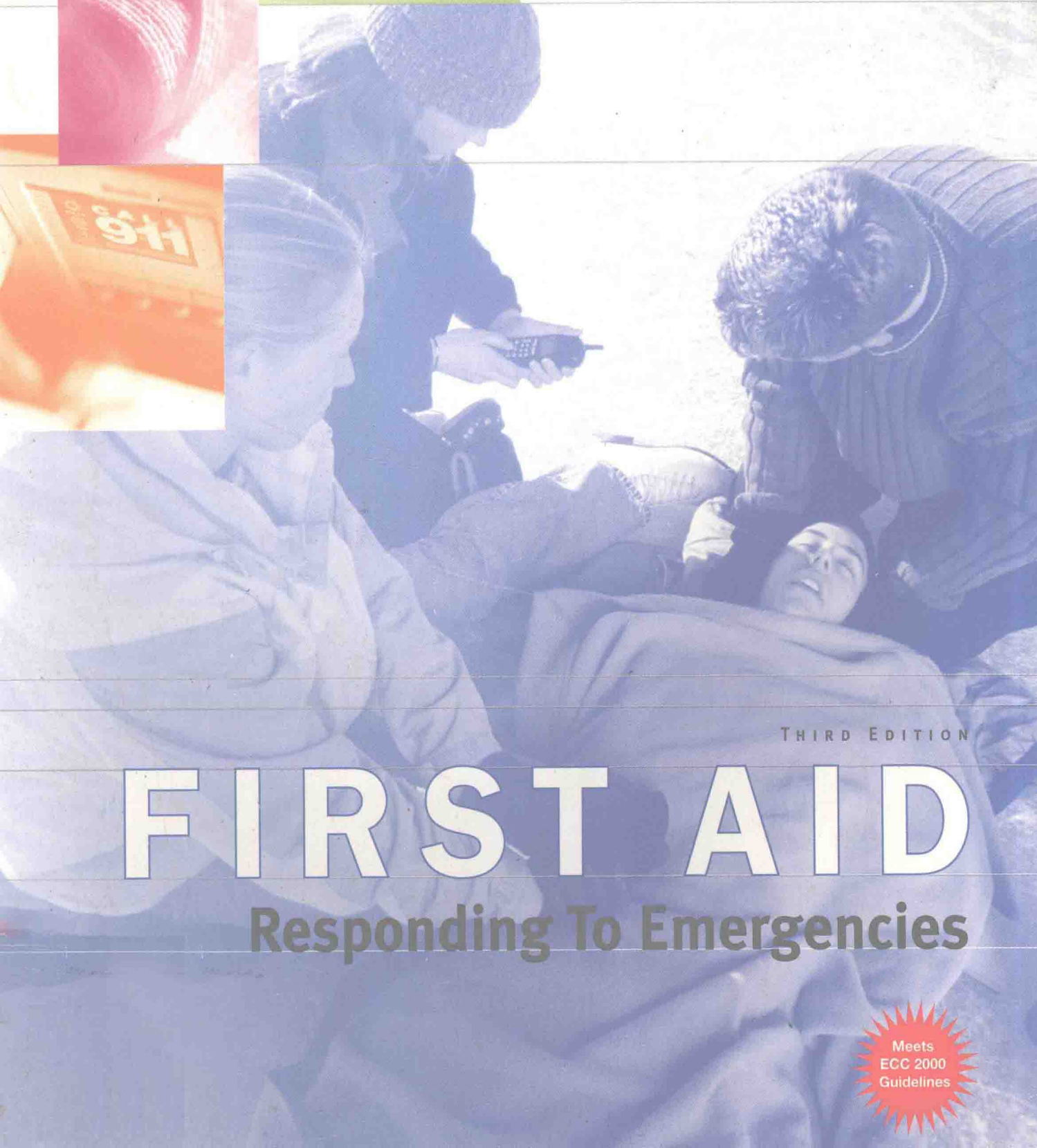




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THIRD EDITION

FIRST AID

Responding To Emergencies

Meets
ECC 2000
Guidelines

American Red Cross

FIRST AID



Responding to Emergencies

Third Edition

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This participant's textbook is an integral part of the American Red Cross First Aid—Responding to Emergencies course. By itself, it does not constitute complete and comprehensive training for first aid. Please contact your Red Cross chapter for further information on this course.

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 the emergency care procedures.

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The care steps for CPR outlined within this product are consistent with the Guidelines 2000 for Emergency Cardiopulmonary Resuscitation and Emergency Cardiovascular Care.

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American Red Cross

FIRST AID

Responding to Emergencies

Third Edition

Important certification information

American Red Cross certificates may be issued upon successful completion of a training program, which uses this textbook as an integral part of the course. By itself, the text material does not constitute comprehensive Red Cross training. In order to issue ARC certificates, your instructor must be authorized by the American Red Cross, and must follow prescribed policies and procedures. Make certain that you have attended a course authorized by the Red Cross. Ask your instructor about receiving American Red Cross certification, or contact your local chapter for more information.



**American
Red Cross**

StayWell

Preface

This text is dedicated to the thousands of paid and volunteer staff of the American Red Cross who contribute their time and talent to supporting and teaching life-saving skills worldwide. And to the thousands of course participants and other readers who have decided to be prepared to take action when an emergency strikes.

This 3rd Edition of the First Aid—Responding To Emergencies text has been updated with the latest in life-saving CPR techniques and information. The text and related program meet the Emergency Cardiovascular Care (ECC) Guidelines 2000 while still maintaining the features and benefits of previous editions. Many of these features have been developed through input from instructors and students.

Look inside and note the vivid chapter opening images and thought-provoking scenarios. Notice that each chapter includes a list of Key Terms, Application Questions, End-of-Chapter Study Questions, and informative skills sheets and health check boxes. Each of these features helps course takers apply their training to their everyday lives. Informative sidebars provide additional topical information and resources that enhance this already information-packed learning resource. These features, combined with a comprehensive instructor's manual and video set, provide educational institutions the opportunity to provide the latest and best life-saving training available.

This text is part of an integral training program with certification available from your local American Red Cross chapter. CPR certification is valid for 1 year while first aid certification is valid for 3 years. Contact your local American Red Cross at www.redcross.org for more information on how you can receive American Red Cross life-saving certification.

For more information on American Red Cross Health & Safety Services training and products, visit www.redcross.org/services/hss

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*This textbook is the third edition of **American Red Cross First Aid—Responding to Emergencies**. We have endeavored to improve and polish this text and course to meet the recent Emergency Cardiovascular Care (ECC) Guidelines 2000. Many individuals shared in the development and revision process in various supportive, technical, and creative ways. Each edition could not have been developed without the dedication and support of paid and volunteer staff.*

Members of the development teams at the American Red Cross national headquarters responsible for designing the course and writing this book include the following: First edition—M. Elizabeth Buoy Morrissey, MPH, Development Team Leader; Lawrence D. Newell, EdD, NREMT-P and S. Elizabeth White, MAEd, ATC, Project Managers; Martha F. Beshers, Elizabeth Peabody, and Joan Timberlake, Editors; Elaine P. McClatchey, Rebekah Jecker Calhoun, MSEd, and Marian F.H. Kirk, Analysts; Ella Holloway and Jane Moore, Administrative Support.

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About This Course

WHY YOU SHOULD TAKE THIS COURSE

People need to know what to do in an emergency before medical help arrives. Since you, the citizen responder, are the person most likely to be first on the scene of an emergency, it is important that you know how to recognize emergencies and how to respond. This course will prepare you to make appropriate decisions regarding first aid care and to act on those decisions.

The first critical step in any emergency depends on the presence of someone who will take appropriate action. After completing this course, you should be able to—

- Recognize when an emergency has occurred.
- Follow the emergency action steps, *Check-Call-Care*, for any emergency.
- Provide care for injury or sudden illness until professional medical help arrives.

This course clarifies when and how to call for emergency medical help, eliminating the confusion that is frequently a factor in any emergency. This course also emphasizes the importance of a safe, healthy lifestyle. The Healthy Lifestyles Awareness Inventory, which your instructor will provide, provides a means for you to evaluate your lifestyle, determine how you can improve it, and help prevent lifestyle-related illness and injury.

HOW YOU WILL LEARN

Course content is presented in various ways. The textbook, which will be assigned reading, contains the information that will be discussed in class. Your instructor has the option to use videos, transparencies, and slides to support class discussions and other activities. These audiovisuals emphasize the key points that you will need to remember when making decisions in emergencies and will help you provide appropriate care. They also present skills that you will practice in class. Participating in all class activities will increase your confidence in your ability to respond to emergencies.

The course design allows you to frequently evaluate your progress in terms of skills competency, knowledge, and decision making. Certain

chapters in the textbook include directions for skill practice sessions that are designed to help you learn specific first aid skills. Some of the practice sessions require practice on a manikin. Others give you the opportunity to practice with another person. This will give you a sense of what it would be like to care for a real person in an emergency situation and help reduce any concerns or fears you may have about giving care. Your ability to perform specific skills competently will be checked by your instructor during the practice sessions.

Your ability to make appropriate decisions when faced with an emergency will be enhanced as you participate in the class activities. Periodically, you will be given situations in the form of scenarios that provide you the opportunity to apply the knowledge and skills you have learned. These scenarios also provide an opportunity to discuss with your instructor the many different situations that you may encounter in any emergency.

REQUIREMENTS FOR COURSE COMPLETION CERTIFICATE

When this course is taught by a currently authorized American Red Cross instructor, you will be eligible for an American Red Cross course completion certificate. In order for you to receive an American Red Cross course completion certificate, you must—

- Perform specific skills competently and demonstrate the ability to make appropriate decisions for care.
- Pass a final written examination with a score of 80 percent or higher.

The final written examination is designed to test your retention and understanding of the course material. You will take this examination at the end of the course. If you do not pass the written examination the first time, you may take a second examination.

If this course is taught at a college or university, there may be additional academic requirements, such as attendance and grading, that your instructor will explain to you.

TEXTBOOK

This textbook has been designed to facilitate your learning and understanding of the knowledge and skills required to effectively respond to emergency situations. The following pages graphically point out how to use this text to your best advantage.

Photographs, drawings, charts, and graphs appear in all chapters, which illustrate skills, concepts, and anatomical features.

What You Should Learn

At the beginning of each chapter is a numbered list of objectives. Each item describes something you should know or be able to do after reading the chapter and participating in class activities. Read this list carefully, and refer back to it as you read the chapter. These objectives form the basis for test questions on the final exam.

CHAPTER 5



It's a warm spring day. You and your friend, Kevin, are playing basketball on the public courts in the park. The ten-year-old next door, Steve, has tagged along. As you and Kevin attempt to play one-on-one, Steve tries to steal the ball. At one point, he is successful, and, dribbling the ball, he dashes to the far end of the court. You and Kevin become angry. You chase Steve. Suddenly, Steve stops in his tracks. He lets the ball go and brings his hands to his chest, gasping and making a strange wheezing sound. As you run to him, you see Steve is really having trouble breathing. As Steve struggles to catch his breath, you and Kevin try to decide what to do.

Breathing Emergencies

WHAT YOU SHOULD LEARN

After reading this chapter, you should be able to—

1. Describe the breathing process.
2. Identify ten signs and symptoms of respiratory distress.
3. Describe the care for a person experiencing respiratory distress.
4. Identify two common childhood illnesses that may cause respiratory distress.
5. Describe the purpose of rescue breathing.
6. Describe when and how to provide rescue breathing for an adult, child, and infant.
7. Describe when and how to use breathing devices.
8. Describe special considerations for rescue breathing.
9. Identify five causes of choking for adults, children, and infants.
10. Describe the care for conscious and unconscious choking for adult, child, and infant victims.
11. Define the key terms for this chapter.

After reading this chapter and completing the class activities, you should be able to demonstrate—

1. How to provide rescue breathing for adult, child, and infant victims.
2. How to care for conscious adult, child, and infant choking victims.
3. How to care for unconscious adult, child, and infant choking victims.
4. How to make appropriate decisions when given an example of an emergency situation in which a person may be experiencing respiratory distress or arrest.

Scenarios

Every chapter opener contains a brief scenario that presents an event involving some aspect of the chapter content. The story in the scenario will be used to answer the Application Questions in the chapter.

Key Terms

A list of key terms with their definitions appears on the front page of each chapter. You need to know these key terms and their meanings to understand the material in the chapters. These key terms are printed in **boldface italics** the first time they are explained in the chapter and also appear, defined, in the *Glossary*. Some key terms are listed in more than one chapter because they are essential to your understanding of the material presented in each. The pronunciation of certain terms is provided, and a pronunciation guide is included in the glossary.

Introduction

When you hear the term **substance abuse**, what thoughts flash through your mind? Narcotics? Cocaine? Marijuana? Because of the publicity they receive, we tend to think of illegal (also known as illicit or controlled) drugs when we hear of substance abuse. In the United States today, however, legal (also called **licit** or **noncontrolled**) substances are among those most often misused or abused. Such legal substances include nicotine (found in tobacco products); alcohol (found in beer, wine, and liquor); and over-the-counter medications, such as aspirin, sleeping pills, and diet pills.

The term **substance abuse** refers to a broad range of improperly used medical and nonmedical substances. Substance abuse costs the United States tens of billions of dollars each year in medical care, insurance, and lost productivity. Even more important, however, are the lives lost or permanently impaired each year from injuries or medical emergencies related to substance abuse or misuse.

This chapter will teach you about common forms of substance misuse and abuse, how to recognize these problems, and how to care for its victims. In an emergency caused by substance abuse or misuse, the immediate care you give can save a life.

Key Terms

Addiction: The compulsive need to use a substance. Stopping use would cause the user to suffer mental, physical, and emotional distress.

Cannabis products: Substances, such as marijuana and hashish, that are derived from the *Cannabis sativa* plant; can produce feelings of elation, distorted perceptions of time and space, and impaired motor coordination and judgment.

Dependency: The desire or need to continually use a substance.

Depressants: Substances that affect the central nervous system to slow down physical and mental activity, such as tranquilizers and sleeping pills.

Drug: Any substance, other than food, intended to affect the functions of the body.

Hallucinogens (the LOO sin 3 gens): Substances that affect mood, sensation, thought, emotion, and self-awareness; alter perceptions of time and space; and produce hallucinations and delusions. Also known as **psychedelics**.

Inhalants: Substances inhaled to produce a mood-altering effect, such as glue and paint thinners.

Medication: A drug given therapeutically to prevent or treat the effects of a disease or condition or otherwise enhance mental or physical well-being.

Narcotics: Drugs prescribed to relieve pain.

Overdose: An excess use of a drug, resulting in adverse reactions ranging from and including mania and hysteria to coma and death; specific reactions include changes in blood pressure and heartbeat, sweating, vomiting, and liver failure.

Stimulants: Substances that affect the central nervous system and increase physical and mental activity.

Substance abuse: The deliberate, persistent, excessive use of a substance without regard to health concerns or accepted medical practices.

Substance misuse: The use of a substance for unintended purposes or for intended purposes but in improper amounts or doses.

Tolerance: Condition in which the effects of a substance on the body decrease as a result of continual use.

Withdrawal: The condition produced when a person stops using or abusing a substance to which he or she is addicted.

CHAPTER 10 Musculoskeletal

- Splint an injury in the position in which you find it. Do not move, straighten, or bend the injured part.
- Splint the injured area and the joints above and below the injury site.
- Check for proper circulation (feeling, warmth, and color) before and after splinting.

Keep the victim as comfortable as possible, and avoid overheating or chilling. Monitor breathing and signs of circulation. Chapter 11 describes splinting in detail.



- What can Rita's sister do to make her more comfortable?
- Should her sister call EMS personnel before providing care for Rita? Why or why not?

CONSIDERATIONS FOR TRANSPORTING A VICTIM

Some musculoskeletal injuries are obviously minor and do not require professional medical care. Others are not minor and may require you to call EMS personnel. If you discover a life-threatening emergency or think it likely one might develop, call EMS personnel and wait for help. Always call EMS personnel for any injury involving severe bleeding; suspected injuries

to the head or spine; and possible injuries that may be difficult to transport, such as to the back, hips, and legs, or that you are unable to adequately immobilize. Remember that fractures of large bones and severe sprains can bleed severely and are likely to cause shock.

Some injuries are not serious enough for you to call EMS personnel but still require professional medical care. If you decide to transport the victim yourself to a medical facility, splint. Always splint the injury before moving the victim. If possible, have someone drive you so that you can continue to provide care. (See Chapter 2 for information on transporting a victim.)

SUMMARY

Sometimes it is difficult to tell whether an injury is a fracture, dislocation, sprain, or strain. Since you cannot be sure which type of injury a victim might have, always care for the injury as if it is serious. If EMS personnel are on the way, do not move the victim. Control any bleeding first, wearing gloves or using appropriate barriers. Take steps to minimize shock and monitor breathing and signs of circulation. If you are going to transport the victim to a medical facility, be sure to immobilize the injury before moving the victim.



Answers to Application Questions

- Rita could have a serious shoulder injury, possibly injuring the bones, muscles, ligaments, and tendons. She might also have injured her neck and back.
- Rita is obviously in pain—moaning and holding her shoulder. She repeatedly hit her shoulder while falling. She seems unable to get up. She appears unable to move her left arm.
- Help her find the most comfortable position; keep from moving her head, neck, and back as much as possible; immobilize her upper extremity and apply ice to the injured area; prevent her from becoming chilled or overheated to delay the onset of shock and keep her comfortable until EMS personnel arrive.
- Although the injury does not appear to be life-threatening—the victim is conscious, breathing, has signs of circulation, and is not bleeding severely—Rita may well have a fracture or dislocation and could also have injured her head, neck, or back. Call EMS personnel immediately. Then make Rita as comfortable as possible, taking care not to move her head, neck, and back. Watch for signs and symptoms of shock.

Application Questions

Application Questions, designated with a yellow and black caution bar and a Mind at Work icon, challenge you to apply the information you have learned and build a solution. The questions are based on the scenario that appears on the chapter-opening page. These questions challenge you to apply the information you have been learning to a real-life situation. Answers to the Application Questions are found at the end of the chapter.

FACTS ABOUT

HIV AND AIDS

First Aid Precautions: The likelihood of HIV transmission during a first aid situation is very low. Always give care in ways that protect you and the victim from disease transmission. If possible, use latex gloves, a resuscitation mask, or other types of barriers, and wash your hands before and after giving care. Avoid touching or being splashed by another person's body fluids, especially blood. Make sure your first aid kit contains disposable latex gloves to put on before providing care and waterless antiseptic hand cleaners to wash with afterward.

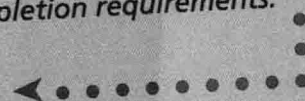
Testing: If you think you may be at risk for HIV infection, get tested. A blood test will tell whether your body is producing antibodies in response to the virus. If you are not sure whether you should be tested, call your doctor, the public health department, or the HIV/AIDS hot line listed below. In the meantime, do not participate in activities that put anyone else at risk.

Hot Lines: If you have questions, call the National HIV/AIDS hot line at 1-800-342-AIDS, 24 hours a day, 7 days a week, or the VIH/SIDA hot line (Spanish) at 1-800-944-7432, 9 a.m.-2 a.m. EST, 7 days a week. TTY/TDD service is available at 1-800-243-7177, Monday-Friday, 10 a.m.-10 p.m. EST, or call your state health department.

TO LEARN MORE ABOUT HIV/AIDS, CO AMERICA

Sidebars

Feature articles called sidebars enhance the information in the main body of the text. They appear in most chapters and are easily recognizable because of their stylized icons. They present historical and current information and events that relate to the chapter content. You will not be tested on any information presented in these sidebars as part of the American Red Cross course completion requirements.



Tables

Tables, on a yellow background, are included in many chapters. They concisely summarize important concepts and information and may aid in studying.

TABLE 16-1

Caring for Bites and Stings

Insect Bites and Stings	Tick Bites	Spider Bites	Scorpion Stings	Snakebites	Marine Life Stings	Domestic and Wild Animal Bites	Human Bites
Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:	Signs and Symptoms:
Stinger may be present	Bull's eye, spotted, or black and blue rash around bite or on other body parts	Bite mark or blister	Bite mark	Bite mark	Possible marks	Bite mark	Bite mark
Pain		Pain or cramping	Local swelling	Severe pain and burning	Pain	Bleeding	Bleeding
Local swelling		Nausea and vomiting	Pain or cramping	Local swelling and discoloration	Local swelling	Pain	Pain
Hives or rash	Fever and chills	Difficulty breathing and swallowing	Difficulty breathing or swallowing				
Nausea and vomiting	Flulike aches	Profuse sweating or salivation	Profuse sweating or salivation				
Breathing difficulty		Irregular heartbeat	Irregular heartbeat				
Care:	Care:	Care:	Care:	Care:	Care:	Care:	Care:
Remove stinger; scrape it away with card or knife	Remove tick with tweezers	If black widow or brown recluse—call EMS personnel immediately to receive antivenin and have wound cleaned	Wash wound	Wash wound	If jellyfish—soak area in either vinegar, alcohol, or baking soda paste	If wound is minor—wash wound, control bleeding, apply a dressing, and get medical attention as soon as possible	If wound is minor—wash wound, control bleeding, and get medical attention as soon as possible
Wash wound	Apply antiseptic and antibiotic ointment to wound		Apply a cold pack	Immobilize bitten part and keep it lower than the heart	Call EMS personnel or local emergency number		
Cover wound	Watch for signs of infection		Get medical care to receive antivenin	Call EMS personnel or local emergency number	Minimize victim's movement	If wound is severe—call EMS personnel or local emergency number, control bleeding, and do not wash wound	If wound is severe—call EMS personnel or local emergency number, control bleeding, and do not wash wound
Apply a cold pack	Get medical attention if necessary						
Watch for signs and symptoms of allergic reactions; take steps to minimize shock if they occur							

WEIGHT-LOSS STRATEGIES

Use some of the following strategies to help you lose weight —

- Keep a log of the times, settings, reasons, and feelings associated with your eating.
- Set realistic, long-term goals (for example, losing one pound per week, instead of five pounds per week).
- Occasionally reward yourself with small amounts of food you enjoy.
- Eat slowly, and take time to enjoy the taste of the food.
- Be more physically active (take stairs instead of elevators, or park in the distant part of the parking lot).
- Reward yourself when you reach your goals (for example, with new clothes, sporting equipment).
- Share your commitment to losing weight with your family and friends who will support you.
- Keep a record of the food you eat each day.
- Weigh yourself once a week at the same time and to your weight.
- Be prepared to deal with occasional plateaus as you lose weight.

Weight loss or gain should always be combined with regular exercise—another part of a healthy lifestyle. Any activity—walking to the bus, climbing the stairs, cleaning house—uses calories. You even burn off a few while you sleep. The more active you are, the more calories you use. Activity allows you to eat a few more calories and still maintain body weight.

Your eating habits should change as you grow older. A person who eats the same number of calories between the ages of 20 to 40 and maintains the same level of activity during this time will be considerably heavier at 40 than at age 20. It is more important as you grow older to eat

NUTRITION AND WEIGHT

The following statements represent a healthy lifestyle that can reduce your chance of disease. Check each statement that reflects your lifestyle.

- ☐ I eat a balanced diet.
 - ☐ I read the nutrition labels on food products to help me eat a balanced diet.
 - ☐ I monitor my intake of foods high in fats.
 - ☐ I monitor my intake of sodium and sugars.
 - ☐ I do not fry foods.
 - ☐ I maintain an appropriate weight.
 - ☐ If I need to lose weight, I use medically approved diet techniques.
 - ☐ For snacks, I eat fruit, vegetables, and other healthy food rather than "junk foods."
 - ☐ I drink 6 to 8 glasses of water daily.
- If you only checked one or two statements, you should consider making changes in your lifestyle now.

Fitness

Many of us would like to be more fit. In general, fitness involves cardiorespiratory endurance, muscular strength, muscular endurance, and flexibility. You do not need to take part in sports, such as tennis, basketball, or soccer, to achieve health-related fitness. You can achieve fitness for health purposes by taking part in such activities as walking, jogging, swimming, cycling, hiking, and weight training, among others.

Exercise

"No pain, no gain" theory is not a good exercise. In fact, experiencing pain means you are exercising improperly. The health benefits of exercise are somewhat uncomfortable, but not

Boxes

Boxes contain information that may be useful or of interest to you. They appear throughout the textbook.

Health Check Box

Health Check Boxes are easily recognizable because of their apple icon. They provide you with an opportunity to assess your understanding and practice of healthy behaviors.



STUDY QUESTIONS

1. Match each term with the correct definition.

- a. Citizen responder
- b. First responder
- c. EMT-Paramedic

- d. Rehabilitation
- e. Hospital care providers
- f. EMS dispatcher

- _____ Often the first person on the scene trained to provide a higher level of emergency care, such as a law enforcement officer, fire fighter, or lifeguard.
- _____ The "eyes and ears" of the physician at an emergency scene; provides the highest level of out-of-hospital care, such as administering medications or intravenous fluids.
- _____ The staff that assume responsibility for the care of the injured or ill person while in the hospital.
- _____ The person who receives the call for help and determines what help is needed at the scene.
- _____ The process of returning the victim to his or her previous state of health.
- _____ Someone who recognizes an emergency and decides to act; the first link in the chain of survival.

2. Using all of the terms in Question 1, organize the six links of the EMS system components in the most effective order.

- a.
- b.
- c.
- d.
- e.
- f.

3. What potential indicators of an emergency do you find in each scenario that follows? Circle the five indicators.

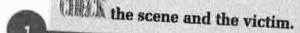
- a. I was fixing sandwiches and talking with Mrs. Roberts from next door, who had come by to borrow a book. Three-year-old Jenny was in the next room playing with some puzzles and singing to herself. As Mrs. Roberts got up to leave, I realized that I wasn't hearing any sounds. "Jenny," I called. No answer. I called louder. Nothing. I went into the room, but Jenny wasn't there. Suddenly, I heard a loud thump and a shriek from upstairs.

Study Questions

At the end of each chapter are a series of Study Questions designed to test your retention and understanding of the chapter content. Completing these questions will help you evaluate how well you understand the material and also help you prepare for the final written examination. The answers to Study Questions are found in Appendix A of the text. Write the answers in your textbook and use additional paper, if necessary.

Learning specific skills that you will need to provide appropriate care for victims of sudden illness or injury is an important part of this course. Illustrated skill sheets at the end of certain chapters give step-by-step directions for performing specific skills.

SKILL SHEETS



- Introduce yourself, tell him or her your level of training, and get permission to give care.
- Ask—
 - His or her name?
 - What happened?
 - Do you feel pain anywhere?
 - Do you have any allergies?
 - Do you have any medical conditions or are you taking any medication?

- Visually inspect body.
- Before you begin, tell person what you are going to do.
- Look carefully for bleeding, cuts, bruises, and obvious deformities.
- Look for medical alert tag.

A black and white line drawing showing a person on the left, seen in profile, examining the ear of another person on the right. The person on the right is facing forward. The person on the left is wearing a dark, short-sleeved shirt. The person on the right is wearing a light-colored collared shirt. The person on the left is using their right hand to touch the ear of the person on the right.

- Look at scalp, face, ears, eyes, nose, and mouth for cuts, bumps, bruises, and depressions.
- Notice if victim is drowsy, not alert, or confused.

You should complete the following five steps for each chapter to gain the most from this course:

1. Read the chapter objectives before reading the chapter.
2. As you read the chapter, keep the objectives in mind. When you finish, go back and review the objectives. Check to see that you can meet them without difficulty.
3. Review figures and illustrations. Read captions and labels.
4. Answer the Application Questions as you read the chapter. Check your answers with those at the end of the chapter. If you cannot answer or do not understand the answers given, ask your instructor to help you with concepts or questions with which you are having difficulty.

5. Answer the Study Questions at the end of each chapter. Mark or write your answers in the text to facilitate your review or study. Answer as many questions as you can without referring to the chapter. Then review the information covering any questions you were unable to answer, and try them again. Check your responses to the questions with the answers in Appendix A. If you have not answered a question appropriately, reread that part of the chapter to ensure that you understand why the answer is correct. This exercise will help you gauge how much information you are retaining and which areas you need to review. If, after rereading that part of the chapter, you still do not understand, ask your instructor to help you.

HEALTH PRECAUTIONS AND GUIDELINES DURING FIRST AID TRAINING

The American Red Cross has trained millions of people in first aid and CPR (cardiopulmonary resuscitation) using manikins as training aids. According to the Centers for Disease Control (CDC), there has never been a documented case of any disease caused by bacteria, a fungus, or a virus transmitted through the use of training aids, such as manikins used for CPR.

The Red Cross follows widely accepted guidelines for cleaning and decontaminating training manikins. **If these guidelines are adhered to, the risk of any kind of disease transmission during training is extremely low.**

To help minimize the risk of disease transmission, you should follow some basic precautions and guidelines while participating in training. You should take precautions if you have a condition that would increase your risk or other participants' risk of exposure to infections. Request a separate training manikin if you —

- Have an acute condition, such as a cold, a sore throat, or cuts or sores on the hands or around your mouth.
- Know you are seropositive (have had a positive blood test) for hepatitis B surface antigen (HBsAg), indicating that you are currently infected with the hepatitis B virus.
- Know you have a chronic infection indicated by long-term seropositivity (long-term positive blood tests) for the hepatitis B surface antigen (HBsAg)* or a positive blood test for anti-HIV (that is, a positive test for antibodies to HIV, the virus that causes many severe infections including AIDS).
- Have a type of condition that makes you unusually likely to get an infection.

If you decide you should have your own manikin, ask your instructor if he or she can provide one for you to use. You will not be asked to explain why in your request. The manikin will not be used by anyone else until it has been cleaned according to the recommended end-of-class decontamination procedures. Because the number of manikins available for class is limited, the more advance notice you give, the more likely it is that you can be provided a separate manikin.


GUIDELINES

In addition to taking the precautions regarding manikins, you can further protect yourself and other participants from infection by following these guidelines:

- Wash your hands thoroughly before participating in class activities.
- Do not eat, drink, use tobacco products, or chew gum during classes when manikins are used.

** A person with hepatitis B infection will test positive for the hepatitis B surface antigen (HBsAg). Most persons infected with hepatitis B will get better within a period of time. However, some hepatitis B infections will become chronic and will linger for much longer. These persons will continue to test positive for HBsAg. Their decision to participate in CPR training should be guided by their physician.*

After a person has had an acute hepatitis B infection, he or she will no longer test positive for the surface antigen but will test positive for the hepatitis B antibody (anti-HBs). Persons who have been vaccinated for hepatitis B will also test positive for the hepatitis B antibody. A positive test for the hepatitis B antibody (anti-HBs) should not be confused with a positive test for the hepatitis B surface antigen (HBsAg).



- Clean the manikin properly before use. For some manikins, this means vigorously wiping the manikin's face and the inside of its mouth with a clean gauze pad soaked with either a solution of liquid chlorine bleach and water (sodium hypochlorite and water) or rubbing alcohol. For other manikins, it means changing the rubber face. Your instructor will provide you with instructions for cleaning the type of manikin used in your class.

- Follow the guidelines provided by your instructor when practicing skills such as clearing a blocked airway with your finger.

PHYSICAL STRESS AND INJURY

Training in first aid and CPR requires physical activity. If you have a medical condition or disability that will prevent you from taking part in the practice sessions, please let your instructor know.

PART ONE

