American Red Cross

American Red Cross Administering Emergency Oxygen

INSTRUCTOR'S MANUAL

American
Red Cross

This instructor's manual is part of the American Red Cross Administering Emergency Oxygen program. Visit redcross.org to learn more about this program.

The emergency care procedures outlined in this book reflect the standard of knowledge and accepted emergency practices in the United States at the time this book was published. It is the reader's responsibility to stay informed of changes in emergency care procedures.

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ACKNOWLEDGMENTS

This manual is dedicated to the thousands of employees and volunteers of the American Red Cross who contribute their time and talent to supporting and teaching lifesaving skills worldwide and to the thousands of course participants who have decided to be prepared to take action when an emergency strikes.

The care steps outlined within this product are consistent with the Guidelines 2010 for First Aid and the 2010 Consensus on Science for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. These treatment recommendations and related training guidelines have been reviewed by the American Red Cross Scientific Advisory Council, a panel of nationally recognized experts in fields that include emergency medicine, occupational health, sports medicine, school and public health, emergency medical services (EMS), aquatics, emergency preparedness and disaster mobilization.

Many individuals shared in the development and revision process in various supportive, technical and creative ways. The *American Red Cross Administering Emergency Oxygen Instructor's Manual* was developed through the dedication of employees and volunteers both. Their commitment to excellence made this manual possible.

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SECTION 1 ADMINISTRATION

Course Purpose

The purpose of the American Red Cross Administering Emergency Oxygen course is to give participants the knowledge and skills necessary to provide care to a victim of a breathing emergency using breathing devices, including resuscitation masks, bag-valve-mask resuscitators (BVMs) and emergency oxygen.

Course Prerequisites

To be eligible for the Administering Emergency Oxygen course, a participant must have, at minimum, an American Red Cross Universal Certificate indicating Adult, Child or Infant CPR or equivalent.

Course Participants

Participants in this course may represent a broad range of backgrounds and differ in levels of education and experience. Participants may include:

- Public safety personnel, such as law enforcement agents and firefighters.
- Medical personnel, such as athletic trainers, emergency medical technicians, pharmacists, nurses and physicians.
- Members of emergency response teams, such as ski patrollers and lifeguards.
- Employees with a duty to respond.

Course Length

The Administering Emergency Oxygen course is designed to be taught in approximately 1 hour, 40 minutes. These estimates are based on:

- Ten participants per instructor.
- The experience and abilities of participants.
- The experience and abilities of the instructor.
- The recommended amount of equipment needed at each class session.

You must carefully consider the issues of time when planning each course session. The lesson plan in this instructor's manual should be followed as closely as possible; however, facility constraints, specific instructor-to-participant ratios and equipment-to-participant ratios, and participant needs, such as breaks, may increase course length.

Other factors may influence lesson planning including:

- Classroom availability and layout.
- Equipment availability.
- Number of participants.
- Skill level of participants.
- Instructor experience.
- Number of instructors.

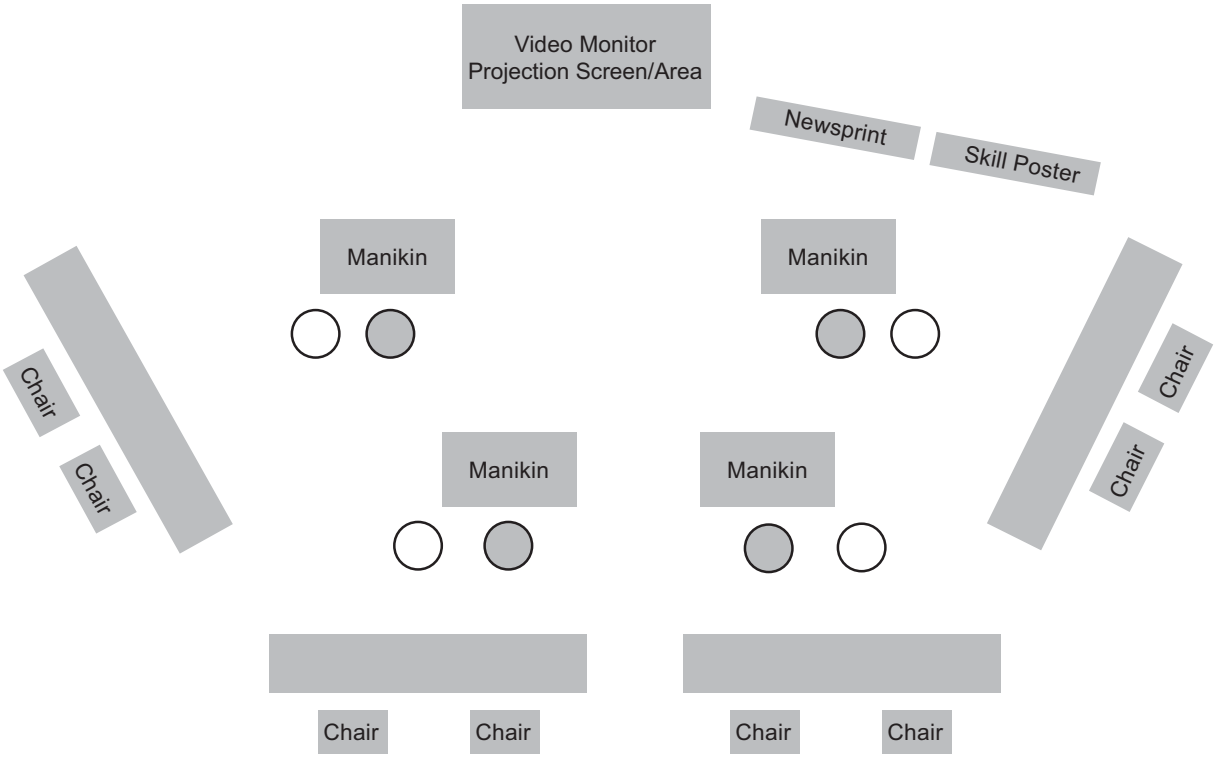
Enrichment material is available to provide more in-depth information and additional skills to meet broader training needs. Teaching the Enrichment sections, however, will require additional time to be added to the length of the course.

Classroom Space

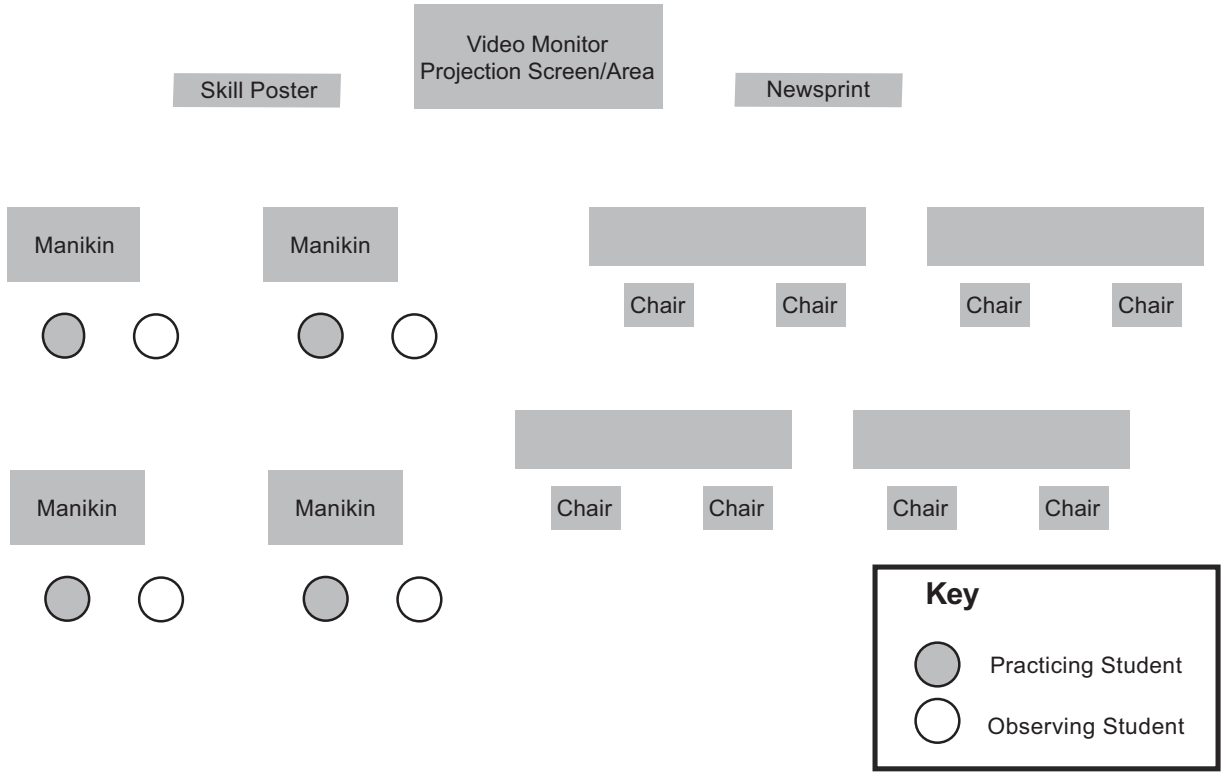
The lesson in this instructor's manual require classroom space suitable for lectures, class discussions, activities, video presentations and skill sessions. The classroom should provide a safe, comfortable and appropriate learning environment. The room should be well lit, well ventilated and comfortable in temperature. If the practice area is not carpeted, provide some knee protection, such as folded blankets or mats, for use by participants or allow them to bring their own padding materials.

The following diagrams provide examples of appropriate classroom setups to facilitate classroom discussions and video presentations.

Classroom Layout #1



Classroom Layout #2



Class Size

The course outline and lesson have been developed for a class of approximately 10 participants. If your class is larger, you will probably need to allow more time or have co-instructors, assisting instructors or instructor aides help you. The amount of available equipment and assistance from additional instructors may limit class size. Personal supervision is necessary to ensure effective practice and the safety of participants. If the class is too large, you may not be able to provide proper supervision or complete class activities in the allotted time. It is strongly recommended you have additional instructors help during skill sessions.

Class Safety

As a Red Cross instructor, it is important for you to make the teaching environment as safe as possible. Participants who believe they are at risk for injury or illness may become distracted. These same feelings may also affect your ability to conduct the courses. There are several steps you can take to help increase class safety:

- *Instructor preparation*. Consider possible hazards and manage safety concerns before a course starts. Often, you can foresee hazards and take steps to eliminate or control them long before participants arrive.
- *Assisting instructors and co-instructors*. Having assisting instructors and co-instructors can help decrease risks by adding supervision and reducing the instructor-to-participant ratio. They also increase participation and learning by providing additional one-on-one attention to participants. When using assisting instructors or co-instructors, clearly define their roles and responsibilities. Doing so will help eliminate confusion and lapses in supervision. Remember you are ultimately responsible for your participants' safety. To determine your staffing needs, consider the

different ages and the individual abilities of participants. If your course has a large number of participants, you will need additional help.

- *Instructor aides*. Individuals who express an interest in becoming an instructor but do not meet the instructor requirements—for example, the minimum age—can participate in the course experience as an instructor aide. Clearly define their roles and responsibilities. Instructor aides must always be under the direct supervision of an instructor and should never be left alone to supervise course participants. Instructor aides may not evaluate or certify participants' skill performances. Instructor aides must possess a basic-level certificate in the applicable program or course for which they wish to assist. Instructors can train instructor aide candidates. Contact the local Red Cross chapter to obtain further information about instructor aide training. In general, duties and responsibilities of instructor aides include:
  - Handling registration and record keeping.
  - Setting up classrooms and handing out supplies.
  - Assisting with equipment (e.g., setup, cleaning and distribution of materials).
  - Helping participants with skill sessions or small-group activities.

Health Precautions for Course Participants

As a Red Cross instructor, one of your responsibilities is to protect participants from health risks. The materials and procedures for teaching these courses are designed to:

- Limit the risk of disease transmission.
- Limit the risk of one participant injuring another when practicing with a partner.
- Limit the risk that the activity involved in the skill session could cause injury or sudden illness.

When possible, prospective participants should be provided information about health requirements and safety before enrolling in the course. The Sample Letter to Administering Emergency Oxygen Program Participants available on Instructor's Corner is one way to communicate that information. Ask participants to talk with you before any skill session if they doubt they can participate.

People with certain health conditions may be hesitant to take part in the skill sessions. These conditions could include a history of heart attacks or other heart conditions or respiratory problems. Suggest that these participants check with their health care provider before participating in skill sessions involving physical activity. Inform participants who take the course but are not able to demonstrate the skills taught in the skill sessions that they cannot receive a Red Cross course completion certificate. Encourage them, however, to participate to whatever extent possible because they can still learn valuable, lifesaving information. The Red Cross advocates that, whenever possible, the instructor adjust the activity level required by the course as necessary to facilitate learning and help participants meet course and skill objectives.

Participants with Disabilities and Special Health Considerations

People with disabilities and other conditions may be able to perform the skills for the course, but the skills may need modification to achieve the same result. Instructors should focus on the critical components of a skill necessary to successfully meet the objective.

Detailed guidance on these topics is included in the *Americans with Disabilities Act (ADA) Resource Guide for Conducting and Administering Health and Safety Services Courses*, which is available on Instructor's Corner.

Modifications for Different Settings

Administering Emergency Oxygen can be customized to meet participants' specific needs. It can be offered, for example, as a certification program to meet a regulatory requirement or as an employee benefit program. Schools may integrate training into the curriculum.

Training in the Workplace

Training to Meet a Workplace Certification Requirement

Courses are designed to meet the training requirements of various occupational, office or industrial settings. When offering the program to meet certification requirements, adapting the training does not mean you can add to, delete or change the content.

To modify for a workplace with certification needs, a Red Cross chapter representative should meet with the workplace safety representative to discuss the needs before scheduling a course. A chapter representative should convey this information to you so you can adequately prepare to deliver the course material. As an instructor, you should ask these questions:

- Why is the workplace customer offering this training?
- What is the background of participants? This includes:
  - Previous CPR/AED training.
  - Job responsibilities.
  - Educational background.
  - English as a second language.
- What site-specific information is known? This includes:
  - The type and frequency of past incidents of injury or sudden illness in the workplace.
  - Established emergency procedures. (Is there a written emergency action plan?)
  - The type and location of first aid supplies at the site.

Training as an Employee Benefit

In some cases, first aid training is offered as an employee benefit rather than for certification or to meet other regulations. Under such circumstances, if the employer does not require or want certification, it is possible to customize the program by presenting only those topics that meet the employer's specific needs. These can be taught as stand-alone lessons, for example, during a lunch hour.

Before training begins, the local Red Cross chapter must ensure the employer understands that, although the information to be conveyed is relevant and important, this type of training is not comprehensive and will not result in Red Cross certification for employees.

Participant Materials

All Administering Emergency Oxygen course participants have access to free electronic fact sheets and skill sheets that can be downloaded and printed. The participant materials are available on redcross.org.

Instructor Materials

Instructor's Manual

The instructor's manual contains all the information needed for planning, preparing and conducting the course. The lesson plan must be followed to ensure consistency in delivery. Useful information is included in the instructor's manual for planning and preparation in the administration and appendices sections.

The instructor's manual is available in a free electronic version, which can be printed. Section 2 (the lesson) should be printed and used when teaching the course. Sections 1 and 3 can be viewed online at any time. The lesson has been streamlined and formatted to be printer friendly.

The instructor's manual provides the tools necessary to evaluate the performance of participants. It includes the following sections:

- Section 1: Administration. This section describes the organization of the program, provides administrative information on conducting the training, helps prepare instructors to teach and contains information on instructor responsibilities.
- Section 2: Lesson. This section contains the course outline, learning objectives and comprehensive lesson that makes up the course.
- Section 3: Appendices. This section includes Teaching Strategies, the Criteria for Assessing Participants and final written exams.

Video Segments

The *CPR/AED for Professional Rescuers and Health Care Providers* DVD is designed for use during the Administering Emergency Oxygen course. Instructors are required to show the video segments because they contain model demonstrations that combine real-life scenarios with studio-based skill segments to help ensure lesson objectives are met. The video segments can also be viewed on Instructor's Corner. The course cannot be conducted if the video segments are not available.

Instructor's Corner

As an instructor, you should register on Instructor's Corner and visit the site regularly for program information and updates. Once you have completed the brief registration process, you will have free access to many important resources for instructors.

The following instructor resources are available on Instructor's Corner:

- Administrative Terms and Procedures
- Guidelines for Conducting American Red Cross Administering Emergency Oxygen Review Courses and Challenges
- Manikin Decontamination and Use
- Participant Progress Log
- Sample *Course Record* and *Course Record Addendum*
- The *Americans with Disabilities Act (ADA) Resource Guide for Conducting and Administering Health and Safety Services Courses*
- Administering Emergency Oxygen course presentation

Additional materials on Instructor's Corner include:

- Administrative forms and policies, including the *Instructor Agreement* and *Code of Conduct* and the *Manual of Administrative Policies and Procedures (MAPP)*.
- Information about other Red Cross training and education programs.
- Frequently asked questions (FAQs) and expert answers to your technical questions.
- Link to the Red Cross Learning Center website.
- Links to redcrossstore.org and shopstaywell.com for training supplies and Red Cross retail products

Course Presentation

Another resource for instructors is the Administering Emergency Oxygen course presentation. Similar to a PowerPoint presentation, the course presentation is an in-class visual aid that is projected onto a screen or viewing area. Instructors click through the presentation slides as they progress through the lesson.

The course presentation is designed to include all the visual information necessary to conduct the Administering Emergency Oxygen course. The course presentation includes lecture points, video segments, activity directions and skill sheets. When using the course presentation, it is not necessary to use any print products (other than the lesson).

Before conducting the course, become familiar with the presentation software and test the display of the system to be used. Although printed reference materials are not necessary when using the course presentation, it is recommended you have backup copies of the presentation in case technical difficulties occur.

Course Presentation System Requirements:

- Adobe Reader 9
- Flash Player 8, 9 for Windows and Mac
- Flash Player 9 for Linux and Solaris

Equipment Requirements:

- Laptop/desktop computer
- Power source
- Projector
- Projection screen/area
- Computer speakers

The presentation is available to download on Instructor's Corner. The presentation is saved in PDF format. To view the presentation, save the file to your computer and double click on the PDF icon to open it. Additional directions for using the course presentation are available on Instructor's Corner.

Course Content

The technical content within the Administering Emergency Oxygen course reflects the most current consensus on scientific recommendations. The course content includes the knowledge and skills necessary for participants to safely identify and provide appropriate care, regardless of the type of emergency.

Instructional Design Elements

To make the courses more engaging for the instructor and participants, a variety of interactive exercises are integrated into the lesson, along with video-based skill demonstrations, skill sessions and traditional lectures. For detailed explanations of each lesson component and additional instructional tools, refer to Appendix B: Teaching Strategies.

The activities included in the lesson, such as guided discussions and small-group activities, are designed to correspond with the lesson objectives and reinforce essential information participants need to know.

The lecture points included in the courses represent the fundamental concepts instructors need to convey to meet the associated learning objectives. They are designed to be read as is or used as a guide, to allow instructors to deliver the lecture material more naturally.

Skill sessions are conducted via the Watch-Then-Practice instructional method. Skill charts and skill assessment tools are located in the instructor's manual in the lesson.

Criteria for Course Completion and Certification

Red Cross certification means that on a particular date an instructor verified a participant demonstrated competency in all required skills taught in the course. *Competency* is defined as being able to demonstrate correct decision-making processes, to sequence care steps properly and to demonstrate proficiency in completing all required skills without any coaching or assistance. To complete the course successfully, the participant must:

- Attend the entire class session.
- Participate in all skill sessions.
- Demonstrate competency in all required skills.
- Pass the final written exam with a minimum grade of 80 percent (12 correct answers out of 15 questions).

Procedures for assessing participant progress are included in Appendix C: Criteria for Assessing Participants.

Reporting Procedures

You must submit a completed *Course Record* and *Course Record Addendum* to the local Red Cross chapter within 10 working days of course completion. The *Course Record* can be submitted by mail, fax or e-mail. Check with the local Red Cross chapter for procedures on submitting course records.

Awarding Certificates

Discuss with the local Red Cross chapter the procedures for obtaining American Red Cross course completion certificates. If you receive certificates after the course is over, make arrangements to get them to participants.

Instructor Responsibilities

Your responsibilities as a certified Red Cross instructor are to:

- Be familiar with course materials and know how to use them to teach effectively.
- Plan, coordinate and manage a course in conjunction with the local Red Cross chapter.
- Advise the local Red Cross chapter in advance of any teaching activity.
- Inform participants of evaluation procedures and course completion requirements.
- Create a nonthreatening environment that fosters learning.
- Demonstrate healthy behaviors while conducting a course or presentation.
- Adapt your teaching approaches to the experiences and abilities of participants to enable them to meet the course objectives.
- Prepare participants to meet the course objectives.
- Be prepared to answer participants' questions or know how to find the answers.
- Provide for the health and safety of participants by ensuring manikins have been properly cleaned according to the recommendations in Manikin Decontamination and Use (redcross.org/instructorscorner).
- Ensure the classroom and practice area are free of hazards.
- Ensure participants are aware of health precautions and guidelines concerning the transmission of infectious diseases during training.
- Ensure participants know they should consult you if they have special needs for any skill practice.
- Supervise participants while they are practicing course skills.
- Provide participants with timely, positive and corrective feedback as they learn.
- Evaluate participants as they perform skills, with a focus on the critical performance steps as described in the skill assessment tools and as shown in the video segments.
- Identify participants who are having difficulty and develop effective strategies to help them meet course objectives.
- Conduct courses in a manner consistent with design.
- Submit completed course records and reports to the Red Cross representative within 10 working days from the course completion.
- Be familiar with and inform participants of other Red Cross courses and programs.
- Identify potential instructor candidates and refer them to the appropriate Red Cross representatives.
- Abide by the obligations in the *Instructor Agreement and Code of Conduct* and, if applicable, the *Authorized Provider Agreement*.
- Represent the Red Cross in a positive manner.
- Promote volunteer opportunities available through the Red Cross.

American Red Cross Resources

Keep updated on the latest instructor information by visiting Instructor's Corner (redcross.org/instructorscorner). This site features program materials, FAQs, instructor and program updates, and course-related forms. Your local Red Cross chapter may have additional information and resources provided by national headquarters, as well as additional equipment, marketing materials and instructional aids you can use. Before you start the Administering Emergency Oxygen program, find out how your local Red Cross chapter can support you.

Additional Resources for Instructors and Participants

Training Equipment and Red Cross Retail Products

Equipment used during the course, such as CPR breathing barriers and first aid kits, and a wide range of Red Cross retail products are available through the local Red Cross chapter or the Red Cross store (redcrossstore.org).

Additional Red Cross Courses

A wide range of additional training opportunities in health and safety and preparedness are offered through the Red Cross. Additional Red Cross programs include:

- Lifeguarding.
- Swimming and Water Safety.
- Babysitter's Training.
- Family Caregiving.
- Nurse Assistant Training.
- Wilderness and Remote First Aid.
- Emergency Medical Response.

Refer participants to the local Red Cross chapter for more information about scheduled courses in their community.

Continuing Education Units for Professionals

Many course takers are professionals who need continuing education units (CEUs) to maintain a license and/or certification. Examples include nurses, social workers, recreation professionals, teachers and day care providers.

The American Red Cross is approved as an authorized provider by the International Association for Continuing Education and Training (IACET) (www.iacet.org). IACET's Criteria and Guidelines for Quality Continuing Education and Training Programs are the standards by which hundreds of organizations measure their educational offerings. For additional information, contact the local Red Cross chapter.

SECTION 2

ADMINISTERING EMERGENCY OXYGEN COURSE

COURSE OUTLINE

Activity	Time
Introduction to the Course	10 minutes
Standard Precautions	7 minutes
Resuscitation Masks	10 minutes
BVMs	15 minutes
Emergency Oxygen	25 minutes
Pulse Oximetry	10 minutes
Wrap-Up	5 minutes
Final Written Exam	15 minutes
Closing	3 minutes
Enrichment: Suctioning	15 minutes
Enrichment: Airway Adjuncts	15 minutes
Total Course Time	**1 hour, 40 minutes**
Total Enrichment Time	**30 minutes**

Instructor's Note: *This outline provides you with an overview of the knowledge and skills to be taught in the American Red Cross Administering Emergency Oxygen course. It is one class session for a total time of 1 hour, 40 minutes.*

The course length includes the minimum time needed for practicing skills, conducting class activities and viewing video segments. Because the times allotted in the lesson do not include breaks, you may have to build additional time into the course.

Course Length: 1 hour, 40 minutes

LESSON OBJECTIVES

After completing this lesson, participants should be able to:

- Identify the situations requiring the use of a resuscitation mask and BVM.
- Describe the importance of administering emergency oxygen.
- List the steps required to administer emergency oxygen.
- Identify different delivery devices and when to use them.
- List the precautions to take when using emergency oxygen.
- Describe the two types of suctioning devices and their uses.
- Discuss the purposes of and uses for airway adjuncts.
- Demonstrate how to use a resuscitation mask and BVM.
- Demonstrate how to prepare oxygen equipment and administer emergency oxygen.
- Demonstrate how to use a manual suctioning device (Enrichment).
- Demonstrate how to insert an oral airway (Enrichment).
- Demonstrate how to insert a nasal airway (Enrichment).

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:

- Discuss all points in the Introduction to the Course.
- Lead a guided discussion on standard precautions.
- Lead the discussion on resuscitation.
- Show the video segment, "Using a Resuscitation Mask," and conduct the skill session.
- Lead the discussion on bag-valve-mask resuscitators (BVMs).
- Show the video segment, "Using a Bag-Valve-Mask Resuscitator—Two Rescuers," and conduct the skill session.
- Conduct the lecture on emergency oxygen.
- Lead the guided discussion on oxygen delivery systems.
- Conduct the lecture on oxygen safety precautions.
- Conduct the lecture on oxygen delivery devices.
- Show the video segment, "Oxygen Delivery," and conduct the skill session.
- Conduct the lecture on pulse oximetry.
- Complete the Wrap-Up.
- Administer the Final Written Exam.
- Conduct the Closing.

To complete the Enrichments and meet the Enrichment objectives, you must:

- Conduct the lecture on suctioning.
- Show the video segment, "Using a Manual Suctioning Device," and conduct the skill session.
- Show the video segment, "Using a Mechanical Suctioning Device."

- Conduct the lecture about airway adjuncts.
- Conduct the skill session for Inserting an Oral Airway.
- Conduct the skill session for Inserting a Nasal Airway.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Examples of personal protective equipment (PPE), such as gowns, eye protection and CPR breathing barriers
- Adult manikins (one per two participants)
- Resuscitation masks with oxygen inlet (one per participant)
- BVMs (one per two participants)
- Emergency oxygen cylinders
- Pressure regulator and flowmeter
- Oxygen delivery devices, such as nasal cannula and non-rebreather masks (adult and pediatric, one per two participants)
- Decontamination supplies
- Copies of Final Written Exams A and B and answer sheets (one exam, either Exam A or Exam B, per participant)
- Answer keys for Final Written Exams A and B
- Manual suctioning devices (Enrichment)
- Oral and nasal airways (Enrichment)
- Manikin for airway insertion (one per two participants) (Enrichment)

TOPIC: INTRODUCTION TO THE COURSE

Time: 10 minutes

Discussion	■ Welcome participants and briefly introduce yourself and co-instructors, if applicable. Give your background and identify yourself as an American Red Cross instructor. ■ Have participants briefly introduce themselves and write their names on name tags or name tents and display them. ■ Review facility policies and procedures, and give locations of restrooms, water fountains and break areas. Also point out where the exits are located as well as where the automated external defibrillators (AEDs) are located. ***Instructor's Note:*** *If this training is conducted immediately after a CPR/AED for Professional Rescuers and Health Care Providers course, or if the training involves the same participants from a previous session, omit the previous points of the Introduction to the Course.* ■ Remind participants that they must have, at a minimum, an American Red Cross Universal Certificate indicating Adult, Child or Infant CPR or equivalent. ■ Review the course outline, including skill sessions, activities and exams. ■ Point out and/or distribute the fact sheets and skill sheets, which participants should use during the course. ■ Ask participants to inform you privately if they have any medical condition or disability that prevents them from taking part in skill sessions.

INTRODUCTION TO THE COURSE *Continued*	
Lecture Points	■ **The purpose of the Administering Emergency Oxygen course is to give participants the knowledge and skills necessary to provide care to a victim of a breathing emergency using breathing devices, including resuscitation masks, bag-valve-mask resuscitators (BVMs) and emergency oxygen.** ■ **To receive the course completion certificate for Administering Emergency Oxygen, you must:** ○ **Attend the entire class session.** ○ **Participate in all skill sessions and activities.** ○ **Demonstrate competency in all required skills.** ○ **Pass the final written exam with a minimum grade of 80 percent.**

TOPIC: STANDARD PRECAUTIONS

Time: 7 minutes

GUIDED DISCUSSION

■ Ask participants to define standard precautions and identify what is included in standard precautions.

Answers: *Responses should include:*

○ *Standard precautions are a means of reducing the risk of exposure to bloodborne pathogens and help to prevent disease transmission. Standard precautions assume that all body fluids may be infectious.*

○ *Standard precautions include the use of personal protective equipment (PPE), such as CPR breathing barriers, disposable gloves, gowns, masks, shields and protective eyewear.*

TOPIC: RESUSCITATION MASKS

Time: 10 minutes

Instructor's Note: *If this course is conducted immediately after completion of the CPR/AED for Professional Rescuers and Health Care Providers course, this topic may be omitted.*

Discussion	■ Briefly describe a resuscitation mask. ■ Inform participants of the benefits of using resuscitation masks, such as: ○ Helping to get air quickly into the victim. ○ Creating a seal over the victim's mouth and nose. ○ Being able to connect to emergency oxygen. ○ Protecting against disease transmission. ○ Providing ventilations that are more effective.
Video	■ Show the video segment, "Using a Resuscitation Mask," (2:29). Answer participants' questions about the segment.
USING A RESUSCITATION MASK TO GIVE VENTILATIONS	
Skill Session	**WATCH-THEN-PRACTICE** ■ Assign partners or ask participants to find partners. ■ Explain that each participant will demonstrate the use of a resuscitation mask to give ventilations to a manikin. ■ Observe each participant performing the skill and evaluate completion of the skill using the skill assessment tool. ■ Point out any common errors, such as giving ventilations too quickly, failing to obtain a seal with the resuscitation mask, using an improperly sized mask for the victim or not reassessing the victim after 2 minutes. ■ Check off each participant's progress on the Participant Progress Log.

TOPIC: **BVMs**

Time: 15 minutes

Instructor's Note: *If this course is conducted immediately after completion of the CPR/AED for Professional Rescuers and Health Care Providers course, this topic may be omitted.*

Discussion	■ Briefly show participants a BVM and point out the three parts—a bag, a valve and a mask—demonstrating how squeezing the bag opens the one-way valve, forcing air into the lungs, and how releasing the bag closes the valve, allowing environmental air to refill it. ■ Emphasize the need for two rescuers: one to position and seal the mask and one to squeeze the bag. ■ Review the advantages of using a BVM, including: ○ Increased oxygen levels in the victim's blood (due to using ambient air rather than air exhaled by rescuer). ○ Ability to connect to emergency oxygen. ○ Prevention of disease transmission.
Video	■ Show the video segment, "Using a Bag-Valve-Mask Resuscitator—Two Rescuers" (1:24). Answer participants' questions about the segment.
USING A BVM—TWO RESCUERS	
Skill Session	**WATCH-THEN-PRACTICE** ■ Assign groups of three or ask participants to find groups of three. ■ Explain that each participant will demonstrate the use of a BVM to give ventilations to a manikin. ■ Observe each participant performing the skill and evaluate completion of the skill using the skill assessment tool. ■ Point out any common errors, such as positioning the mask improperly, failing to ensure a seal, failing to keep the airway open or failing to reassess the victim. ■ Check off each participant's progress on the Participant Progress Log.

TOPIC: **EMERGENCY OXYGEN**

Time: 25 minutes

Lecture Points	■ **A breathing or cardiac emergency reduces the supply of oxygen to the brain, heart and rest of the body, leading to hypoxia (insufficient oxygen reaching the cells).** ■ **Signs and symptoms of hypoxia include increased breathing and heart rates, changes in consciousness, restlessness, chest pain and cyanosis (bluish lips and nail beds).** ■ **The air we normally breathe contains 21 percent oxygen; when giving ventilations, the exhaled air blown into the victim contains 16 percent oxygen, which may not be adequate to save the victim's life.** ■ **Emergency oxygen allows delivery of a higher percentage of oxygen and should be used for:** ○ **An adult breathing fewer than 12 breaths or more than 20 breaths per minute.** ○ **A child breathing fewer than 15 breaths or more than 30 breaths per minute.** ○ **An infant breathing fewer than 25 breaths or more than 50 breaths per minute.**

EMERGENCY OXYGEN *Continued*

- **Administer emergency oxygen to all victims with respiratory distress or respiratory failure, as these conditions are usually caused by abnormal oxygen levels to the tissues.**
- **In most cases, short-term hyperoxia (a condition in which an excess of oxygen reaches the cells) as a result of emergency oxygen intake should not cause problems. In fact, hyperoxia is desirable while caring for victims with carbon monoxide (CO) poisoning. Always administer emergency oxygen for suspected CO poisoning and all smoke inhalation cases.**

OXYGEN DELIVERY SYSTEMS

Guided Discussion

- Briefly describe the two types of oxygen delivery systems: variable-flow-rate and fixed-flow-rate oxygen delivery systems.
- Point out advantages and disadvantages of each system.
  - *Variable-flow-rate oxygen system:* The rescuer can adjust the flow rate. It is practical because of the large amount of oxygen that can be delivered and because it can be used with a variety of equipment and in various emergencies. It requires an oxygen cylinder, regulator with pressure gauge and flowmeter, and a delivery device. It requires assembly/setup for use.
  - *Fixed-flow-rate oxygen system:* It uses a preset flow rate, usually 15 liters per minute (LPM) or a dual (high/low) flow setting. The system is preassembled. The type of delivery device that can be used is limited and, therefore, the concentration of oxygen delivered is limited.

OXYGEN SAFETY PRECAUTIONS

Lecture Points

- **Safety is a major concern when administering emergency oxygen.**
- **Always follow these guidelines when using emergency oxygen:**
  - **Be sure that oxygen is flowing before putting the delivery device over the victim's face.**
  - **Do not use oxygen around flames or sparks. Oxygen causes fire to burn more rapidly and intensely.**
  - **Do not use grease, oil or petroleum products to lubricate or clean the regulator. This could cause an explosion.**
  - **Do not stand oxygen cylinders upright unless they are well secured. If the cylinder falls, the regulator or valve could become damaged or cause injury.**
  - **Do not drag or roll cylinders or carry a cylinder by the valve or the regulator.**
  - **Do not hold on to protective valve caps or guards when moving or lifting cylinders.**
  - **Do not deface, alter or remove any labeling or markings on the oxygen cylinder.**
  - **Do not attempt to mix gases in an oxygen cylinder or transfer oxygen from one cylinder to another.**
- **The oxygen cylinder also needs to be checked before use. Be sure to check for the following:**
  - **Cylinder leaks, abnormal bulging, defective or inoperative valves or safety devices.**
  - **The physical presence of rust or corrosion on a cylinder or cylinder neck.**
  - **Any foreign substances or residues, such as adhesive tape around the cylinder neck, oxygen valve or regulator assembly, which can hamper oxygen delivery and, in some cases, may cause a fire or explosion.**

OXYGEN SAFETY PRECAUTIONS *Continued*	
	■ **Ensure that all oxygen cylinders underwent proper hydrostatic testing and are marked appropriately.** ■ **If defibrillating using an automated external defibrillator (AED), make sure that no one is touching or in contact with the victim or the resuscitation equipment. Do not defibrillate someone when around flammable materials, such as free-flowing oxygen or gasoline.**
OXYGEN DELIVERY DEVICES	
Lecture	■ **There are several oxygen delivery devices you can use to administer emergency oxygen, including a nasal cannula, resuscitation mask, non-rebreather mask and BVM.** ■ **A nasal cannula is a plastic tube held in place over the victim's ears with two small prongs inserted into the nostrils.** ○ **A nasal cannula can be used on a breathing victim and is usually used on victims who are unable to tolerate a mask over the face.** ■ **A nasal cannula can be set to a flow rate from 1 to 6 LPM and can deliver up to 44 percent oxygen concentration.** ■ **A non-rebreather mask is a mask with an attached reservoir bag and a one-way valve between the mask and the bag to prevent the victim's exhaled air from mixing with oxygen in the reservoir bag. Oxygen is inhaled from the bag and exhaled air escapes through flutter valves on the sides of the mask.** ○ **A non-rebreather mask can be used on a breathing victim.** ■ **A non-rebreather mask can be set to a flow rate from 10 to 15 LPM and can deliver up to 90 percent oxygen concentration.** ■ **Resuscitation masks and BVMs can be used on breathing and nonbreathing victims.** ■ **A resuscitation mask can be set to a flow rate from 6 to 15 LPM and can deliver 35 to 55 percent oxygen concentration.** ■ **A BVM can be set to a flow rate at 15 LPM or more and can deliver 90 percent or greater oxygen concentration.**
Video	■ Show the video segment, "Oxygen Delivery" (3:47). Answer participants' questions about the segment.
OXYGEN DELIVERY	
Skill Session	**WATCH-THEN-PRACTICE** ■ Assign partners or ask participants to find partners. ■ Explain that each pair will demonstrate administering emergency oxygen on a manikin. ■ Instruct participants that they should not administer oxygen to a fellow participant. They should verify the flow but not place a mask with flowing oxygen on a partner. ■ Observe each participant performing the skill and evaluate completion of the skill using the skill assessment tool. ■ Point out any common errors, such as not checking the pressure gauge, improperly connecting the plastic tubing to the delivery device or flowmeter or setting an incorrect flow rate for the delivery device. ■ Check off each participant's progress on the Participant Progress Log.

PULSE OXIMETRY

Time: 10 minutes

Key Points	
	■ **Pulse oximetry is used to measure the percentage of oxygen saturation in the blood; normal saturation is approximately 95 to 100 percent, recorded as 95 to 100 percent SpO_2.** ■ **A reading below 94 percent may indicate hypoxia, which indicates a need for emergency oxygen. A reading of 95 or more percent SpO_2 indicates that emergency oxygen is not needed.** ■ **Pulse oximetry is applied whenever a victim's oxygenation is a concern and should be used during the assessment to determine whether emergency oxygen should be administered.** ■ **You should monitor the effectiveness of the oxygen delivery using a pulse oximeter.** ■ **The pulse oximeter reading never should be used to withhold oxygen from a victim who appears to be in respiratory distress or when it is the standard of care to apply oxygen despite good pulse oximetry readings, such as in a victim with chest pain.** ■ **To use the pulse oximeter:** ○ **Turn on the machine and allow for self-tests.** ○ **Remove any nail polish on the victim's fingernail with an acetone wipe if present.** ○ **Apply the probe to the victim's finger; if necessary, use alternative sites such as the earlobe for an adult and the foot for an infant.** ○ **Allow the machine to register the oxygen saturation level.** ○ **Record the time and initial saturation percent.** ○ **Verify the victim's pulse rate on the oximeter with the victim's actual pulse rate.** ■ **If the oxygen level reaches 100 percent and local protocols allow, you may decrease the flow rate of oxygen and change to a lower-flowing delivery device.** ■ **The reliability of the readings may be affected by hypoperfusion or poor perfusion, cardiac arrest, excessive victim motion, fingernail polish, carbon monoxide poisoning, hypothermia or other cold-related illness, sickle cell disease or anemia, cigarette smoking, edema and time lag in detecting respiratory insufficiency.**

WRAP-UP

Time: 5 minutes

■ In review, ask participants the following questions and answer any participants' questions:

○ **Which oxygen delivery device provides the lowest concentration of oxygen?**

Answer: *Nasal cannulas are set at flow rates of 1 to 6 LPM and deliver an oxygen concentration up to 44 percent.*

○ **A victim is having trouble breathing. You applied a pulse oximeter and found the victim has an SpO_2 percentage of 92. What care should you provide for this victim?**

Answer: *You should administer emergency oxygen until you get a pulse oximeter reading of 95 percent SpO_2 or greater.*

TOPIC: **FINAL WRITTEN EXAM**

Time: 15 minutes

- Tell participants that they will now take a final written exam on the information covered in this course.
- Explain that they may not use their books or notes to answer the questions.
- Hand out an exam and answer sheet to each participant.
- Tell participants to use a pencil, to write only on the answer sheet and to mark the answers clearly.
- Tell participants to come to you or to raise their hands when they have finished the exam or if they have any questions.
- Collect all answers sheets and exams.
- Grade the exam using the answer key on page 37.
- After grading the exam, if time allows, discuss with the class any exam questions that were confusing or frequently missed. Privately counsel any participant who does not successfully complete the exam and schedule a retest. If scheduling a retest, be sure to use the alternative test and not the original. If the participant tested the first time with Exam A, for example, have him or her retest with Exam B.

TOPIC: **CLOSING**

Time: 3 minutes

- Tell participants who meet the following requirements that they have successfully passed the course:
  - Passed the final written exam with a score of at least 80 percent (12 correct answers out of 15 questions).
  - Demonstrated competency for all required skills and scenarios.
- Thank all participants for attending the course.
- Inform participants of other Red Cross courses they may be interested in taking and of volunteer opportunities.
- Arrange to retest any participants who did not pass the final written exam.

Skill Charts and Skill Assessment Tools

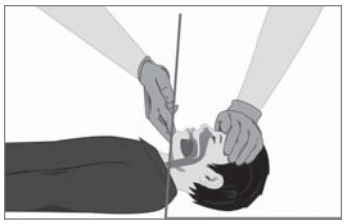
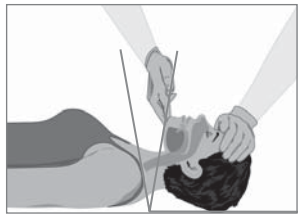
In addition to performing the steps listed in the skill charts in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

SKILL CHART: USING A RESUSCITATION MASK

Note: *Always follow standard precautions when providing care. Always select a properly sized mask for the victim.*

1. Assemble the resuscitation mask.
   - ○ Attach the one-way valve to the resuscitation mask, if necessary.
2. Position the mask.
   - ○ Kneel to the side of or above the victim's head and place the rim of the mask between the victim's lower lip and chin.
   - ○ Lower the resuscitation mask until it covers the victim's mouth and nose.
3. Seal the mask.
   - ○ From the *side* of the victims' head:
     - ● With your top hand, place your thumb and fingers around the top of the resuscitation mask to create a "C."
     - ● With your other hand, slide your first two fingers into position on the bony part of the victim's chin.
     - ● Apply even, downward pressure with your top hand and the thumb of your lower hand to seal the top and bottom of the mask.
   - ○ From *above* the victim's head:
     - ● Place your thumbs and index fingers along each side of the resuscitation mask to create a "C."
     - ● Slide your fingers into position behind the angles of the victim's jawbone to create an "E" on both sides of the victim's jawbone.
     - ● Apply even, downward pressure with your thumbs.
   - ○ If you suspect a head, neck or spinal injury:
     - ● Place your thumbs along each side of the resuscitation mask using the elbows for support.
     - ● Slide your fingers into position under the angles of the victim's jawbone.
     - ● Without moving the victim's head, apply even, downward pressure with your thumbs to seal the mask.
4. Open the airway.
   - ○ From the *side* of the victim's head:
     - ● Tilt the head back and lift the chin to open the airway.
   - ○ From *above* the victim's head:
     - ● Tilt the head back and lift the jaw to open the airway.
   - ○ If you suspect a head, neck or spinal injury:
     - ● Without tilting the head back, open the airway by pushing or thrusting the lower jaw up with your fingers along the jawbone.
5. Blow into the mask.
   - ○ Each ventilation should last about **1** second and make the victim's chest clearly rise.
   - ○ The chest should fall before the next ventilation is given.

SKILL ASSESSMENT TOOL: USING A RESUSCITATION MASK

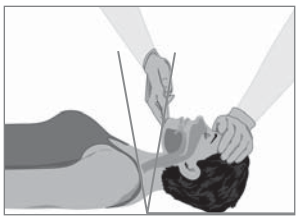
Criterion	Proficient	Not Proficient
Seal the mask	Pushes down on the mask creating a tight seal not allowing air to escape	Pushes down on the mask but air escapes
Open the airway	Tilts head back so that jaw line is at an angle of 80° to 100° to the floor (not for a suspected head, neck or spinal injury) 	Tilts head back so that jaw line is at an angle less than 80° or greater than 100° to the floor (not for a suspected head, neck or spinal injury) 
Give ventilations	Gives ventilations that make the chest clearly rise and last about 1 second each	Gives ventilations that do not make the chest clearly rise and last 2 or more seconds each

SKILL CHART: USING A BVM—TWO RESCUERS

Note: *Always follow standard precautions when providing care. Always select the properly sized BVM for the victim.*

1. Assemble the BVM.
2. Rescuer 1 kneels behind the victim's head and positions the mask over the victim's mouth and nose.
3. Rescuer 1 seals the mask.
4. Rescuer 1 opens the airway.
   - ○ Place the thumbs along each side of the mask, using the elbows for support.
   - ○ Slide the fingers behind the angles of the victim's jawbone.
   - ○ Push down on the mask with the thumbs, lift the jaw and tilt the head back.
5. Rescuer 2 gives ventilations.
   - ○ Squeeze the bag slowly with both hands.
   - ○ Each ventilation should last about **1** second and make the chest clearly rise. The chest should fall before the next ventilation is given.

SKILL ASSESSMENT TOOL: USING A BVM—TWO RESCUERS

Criterion	Proficient	Not Proficient
Open the airway	Tilts head back so that jaw line is at an angle of 80° to 100° to the floor 	Tilts head back so that jaw line is at an angle less than 80° or greater than 100° to the floor 
Give ventilations	Gives ventilations that make the chest clearly rise and last about 1 second each	Gives ventilations that do not make the chest clearly rise and last 2 or more seconds each

SKILL CHART: OXYGEN DELIVERY

Note: *Always follow standard precautions when providing care.*

1. Check the cylinder.
   - Make sure the oxygen cylinder is labeled "U.S.P." (United States Pharmacopeia) and marked with a yellow diamond that says "Oxygen."
2. Clear the valve.
   - Remove the protective covering.
   - Remove and save the O-ring gasket, if necessary.
   - Turn the cylinder away from you and others before opening for **1** second to clear the valve of any debris.
3. Attach the regulator.
   - Put the O-ring gasket into the valve on top of the cylinder, if necessary.
   - Make sure that it is marked "Oxygen Regulator." Check to see that the pin index corresponds to an oxygen cylinder.
   - Secure the regulator on the cylinder by placing the two metal prongs into the valve.
   - Hand-tighten the screw until the regulator is snug.
4. Open the cylinder and check pressure.
   - Open counterclockwise one full turn and check the pressure gauge.
   - Determine that the cylinder has enough pressure (more than 200 psi). If the pressure is lower than 200 psi, **DO NOT** use.
5. Attach the delivery device.
   - Attach the plastic tubing between the flowmeter and the delivery device.
6. Adjust the flowmeter.
   - Turn the flowmeter to the desired flow rate.
     - With a nasal cannula, set the rate at 1 to 6 LPM.
     - With a resuscitation mask, set the rate at 6 to 15 LPM.
     - With a non-rebreather mask, set the rate at 10 to 15 LPM.
     - Inflate the oxygen reservoir bag to two-thirds full by placing your thumb over the one-way valve until the bag is sufficiently inflated.With a BVM, set the rate at 15 LPM or more.
7. Verify the oxygen flow.
   - Listen for a hissing sound and feel for oxygen flow through the delivery device.
8. Place the delivery device on the victim and continue care until more advanced medical personnel take over.
9. Break down the oxygen equipment by reversing the steps, being sure to bleed the pressure regulator by turning on the flowmeter after the tank has been turned off.

Note: *When monitoring a conscious victim's oxygen saturation levels using a pulse oximeter, you may reduce the flow of oxygen and change to a lower-flowing delivery device if the oxygen level of the victim reaches 100 percent.*

SKILL ASSESSMENT TOOL: OXYGEN DELIVERY

Criterion	Proficient	Not Proficient
Open the cylinder	Opens the cylinder counterclockwise one full turn	Opens the cylinder less than 1 full turn or more than 2 full turns
Verify oxygen flow	Verifies oxygen flow by listening and feeling	Applies delivery device without verifying oxygen flow

ENRICHMENT TOPIC: **SUCTIONING**

Time: 15 minutes

Lecture Points	■ **Foreign matter such as mucus, fluids or blood can collect in a victim's airway.** ■ **A finger sweep (with a gloved finger) should be used *only* on an unconscious victim and *only* when material is visible in the mouth.** ■ **Suctioning is a process of removing foreign matter from a victim's upper airway.** ■ **It can be done using a manual or mechanical suctioning device.** ■ **Manual suction units are operated by hand.** ○ **They are lightweight, compact and relatively inexpensive.** ○ **They do not require an energy source.** ■ **Mechanical suctioning devices are electrically powered, producing a vacuum powerful enough to remove substances from the throat.** ○ **They operate on batteries, which must be checked to ensure that they are fully charged (unless the unit is the type with batteries that can be constantly charged).** ○ **Otherwise, the vacuum may be insufficient to operate the unit effectively.** ■ **Either type requires the use of sterile suction catheters, which come in sizes. Several sizes should be kept on hand for use.**
Video	■ Show the video segment, "Using a Manual Suctioning Device" (0:57). Answer participants' questions about the segment.
USING A MANUAL SUCTIONING DEVICE	
Skill Session	**WATCH-THEN-PRACTICE** ■ Assign partners or ask participants to find a partner. ■ Explain that each pair will demonstrate manual suctioning on a manikin. ■ Observe each participant performing the skill and evaluate completion of the skill using the skill assessment tool. ■ Point out any common errors, such as measuring incorrectly, inserting the suction tip too far, not checking that the suction is working properly or choosing the wrong size of suction catheter. ■ Check off each participant's progress on the Participant Progress Log.
USING A MECHANICAL SUCTIONING DEVICE	
Video	■ Show the video segment, "Using a Mechanical Suctioning Device" (1:59). Answer participants' questions about the segment.

Skill Chart and Skill Assessment Tool

In addition to performing the steps listed in the skill chart in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

SKILL CHART: USING A MANUAL SUCTIONING DEVICE

Note: *Always follow standard precautions when providing care. If needed, assemble the device according to manufacturer's instructions.*

1. Position the victim.
   - ○ Roll the victim's body as a unit onto one side.
   - ○ Open the mouth.
2. Remove any visible large debris from the victim's mouth with a gloved finger.
3. Measure and check the suction tip.
   - ○ Measure from the victim's earlobe to the corner of the mouth.
   - ○ Note the distance to prevent inserting the suction tip too deeply.
   - ○ Check that the suction is working by placing your finger over the end of the suction tip as you squeeze the handle of the device.
4. Suction the mouth.
   - ○ Insert the suction tip into the back of the mouth.
   - ○ Squeeze the handle of the suction device repeatedly to provide suction.
   - ○ Apply suction as you withdraw the tip using a sweeping motion, if possible.
   - ○ Suction for no more than **15** seconds at a time for an adult, **10** seconds for a child and **5** seconds for an infant.

SKILL ASSESSMENT TOOL: USING A MANUAL SUCTIONING DEVICE

Criterion	Proficient	Not Proficient
Measure suction tip	Measures from the victim's earlobe to the corner of the mouth	Measures from somewhere other than earlobe to somewhere other than corner of mouth
Suction the mouth	■ Suctions the mouth for an adult for more than 12 but less than 16 seconds ■ Suctions the mouth for a child for more than 7 but less than 11 seconds ■ Suctions the mouth for an infant for more than 3 but less than 6 seconds	■ Suctions the mouth for an adult for less than 12 or more than 16 seconds ■ Suctions the mouth for a child for less than 7 or more than 11 seconds ■ Suctions the mouth for an infant for less than 3 or more than 6 seconds

ENRICHMENT TOPIC: **AIRWAY ADJUNCTS**

Time: 15 minutes

Lecture Points	■ **The tongue is the most common cause of airway obstruction in an unconscious person.** ■ **Keeping the tongue from blocking the air passage is a high priority.** ■ **Airways, such as oropharyngeal (oral) airways (OPAs) and nasopharyngeal (nasal) airways (NPAs), can help accomplish this task.** ■ **Follow local protocols for the use of OPAs and NPAs.** ■ **Airways come in a variety of sizes and have a curved design to fit the natural contour of the mouth and throat.** ■ **An OPA is inserted into the mouth and, when properly positioned, keeps the tongue away from the back of the throat.** ○ **If placed improperly, it can depress the tongue into the back of the throat, further blocking the airway.** ○ **OPAs are used *only* on unconscious, unresponsive victims with no gag reflex.** ○ **OPAs should *not* be used if the victim has suffered oral trauma, such as broken teeth, or has recently undergone oral surgery.** ■ **The NPA keeps the tongue out of the back of the throat, thereby keeping the airway open.** ○ **NPAs can be used on a conscious, responsive victim or an unconscious victim.** ○ **NPAs should *not* be used on victims with suspected head trauma or suspected skull fracture.**
INSERTING AN ORAL AIRWAY	
Skill Session	■ Assign partners or ask participants to find a partner. ■ Explain that each pair will demonstrate inserting an oral airway on a manikin. ■ Observe each participant performing the skill and evaluate completion of the skill using the skill assessment tool. ■ Point out any common errors, such as choosing an inappropriately sized airway, inserting the airway upside down or failing to rotate it as the tip approaches the back of the mouth. ■ Check off each participant's progress on the Participant Progress Log.
INSERTING A NASAL AIRWAY	
Skill Session	■ Guide participants through the steps listed on the Inserting a Nasal Airway skill chart. ■ Assign partners or ask participants to find a partner. ■ Explain that each pair will demonstrate inserting a nasal airway on a manikin. ■ Follow the same steps as before: ○ Have participants practice the skill. ○ Observe and evaluate each participant's performance of the skill using the skill assessment tool. ○ Point out any common errors, such as choosing an inappropriately sized airway, failing to lubricate the airway or inserting the nasal with the bevel pointed away from the septum.

Skill Charts and Skill Assessment Tools

In addition to performing the steps listed in the skill charts in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

SKILL CHART: INSERTING AN ORAL AIRWAY

Notes:

- *Always follow standard precautions when providing care.*
- *Before inserting an OPA, be sure the victim is unresponsive, has no oral trauma, such as broken teeth, and has not had recent oral surgery.*
- *Use an appropriately sized OPA for the victim.*
- *If the victim gags, remove the OPA immediately.*

1. Select the proper size.
   - Measure the airway from the victim's earlobe to the corner of the mouth.
2. Open the victim's mouth.
   - Use the cross-finger technique to open the victim's mouth.
     - Cross the thumb and forefinger of one hand.
     - Put your thumb on the victim's lower teeth and your forefinger on the victim's upper teeth.
     - Use a scissors motion to open the mouth.
3. Insert the OPA.
   - Grasp the victim's lower jaw and tongue and lift upward.
   - Insert the OPA with the curved end along the roof of the mouth.
   - As the tip approaches the back of the mouth, rotate it one half-turn (180 degrees).
   - Slide the OPA into the back of the throat.

Note: *The alternative procedure for a child or an infant is to insert the OPA sideways and then rotate it 90 degrees. You can also insert the OPA using a tongue blade or a tongue depressor, then insert with the tip of the device pointing toward the back of the tongue and throat in the position it will rest in after insertion.*

4. Ensure correct placement.
   - The flange should rest on the victim's lips.
   - If the victim vomits, remove and suction the airway, ensuring all debris is removed from the airway. Thoroughly clean the device and reinsert the OPA *only* if the victim is still unconscious and does *not* have a gag reflex.

SKILL ASSESSMENT TOOL: INSERTING AN ORAL AIRWAY

Criterion	Proficient	Not Proficient
Measure the airway	Measures from the victim's earlobe to the corner of the mouth	Measures from somewhere other than earlobe to somewhere other than corner of mouth
Insert the OPA	Inserts the OPA with the curved end along the roof of the mouth and, as the tip approaches the back of the mouth, rotates it one half-turn (180 degrees)	■ Inserts the OPA with the curved end along the tongue AND ■ As the tip approaches the back of the mouth, rotates it one half-turn (180 degrees) OR ■ Inserts the OPA with the curved end along the roof of the mouth AND ■ As the tip approaches the back of the mouth, rotates it one quarter (90 degrees) or three quarter-turns (270 degrees)

SKILL CHART: INSERTING A NASAL AIRWAY

Notes:

- *Always follow standard precautions when providing care.*
- *NPAs must not be used on a victim with suspected head trauma or a suspected skull fracture.*
- *Use an appropriately sized NPA for the victim.*

1. Select the proper size.
   - Measure the NPA from the victim's earlobe to the tip of the nostril. Ensure that the diameter of the NPA is smaller than the nostril.
2. Lubricate the NPA.
   - Use a water-soluble lubricant to lubricate the airway prior to insertion.
3. Insert the NPA.
   - With the bevel toward the septum (center of the nose), advance the NPA gently, straight in, following the floor of the nose.
   - If resistance is felt, do *not* force.
   - If you are experiencing problems, try the other nostril.
4. Ensure correct placement.
   - The flange should rest on the nostril.

SKILL ASSESSMENT TOOL: INSERTING A NASAL AIRWAY

Criterion	Proficient	Not Proficient
Measure the NPA	Measures from the victim's earlobe to the tip of the nostril	Measures from somewhere other than earlobe to somewhere other than the tip of the nostril
Insert the NPA	Inserts the NPA with the bevel toward the septum	Inserts the NPA with the bevel away from the septum

SECTION 3

APPENDICES

APPENDIX A

FINAL WRITTEN EXAMS, ANSWER SHEET AND ANSWER KEYS

- Final Written Exam A
- Final Written Exam B
- Answer Sheet—Final Written Exam
- Answer Key—Final Written Exam A
- Answer Key—Final Written Exam B

—DO NOT WRITE ON THIS EXAM—

American Red Cross Administering Emergency Oxygen Course Final Written Exam — Exam A

IMPORTANT: Read all instructions before beginning the exam.

INSTRUCTIONS: Do not write on this exam. Mark all answers in pencil on the separate answer sheet as directed by your instructor. Read each question carefully. Then choose the **best** answer and completely fill in that circle on the answer sheet. If you wish to change an answer, erase your first answer entirely. Return this exam with your answer sheet to your instructor when you are finished.

EXAMPLE

ANSWER SHEET

xx. ⓐ ⓑ ⓒ ●

xx. Why does the American Red Cross teach this course?

a. To help people recognize and respond appropriately in an emergency

b. To help people make appropriate decisions when they see an emergency

c. To enable people to provide immediate care to a suddenly injured or ill person until more advanced medical care takes over

d. All of the above

American Red Cross Administering Emergency Oxygen Course Final Written Exam — Exam A

1. When giving ventilations to a victim, the oxygen concentration that you exhale into the victim contains approximately what percentage of oxygen?

   a. 16

   b. 21

   c. 32

   d. 44

2. You determine that a victim needs emergency oxygen because he is exhibiting signs and symptoms of hypoxia. Which of the following is most likely present?

   a. Cough

   b. Fatigue

   c. Increased heart rate

   d. Nausea

—DO NOT WRITE ON THIS EXAM—

3. You should administer emergency oxygen to an adult victim with which of the following breathing rates?
   a. 12 breaths per minute
   b. 16 breaths per minute
   c. 20 breaths per minute
   d. 24 breaths per minute

4. When placing a resuscitation mask on a victim, position the rim of the mask between which of the following?
   a. Nose and upper lip
   b. Lower lip and chin
   c. Bridge and tip of the nose
   d. Cheek and mouth

5. Which method is most appropriate to determine that ventilations given with a bag-valve-mask resuscitator (BVM) are effective?
   a. Listening for air to escape through the victim's mouth
   b. Noting air being exhaled through the victim's nose
   c. Observing the victim's chest rising clearly
   d. Watching for movement of the victim's body

6. You and another rescuer are using a BVM. You position and seal the mask. Which action is next?
   a. Giving one ventilation
   b. Opening the airway
   c. Reassessing breathing
   d. Squeezing the bag slowly

7. A victim is receiving emergency oxygen via nasal cannula. Which flow rate is most appropriate to use with this device?
   a. 4 liters per minute (LPM)
   b. 8 LPM
   c. 12 LPM
   d. 14 LPM

8. A victim is receiving emergency oxygen that is attached to a BVM. The minimum appropriate flow rate is:
   a. 10 LPM.
   b. 12 LPM.
   c. 15 LPM.
   d. 20 LPM.

—DO NOT WRITE ON THIS EXAM—

9. Which oxygen delivery device delivers the highest oxygen concentration to a victim?
   a. BVM
   b. Nasal cannula
   c. Non-rebreather mask
   d. Resuscitation mask

10. When administering emergency oxygen to a victim, which of the following is most important to do?
   a. Apply a general-purpose petroleum product to help lubricate the regulator.
   b. Ensure oxygen is flowing through the device before putting it on the victim.
   c. Ensure that the oxygen cylinder is standing upright, free from any securing devices.
   d. Hold on to the valve on the oxygen cylinder when dragging or rolling it.

11. When administering emergency oxygen to a victim, which of the following is used to set the liters per minute?
   a. Flowmeter
   b. O-ring gasket
   c. Oxygen regulator
   d. Pressure gauge

12. You are administering emergency oxygen to a victim and you need to verify that the oxygen is flowing. Which of the following should you do?
   a. Feel for air coming out of the victim's mouth.
   b. Listen for a hissing sound coming from the device.
   c. Look for bubbles in the oxygen tubing.
   d. Watch for steam coming out of the delivery device.

13. Which of the following is least likely to interfere with the accuracy of a pulse oximeter reading?
   a. Poor perfusion
   b. Victim is lying still
   c. Hypothermia
   d. Edema

14. The pressure gauge on an oxygen cylinder reads 200 pounds per square inch (psi). Which action is most appropriate?
   a. Attaching the flowmeter
   b. Changing the O-ring gasket
   c. Lubricating the connection sites
   d. Replacing the cylinder with a new one

—DO NOT WRITE ON THIS EXAM—

15. Which pulse oximeter reading indicates possible hypoxia?
    a. 92 percent SpO_2
    b. 95 percent SpO_2
    c. 98 percent SpO_2
    d. 100 percent SpO_2

—DO NOT WRITE ON THIS EXAM—

American Red Cross Administering Emergency Oxygen Course Final Written Exam — Exam B

IMPORTANT: Read all instructions before beginning the exam.

INSTRUCTIONS: Do not write on this exam. Mark all answers in pencil on the separate answer sheet as directed by your instructor. Read each question carefully. Then choose the **best** answer and completely fill in that circle on the answer sheet. If you wish to change an answer, erase your first answer entirely. Return this exam with your answer sheet to your instructor when you are finished.

EXAMPLE

ANSWER SHEET

xx. ⓐ ⓑ ⓒ ●

xx. Why does the American Red Cross teach this course?

a. To help people recognize and respond appropriately in an emergency
b. To help people make appropriate decisions when they see an emergency
c. To enable people to provide immediate care to a suddenly injured or ill person until more advanced medical care takes over
d. All of the above

American Red Cross Administering Emergency Oxygen Course Final Written Exam — Exam B

1. When administering emergency oxygen via a BVM, the victim receives which percentage of oxygen?
   a. 44 or lower
   b. 55
   c. 85
   d. 90 or greater

2. Which pulse oximeter reading indicates possible hypoxia?
   a. 92 percent SpO_2
   b. 95 percent SpO_2
   c. 98 percent SpO_2
   d. 100 percent SpO_2

—DO NOT WRITE ON THIS EXAM—

3. When giving ventilations through a resuscitation mask, you would blow into the mask, making sure that each ventilation lasts approximately how many seconds?
   a. 1
   b. 2
   c. 3
   d. 4

4. You are preparing to use a resuscitation mask to give ventilations. After assembling the mask, which of the following should you do next?
   a. Open the airway.
   b. Seal the mask.
   c. Position the mask.
   d. Blow into the mask.

5. When administering emergency oxygen to a victim, which of the following is used to set the liters per minute?
   a. Flowmeter
   b. O-ring gasket
   c. Oxygen regulator
   d. Pressure gauge

6. You would expect to administer emergency oxygen to which of the following victims?
   a. A child with a breathing rate of 22 breaths per minute
   b. An infant with a breathing rate of 72 breaths per minute
   c. An adult who is breathing at a rate of 18 breaths per minute
   d. A child who is breathing at a rate of 16 breaths per minute

7. When preparing to administer emergency oxygen to a victim, you check the pressure gauge, which reads 800 pounds per square inch (psi). Which action is most appropriate?
   a. Obtaining a new oxygen cylinder because this one is almost empty
   b. Attaching the delivery device to the current oxygen cylinder
   c. Turning on the flowmeter to see if there is oxygen in the cylinder
   d. Placing the O-ring gasket into the valve on top of the cylinder

8. Which of the following is least likely to interfere with the accuracy of a pulse oximeter reading?
   a. Poor perfusion
   b. Victim is lying still
   c. Hypothermia
   d. Edema

—DO NOT WRITE ON THIS EXAM—

9. A victim is receiving emergency oxygen through a non-rebreather mask. Which flow rate is appropriate to use with this victim?
   a. 2 liters per minute (LPM)
   b. 6 LPM
   c. 8 LPM
   d. 12 LPM

10. Your primary assessment indicates that the victim is experiencing a breathing emergency and you suspect that she may be developing hypoxia based on which of the following?
   a. Abdominal pain
   b. Changes in consciousness
   c. Decreased breathing rate
   d. Pink lips

11. When placing a resuscitation mask on a victim, you would position the rim of the mask between which of the following?
   a. Nose and upper lip
   b. Lower lip and chin
   c. Bridge and tip of the nose
   d. Cheek and mouth

12. The pressure gauge on an oxygen cylinder reads 200 psi. Which action is most appropriate?
   a. Attaching the flowmeter
   b. Changing the O-ring gasket
   c. Lubricating the connection sites
   d. Replacing the cylinder with a new one

13. You are preparing to administer emergency oxygen using a fixed-flow-rate system. Which action is most appropriate?
   a. Obtaining a regulator and pressure gauge
   b. Ensuring that oxygen is flowing before placing the mask over the victim's mouth and nose
   c. Connecting a nasal cannula to the system to deliver the oxygen
   d. Disassembling the necessary components of the system

—DO NOT WRITE ON THIS EXAM—

14. You are preparing to administer emergency oxygen to a victim using a variable-flow-rate system. After checking the cylinder label and markings, which of the following should you do first?
    a. Adjust the flowmeter.
    b. Attach the regulator.
    c. Open the cylinder counterclockwise one full turn.
    d. Clear the valve.

15. You are providing care to a 75-year-old woman who is conscious but is having difficulty breathing. After completing your primary assessment and summoning more advanced medical personnel, which action is most appropriate?
    a. Administering emergency oxygen
    b. Giving ventilations using a resuscitation mask
    c. Inserting an oral airway
    d. Beginning CPR

ANSWER SHEET: American Red Cross Administering Emergency Oxygen Final Written Exam

Name: _____ **Date:** _____

Directions

Beside the number of each question, fill in with a pencil the circle containing the letter for your answer. Return the exam and answer sheet to your instructor when you are finished.

Exam	A	B

1. (a) (b) (c) (d)
2. (a) (b) (c) (d)
3. (a) (b) (c) (d)
4. (a) (b) (c) (d)
5. (a) (b) (c) (d)
6. (a) (b) (c) (d)
7. (a) (b) (c) (d)
8. (a) (b) (c) (d)
9. (a) (b) (c) (d)
10. (a) (b) (c) (d)
11. (a) (b) (c) (d)
12. (a) (b) (c) (d)
13. (a) (b) (c) (d)
14. (a) (b) (c) (d)
15. (a) (b) (c) (d)

ANSWER KEY: American Red Cross Administering Emergency Oxygen Final Written Exam

Exam A		Exam B	
1.	●	1.	●
2.	●	2.	●
3.	●	3.	●
4.	●	4.	●
5.	●	5.	●
6.	●	6.	●
7.	●	7.	●
8.	●	8.	●
9.	●	9.	●
10.	●	10.	●
11.	●	11.	●
12.	●	12.	●
13.	●	13.	●
14.	●	14.	●
15.	●	15.	●

TEACHING STRATEGIES

Teaching the Lessons

Before you teach a lesson, you should read the lesson plan, review the appropriate pages in the handbook and gather necessary materials, equipment and supplies.

The lesson plan contains the following:

- Lesson name
- Lesson objectives (specific course knowledge and skill objectives appropriate to the lesson)
- Guidance for the instructor (steps to be taken to complete the lesson)
- Materials, equipment and supplies (materials specific to course being taught)
- Topic names
- Activities (class exercises that enhance participants' understanding of the course material)
- Skill sessions (practice of skills by participants)
- Lesson wrap-up (lesson review)
- Enrichment topics (optional topics and skills that can be added to the course)

There are multiple teaching strategies used throughout the course to keep participants engaged including activities and skill sessions. Rather than simply lecturing to participants, maximize learning by facilitating class discussion and interaction. Question-and-answer sessions are built into the course to help such interaction. The questions enable participants to think about the issues and draw on experience or prior knowledge.

Working with Your Audience

Understanding your audience will help you engage participants in course activities. If you can relate to your audience, you will be better able to facilitate the activities successfully, help participants associate classroom information with personal experiences, provide a positive learning environment and maintain participants' self-esteem. You may have adults and youths from a variety of age groups in your course. Being aware of these differences before the course begins can help you anticipate any issues before they arise, such as different levels of understanding and skill.

Facilitating Discussion

Many activities and discussions in this course make use of facilitation principles, with the course instructor serving as the facilitator.

Facilitation is based on the concept of pushing, pulling and balancing the flow of information. *Push skills* have to do with information flowing mostly from instructor to participants. *Pull skills* are used when the instructor engages participants through the use of interactive exercises and by asking and answering questions or using other approaches that actively involve participants in their own learning, such as with the use of open-ended questions. *Balance skills* involve managing the push and pull of information to keep the learning process moving and to maximize learning.

When you facilitate classroom discussion and participant responses, keep in mind the following points:

- Maximize class interaction.
- Use pull skills to engage participants in classroom discussions and to keep discussions on topic or to provide necessary information.

- Pull skills are also useful to solicit responses from different participants to prevent one participant from dominating the discussion.
- Promote an open exchange of information and ideas by asking open-ended questions (i.e., questions that begin with "who," "what," "when," "where," "why" or "how"), waiting for responses, listening, managing silence and referring participants' questions back to the group for discussion and resolution.
- Ensure effective discussion sessions by giving and receiving feedback, maintaining an open perspective, setting the climate, staying on topic and managing time effectively.

Facilitation techniques allow you to evaluate participants' knowledge and understanding throughout the course. In addition, facilitation:

- Gives you the opportunity to evaluate the group's needs and focus the activities on those needs.
- Allows you to build on participants' previous knowledge and skills.
- Allows participants to associate previous knowledge and skills with new information.
- Allows participants to learn from one another.
- Keeps participants engaged and interested throughout the course.

Activities

The educational activities in this course:

- Are learner-focused and involve ongoing evaluation of participants, beginning when they enter the classroom.
- Teach participants to use their critical-thinking skills to solve problems.
- Allow participants to associate information with their personal experience.

Guided Discussion

The instructor's role in the guided discussions is critical. The ability to introduce questions that prompt discussion is an important aspect of facilitating good discussions. The purposes of asking questions for guided discussions are to:

- Increase comprehension (i.e., when the group does not understand something, the discussion may offer an alternative explanation that clarifies the information for participants).
- Monitor and evaluate the group's level of understanding.
- Focus the group's attention on the relevant topic.
- Ensure that the group covers all of the supplied content for each activity.

Lectures

Instructor presentation, or lecture, is sometimes the most effective way to deliver information. However, because lecturing is a passive way for participants to learn, it should be kept as brief as possible. Too much lecturing causes participants to become disengaged, resulting in less effective learning. Lecture points are specific content that instructors must communicate to participants and are written so that they can be read aloud as written or rephrased as needed. When you use lecture points, it is important that you fully understand the content in order to rephrase or provide context as needed. If you are using the course presentation, the main points for the lecture are included on the accompanying slide. If you are not using the course presentation, it is often helpful to write bullet points on newsprint before the class to facilitate the learning process. This practice also helps you meet the various learning needs of participants.

When delivering a lecture, it is important that the lecture be dynamic and engaging. Keeping the lecture moving, avoiding long stories of personal experiences and maintaining a learner-centered focus will vastly improve educational outcomes. One way to accomplish this is to prepare for interactive lectures. An *interactive lecture*

will have opportunities for two-way communication between participants and the instructor as well as among the participants themselves. To prepare an interactive lecture, keep the following suggestions in mind:

- Ensure that you understand the purpose of the lecture and plan accordingly.
- Feel free to rephrase the lecture points to fit your natural speaking style.
- Prepare lecture notes so that you can avoid reading from the instructor's manual while lecturing.
- Use analogies to help create a bridge between lecture material and participants' experiences.
- Strive for interaction with participants during lectures.
- Encourage participants to add to the lecture.

Group Activities

This course also uses group exercises to meet learning needs and promote interaction. When conducting group exercises, you should choose both the size and makeup of the groups. Form groups using the fewest number of participants necessary to conduct the exercise. Keeping the group size small will help avoid potential group-dynamics issues and establish a comfortable environment for the exchange of ideas.

Form new groups for each activity. Changing group members among activities promotes class cohesion, avoids situations in which one or more participants feel left out and keeps friendships from taking precedence over learning. Using an arbitrary selection criterion each time you form groups will help you vary group makeup and give participants the chance to interact with many different classmates. For example, try using selection criteria such as find the person in class whose birthday is closest to yours and form a pair, find the person who lives the farthest from you and form a pair, or find the other people in class whose birthday is in the same season as yours (winter, spring, summer or fall) and form a group.

Small-Group Exercises

Small-group exercises use two to four participants working together to solve a problem or complete an activity. These exercises allow participants to use one another's knowledge to solve problems and learn from others' experiences.

Large-Group Exercises

Large-group exercises use large numbers of participants or the whole class to solve a problem or complete an activity. When the entire class works together, it provides an opportunity to exchange ideas, discuss problems and think about the many ways to solve a problem.

Lesson Wrap-Ups

These question-and-answer sessions are found at the end of each lesson. As you lead the wrap-ups, ask for volunteers to provide answers. Waiting up to 10 seconds for an answer can help encourage hesitant participants to answer. Call on participants by name if you are having a hard time finding volunteers. However, do not insist that all participants provide answers. Participants can still gain from this format even if they appear reluctant to answer.

Ideal responses are provided for each question. Answers labeled "Responses could include" are examples of one or more possible correct answers. For these questions, an example of a correct answer is provided in case participants are unable to come up with the correct answer(s) on their own. Answers labeled "Responses should include" are the correct answer(s) that must be covered. In this case, instructors must provide any or all of the answers if participants are unable to come up with the correct answer(s) on their own.

Conducting Skill Sessions

Skill sessions are a critical component of most American Red Cross courses that result in certification. Skill sessions should be well organized and well managed. During the skill sessions, participants are learning and perfecting skills. These sessions should include direction and instruction, ample practice time, instructor

reinforcement, corrective feedback and encouragement to ensure participants' success. Plan the skill sessions to reinforce learning objectives.

Skill session structure may include practice while you watch, when participants practice the skill along with on-screen instruction and watch then practice, when participants receive on-screen instruction and then apply that knowledge by practicing the skill.

When conducting a course that includes adult and child skills, you may conduct either the adult or the child skill sessions, based on the needs of the participants. The video segments and class instruction for these skills contain all the necessary information for both skills. However, if your course includes infant skills in combination with adult and/or child skills, you must conduct the infant skill sessions. For courses that include only infant skills, the full infant video segments must be viewed.

During the skill sessions, you are responsible for:

- Maintaining a safe learning environment.
- Ensuring that participants can see the video monitor when appropriate.
- Helping participants form pairs and making sure that they have the necessary equipment for skill practice (e.g., CPR breathing barriers, non-latex disposable gloves).
- Demonstrating a skill or skill components and/or guiding participants through a skill.
- Keeping the sessions running smoothly.
- Providing sufficient time for all participants to practice each skill.
- Identifying errors promptly and providing appropriate feedback to help participants improve their skills.
- Encouraging participants to improve their skills.
- Checking each participant for skill competency.

Orienting Participants to Skill Sessions

Orienting participants to the skill sessions will help them get started quickly and practice more efficiently. Participants should practice in groups of two or three. Some skill sessions require participants to practice on a partner, whereas others require practice on a manikin. Practice on a real person (partner) is important because participants can experience providing care to someone and understanding how care is experienced.

Coaching vs. Prompting Participants

The desired outcome of each skill session is for participants to demonstrate a skill correctly from beginning to end without receiving any assistance from you or a partner or referring to the participant materials. Because participants learn at different rates, bring different levels of knowledge and learn in different ways, you will find yourself generally coaching or guiding participants as they first learn skill elements. Coaching occurs in the initial phases of skill practice and allows you to give participants information that they need to establish a sequence, timing, duration and technique of a particular skill. When coaching, also known as guided practice, provide information such as the sequence of steps in a skill. Statements such as "Size-up the scene for safety" or "Check the victim for responsiveness" are examples of coaching.

Once guided practice ends and independent demonstration of a skill begins, you should change tactics and shift to prompting. Prompting allows instructors to assess that a participant is able to make the right decision at the right time and provide the appropriate care.

Because participants are expected to demonstrate skills without any assistance, when you prompt someone, provide only the information necessary for the participant to make a decision and provide care. In other words, you should give information only about the conditions found. For example say, "The child is unconscious" instead of "Call 9-1-1," or "Ventilations do not make the chest clearly rise" instead of "Give ventilations."

Partner Practice

Practicing on a partner has been included in this training to provide participants with experience in providing care to a real person. One participant acts as the injured or ill person while the other provides care. Participants change roles so that each participant has a chance to practice the skill. During partner practice, be sure that participants do not engage in horseplay, which can lead to injury. To ensure a satisfactory comfort level, it is better to allow participants to choose their partners. Some participants may be reluctant to practice with participants of the opposite sex. Instructors should accommodate participants' preferences. It is important that partner pairs be rotated (exchange roles), or one partner will gain most of the skills while the other partner misses a critical learning experience.

Instructor-Led Practice

Instructor-led practice can be used to focus on a skill or part of a skill. It is particularly useful for introducing new skills that build on previously learned skills or for safety reasons. With this method, the instructor guides participants through each step of a skill while checking on participants to ensure that all in the group complete the steps properly as the instructor calls them out.

When you lead the practice, position yourself so that you can see everyone. It may help to have participants' heads pointing in the same direction and their partners in the same relative position next to them. Being able to see everyone allows you to monitor skill performance as well as ensure participant safety.

Reciprocal Practice

Reciprocal practice occurs when course participants guide, provide feedback and check one another's skill performance. The goal is for a participant to demonstrate a skill correctly without any assistance from a partner. During reciprocal practice, move among participants and observe to ensure that they are appropriately practicing the skills and are receiving feedback from their partners. Provide feedback as appropriate and assistance as needed. Remember, if you can observe a participant correctly demonstrate a skill from start to finish without assistance and at the level of proficiency indicated on the skill assessment tool, you may check off that person's skill on the Participant Progress Log. Let the participant know that no further demonstration of that skill is required.

How Participants Learn Skills

Closely supervise participants during skill sessions. The time for learning and refining skills in this course is relatively short. Therefore, skill sessions, particularly the first one, are demanding of the instructors. By carefully planning the first session and commending participants for practicing correctly, you can create a positive learning environment.

The skills taught will likely be new to most participants and may require frequent one-on-one attention. Keeping in mind the following list of skill characteristics will allow for more effective skill sessions.

- Course skills are complex. Participants often have some difficulties when they first begin.
- Skills are learned by hands-on practice. Immediate success in demonstrating the skill is unlikely. Refinements in technique take time and practice. Allow participants multiple opportunities to practice skills.
- Skills require a defined sequence of movements. Participants should consistently follow this sequence when learning skills.
- Learning times for each skill differ, because some skills are easier than others.
- Participants have different learning rates. Take individual differences into account when teaching any course.
- Skills, especially the individual components of opening the airway and checking for breathing, are quickly forgotten. Frequent practice improves skill retention.

Helping Participants Practice Correctly

Practicing a skill aids learning only when the skill is performed correctly. One of your most difficult challenges as an instructor is to ensure that participants practice correctly. Continually monitor all participants, watching for errors participants make while practicing. Try to correct problems as soon as possible so that participants will practice the skill correctly. While you are working closely with one participant, check others with an occasional glance. Correct any problems you notice to keep participants from continuing to practice incorrectly. Encourage participants to ask questions if they are unsure how to perform any part of a skill.

A positive learning environment is important. Participants perform best when you keep them informed of their progress. When participants are practicing correctly, provide positive feedback that identifies what they are doing correctly. If participants are practicing incorrectly, provide specific corrective feedback. Before saying what they are doing wrong, tell them what they are doing correctly. Then, tactfully help them improve their performance.

Other strategies for corrective feedback include the following:

- If the error is simple, explain directly and positively how to correct the skill performance. Be specific when providing feedback. For example, if the participant is having trouble sealing the resuscitation mask, you might say, "The steps leading up to sealing the mask are good; now try pressing down with both thumbs while pressing up on the jaw with the fingers. That will help ensure an adequate seal."
- Show the participant what he or she should be doing. For the previous example, you might have to demonstrate sealing the mask for the person doing the skill.
- Explaining why participants should perform a skill in a certain way may help them remember how to perform the skill correctly. For example, if a participant continually forgets to size-up a scene for safety before assessing a victim, you might remind the participant that the responder can quickly become injured or ill because of an unsafe scene.
- If a participant has an ongoing problem with a technique, carefully observe what he or she is doing. Give specific instructions for performing the technique the correct way and lead the participant through the skill. It may help to have the participant state the steps back to you for reinforcement.
- Emphasize the critical performance steps to focus on those skills that make a difference in the successful completion of a skill.
- During skill sessions, resist telling participants anecdotes, which can distract or confuse participants.
- Remind participants what they are doing right and what they need to improve. Use phrases such as, "The placement of the mask is good, but try to create a good seal with both hands before blowing into the mask."
- Help participants focus on the *critical* components of each skill.

Participants with Disabilities and Other Health Conditions

People with disabilities and other health conditions can perform the skills in the Administering Emergency Oxygen course. In some cases, the skills needed to care for injured or ill individuals may need modification, but the result is the same. Instructors should focus on the critical components of a skill that are needed to successfully meet the objective. Instructors must always teach to the standards set forth but must be aware that participants may modify how a skill is accomplished and still meet the objective, which allows them to receive certification in the course. See the *Americans with Disabilities Act (ADA) Resource Guide for Conductingand Administering Health and Safety Services Courses* on Instructor's Corner for more information.

As a Red Cross instructor, you may conduct a course that includes a person with a disability or other condition. Participants with a physical disability include those who are deaf or hard of hearing, legally blind, lack full use of limbs, have breathing difficulties or have other physical problems. When a participant with a disability or other condition can successfully meet course objectives, he or she should receive a course completion certificate. If a participant cannot meet the course objectives because of a disability or other condition, this should be communicated to the participant as early as possible.

Helping Participants with Physical Disabilities

To help a participant who has a physical disability, you may modify the delivery of course materials as follows:

- Increase the amount of time you spend with each participant
- Allow frequent rest periods
- Help participants modify the techniques necessary for successful skill completion

People with Reading Difficulties and Disabilities

If you believe that a class includes participants who have reading difficulties or disabilities, you should discuss this with those participants individually and privately without attracting the attention of the rest of the class. You should make modifications that will allow these individuals to participate fully in class, such as reading any necessary material to the class.

Identifying People with Reading Difficulties or Disabilities

Course participants will do some reading during this course. You must be prepared to detect any such difficulties and provide those participants with every opportunity to succeed, including modifications. Some participants may have difficulty reading because English is his or her second language. Through observation, you may be able to detect that an individual has reading difficulties.

Problems with reading skills may be present when:

- A participant does not follow along with written material or turn pages as the instructor reads.
- A participant says that he or she:
  - Forgot his or her glasses.
  - Has not done well in educational settings.
  - Does not do well in testing situations.

Helping Participants with Reading Difficulties or Disabilities

Final written exams are a required component of the course. If a final exam has been requested or required by an employer, course provider, or state or local regulations, you may administer an oral exam instead.

CRITERIA FOR ASSESSING PARTICIPANTS

Criteria for Course Completion

Many agencies, organizations and individuals look to the American Red Cross for formal training that results in certification. *Red Cross certification* means that on a particular date an instructor verified that a course participant could demonstrate competency in all required skills taught in the course. *Competency* is defined as being able to perform each skill to meet the objective without guidance and apply those skills in a simulated emergency.

Achieving course certification does not imply any future demonstration of the knowledge or skill at the level achieved on the particular date of course completion.

To successfully complete the course, the participant must:

- Attend the entire course.
- Participate in all skill sessions.
- Demonstrate competency in all required skills.
- Pass the final written exam with a minimum grade of 80 percent (12 correct answers out of 15 questions).

Evaluating Skills

In the Administering Emergency Oxygen course, skills are evaluated during skill sessions within the lesson. As an instructor, your goal is to help participants achieve the performance criteria for each skill. The primary tools to assist you in evaluating participants' skills are the skill charts and skill assessment tools.

Before conducting a course, become familiar with the skill charts and skill assessment tools. The skill charts contain the required steps of a skill in numerical order. The skill assessment tools provide assessment criteria for proficient and not proficient performance of the critical components of a skill that are necessary to meet the objective. Skill assessment tools include specific depths, ranges, rates, intervals, times and other quantifiable elements by which to assess skill performance. The skill assessment tools are designed to help you decide whether a participant has met the objective.

During skill sessions, you should check off a skill as completed on the Participant Progress Log once participants demonstrate proficiency in it. It is your responsibility as the instructor to observe participants' skill performances to determine whether they are performing a skill correctly with respect to sequence, timing and duration, and whether their techniques meet the established skill proficiency criteria.

In order to complete the course requirements and receive a completion certificate, the participant must be able to complete all required skills proficiently without any coaching or assistance.

For additional guidance on evaluating skill performance, you may also review Conducting Skill Sessions in Appendix B: Teaching Strategies.

Written Exams

Written exams are a required component of the course. When administering the final written exam, you must use the exam provided and may not substitute exam questions. Either Exam A or Exam B can be used. To pass the written exam, participants must score 80 percent or better (correctly answer 12 out of 15 questions). If a participant does not achieve a score of 80 percent, he or she has the opportunity to take the alternative exam. Instructors may allow participants who passed the exam to review questions they missed. Graded answer sheets and written exams must be returned to the instructor.

Oral exams may be given if the instructor determines that a participant has a reading or language difficulty.

Contact the Red Cross chapter in the area that the course was conducted for guidance if a participant fails the written exam but successfully completes all other course components.

Criteria for Grading Participants

Course participants are assigned one of the following grades:

- **Successful** is entered for a participant who has attended all class sessions, participated in all course activities, passed all the required course skills and passed the final written exam.
- **Unsuccessful** is entered for a participant who has not met course objectives and/or does not successfully attend all class sessions, participate in all course activities or complete all the required course skills or who does not pass the final written exam and who prefers not to be retested or does not pass a retest.
- **Not Evaluated** is entered as the final grade for a participant who is not attending the course with intent to receive a completion certificate. The participant, with approval from the instructor, is allowed to choose his or her own level of participation in the course. This grade should not be substituted for **Unsuccessful** for a participant who attempts certification but is unable to pass the completion requirements. A participant who chooses to audit must make his or her intent known to the instructor at the beginning of the class.

Make any notations that you think are necessary to record in the comments section on the *Course Record*, for instance, when you make accommodations, such as administering the final exam verbally.

Awarding Certificates

Discuss with the local Red Cross chapter the procedures for obtaining Red Cross course completion certificates for participants in your courses. Be sure to follow approved procedures.