arm?
Answer: _____

Question 20: How do you care for an attached tick?
Answer: _____

Answers:

1. Apply direct pressure and bandage.
2. Keep the injured area from moving and causing more damage.
3. Control bleeding, recover the part, keep the part dry and cool.
4. Support the object in place.
5. Use cool water to stop the burning process.
6. Brush off dry chemicals until water is available, then flush continuously.
7. Rest, Ice, Compress, Elevate to care for muscle, bone, and joint injuries.
8. Hold the head still to prevent movement and further injury.
9. Keep the victim warm and position the victim on his or her back (unless breathing difficulty is present)
10. Call 9-1-1; position for ease of breathing; assist victim with his/her prescribed epinephrine auto injector if available
11. Provide sugar in the form of glucose tabs, sugary drink, or sugary candy.
12. Cool the victim and provide water and electrolyte beverage if not nauseated
13. Heart attack = Chest discomfort, shortness of breath, fatigue, and sweating. Stroke = Weakness, numbness, dizziness, vision problems, speaking problems, and sudden/severe headache.
14. Stop the bleeding; preserve the tooth in Hanks Balanced Salt Solution, coconut water, milk, a saltwater solution, or the victim's saliva.
15. 1-800-222-1222
16. Remove any wet/cold clothes and rewarm the victim gradually.
17. A systematic approach used to prioritize care when the number of victims exceeds the number of rescuers
18. Identify hazardous substances at a worksite and how to care for exposure to these substances.
19. Support and splint the injured arm.
20. Remove the tick with tweezers, clean and disinfect the site, and watch for later signs of tick disease.

SAMPLE CLASSROOM COURSE ROSTER

This roster can be used in the event the electronic roster on the Client Services System is temporarily inaccessible.

CLIENT: _____ COURSE LOCATION: _____

COURSE NAME: _____ DATE(S): _____

INSTRUCTOR(S): _____

LEAD INSTRUCTOR: I verify that this information is accurate, and that this course was taught in accordance with E&A administrative policies and procedures.
Signature: _____

#	Participant's Name	e-mail Address
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ADDITIONAL NOTES