



# **INSTRUCTIONAL PACKAGE**

EMS 104  
Emergency Care I

Effective Term  
Fall 2024/Spring 2025/Summer 2025

# INSTRUCTIONAL PACKAGE

## Part I: Course Information

Effective Term: Fall 2024/Spring 2025/Summer 2025

COURSE PREFIX: EMS 104

COURSE TITLE: Emergency Care I

CONTACT HOURS: 6-3-7

CREDIT HOURS: 7

### **RATIONALE FOR THE COURSE:**

To develop a working knowledge of skills and modalities for the assessment and treatment of patients in the prehospital emergency environment.

### **COURSE DESCRIPTION:**

The Emergency Medical Technician (EMT) Basic Certificate is designed to prepare students with the knowledge, coursework, skills, procedures, and practical experience necessary for entry level of EMS. The curriculum will focus on rapid in-field treatment and transport to higher medical providers. Students will acquire basic medical assessment skills to be prepared to care for patients at the scene of an accident and while transporting patients by ambulance to the hospital under the direction of more highly trained medical personnel. The EMT-Basic has the emergency skills to assess a patient's condition and manage respiratory, cardiac, and trauma emergencies.

### **PREREQUISITES/CO-REQUISITES:**

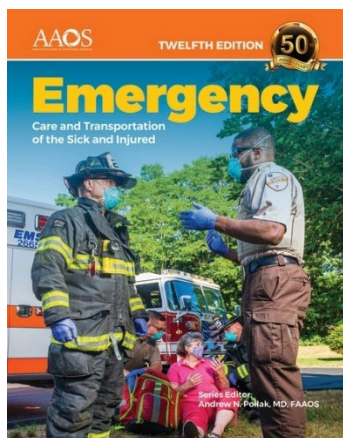
To progress in the curriculum, the student must:

- Student must be 18 years of age and have a high school diploma or GED.
- Maintain a minimum cumulative GPA of 2.0 on all required courses.
- Pass a criminal background check.
- Submit a completed Health Sciences Division Physical Examination Form & Immunizations prior to enrollment in the second semester.

\***Online/Hybrid** courses require students to complete the [Distance Learning Orientation Video](#) prior to enrolling in an online course.

### **REQUIRED MATERIALS:**

- Jones and Bartlett Learning (JBLEARNING) Emergency Care and Transportation of the Sick and Injured – Twelfth Edition (Required)
- Jones and Bartlett Learning (JBLEARNING) Emergency Care and Transportation of the Sick and Injured Student Workbook (optional)



Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

- Emergency Medical Technology Program Uniform – please see programs uniform policy.

### **ADDITIONAL REQUIREMENTS:**

Receives calls from dispatchers, responds verbally to emergency calls, reads maps, drives ambulances to emergency sites, uses most expeditious route, and observes traffic ordinances and regulations.

Works as a member of a two-person team.

Determines nature and extent of illness or injury, takes pulse, blood pressure, visually observes changes in skin color, auscultate breath sounds, makes determination regarding patient status, establishes priority for emergency care, renders appropriate emergency care (based upon competency and certification level); may administer intravenous drugs for fluid replacement as directed by a physician and based upon competency and certification level. May use equipment (based upon competency and certification level) such as but not limited to, defibrillator, electrocardiograph, inserts oral airway adjuncts, maintains open airways and ventilates patients.

Assists with lifting, carrying, and transporting patient in ambulance to a medical facility.

Reassures patients and bystanders, avoids mishandling patient and undue haste, and searches for medical identification emblem to aid in care. Extricates patients from entrapment, assess extent of injury, uses prescribed techniques and appliances, radios dispatcher for additional assistance or services, provides light rescue service if required, provides additional emergency care following established protocols.

Complies with regulations in handling deceased, notifies authorities, and arranges for protection of property and evidence at scene. Determines appropriate facility to which patient will be transported, report nature and extent of injuries or illness to the facility, ask for direction from hospital physician or emergency department (based upon competency and certification level). Observes patient enroute and administers care as directed by physician or emergency department or according to published protocol based on competency and certification level. Identifies diagnostic signs that require communication with facility. Assist in removing patient from ambulance and into emergency facility. Reports verbally and in writing observations about and care of patients at the scene and enroute to facility, helps emergency staff as required.

Replaces supplies, prepares and / or sends used supplies for sterilization and / or disposal in accordance with state and OSHA regulations and published standard operating procedures. Checks all equipment for future readiness, maintains ambulance in operable condition, ensures ambulance cleanliness and orderliness of equipment and supplies, decontaminates vehicle interior determines vehicle readiness by checking oil, gas, water in battery and radiator, and tire pressure, maintains familiarity with all specialized equipment.

### **ALL EMT's MUST BE ABLE TO PERFORM THESE ESSENTIAL JOB FUNCTIONS:**

- Ability to communicate verbally, via telephone and radio equipment.
- Ability to lift, carry, and balance up to 125 pounds (250 pounds with assistance).
- Ability to read and interpret written, oral, and diagnostic form instructions.
- Ability to use good sound judgment and remain calm in high stress situations.
- Ability to work effectively in an environment with loud noises and flashing lights.
- Ability to function efficiently throughout an entire work shift.
- Ability to calculate weight and volume ratios and read small print, both under life threatening time constraints.
- Ability to read and understand English language manuals and road maps.
- Accurately discern street signs and address numbers.
- Ability to interview patient, family members, and bystanders; Ability to document, in writing, all relevant information in prescribed format considering legal ramifications of such.
- Ability to converse in English with co-workers and hospital staff as to status of patient.
- Good manual dexterity, with ability to perform all tasks related to highest quality patient care.
- Ability to bend, stoop, and crawl on uneven terrain.

- Ability to withstand varied environmental conditions such as extreme heat, cold, and moisture.
- Ability to work in low light, confined spaces, and other dangerous environments.
- Students must be 18 years old by the last day of class and possess a high school diploma or GED.

### **TECHNICAL REQUIREMENTS:**

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.

Access to myHGTC portal for student self-services.

College email access – this is the college's primary official form of communication.

Honorlock Remote Proctor Program (optional)

### **STUDENT IDENTIFICATION VERIFICATION:**

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

### **CLASSROOM ETIQUETTE:**

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

## **Part II: Student Learning Outcomes**

### **COURSE LEARNING OUTCOMES and ASSESSMENTS\*:**

Upon completion of the course, the student will have been provided with the knowledge and skills necessary to be able to:

1. Demonstrate the proper donning and doffing of protective gear appropriate for the EMT and situation.
2. Perform CPR, both 1 and 2 person for adult, child, and infant to Healthcare provider level consistent with American Heart Association level.
3. Perform basic airway management techniques including insertion of adjuncts intended for the oropharynx and nasopharynx.
4. Demonstrate the ability to assist patients with their own prescribed medicines.

5. Assess, manage, and stabilize patients of all ages and demographics with medical emergencies.
6. Demonstrate the ability to properly prepare the patient for transport while limiting or aggravating any injuries.
7. Demonstrate the knowledge of triage and assigning patients to the appropriate level facility.
8. Demonstrate the ability to interact with other responders appropriately including giving and taking advice on patient care. Interact as a member of a team.
9. Demonstrate the ability to complete a patient care report including a summation of treatment provided to the receiving facility or transporting ambulance.

***\*Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

## **Chapter 1**

### **EMS Systems**

#### **Unit Summary**

After students complete this chapter and the related course work, they will understand the origins and present-day structure of emergency medical care delivery systems. The emergency medical technician’s (EMT’s) roles, responsibilities, and relationship to the emergency medical services (EMS) system as well as the EMT’s role in the quality improvement process are explained, and other levels of EMS providers are described. The foundations necessary for being a competent, effective, caring, and ethical EMT are presented. The interrelationships of the National Highway Traffic Safety Administration’s 14 components of the EMS system, per the *EMS Agenda for the Future*, are outlined. Also described is the EMT’s impact on research, data collection, and evidence-based decision making, as well as the EMT’s responsibilities as a student and a practitioner.

#### **Preparatory**

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/wellbeing of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

#### **EMS Systems**

- EMS systems (pp 12–21)

- History of EMS (pp 7–9)
- Roles/responsibilities/professionalism of EMS personnel (pp 21–23)
- Quality improvement (p 16)
- Patient safety (pp 17–18)

### **Research**

- Impact of research on EMS care (pp 20–21)
- Data collection (pp 20–21)
- Evidence-based decision making (pp 20–21) **Public Health**

Uses simple knowledge of the principles of illness and injury prevention to emergency care.

## **Knowledge Objectives**

1. Define emergency medical services (EMS) systems. (p 3)
2. Name the four levels of EMT training and licensure. (pp 4–7)
3. Describe EMT licensure criteria; include how the Americans with Disabilities Act (ADA) applies to employment as an EMT. (pp 4–7)
4. Discuss the historic background of the development of the EMS system. (pp 7–9)
5. Describe the levels of EMT training in terms of skill sets needed for each of the following: EMR, EMT, AEMT, and paramedic. (pp 9–11)
6. Recognize the possible presence of other first responders at a scene with EMR training, some knowledge of first aid, or merely good intentions, and their need for direction. (pp 10–11)
7. Explain the guiding principles of EMS Agenda 2050. (p 12)
8. Describe how medical direction of an EMS system works and the EMT's role in the process. (p 14)
9. Define mobile integrated healthcare and community paramedicine. (p 15)
10. Explain the purpose of the EMS continuous quality improvement (CQI) process. (p 16)
11. Characterize the EMT's role in disease and injury prevention and public education in the community. (pp 19–20)
12. Describe the roles and responsibilities of the EMT. (pp 21–23)
13. Describe the attributes an EMT is expected to possess. (pp 22–23)
14. Explain the impact of the Health Insurance Portability and Accountability Act (HIPAA) on patient privacy. (p 23)

## Skills Objectives

There are no skills objectives for this chapter.

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 1, and all related presentation support materials.

- Review local EMS system certification/license policies. Include an overview of the local EMS system when discussing components.

## Support Materials

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Slides/overheads of local EMS delivery system organization • Any written materials pertaining to:
  - Course requirements, grading, institutional policies, and other administrative issues
  - Local or state EMS agency requirements or certification/registration
  - Local EMT treatment guidelines or protocols
  - Local skill evaluation tools

# Chapter 2

## Workforce Safety and Wellness

### Unit Summary

After students complete this chapter and the related course work, they will understand the importance of recognizing important hazards; coping with physical and mental stress; assisting patients and families with the emotional aspect of injuries, illness, and/or death; taking appropriate preventive actions to ensure personal safety; dealing with patients and coworkers with sensitivity; taking proper precautions when dealing with infectious diseases; and preventing on-the-job injuries.

### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.



## ***Infectious Diseases***

Awareness of

- How to decontaminate equipment after treating a patient (pp 50–51)

Assessment and management of

- How to decontaminate the ambulance and equipment after treating a patient (pp 50–51)

## **Preparatory**

Applies fundamental knowledge of the safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

## ***Workforce Safety and Wellness***

- Standard safety precautions (pp 41–49)
- Personal protective equipment (p 38, 41–49, 61–65)
- Stress management (pp 32–35, 69–75)
  - Dealing with death and dying (pp 67–69)
- Prevention of response-related injuries (pp 54–61)
- Prevention of work-related injuries (pp 54–61, 77)
- Lifting and moving patients (p 35)
- Disease transmission (pp 38–40)
- Principles of wellness and resilience (pp 31–38)

1. Explain the steps that contribute to wellness and resilience and their importance in managing stress. (pp 31–38)
2. Differentiate infectious disease and communicable disease. (p 38)
3. Identify the risks and hazards of sleep deprivation in EMS. (pp 35–36)
4. State the routes of disease transmission. (pp 38–40)
5. Describe the specific routes of transmission and the steps to prevent and/or deal with an exposure to hepatitis, tuberculosis, or human immunodeficiency (HIV)/acquired immunodeficiency disorder (ADIS). (pp 38–49)
6. Apply the standard precautions used in treating patients to prevent infection. (pp 41–49)
7. Explain the steps to take for personal protection from airborne and bloodborne pathogens. (pp 41–49)
8. Demonstrate proper handwashing techniques. (pp 41–43)

9. Explain the ways in which immunity to infectious diseases is acquired. (pp 51–53)
10. Summarize postexposure management of exposure to patient blood or body fluids, including completing a postexposure report. (pp 53–54)
11. Discuss the steps necessary to determine scene safety and to prevent work-related injuries at the scene. (pp 54–61)
12. Describe the different types of protective clothing worn to prevent injury. (pp 61–65)
13. Differentiate issues concerning care of the dying patient, death, and the grieving process of family members. (pp 67–69)
14. Recognize the physiologic, physical, and psychological responses to stress. (pp 69–70)
15. Explain posttraumatic stress disorder (PTSD) and steps that can be taken, including critical incident stress management, to decrease the likelihood that PTSD will develop. (pp 71–72)
16. Identify the emotional aspects of emergency care. (pp 73–74)
17. Recognize the stress inherent in many situations, such as mass-casualty scenes. (pp 74–75)
18. Recognize the possibility of violent situations and the steps to take to deal with them. (pp 60–61)
19. Identify behavioral emergencies. (pp 60–61)
20. Discuss workplace issues such as cultural diversity, sexual harassment, and substance abuse. (pp 75–77)
21. Identify resources for positive mental health and suicide prevention. (pp 72–73)

## Skills Objectives

1. Demonstrate how to properly remove gloves. (p 44, Skill Drill 2-1)
2. Demonstrate the steps necessary to manage a potential exposure situation. (p 49, Skill Drill 2-2)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 2, and all related presentation support materials.

- The Centers for Disease Control and Prevention (CDC) is a useful source.
- Review hazardous materials in the DOT's *Emergency Response Guidebook*.
- Review National Fire Protection Association (NFPA) Standard 473, *Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents*.
- Review NFPA Standard 1999, *Standard on Protective Clothing for Emergency Medical Operations*.
- Review US Department of Labor, Occupational Safety and Health Administration (OSHA) regulations.

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- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Skill Drill PowerPoint presentations
    - Skill Drill 2-1, Proper Glove Removal Technique
    - Skill Drill 2-2, Managing a Potential Exposure Situation
      - Equipment needed to perform the psychomotor skills presented in this chapter
      - Sample of clothing and protective equipment (turnouts, various gloves, helmets, eye protection, earplugs, masks, HEPA respirators, ANSI-compliant vests)
      - Hazardous materials: *Emergency Response Guidebook* (most current edition), US Department of Transportation • Skill Evaluation Sheets
  - Skill Drill 2-1, Proper Glove Removal Technique -  
Skill Drill 2-2, Managing a Potential Exposure  
Situation

## Chapter 3

### Medical, Legal, and Ethical Issues

#### Unit Summary

After students complete this chapter and the related course work, they will understand the ethical responsibilities and medicolegal directives and guidelines pertinent to the EMT. The EMT's approach to patient care relating to confidentiality, consent to treat, refusal of care, and advance directives is explained. Organ donor systems and policies, evidence preservation, and end-of-life issues are also discussed.

## **Preparatory**

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/wellbeing of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

### **Medical/Legal and Ethics**

- Consent/refusal of care (pp 86–90)
- Confidentiality (p 91)
- Advance directives (pp 93–95)
- Tort and criminal actions (pp 101–103)
- Evidence preservation (p 105)
- Statutory responsibilities (pp 103–104)
- Mandatory reporting (pp 104–105)
- Ethical principles/moral obligations (pp 106–107)
- End-of-life issues (pp 95–97)

1. Define consent and how it relates to decision making. (p 86)
2. Compare expressed consent, implied consent, and involuntary consent. (pp 87–88)
3. Discuss consent by minors for treatment or transport. (p 88)
4. Describe local EMS system protocols for using forcible restraint. (p 89–90)
5. Discuss the EMT's role and obligations if a patient refuses treatment or transport. (pp 90–91)
6. Describe the relationship between patient communications, confidentiality, and the Health Insurance Portability and Accountability Act (HIPAA). (pp 91–92)
7. Discuss the importance of do not resuscitate (DNR) orders and local protocols as they relate to the EMS environment. (pp 93–95)
8. Describe the physical, presumptive, and definitive signs of death. (pp 95–96)
9. Explain how to manage patients who are identified as organ donors. (p 97)
10. Recognize the importance of medical identification devices in treating the patient. (p 97)
11. Discuss the scope of practice and standards of care. (pp 98–100)

12. Describe the EMT's legal duty to act. (p 100)
13. Discuss the issues of negligence, abandonment, assault and battery, and kidnapping and their implications for the EMT. (pp 101–103)
14. Explain the reporting requirements for special situations, including abuse, drug- or felony-related injuries, childbirth, and crime scenes. (pp 104–105)
15. Define ethics and morality, and discuss their implications for the EMT. (pp 106–107)
16. Describe the roles and responsibilities of the EMT in court. (pp 107–109)

## Skills Objectives

There are no skills objectives in this chapter.

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 3, and all related presentation support materials.

- Review any related legal documents, such as statutes and regulations, that pertain to prehospital care services and personnel.
- Review any recent case studies or legal proceedings that may provide updated information on medicolegal issues. The local law librarian is a good reference source who can assist in gathering this type of information.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Local/state statutes, regulations, or policies related to prehospital care: – EMT scope of practice
  - DNR orders
  - Policies for reporting suspected child/elderly abuse, rape, and other crimes
  - Refusal of care policies
  - Use of restraints

## Chapter 4

# Communications and Documentation

### Unit Summary

After students complete this chapter presentation and the related course work, they will have an understanding of therapeutic communication; means to communicate effectively with special populations such as children, geriatric patients, and hearing- and visually impaired patients; methods and procedures for effective communication; components of effective written reports, types of written reports, and ways to correct errors found within written reports; documentation of refusal of care; special reporting situations; use of medical terminology; communications systems and equipment; regulations and protocols governing radio communications; and communication with medical control and hospitals.

### Preparatory

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/wellbeing of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

### Therapeutic Communication

Principles of communicating with patients in a manner that achieves a positive relationship

- Interviewing techniques (pp 122–126)
- Adjusting communication strategies for age, stage of development, patients with special needs, and differing cultures (pp 120, 127–131)
- Verbal defusing strategies (pp 120–123)
- Family presence issues (pp 123–126)

### EMS System Communication

Communication needed to

- Call for resources (pp 151–153)
- Transfer care of the patient (pp 153–156)
- Interact within the team structure (pp 151–153)
- EMS communication system (pp 146–151)
- Communication with other health care professionals (pp 153–156)
- **Team communication and dynamics (pp 131–133, 153–156)**

### Documentation

- Recording patient findings (pp 134–146)

- Principles of medical documentation and report writing (pp 134–136)

### **Medical Terminology**

Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.

### **Knowledge Objectives**

1. Describe the factors and strategies to consider for therapeutic communication with patients. (pp 119–133)
2. Discuss the techniques of effective verbal communication. (pp 122–133)
3. Explain the skills that should be used to communicate with family members, bystanders, people from other agencies, and hospital personnel. (pp 122–133)
4. Discuss special considerations in communicating with older people, children, patients who are hard of hearing, visually impaired patients, and non-English-speaking patients. (pp 127–131)
5. Describe the use of written communications and documentation. (pp 133–146)
6. State the purpose of a patient care report (PCR) and the information required to complete it. (pp 134–143)
7. Explain the legal implications of the PCR. (pp 142–143)
8. Describe how to document refusal of care, including the legal implications. (pp 143–146)
9. Discuss state and/or local special reporting requirements, such as for gunshot wounds, dog bites, and abuse. (p 146)
10. Describe the basic principles of the various types of communications equipment used in EMS. (pp 146–150)
11. Describe the use of radio communications, including the proper methods of initiating and terminating a radio call. (pp 150–151)
12. List the correct radio procedures in the following phases of a typical call: initial receipt of call, en route to call, on scene, arrival at hospital (or point of transfer), and return to service. (pp 151–153)
13. List the proper sequence of information to communicate in radio delivery of a patient report. (p 153–156)

### **Skills Objectives**

1. Demonstrate the techniques of successful cross-cultural communication. (p 120)
2. Demonstrate completion of a PCR. (pp 134–143)

3. Demonstrate how to make a simulated, concise radio transmission with dispatch. (pp 150–153)

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Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 4, and all related presentation support materials.

- Review local radio protocols and procedures for conducting both dispatch and medical communications.
- Review local protocols and procedures for operating radio/telephonic communication equipment, including procedures for equipment failure.

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- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Copies of locally approved prehospital care report forms and refusal of treatment forms (minimum of one per student)
  - Display of radio/telephonic equipment used in the local area

## Chapter 5

# Medical Terminology

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### Unit Summary

After students complete this chapter and the related course work, they will be able to use foundational and anatomic medical terms and abbreviations in written and oral communication with colleagues and health care professionals. They will understand the purpose of medical terminology, be able to identify its components, and be able to define an unknown medical term based on the dissection and understanding of its components. Students will also be able to identify error-prone medical abbreviations and acronyms. Common direction, movement, and position terms are also presented in this chapter.

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#### Medical Terminology

Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.



## Knowledge Objectives

1. Explain the purpose of medical terminology. (p 165)
2. Identify the four components that comprise a medical term. (p 165)
3. Describe the following directional terms: anterior (ventral), posterior (dorsal), right, left, superior, inferior, proximal, distal, medial, lateral, superficial, and deep. (pp 170–173)
4. Describe the prone, supine, Fowler, and semi-Fowler positions of the body. (pp 173–174)
5. Break down the meaning of a medical term based on the components of the term. (p 174)
6. Identify error-prone medical abbreviations and symbols. (pp 174–175)
7. Interpret selected medical abbreviations and symbols. (pp 174–175)

## Skills Objectives

There are no skills objectives for this chapter.

## Readings and Preparation

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 5, and all related presentation support materials.

## Support Materials

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Photocopies of medically accepted abbreviations, acronyms, and symbols.

## Enhancements

- Direct students to Navigate.
- If possible, arrange for a malpractice attorney to visit the class and review cases to illustrate the proper and improper use of medical terminology and how it can impact legal proceedings.
- **Content connections:** Chapter 4, “Communication and Documentation” will discuss in detail the patient care report and documentation. Remind students that proper use of medical terminology is required for all documentation and communications. Chapter 9, “Patient

Assessment" will integrate medical terminology as the process of patient assessment is described in detail.

## Chapter 6

# The Human Body

### Unit Summary

After students complete this chapter and the related course work, they will be able to describe and apply, in context, the body planes, topographic anatomy, and anatomic position. Students will be able to identify basic anatomic structures and related functions and describe each body system, discussing the roles of the structures within these systems and the interaction of body systems in maintaining the life support chain. Students will be able to discuss possible consequences of illness and injury of these structures and systems on proper functioning of the body.

### Preparatory

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/wellbeing of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

### Anatomy and Physiology

Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.

### Pathophysiology

Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.

1. Identify the body's topographic anatomy, including the anatomic position and the planes of the body. (pp 190–191)
2. Identify the anatomy and physiology of the skeletal system. (pp 191–197)
3. Describe the anatomy and physiology of the musculoskeletal system. (pp 197–198)
4. Discuss the anatomy and physiology of the respiratory system. (pp 198–207)
5. Discuss the anatomy and physiology of the circulatory system. (pp 207–220)
6. Discuss the anatomy and physiology of the nervous system. (pp 220–224)

7. Describe the anatomy and physiology of the integumentary system. (pp 224–226)
8. Explain the anatomy and physiology of the digestive system. (pp 226–230)
9. Describe the anatomy and the physiology of the lymphatic system. (p 230)
10. Discuss the anatomy and physiology of the endocrine system. (pp 230–232)
11. Describe the anatomy and physiology of the urinary system. (pp 232–233)
12. Discuss the anatomy and physiology of the genital system. (pp 233–234)
13. Describe the life support chain, aerobic metabolism, and anaerobic metabolism. (pp 235–236)
14. Define pathophysiology. (p 236)

## Skills Objectives

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There are no skills objectives in this chapter.

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Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 6, and all related presentation support materials.

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- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Several copies of a human body diagram (anterior, posterior, and lateral if possible) for distribution in activities and assessments. Have several copies for each student, as they can serve as a template for many activities and assessments.
  - Large (human body size) paper. Leftover newsprint paper works well if you have access to a newsprint facility, or consider taping several large pieces of paper together.

## Chapter 7

### Life Span Development

## Unit Summary

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After students complete this chapter and the related course work, they will have a fundamental understanding of the physiologic and psychosocial differences of each phase of human development. The students will be able to discuss adaptations and strategies that they might

apply to better assess and manage patients.

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### **Preparatory**

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/wellbeing of the emergency medical technician (EMT), and medical/legal and ethical issues to the provision of emergency care.

### **Life Span Development**

Applies fundamental knowledge of life span development to patient assessment and management.

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1. Know the terms used to designate the following stages of life: infants, toddlers, preschoolers, school-age children, adolescents (teenagers), early adults, middle adults, and older adults. (p 254–264)
  2. Describe the major physical and psychosocial characteristics of an infant’s life. (pp 254–258)
  3. Describe the major physical and psychosocial characteristics of a toddler’s and preschooler’s life. (pp 258–260)
  4. Describe the major physical and psychosocial characteristics of a school-age child’s life. (pp 260–261)
  5. Describe the major physical and psychosocial characteristics of an adolescent’s life. (pp 261–262)
  6. Describe the major physical and psychosocial characteristics of an early adult’s life. (p 263)
  7. Describe the major physical and psychosocial characteristics of a middle adult’s life. (pp 263–264)
  8. Describe the major physical and psychosocial characteristics of an older adult’s life. (pp 264–268)

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### **Skills Objectives**

There are no skills objectives for this chapter.

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Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 7, and all related presentation support materials.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation

## Chapter 8

### Lifting and Moving Patients

#### Unit Summary

After students complete this chapter and the related course work, they will understand the body mechanics of patient movement, principles of safe reaching and pulling, urgent and nonurgent moves, how to move patients as a team, types of patient packaging and moving equipment, how to protect themselves from injury when moving patients, and the use of medical restraints.

#### Preparatory

Applies fundamental knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.

1. Explain the need and use of the most common patient-moving equipment, the stretcher and backboard. (pp 274–276)
2. Explain the technical skills and general considerations that are required of EMTs during patient packaging and patient handling. (pp 276–277)
3. Define the term *body mechanics*. (p 277)
4. Discuss how following proper patient lifting and moving techniques can help prevent work-related injuries. (pp 276–277)
5. Identify how to avoid common mistakes when lifting and carrying a patient. (pp 278–280)
6. Explain the power grip and sheet or blanket methods for lifting a patient. (pp 280–282)
7. Explain the general considerations required of EMTs to safely move patients without causing the patient further harm and while protecting themselves from injury. (pp 282–287)
8. Explain how to carry patients safely on stairs, including the selection of appropriate equipment to aid in the process. (pp 287–289)

9. Describe specific situations in which an emergency move may be necessary to move a patient; include how each one is performed. (pp 294–295)
10. Describe specific situations in which an urgent move or rapid extrication may be necessary to move a patient; include how each one is performed. (pp 295–300)
11. Describe specific situations in which a nonurgent move may be necessary to move a patient; include how each one is performed. (pp 300–307)
12. Explain the special considerations and guidelines related to moving and transporting geriatric patients. (p 307)
13. Define the term *bariatrics*. (p 307)
14. Discuss the guidelines for lifting and moving bariatric patients. (pp 307–309)
15. Explain the need and use for additional patient-moving equipment (specialized); include examples. (pp 309–312)
16. Explain the importance of decontaminating equipment in the prevention of disease transmission. (p 312)
17. Describe proper positioning of the following conditions: (pp 312–313)
  - Unresponsive patients without suspected spine injury
  - Patients with chest pain, discomfort, or difficulty breathing
  - Patients with suspected spine injury
  - Pregnant patients with hypotension
  - Patients who are nauseated or vomiting

## Skills Objectives

1. Perform a power lift to lift a patient. (pp 278–280, Skill Drill 8-1)
2. Demonstrate a power grip. (p 280)
3. Demonstrate the body mechanics and principles required for safe reaching and pulling, including the technique used for performing log rolls. (pp 280–282)
4. Perform the diamond carry to move a patient. (pp 284–285, Skill Drill 8-2)
5. Perform the one-handed carry to move a patient. (pp 284–286, Skill Drill 8-3)
6. Perform a patient carry using a stair chair to move a patient down the stairs. (pp 287–288, Skill Drill 8-4)
7. Perform a patient carry to move a patient down the stairs on a backboard. (p 289, Skill Drill 8-5)

8. Demonstrate how to load a stretcher into an ambulance. (pp 291–292, Skill Drill 8-6)
9. Demonstrate how to perform an emergency or urgent move. (pp 294–300)
10. Perform the rapid extrication technique to move a patient from a vehicle. (pp 297–300, Skill Drill 8-7)
11. Perform the direct ground lift to lift a patient. (pp 300–301, Skill Drill 8-8)
12. Perform the extremity lift to move a patient. (pp 302–303, Skill Drill 8-9)
13. Perform the direct carry to move a patient. (pp 302–304, Skill Drill 8-10)
14. Demonstrate how to use the draw sheet method to transfer a patient onto a stretcher. (pp 304–305)
15. Use a scoop stretcher to move a patient. (pp 305–306, Skill Drill 8-11)
16. Demonstrate how to log roll a patient on the ground. (pp 307–308, Skill Drill 8-12)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 8, and all related presentation support materials.

- Review the local protocol for the use of restraints.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Skill Drill PowerPoint presentations
  - Skill Drill 8-1, Performing the Power Lift PowerPoint presentation
  - Skill Drill 8-2, Performing the Diamond Carry PowerPoint presentation
  - Skill Drill 8-3, Performing the One-Handed Carrying Technique PowerPoint presentation
  - Skill Drill 8-4, Using a Stair Chair PowerPoint presentation
  - Skill Drill 8-5, Carrying a Patient on Stairs PowerPoint presentation
  - Skill Drill 8-6, Loading a Stretcher into an Ambulance PowerPoint presentation
  - Skill Drill 8-7, Performing the Rapid Extrication Technique PowerPoint presentation
  - Skill Drill 8-8, The Direct Ground Lift PowerPoint presentation
  - Skill Drill 8-9, Extremity Lift PowerPoint presentation
  - Skill Drill 8-10, Direct Carry PowerPoint presentation
  - Skill Drill 8-11, Using a Scoop Stretcher PowerPoint presentation
- Equipment needed to perform the psychomotor skills presented in this chapter
- Skill Evaluation Sheets

- Skill Drill 8-1, Performing the Power Lift
- Skill Drill 8-2, Performing the Diamond Carry
- Skill Drill 8-3, Performing the One-Handed Carrying Technique
- Skill Drill 8-4, Using a Stair Chair
- Skill Drill 8-5, Carrying a Patient on Stairs
- Skill Drill 8-6, Loading a Stretcher into an Ambulance
- Skill Drill 8-7, Performing the Rapid Extrication Technique
- Skill Drill 8-8, The Direct Ground Lift
- Skill Drill 8-9, Extremity Lift
- Skill Drill 8-10, Direct Carry
- Skill Drill 8-11, Using a Scoop Stretcher

## Chapter 9

### The Team Approach to Health Care

#### Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of a team approach to health care and the impact of this approach on positive patient outcomes. Students will also be able to list and describe the steps an EMT should follow to assist with ALS skills, including placement of advanced airways and vascular access.

#### National EMS Education Standard Competencies

Applies fundamental knowledge of patient safety to the provision of emergency care. Applies fundamental knowledge of transferring patient care; how to interact within the team structure; and team communication and dynamics.

1. Define continuum of care. (p 321)
2. List the five essential elements of a group. (p 322)
3. Explain the advantages of a team over a group; include the advantages of regularly training and practicing together. (pp 321–322)
4. List the five essential elements of a team. (pp 323–325)



5. Explain how crew resource management (CRM) can be useful in the prehospital environment. (pp 325–326)
6. List the five critical elements necessary to ensure effective transfer of patient care from one provider to another. (pp 326–328)
7. List the five steps a receiving health care provider should perform when taking a patient care report (PCR). (p 327)
8. Explain the stages of effective decision making. (pp 329–330)
9. Describe decision traps that can lead to decision-making errors. (p 330)
10. Describe the steps EMTs can take to troubleshoot interpersonal conflicts. (p 331)

## Skills Objectives

There are no skills objectives for this chapter.

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 9, and all related presentation support materials.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation

# Chapter 10

## Patient Assessment

### Unit Summary

After students complete this chapter presentation and the related course work, they will understand the scope and sequence of patient assessment for medical and trauma patients and all the phases and components of patient assessment. Please note that this chapter is divided into five sections: scene size-up, primary assessment, history taking, secondary assessment, and reassessment. These divisions will help facilitate the instructor's approach for teaching this skill as a whole concept.

### National EMS Education Standard Competencies

#### Assessment

Applies scene information and patient assessment findings (scene size-up, primary and secondary assessment, patient history, and reassessment) to guide emergency management.

**Scene Size-up**

- Scene safety (pp 344–345)
- Scene management
- Impact of the environment on patient care (pp 344–345)
- Addressing hazards (p 345)
- Violence (p 345)
- Need for additional or specialized resources (p 349)
- Standard precautions (pp 347–348)
- Multiple patient situations (pp 348–349)

**Primary Assessment**

- Primary assessment for all patient situations (pp 350–351)
- Level of consciousness (pp 352–353)
- ABCs (pp 354–361)
- Identifying life threats (pp 352–353, 357–358)
- Assessment of vital functions (pp 352–353, 357–358)
- Initial general impression (p 351)
- Begin interventions needed to preserve life (pp 353–354, 360–363)
- Integration of treatment/procedures needed to preserve life (pp 363–365)

**History Taking**

- Determining the chief complaint (pp 366–368)
- Mechanism of injury/nature of illness (pp 345–347)
- Associated signs and symptoms (pp 366–369)
- Investigation of the chief complaint (pp 367–369)
- Past medical history (pp 366–369)
- Pertinent negatives (p 369)

**Secondary Assessment**

- Performing a rapid full-body scan (pp 377–379)
- Focused assessment of pain (pp 377–379, 383–401) • Assessment of vital signs (pp 383–392, 401–404)
- Techniques of physical examination:
  - Respiratory system (pp 383–387)
  - Presence of breath sounds (pp 385–387)
  - Cardiovascular system (pp 387–394)
  - Neurologic system (pp 394–398)
  - Musculoskeletal system (pp 399–401)

- All anatomic regions (pp 398–401)

### **Monitoring Devices**

- Obtaining and using information from patient monitoring devices including (but not limited

to)

- Pulse oximetry (pp 401–402)
- Noninvasive blood pressure (p 404)

### **Reassessment**

- How and when to reassess patients (p 405)
- How and when to perform a reassessment for all patient situations (pp 405–406)

## **Knowledge Objectives**

1. Identify the components of the patient assessment process. (p 342)
2. Explain how the different causes and presentations of emergencies will affect how EMTs perform each step of the patient assessment process. (p 342)
3. Discuss some of the possible environmental, chemical, and biologic hazards that may be present at an emergency scene, ways to recognize them, and precautions to protect personal safety. (pp 343–345)
4. Discuss the steps EMTs should take to survey a scene for signs of violence and to protect themselves and bystanders from real or potential danger. (pp 343–345)
5. Describe how to determine the mechanism of injury (MOI) or nature of illness (NOI) at an emergency and the importance of differentiating trauma patients from medical patients. (pp 345–347)
6. List the minimum standard precautions that should be followed and personal protective equipment (PPE) that should be worn at an emergency scene, including examples of when additional precautions would be appropriate. (pp 347–348)
7. Explain why it is important for EMTs to identify the total number of patients at an emergency scene and how this evaluation relates to determining the need for additional or specialized resources, implementation of the incident command system (ICS), and triage. (pp 348–349)
8. Describe the principal goals of the primary assessment process, including how to identify and treat life threats and determine if immediate transport is required. (pp 350– 351)
9. Explain the process of forming a general impression of a patient as part of primary assessment and the reasons why this step is critical to patient management. (p 351)

10. Explain the importance of assessing a patient's level of consciousness (LOC) to determine altered mental status, and include examples of different methods used to assess alertness, responsiveness, and orientation. (pp 352–353)
11. Describe the assessment of airway status in patients who are both responsive and unresponsive, including examples of possible signs and causes of airway obstruction in each case as well as the appropriate EMT response. (pp 354–355)
12. Describe the assessment of a patient's breathing status, including the key information EMTs must obtain during this process and the care required for patients who have both adequate and inadequate breathing. (pp 355–357)
13. List the signs of respiratory distress and respiratory failure. (p 357)
14. Describe the assessment of a patient's circulatory status, including the different methods for obtaining a pulse and appropriate management depending on the patient's status. (pp 357–358)
15. Explain the variations required to obtain a pulse in infant and child patients compared with adult patients. (pp 357–358)
16. Describe the assessment of a patient's skin color, temperature, and condition, including examples of both normal and abnormal findings and the information this provides related to the patient's status. (pp 358–360)
17. Discuss the process of assessing for and methods for controlling external bleeding. (pp 360–361)
18. Discuss the steps used to identify and subsequently treat life-threatening conditions that endanger a patient during an emergency. (pp 361–363)
19. List the steps EMTs should follow during the primary assessment of a trauma patient, including examples of abnormal signs and appropriate related actions. (pp 362–363)
20. Explain the process for determining the priority of patient care and transport at an emergency scene and include examples of conditions that necessitate immediate transport. (pp 363–365)
21. Discuss the importance of protecting a trauma patient's spine and identifying fractured extremities during patient packaging for transport. (pp 363–365)
22. Discuss the process of taking a focused history, its key components, and its relationship to the primary assessment process. (p 366)
23. Describe examples of different techniques EMTs may use to obtain information from patients during the history-taking process. (pp 368–376)

24. Discuss different challenges EMTs may face when taking a patient history on sensitive topics and strategies they may use to facilitate each situation. (pp 370–372)
25. Describe the purpose of a secondary assessment and a physical exam; include how to determine which aspects of the physical exam to use, and the steps. (pp 377– 378)
26. Explain situations in which patients may receive a focused assessment, including examples by body system of what each focused assessment should include based on a patient’s chief complaint. (pp 379–404)
27. List normal blood pressure ranges for adults, children, and infants. (p 394)
28. Explain the importance of performing a reassessment of the patient and the steps in this process. (pp 405–406)

## Skills Objectives

1. Demonstrate how to use the AVPU scale to test for patient responsiveness. (p 352)
2. Demonstrate how to evaluate a patient’s orientation and document his or her status correctly. (pp 352–353)
3. Demonstrate the techniques for assessing a patient’s airway and correctly obtaining information related to respiratory rate, rhythm, quality/character of breathing, and depth of breathing. (pp 354–357)
4. Demonstrate how to assess a radial pulse in a responsive patient and an unresponsive patient. (pp 357–358)
5. Demonstrate how to assess a carotid pulse in an unresponsive patient. (pp 357–358)
6. Demonstrate how to palpate a brachial pulse in a child who is younger than 1 year. (pp 357–358)
7. Demonstrate how to obtain a pulse rate in a patient. (pp 357–358)
8. Demonstrate how to assess capillary refill in an adult or child older than 6 years. (p 360)
9. Demonstrate how to assess capillary refill in an infant or child younger than 6 years; include variations that would be required when assessing a newborn. (p 360)
10. Demonstrate how to perform a rapid exam during primary assessment of a patient. (pp 361–363, Skill Drill 10-1)

11. Demonstrate how to perform a secondary assessment. (pp 379–383, Skill Drill 10-2)
12. Demonstrate how to measure blood pressure by auscultation. (p 391, Skill Drill 10-3)
13. Demonstrate how to measure blood pressure by palpation. (p 393, Skill Drill 104)
14. Demonstrate how to test pupil reaction in response to light in a patient and how to document his or her status correctly. (pp 394–396)
15. Demonstrate the assessment of neurovascular status. (pp 396–397, Skill Drill 105)
16. Demonstrate the use of a pulse oximetry device to evaluate the effectiveness of oxygenation in the patient. (pp 401–402)
17. Demonstrate the use of electronic devices to assist in determining the patient's blood pressure in the field. (p 404)
18. Demonstrate how to assess a patient's blood glucose level. (p 403, Skill Drill 10-6)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 10, and all related presentation support materials.

## Support Materials

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Skill Drill PowerPoint presentations
  - Skill Drill 10-1, Performing a Rapid Exam to Identify Life Threats PowerPoint presentation
  - Skill Drill 10-2, Performing the Secondary Assessment PowerPoint presentation
  - Skill Drill 10-3, Obtaining Blood Pressure by Auscultation PowerPoint presentation
  - Skill Drill 10-4, Obtaining Blood Pressure by Palpation PowerPoint presentation
  - Skill Drill 10-5, Assessing Neurovascular Status PowerPoint presentation
  - Skill Drill 10-6, Assessing Blood Glucose Level PowerPoint presentation
- Equipment needed to perform the psychomotor skills presented in this chapter.
- Patient assessment template from the beginning of Chapter 10 of the text (several copies)
- Skill Evaluation Sheets
  - Skill Drill 10-1, Performing a Rapid Exam to Identify Life Threats
  - Skill Drill 10-2, Performing the Secondary Assessment
  - Skill Drill 10-3, Obtaining Blood

Pressure by Auscultation o Skill Drill 10-4, Obtaining Blood Pressure by Palpation o Skill Drill 10-5, Assessing Neurovascular Status o Skill Drill 10-6, Assessing Blood Glucose Level

## **Chapter 11**

### **Airway Management**

#### **Unit Summary**

After students complete this chapter and the related course work, they will understand the need for proper airway management, including recognizing and measuring adequate and inadequate breathing, maintaining an open airway, and providing artificial ventilation. Students will be able to demonstrate basic competency in applying these concepts to appropriate care through the use of airway adjuncts, suction equipment, oxygen equipment and delivery systems, pulse oximetry, continuous positive airway pressure (CPAP), and resuscitation devices.

#### **National EMS Education Standard Competencies**

##### **Airway Management, Respiration, and Artificial Ventilation**

Applies knowledge of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.

##### **Airway Management**

- Airway anatomy (pp 418–423)
- Airway assessment (pp 431–439)
- Techniques of assuring a patent airway (pp 439–446)

##### **Respiration**

- Anatomy of the respiratory system (pp 418–423)
- Physiology and pathophysiology of respiration o Pulmonary ventilation (pp 424–427) o Oxygenation (p 427) o Respiration (pp 427–429)
  - External (pp 427–428)
  - Internal (p 428)
  - Cellular (pp 428–429)
- Assessment and management of adequate and inadequate respiration (pp 434–439)
- Supplemental oxygen therapy (pp 451–457)

##### **Artificial Ventilation**

- Assessment and management of adequate and inadequate ventilation (pp 460–469)

- Artificial ventilation (pp 461–469) • Minute ventilation (pp 424–425)
- Alveolar ventilation (pp 424–425)
- Effect of artificial ventilation on cardiac output (pp 461–462)

### **Pathophysiology**

Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.

1. Describe the major structures of the respiratory system. (pp 418–423)
2. Discuss the physiology of breathing. (pp 423–428)
3. Give the signs of adequate breathing. (p 432)
4. Give the signs of inadequate breathing. (pp 432–434)
5. Describe the assessment and care of a patient with apnea. (p 434)
6. Explain how to assess for adequate and inadequate respiration, including the use of pulse oximetry. (pp 434–439)
7. Explain how to assess for a patent airway. (pp 439–440)
8. Describe how to perform the head tilt–chin lift maneuver. (pp 440–441)
9. Describe how to perform the jaw-thrust maneuver. (pp 441–442)
10. Explain the importance and techniques of suctioning. (pp 442–446)
11. Explain how to measure and insert an oropharyngeal (oral) airway. (pp 446–448)
12. Describe how to measure and insert a nasopharyngeal (nasal) airway. (p 449)
13. Explain the use of the recovery position to maintain a clear airway. (pp 449–451)
14. Describe the importance of giving supplemental oxygen to patients who are hypoxic. (p 451)
15. Discuss the basics of how oxygen is stored and the various hazards associated with its use. (pp 451–457)
16. Explain the use of a nonrebreathing mask and the oxygen flow requirements for its use. (p 458)
17. Describe the indications for using a nasal cannula rather than a nonrebreathing face mask. (p 458)
18. Describe the indications for use of a humidifier during supplemental oxygen therapy. (p 460)



19. Describe how to perform mouth-to-mouth or mouth-to-mask ventilation. (pp 462–463)
20. Describe the use of a one- or two-person bag-mask device. (pp 463–467)
21. Describe the signs associated with adequate and inadequate artificial ventilation. (p 468)
22. Describe the use of continuous positive airway pressure (CPAP). (pp 469–474)
23. Explain how to recognize and care for a foreign body airway obstruction. (pp 474–477)
24. Describe the four-step process of assisting with advanced life support (ALS) skills. (pp 477–482)
25. Discuss the importance of preoxygenation when performing endotracheal (ET) intubation. (p 477)
26. Describe the six steps of the BE MAGIC intubation procedure. (pp 478–481)
27. Describe the signs that indicate a complication with an intubated patient. (pp 481–482)

## Skills Objectives

1. Demonstrate use of pulse oximetry. (pp 435–436, Skill Drill 11-1)
2. Demonstrate how to position the unconscious patient. (pp 439–440, Skill Drill 11-2)
3. Demonstrate how to perform the head tilt–chin lift maneuver. (pp 440–441)
4. Demonstrate how to perform the jaw-thrust maneuver. (pp 441–442)
5. Demonstrate how to operate a suction unit. (pp 444–446)
6. Demonstrate how to suction a patient’s airway. (pp 444–446, Skill Drill 11-3)
7. Demonstrate the insertion of an oral airway. (pp 446–447, Skill Drill 11-4)
8. Demonstrate the insertion of an oral airway with a 90-degree rotation. (p 448, Skill Drill 11-5)
9. Demonstrate the insertion of a nasal airway. (p 449, Skill Drill 11-6)
10. Demonstrate how to place a patient in the recovery position. (p 449)
11. Demonstrate how to place an oxygen cylinder into service. (pp 455–457, Skill Drill 11-7)
12. Demonstrate the use of a partial rebreathing mask in providing supplemental oxygen therapy to patients. (p 459)

13. Demonstrate the use of a Venturi mask in providing supplemental oxygen therapy to patients. (p 459)
14. Demonstrate the use of a humidifier in providing supplemental oxygen therapy to patients. (p 460)
15. Demonstrate how to assist a patient with ventilations using the bag-mask device. (pp 464–466, Skill Drill 11-8)
16. Demonstrate the use of an automatic transport ventilator to assist in delivering artificial ventilation to the patient. (pp 468–469)
17. Demonstrate the use of CPAP. (pp 469–474, Skill Drill 11-9)

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Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 11, and all related presentation support materials.

- Instruct students to review respiratory system notes from Chapter 6, “The Human Body,” to better prepare for reading Chapter 11, “Airway Management,” and expanding on existing knowledge.

- 
- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Skill Drill PowerPoint presentations
    - Skill Drill 11-1, Performing Pulse Oximetry PowerPoint presentation
    - Skill Drill 11-2, Positioning the Unconscious Patient PowerPoint presentation
    - Skill Drill 11-3, Suctioning a Patient’s Airway PowerPoint presentation
    - Skill Drill 11-4, Inserting an Oral Airway PowerPoint presentation
    - Skill Drill 11-5, Inserting an Oral Airway With a 90° Rotation PowerPoint presentation
    - Skill Drill 11-6, Inserting a Nasal Airway PowerPoint presentation
    - Skill Drill 11-7, Placing an Oxygen Cylinder Into Service PowerPoint presentation
    - Skill Drill 11-8, Performing One-Rescuer Bag-Mask Ventilations PowerPoint presentation
    - Skill Drill 11-9, Using CPAP PowerPoint presentation
  - Equipment needed to perform the psychomotor skills presented in this chapter
  - Skill Evaluation Sheets

- Skill Drill 11-1, Performing Pulse Oximetry
- Skill Drill 11-2, Positioning the Unconscious Patient
- Skill Drill 11-3, Suctioning a Patient's Airway
- Skill Drill 11-4, Inserting an Oral Airway
- Skill Drill 11-5, Inserting an Oral Airway With a 90° Rotation
- Skill Drill 11-6, Inserting a Nasal Airway
- Skill Drill 11-7, Placing an Oxygen Cylinder Into Service
- Skill Drill 11-8, Performing One-Rescuer Bag-Mask Ventilations
- Skill Drill 11-9, Using CPAP

## Chapter 12

### Principles of Pharmacology

#### Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of general pharmacology and will be able to identify, describe, and demonstrate the steps for assisting/administering medications carried by the EMT.

#### Pharmacology

Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.

Principles of Pharmacology

- Medication safety (pp 503–505)
- Kinds of medications used during an emergency (pp 507–518)

#### Medication Administration

- Self-administer medication (pp 506–507)
- Peer-administer medication (pp 506–507)
- Assist/administer medications to a patient (pp 506–507)

#### Emergency Medications

- Names (pp 497–498)
- Effects (pp 495–497)

- Actions (pp 495–497)
- Indications (p 497)
- Contraindications (p 497)
- Complications (p 497)
- Routes of administration (pp 498–500)
- Adverse effects (p 497)
- Interactions (pp 508–509, 518–519)
- Dosages for the medications administered (pp 496, 504, 508–509)

## Knowledge Objectives

1. Define the terms pharmacodynamics, therapeutic effects, indications, adverse effects, pharmacokinetics, onset of action, peak, duration, elimination, unintended effects, and untoward effects. (pp 495–497)
2. Explain medication contraindications; include an example. (p 497)
3. Explain the differences between a generic medication name and a trade medication name; provide an example of each. (p 497)
4. Differentiate enteral and parenteral routes of medication administration. (p 498)
5. Describe rectal, oral, intravenous, intraosseous, subcutaneous, intramuscular, intranasal, inhalation, sublingual, and transcutaneous routes of medication administration; include the rates of absorption. (pp 498–500)
6. Explain the solid, liquid, and gas forms of medication and routes of administration; provide examples of each. (pp 501–503)
7. List the “rights” of medication administration; include how each one relates to EMS. (pp 503–505)
8. Explain the difference between direct orders (online) and standing orders (off-line) and the role of medical control. (p 506)
9. Discuss the medication administration circumstances involving peer-assisted medication, patient-assisted medication, and EMT-administered medication. (pp 506–507)
10. Know the generic and trade names, actions, indications, contraindications, routes of administration, adverse effects, interactions, and doses of medications that may be administered by an EMT in an emergency as dictated by state protocols and local medical direction. (pp 497–518)
11. Describe the medication administration considerations related to special populations, including pediatric, geriatric, and pregnant patients. (pp 507, 515, 517)

12. State the steps to follow when dispensing medications to a patient using an autoinjector. (p 514)
13. Explain why determining what prescription and over-the-counter medications a patient is taking is a critical aspect of patient assessment during an emergency. (pp 518–519)
14. State the steps to take if a medication error occurs. (p 522)

## Skills Objectives

1. Apply the rights of medication administration. (pp 503–505)
2. Perform the medication cross-check procedure prior to administering a medication. (pp 505–506)
3. Demonstrate how to administer oral medication to a patient. (pp 507, 510–511)
4. Demonstrate how to administer aspirin to a patient with chest pain. (p 511)
5. Demonstrate how to administer oral glucose to a patient with hypoglycemia. (pp 507, 510)
6. Demonstrate how to assist a patient with the sublingual administration of a medication. (pp 511–513)
7. Demonstrate how to administer a medication by auto-injector. (p 514)
8. Demonstrate how to administer an intranasal medication. (p 515)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 12, and all related presentation support materials.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Equipment needed to perform the psychomotor skills presented in this chapter
- Samples of medications that the EMT may find in the home (may include medication inserts, labels, OTC bottles/boxes, and old prescription bottles with names blocked out) •  
Samples of medications that the local EMS agency carries

# Chapter 13

## Shock

### Unit Summary

After students complete this chapter and the related course work, they will have an understanding of the different types and causes of shock, the process of perfusion, the signs and symptoms associated with shock, application of the assessment process with the shock patient, and the general and specific emergency medical care provided to patients experiencing shock.

### Shock and Resuscitation

Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post-resuscitation management.

### Pathophysiology

Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.

1. Describe the pathophysiology of shock (hypoperfusion). (pp 531–534)
2. Identify the causes of shock. (p 534)
3. Differentiate among the various types of shock. (pp 534–539)
4. Describe the signs and symptoms of shock including compensated and decompensated. (p 540)
5. Discuss key components of patient assessment for shock. (pp 540–542)
6. Describe the steps to follow in the emergency care of the patient with various types of shock. (pp 543–548)

### Skills Objectives

1. Demonstrate how to control shock. (pp 543–548)
2. Demonstrate how to complete an EMS patient care report for a patient with shock. (p 551)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 13, and all related presentation support materials.

- Review local treatment and transportation protocols for patients presenting in shock.
- Review criteria for requesting aeromedical evacuation in patients presenting in shock.
- Attempt to find as many opportunities as possible for students to have personal observations of injured/ill patients in shock. You will need to ensure that the students complete ride-alongs and hospital observation shifts as often as possible.
- Use a variety of scenarios/simulations regarding shock with a significant focus on the assessment and treatment protocols for the various kinds of shock.

- 
- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Equipment needed to perform the psychomotor skills presented in this chapter.

## **Chapter 14**

### **BLS Resuscitation**

**(covered with AHA CPR Course)**

#### **Unit Summary**

After students complete this chapter and the related course work, they will have reviewed the basic life support (BLS) procedures for adults, infants, and children. Please note that BLS knowledge is a prerequisite for the course and that this chapter should serve as a review.

#### **Shock and Resuscitation**

Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.

#### **Knowledge Objectives**

1. Explain the elements of basic life support (BLS), how it differs from advanced life support (ALS), and why BLS must be applied rapidly. (pp 557–559)
2. Explain the goals of cardiopulmonary resuscitation (CPR) and when it should be performed on a patient. (p 559)
3. Explain the components of CPR, the five links in the American Heart Association (AHA) chain of survival, and how each one relates to maximizing the survival of a patient. (pp 559–560)

4. Discuss guidelines for circumstances that require the use of an automated external defibrillator (AED) on both adult and pediatric patients experiencing cardiac arrest. (pp 561–562)
5. Explain three special situations related to the use of an AED. (p 562)
6. Describe the proper way to position an adult patient to receive BLS care. (pp 562–563)
7. Describe the purpose of external chest compressions. (p 563)
8. Describe the two techniques EMTs may use to open an adult patient's airway and the circumstances that would determine when each technique would be used. (pp 566– 567)
9. Describe the recovery position and circumstances that would warrant its use, as well as situations in which it would be contraindicated. (pp 567–568)
10. Describe the process of providing artificial ventilations to an adult patient, ways to avoid gastric distention, and modifications required for a patient with a stoma. (pp 568–569)
11. Explain the steps in providing single-rescuer adult CPR. (pp 569–571)
12. Explain the steps in providing two-rescuer adult CPR, including the method for switching positions during the process. (pp 571–573)
13. Describe the different mechanical devices that are available to assist emergency care providers in delivering improved circulatory efforts during CPR. (pp 573, 575– 577)
14. Describe the different possible causes of cardiopulmonary arrest in children. (p 577)
15. Explain the four steps of pediatric BLS procedures and how they differ from BLS procedures used in an adult patient. (pp 577–584)
16. Describe the ethical issues related to patient resuscitation, including examples of when not to start CPR on a patient. (pp 584–586)
17. Explain the various factors involved in the decision to stop CPR after it has been started on a patient. (pp 586–587)
18. Explain common causes of foreign body airway obstruction in both children and adults and how to distinguish mild or partial airway obstruction from complete airway obstruction. (pp 587–588)
19. Describe the different methods for removing a foreign body airway obstruction in an infant, child, and adult, including the procedure for a patient with an obstruction who becomes unresponsive. (pp 588–593)



20. Discuss how to provide grief support for a patient's family members and loved ones after resuscitation has ended. (pp 594–595)
21. Discuss the importance of frequent CPR training for EMTs, as well as public education programs that teach compression-only CPR. (p 595)

## Skills Objectives

1. Demonstrate how to position an unresponsive adult for CPR. (pp 562–563)
2. Demonstrate how to check for a pulse at the carotid artery in an unresponsive child or adult. (p 563)
3. Demonstrate how to perform external chest compressions on an adult. (pp 563–565, Skill Drill 14-1)
4. Demonstrate how to perform a head tilt–chin lift maneuver on an adult. (p 566)
5. Demonstrate how to perform a jaw-thrust maneuver on an adult. (pp 566–567)
6. Demonstrate how to place a patient in the recovery position. (pp 567–568)
7. Demonstrate how to perform rescue breathing in an adult. (p 568)
8. Demonstrate how to perform one-rescuer adult CPR. (pp 569–571, Skill Drill 14-2)
9. Demonstrate how to perform two-rescuer adult CPR. (pp 571–573, Skill Drill 14-3)
10. Demonstrate the use of mechanical devices that assist emergency responders in delivering improved circulatory efforts during CPR. (pp 573–577)
11. Demonstrate how to check for a pulse at the brachial artery in an unresponsive infant (p 579)
12. Demonstrate how to perform external chest compressions on an infant. (pp 579–580, Skill Drill 14-4)
13. Demonstrate how to perform CPR in a child who is between 1 year of age and the onset of puberty. (pp 580–582, Skill Drill 14-5)
14. Demonstrate how to perform a head tilt–chin lift maneuver on a pediatric patient. (p 582)
15. Demonstrate how to perform a jaw-thrust maneuver on a pediatric patient. (pp 582–583)
16. Demonstrate how to perform rescue breathing on a child. (p 583)
17. Demonstrate how to perform rescue breathing on an infant. (p 583)

18. Demonstrate how to remove a foreign body airway obstruction in a responsive adult patient using abdominal thrusts (Heimlich maneuver). (p 588)
19. Demonstrate how to remove a foreign body airway obstruction in a responsive pregnant or obese patient using chest thrusts. (p 588–591)
20. Demonstrate how to remove a foreign body airway obstruction in a responsive child older than 1 year using abdominal thrusts (Heimlich maneuver). (pp 590–591)
21. Demonstrate how to remove a foreign body airway obstruction in an unresponsive child. (pp 591–592, Skill Drill 14-6)
22. Demonstrate how to remove a foreign body airway obstruction in an infant. (pp 591, 593)

## Readings and Preparation

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 14, and all related presentation support materials.

- Review current American Heart Association standards for basic life support (CPR) for adults, children, and infants.

## Support Materials

- Lecture PowerPoint presentation
- Skill Drill PowerPoint presentations
  - Skill Drill 14-1, Performing Chest Compressions PowerPoint presentation
  - Skill Drill 14-2, Performing One-Rescuer Adult CPR PowerPoint presentation
  - Skill Drill 14-3, Performing Two-Rescuer Adult CPR PowerPoint presentation
  - Skill Drill 14-4, Performing Infant Chest Compressions PowerPoint presentation
  - Skill Drill 14-5, Performing CPR on a Child PowerPoint presentation
    - Skill Drill 14-6, Removing a Foreign Body Airway Obstruction in an Unresponsive Child PowerPoint presentation
- Equipment needed to perform the psychomotor skills presented in this chapter.
- Skill Evaluation Sheets
  - Skill Drill 14-1, Performing Chest Compressions
  - Skill Drill 14-2, Performing One-Rescuer Adult CPR
  - Skill Drill 14-3, Performing Two-Rescuer Adult CPR
    - Skill Drill 14-4, Performing Infant Chest Compressions
    - Skill Drill 14-5, Performing CPR on a Child
    - Skill Drill 14-6, Removing a Foreign Body Airway Obstruction in an Unresponsive Child

# Chapter 15

## Medical Overview

### Unit Summary

After students complete this chapter and the related course work, they will understand the need for proper assessment techniques when called to patients with a chief complaint of a medical nature.

### **Medicine**

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

### **Medical Overview**

Assessment and management of a

- Medical complaint (pp 605–613)

Pathophysiology, assessment, and management of medical complaints to include:

- Transport mode (pp 611–613) • Destination decisions (p

613)

### **Infectious Diseases**

Awareness of

- A patient who may have an infectious disease (pp 613–621)

Assessment and management of

- A patient who may have an infectious disease (pp 613–621)

### **Knowledge Objectives**

1. Differentiate between medical emergencies and trauma emergencies, remembering that some patients may have both. (p 605)
2. Name the various categories of common medical emergencies and give examples. (pp 605–605)
3. Describe the evaluation of the nature of illness (NOI). (p 606)
4. Discuss the assessment of a patient with a medical emergency. (pp 605–611)
5. Explain the importance of transport time and destination selection for a medical patient. (pp 611–613)
6. Define infectious disease and communicable disease. (p 613)
8. Discuss diseases of special concern and their routes of transmission, including influenza,

herpes simplex, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), hepatitis, meningitis, tuberculosis, whooping cough, methicillin resistant *Staphylococcus aureus* (MRSA), Middle East respiratory syndrome coronavirus (MERS-CoV), 2019 novel coronavirus (2019-nCoV), and Ebola. (pp 614–620)

## Skills Objectives

There are no skills objectives for this chapter.

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 15, and all related presentation support materials.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation

- Direct students to visit Navigate.
- **Content connections:** Chapter 2, “Workforce Safety and Wellness,” discusses the routes of transmission and standard precautions that responders need to take to reduce risk and increase prevention of infectious and communicable diseases. Chapter 15, “Medical Overview,” discusses the management, awareness, and assessment of a patient who may have a communicable or infectious disease. Chapter 37, “Transport Operations,” discusses decontamination techniques for transport.

# Chapter 16

## Respiratory Emergencies

### Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of respiratory emergencies in infant, child, and adult populations. Students should be able to demonstrate a fundamental comprehension on the following topics: respiratory anatomy and physiology, pathophysiology, signs and symptoms of various respiratory etiologies (eg. asthma, COPD, pneumonia), and the assessment and management necessary to provide basic care in the prehospital setting.

## **Medicine**

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

### **Respiratory**

Anatomy, signs, symptoms, and management of respiratory emergencies, including those that affect the

- Upper airway (pp 628–638, 656–662)
- Lower airway (pp 628–638, 656–662)

### **Anatomy, physiology, pathophysiology, assessment, and management of**

- Epiglottitis (pp 635, 647–656, 662)
- Spontaneous pneumothorax (pp 644, 648–656, 664)
- Pulmonary edema (pp 638–639, 647–656, 662–663)
- Asthma (pp 642–643, 648–656, 663–664)
- Chronic obstructive pulmonary disease (pp 639–641, 648–656, 663)
- Environmental/industrial exposure (pp 647–656, 665)
- Toxic gas (pp 647–656, 665)
- Pertussis (pp 636–637, 648–656)
- Cystic fibrosis (pp 648–656, 666–667)
- Pulmonary embolism (pp 645–646, 664)
- Pneumonia (pp 636, 647–656, 662)
- Viral respiratory infections (pp 634–637, 648–656, 662)

## **Knowledge Objectives**

1. List the structures and functions of the upper and lower airways, lungs, and accessory structures of the respiratory system. (pp 628–629)
2. Explain the physiology of respiration; include the signs of normal breathing. (pp 629–631)
3. Discuss the pathophysiology of respiration, including examples of the common signs and symptoms a patient with inadequate breathing may present with in an emergency situation. (pp 631–633)
4. Explain the special patient assessment and care considerations that are required for geriatric patients who are experiencing respiratory distress. (pp 633, 636–637, 665–667)

5. Describe different respiratory conditions that cause dyspnea, including their causes, assessment findings and symptoms, complications, and specific prehospital management and transport decisions. (pp 633–634, 656–667)
6. List the characteristics of infectious diseases that are frequently associated with dyspnea. (pp 634–638)
7. Discuss some pandemic considerations related to the spread of influenza type A and coronavirus and strategies EMTs should employ to protect themselves from infection during a possible crisis situation. (pp 634, 637)
8. Explain the special patient assessment and care considerations that are required for pediatric patients who are experiencing respiratory distress. (pp 634–638, 642, 662–667)
9. Describe the assessment of a patient who is in respiratory distress and the relationship of the assessment findings to patient management and transport decisions. (pp 648–655)
10. Describe the primary emergency medical care of a person who is in respiratory distress. (pp 648–651, 656–662)
11. List five different types of adventitious breath sounds, their signs and symptoms, and the disease process associated with each one. (p 651)
12. State the generic name, medication forms, dose, administration, indications, actions, and contraindications for medications that are administered via metered-dose inhalers (MDIs) and small-volume nebulizers. (pp 656–662)

## Skills Objectives

1. Demonstrate the process of history taking to obtain more information related to a patient's chief complaint based on a case scenario. (pp 651–653)
2. Demonstrate how to use the OPQRST assessment to obtain more specific information about a patient's breathing problem. (p 653)
3. Demonstrate how to use the PASTE assessment to obtain more specific information about a patient's breathing problem. (p 653)
4. Demonstrate how to assist a patient with the administration of a metered-dose inhaler. (pp 659–660, Skill Drill 16-1)
5. Demonstrate how to assist a patient with the administration of a small-volume nebulizer. (pp 659–662, Skill Drill 16-2)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 16, and all related presentation support

materials.

- Review local agency protocols for EMT airway management, particularly those regarding the support and management of respiratory diseases, assistance with administration of oxygen and MDIs, and how the EMT provider will support the ALS provider in the prehospital setting.

- 
- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation
  - Skill Drill PowerPoint Presentations
    - Skill Drill 16-1, Assisting a Patient With a Metered-Dose Inhaler PowerPoint presentation
    - Skill Drill 16-2, Assisting a Patient With a Small-Volume Nebulizer PowerPoint presentation
  - Equipment needed to perform the psychomotor skills presented in this chapter.
  - Skill Evaluation Sheets
    - Skill Drill 16-1, Assisting a Patient With a Metered-Dose Inhaler
    - Skill Drill 16-2, Assisting a Patient With a Small-Volume Nebulizer

## Chapter 17

### Cardiovascular Emergencies

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#### Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of the anatomy and physiology of the cardiovascular system; cardiovascular emergencies; the pathophysiology of respiration and perfusion; signs and symptoms of the most common cardiac conditions; the indications, contraindications, and use of automated external defibrillators (AEDs); and the general care of a patient experiencing a cardiac emergency. The student should also be able to apply this fundamental knowledge to patient assessment and management during in-classroom scenarios.

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#### Pathophysiology

Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.

#### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

## Cardiovascular

Anatomy, signs, symptoms, and management of

- Chest pain (pp 677–716)
- Cardiac arrest (pp 677–688, 705–716)

Anatomy, physiology, pathophysiology, assessment, and management of

- Acute coronary syndrome (pp 677–688, 692–716)
  - Angina pectoris (pp 677–686, 692–702)
  - Myocardial infarction (pp 677–688, 705–716)
- Aortic aneurysm/dissection (pp 677–684, 692–702)
- Thromboembolism (pp 677–685, 688–702)
- Heart failure (pp 677–684, 688–702)
- Hypertensive emergencies (pp 677–684, 692–702)

1. Discuss the basic anatomy and physiology of the cardiovascular system. (pp 677–684)
2. Discuss the pathophysiology of the cardiovascular system. (pp 684–692)
3. Describe the anatomy, physiology, pathophysiology, assessment, and management of thromboembolism. (pp 684–688)
4. Describe the anatomy, physiology, pathophysiology, assessment, and management of angina pectoris. (pp 685–686)
5. Describe the anatomy, physiology, pathophysiology, assessment, and management of myocardial infarction. (pp 686–688)
6. Describe the anatomy, signs and symptoms, and management of hypertensive emergencies. (pp 690–692)
7. Describe the anatomy, physiology, pathophysiology, assessment, and management of aortic aneurysm/dissection. (p 691)
8. Explain patient assessment for patients with cardiovascular problems. (pp 692–696)
9. Explain the relationship between airway management and the patient with cardiac compromise. (pp 692–693)
10. Give the indications and contraindications for the use of aspirin and nitroglycerin. (pp 697–699)



11. Recognize that many patients will have had cardiac surgery and may have implanted pacemakers or defibrillators. (pp 703–704)
12. Define cardiac arrest. (p 705)
13. Compare the difference between the fully automated and the semiautomated defibrillator. (pp 705–707)
14. Describe the different types of AEDs. (pp 705–707)
15. Explain the use of remote adhesive defibrillator pads. (p 706)
16. Recognize that not all patients in cardiac arrest require an electric shock. (p 707)
17. List the indications and contraindications for use of an AED. (pp 707–708)
18. Discuss the reasons for early defibrillation. (p 707)
19. Explain the circumstances that may result in inappropriate shocks from an AED. (p 708)
20. Explain the reason not to touch the patient, such as by delivering CPR, while the AED is analyzing the heart rhythm and delivering shocks. (pp 708, 710)
21. Describe AED maintenance procedures. (pp 708–710)
22. Explain the relationship of age to energy delivery. (p 708)
23. Explain the role played by medical direction in the use of AEDs. (p 710)
24. Discuss the importance of practice and continuing education with the AED. (p 710)
25. Explain the need for a case review of each incident in which an AED is used. (p 710)
26. List quality improvement goals relating to AEDs. (p 710)
27. Discuss the procedures to follow for standard operation of the various types of AEDs. (pp 710–714)
28. Describe the emergency medical care for the patient with cardiac arrest. (pp 710–714)
29. Describe the components of care following AED shocks. (p 714)
30. Explain criteria for transport of the patient for advanced life support (ALS) following CPR and defibrillation. (pp 714–715)
31. Discuss the importance of coordinating with ALS personnel. (pp 715–716)

## **Skills Objectives**

1. Demonstrate the steps to take in the assessment of a patient with chest pain or discomfort. (pp 692–696)

2. Demonstrate how to provide emergency medical care for a patient with chest pain or discomfort. (pp 696–697)
3. Demonstrate how to administer nitroglycerin. (pp 697–699, Skill Drill 17-1)
4. Demonstrate how to attach a cardiac monitor to obtain an ECG. (pp 700–702, Skill Drill 17-2)
5. Demonstrate how to perform maintenance of an AED. (pp 708–710)
6. Demonstrate how to perform CPR. (pp 711, 713–714)
7. Demonstrate the use of an AED. (pp 711–714, Skill Drill 17-3)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 17, and all related presentation support materials.

- Review local agency protocols for EMT cardiovascular emergencies
- Review local protocols pertaining to AED training and authorization, algorithms for AED use, and approved equipment.

### **Support Materials**

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Skill Drill PowerPoint presentations
  - Skill Drill 17-1, Administration of Nitroglycerin PowerPoint presentation
  - Skill Drill 17-2, Performing Cardiac Monitoring PowerPoint presentation
  - Skill Drill 17-3, AED and CPR PowerPoint presentation
- Equipment needed to perform the psychomotor skills presented in this chapter.
- A website providing audio samples of basic heart sounds • Skill Evaluation Sheets
  - Skill Drill 17-1, Administration of Nitroglycerin
  - Skill Drill 17-2, Performing Cardiac Monitoring
  - Skill Drill 17-3, AED and CPR

## **Chapter 18**

### **Neurologic Emergencies**

#### **Unit Summary**

After students complete this chapter presentation and the related course work, they will

understand the significance and characteristics of the following: anatomy and physiology of the nervous system, common disease processes (strokes, seizures, headaches, and altered mental status), assessment and basic care management involving patients with neurologic emergencies (including performing tests for speech, facial movement, and arm movement), and assistance of the ALS provider in managing these neurologic emergencies.

## **National EMS Education Standard Competencies**

### **Medicine**

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

### **Neurology**

Anatomy, presentations, and management of

- Decreased level of responsiveness (pp 724–725, 735–737, 749)
- Seizure (pp 724–725, 732–735, 748–749)
- Stroke (pp 724–725, 727–731, 747–748)

### **Anatomy, physiology, pathophysiology, assessment, and management of**

- Stroke/transient ischemic attack (pp 724–731, 737–747)
- Seizure (pp 724–725, 737–744, 748–749)
- Status epilepticus (pp 724–725, 737–745, 748–749)
- Headache (pp 724–727, 737–741, 744–747)

## **Knowledge Objectives**

1. Describe the anatomy and physiology and functions of the brain and spinal cord. (pp 724–726)
2. Discuss the different types of headaches, the possible causes of each, and how to distinguish a harmless headache from a potentially life-threatening condition. (pp 726–727)
3. Explain the various ways blood flow to the brain may be interrupted and cause a cerebrovascular accident. (pp 727–728)
4. Discuss the causes, similarities, and differences of an ischemic stroke, hemorrhagic stroke, and transient ischemic attack. (pp 728–730)
5. List the general signs and symptoms of stroke and how those symptoms manifest if the left hemisphere of the brain is affected and if the right hemisphere of the brain is affected. (pp 730–731)
6. List three conditions with symptoms that mimic stroke and the assessment techniques EMTs may use to identify them. (p 731)

7. Define a generalized seizure, focal-onset seizure, and status epilepticus; include how they differ from each other and their effects on patients. (pp 732–733)
8. Describe how the different stages of a seizure are characterized. (p 733)
9. Discuss the importance for EMTs to recognize when a seizure is occurring or whether one has already occurred in a patient. (pp 734–735)
10. Explain the postictal state and the specific patient care interventions that may be necessary. (p 735)
11. Define altered mental status; include possible causes and the patient assessment considerations that apply to each. (pp 735–737, 749)
12. Discuss scene safety considerations when responding to a patient with a neurologic emergency. (pp 737–738)
13. Explain the special considerations required for pediatric patients who exhibit altered mental status. (p 737)
14. Explain the primary assessment of a patient who is experiencing a neurologic emergency and the necessary interventions that may be required to address all life threats. (pp 738–739)
15. Describe the process of history taking for a patient who is experiencing a neurologic emergency and how this process varies depending on the nature of the patient's illness. (pp 739–741)
16. Explain the secondary assessment of a patient who is experiencing a neurologic emergency. (pp 741–744)
17. Explain how to use stroke assessment tools to rapidly identify a stroke patient; include two commonly used tools. (pp 741–744)
18. Explain the concept of a stroke alert and the important timeframe for the most successful treatment outcome for a patient who is suspected of having a stroke. (pp 745–746)
19. List the key information EMTs must obtain and document for a stroke patient during assessment and reassessment. (pp 741–745)
20. Explain the care, treatment, and transport of patients who are experiencing headaches, stroke, seizure, and altered mental status. (pp 745–749)
21. Explain the special considerations required for geriatric patients who are experiencing a neurologic emergency. (p 747)

## Skills Objectives

1. Demonstrate how to use a stroke assessment tool such as the Cincinnati Prehospital Stroke Scale, 3-Item Stroke Severity Scale (LAG), or BE-FAST mnemonic to test a patient for

aphasia, facial weakness, and motor weakness. (pp 741–745)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 18, and all related presentation support materials.

- Review local agency protocols for EMTs regarding neurologic emergencies, particularly those regarding the support and management of neurologic diseases (TIA, CVA, seizures, etc), assistance with administration of oxygen, and how the EMT provider will support the ALS provider in the prehospital setting.
- Provide the EMT student with evidence-based research articles relating to various neurologic topics. This activity helps to validate the effectiveness and necessity of basic assessment tools such as those the EMT is learning to master during the training program.
- Review any pertinent local protocols, especially those related to hypoglycemia testing and to transport destinations for stroke patients to obtain the required intervention.

## Chapter 19

### Gastrointestinal and Urologic Emergencies

#### Unit Summary

Students who complete this chapter presentation and the related course work will understand the anatomy and physiology of the gastrointestinal, genitourinary, and renal systems. Students should be able to assess and manage various patient populations with numerous related gastrointestinal/genitourinary complaints, which include, but are not limited to, direct or referred abdominal pain, hypoglycemia, hyperglycemia, shock related to acute (medical versus trauma) or chronic gastrointestinal disorders, hemorrhage, peritonitis, and complications related to the renal system (renal dialysis).

#### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

#### **Abdominal and Gastrointestinal Disorders**

Anatomy, presentations, and management of shock associated with abdominal emergencies:

- Gastrointestinal bleeding (pp 756–757, 762, 766–768, 770–772)

Anatomy, physiology, pathophysiology, assessment, and management of

- Acute and chronic gastrointestinal hemorrhage (pp 756–757, 762, 766–770)

- Peritonitis (pp 756–760, 766–771)
- Ulcerative diseases (pp 756–757, 760–761, 766–770)

### **Genitourinary/Renal**

- Blood pressure assessment in hemodialysis patients (pp 771–772)

Anatomy, physiology, pathophysiology, assessment, and management of

- Complications related to
  - Renal dialysis (pp 764–765, 771–772)
  - Urinary catheter management (not insertion) (p 772)
- Kidney stones (pp 764–765)

1. Describe the basic anatomy and physiology of the gastrointestinal, genital, and urinary systems. (pp 756–758)
2. Define the term *acute abdomen*. (p 758)
3. Describe pathologic conditions of the gastrointestinal, genital, and urinary systems. (pp 758–766)
4. Explain the concept of referred pain. (p 760)
5. Describe other organ systems that can cause abdominal pain. (pp 759–760, 765–766)
6. Identify the signs and symptoms, and common causes, of an acute abdomen. (pp 760–64)
7. Describe the assessment and management of acute and chronic gastrointestinal hemorrhage, peritonitis, and ulcerative diseases. (pp 758–764, 766–770)
8. List the most common abdominal emergencies, with the most common locations of direct and referred pain. (p 760)
9. Describe the assessment of a patient with a gastrointestinal and urologic emergency. (pp 766–770)
10. Describe the procedures to follow in managing the patient with shock associated with abdominal emergencies. (p 767–768)
11. Describe the emergency medical care of the patient with gastrointestinal or urologic emergencies. (pp 770–772)
12. Explain the principles of kidney dialysis. (p 771–772)

### **Skills Objectives**

1. Demonstrate the assessment of a patient's abdomen. (pp 769–770)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 19, and all related presentation support materials.

- Provide students with evidence-based research articles relating to various gastrointestinal/genitourinary topics. This activity helps to validate the effectiveness and necessity of the basic assessment tools that the EMT is learning to master during his or her training program.
- Review any pertinent local protocols, especially those related to assessment for suspected hypoglycemia/hyperglycemia, abdominal pain, and kidney stones, as well as the transport destinations for patients with medical or traumatic injuries involving the gastrointestinal/genitourinary system.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation

## Chapter 20

### Endocrine and Hematologic Emergencies

#### Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of diabetes, sickle cell disease, clotting disorders, and the complications associated with each. Students should be able to demonstrate knowledge of the characteristics of type 1 and type 2 diabetes. They should be able to list the appropriate steps for assessment and prehospital treatment of diabetic emergencies. Students should also be able to discuss hematologic emergencies and describe sickle cell disease, hemophilia, thrombophilia, and deep vein thrombosis.

#### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

#### **Endocrine Disorders**

Awareness that

- Diabetic emergencies cause altered mental status. (pp 780–781, 787–789, 790–792)

Anatomy, physiology, pathophysiology, assessment, and management of

- Acute diabetic emergencies (pp 778–793)

### **Hematology**

Anatomy, physiology, pathophysiology, assessment, and management of

- Sickle cell crisis (pp 793–797)
- Clotting disorders (pp 793–797)

1. Describe the anatomy and physiology of the endocrine system and its main function in the body. (pp 778–780)
2. Discuss the role of glucose as a major source of energy for the body and its relationship to insulin. (pp 778–780)
3. Define the terms *diabetes mellitus*, *hyperglycemia*, and *hypoglycemia*. (pp 780–781)
4. Describe the differences and similarities between hyperglycemic and hypoglycemic diabetic emergencies, including their onset, signs and symptoms, and management considerations. (pp 780–781)
5. Distinguish between the individual types of diabetes and how their onset and presentation are different. (pp 782–784)
6. Describe the interventions for providing emergency medical care to both a conscious and unconscious patient with an altered mental status and a history of diabetes who is having symptomatic hyperglycemia. (pp 784–785)
7. Describe the interventions for providing emergency medical care to both a conscious and unconscious patient with an altered mental status and a history of diabetes who is having symptomatic hypoglycemia. (pp 785–786)
8. Explain the process for assessing and managing the airway of a patient with an altered mental status, including ways to differentiate a hyperglycemic patient from a hypoglycemic patient. (pp 784–786, 792)
9. Explain some age-related considerations when managing a pediatric patient who is experiencing symptomatic hypoglycemia. (p 786)
10. Discuss the steps the EMT should follow when conducting a primary and secondary assessment of a patient with an altered mental status who is suspected of having diabetes. (pp 786–788)
11. Explain when it is appropriate to obtain medical direction when providing emergency medical care to a patient with diabetes. (pp 788–791)



12. Explain some age-related considerations when managing an older patient who has undiagnosed diabetes. (p 780)
13. Provide the forms, dose, administration, indications, and contraindications for giving oral glucose to a patient with a decreased level of consciousness who has a history of diabetes. (p 791)
14. Discuss the composition and functions of blood. (p 793)
15. Describe the pathophysiology of sickle cell disease, complications, and management of sickle cell disease. (pp 793–794, 797)
16. Describe two types of blood clotting disorders, and the risk factors, characteristics, and management of each. (pp 794–797)

## Skills Objectives

1. Demonstrate the assessment and care of a patient with hypoglycemia and a decreased level of consciousness. (pp 780–781, 786–793)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 20, and all related presentation support materials.

- Review local agency protocols for glucose administration and blood glucose testing in the field by the EMT.
- Provide the EMT student with evidence-based research articles relating to various endocrine and hematologic topics. This activity helps to validate the effectiveness and necessity of the basic endocrine and hematologic emergency management tools that EMTs are learning to master during their training program.
- Review local protocols pertaining to oral glucose administration in the prehospital environment.

## Chapter 21

### Allergy and Anaphylaxis

#### Unit Summary

After students complete this chapter and the related course work, they will understand the anatomy, physiology, and pathophysiology of hypersensitivity disorders and anaphylactic reactions. Additionally, students will have the knowledge and skills to recognize and manage hypersensitivity disorders and anaphylactic reactions.

## Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

## Immunology

Recognition and management of shock and difficulty breathing related to

- Anaphylactic reactions (pp 808–816)

Anatomy, physiology, pathophysiology, assessment, and management of

- Hypersensitivity disorders and/or emergencies (pp 804–816)
- Anaphylactic reactions (pp 804–816)

## Knowledge Objectives

1. Define the terms *allergic reaction* and *anaphylaxis*. (p 804)
2. Explain the difference between a local and a systemic response to allergens. (p 804)
3. List the five categories of stimuli that could cause an allergic reaction or an extreme allergic reaction. (p 806)
4. Differentiate the primary assessment for a patient with a systemic allergic or anaphylactic reaction and with a local reaction. (pp 808–809)
5. Explain the importance of managing the ABCs of a patient who is having an allergic reaction. (p 808)
6. Discuss the steps in the primary assessment that are specific to a patient who is having an allergic reaction. (pp 808–810)
7. Explain the factors involved when making a transport decision for a patient having an allergic reaction. (p 809)
8. Review the process for providing emergency medical care to a patient who is experiencing an allergic reaction. (pp 811–816)
9. Explain the rationale, including communication and documentation considerations, when determining whether to administer epinephrine to a patient who is having an allergic reaction. (pp 813–816)
10. Describe some age-related contraindications to using epinephrine to treat an allergic reaction in a geriatric patient. (p 816)

## Skills Objectives

1. Demonstrate how to remove the stinger from a honeybee sting and proper patient management following its removal. (pp 812–813)
2. Demonstrate how to use an EpiPen auto-injector. (pp 813–815, Skill Drill 21-1)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 21, and all related presentation support materials.

- Review local protocols regarding EMT assistance with epinephrine auto-injectors.

## Chapter 22

### Toxicology

#### Unit Summary

After students complete this chapter and the related course work, they will be familiar with the classes of compounds involved in substance abuse and poisonings; the routes by which poisons enter the body; and the signs, symptoms, assessment, and treatment for various poisoning emergencies.

#### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

#### Toxicology

Recognition and management of

- Carbon monoxide poisoning (pp 826–827)
- Nerve agent poisoning (pp 842–843)

How and when to contact a poison control center (p 826)

Anatomy, physiology, pathophysiology, assessment, and management of

- Inhaled poisons (pp 826–827, 830–833)
- Ingested poisons (pp 828–829, 830–833)
- Injected poisons (pp 829–833)
- Absorbed poisons (pp 827–828, 830–833)
- Alcohol intoxication and withdrawal (pp 834–836)

#### Knowledge Objectives

1. Define toxicology, poison, toxin, and overdose. (p 822)

2. Identify the common signs and symptoms of poisoning or toxic exposure. (pp 823–824)
3. Describe how poisons and toxins can enter the body. (pp 824–830)
4. Describe the assessment and treatment of a patient with a suspected poisoning or toxic exposure. (pp 830–846)
5. Describe the assessment and treatment of the patient with a suspected overdose. (pp 830–843)
6. Discuss scene safety considerations for working at a scene with a potentially hazardous material or violent patient. (p 830)
7. Understand the role of airway management in the patient suffering from poisoning or overdose. (pp 830–845)
8. Explain the use of activated charcoal, including indications, contraindications, and the need to obtain approval from medical control before administration. (pp 829–834)
9. Identify the main types of toxins and poisons and their effects, including alcohol, opiates and opioids, sedative-hypnotic drugs, inhalants, hydrogen sulfide, sympathomimetics, synthetic cathinones, marijuana, hallucinogens, anticholinergic agents, and cholinergic agents. (pp 834–843)
10. Discuss how to manage a patient who has overdosed on an opioid or opiate and who has gone into cardiac or respiratory arrest. (pp 836–837)
11. Describe the assessment and treatment for the patient with suspected food poisoning. (pp 843–845)
12. Describe the assessment and treatment for the patient with suspected plant poisoning. (pp 846–847)

## Skills Objectives

1. Demonstrate how to assess and treat a patient with a suspected poisoning. (pp 830–833)
2. Demonstrate how to assess and treat a patient with a suspected overdose. (pp 831–833)
3. Demonstrate how to administer activated charcoal. (p 833–834)

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 22, and all related presentation support materials.

- Review local EMT treatment protocols for the emergency care of patients with poisoning and overdose. In particular, review local protocols for activated charcoal administration.

- Lecture PowerPoint presentation
- Case Study PowerPoint presentation
- Examples of various forms of unit doses of activated charcoal

## Chapter 23

### Behavioral Health Emergencies

#### Unit Summary

After students complete this chapter and the related course work, they will be able to recognize behaviors that pose a risk to the EMT, patient, or others and the basic principles of the mental health system. Additionally, students will have the knowledge and skills to successfully assess and manage patients suffering from a behavioral health emergency within the legal parameters of their scope of practice.

#### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

#### Psychiatric

Recognition of

- Behaviors that pose a risk to the EMT, patient, or others (pp 855–856, 862–863, 868–871)
- Basic principles of the mental health system (p 855)
- Assessment and management of
  - Acute psychosis (pp 857–863)
  - Suicidal/risk (pp 857–862, 869–871)
  - Agitated delirium (pp 857–864)

1. Discuss the myths and realities concerning behavioral health emergencies. (pp 854–855)
2. Discuss general factors that can cause alteration in a patient's behavior. (p 855)

3. Define a behavioral crisis. (p 855)
4. Recognize the magnitude of mental health disorders in society. (p 856)
5. Know the main principles of how the mental health care system functions. (p 855)
6. Know the two basic categories of diagnosis that a mental health professional will use. (p 857)
7. Explain special considerations for assessing and managing a behavioral crisis or behavioral health emergency. (pp 857–862)
8. Define acute psychosis. (p 862)
9. Define schizophrenia. (p 863)
10. Explain the care for a psychotic patient. (pp 862–863)
11. Define excited delirium and agitated delirium. (p 864)
12. Explain the care for a patient with excited delirium. (p 864)
13. Describe methods used to restrain patients. (pp 864–868)
14. Know the main principles of care for the agitated, violent, or uncooperative patient. (pp 868–869)
15. Explain how to recognize the behavior of a patient at risk of suicide, including the management of such a patient. (pp 869–871)
16. Recognize issues specific to posttraumatic stress disorder (PTSD) and the returning combat veteran. (pp 871–873)
17. Discuss the medical and legal aspects of managing a behavioral health emergency. (pp 873–874)

## Skills Objectives

1. Demonstrate the techniques used to mechanically restrain a patient. (pp 866–867, Skill Drill 23-1)

## Readings and Preparation

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 23, and all related presentation support materials.

- Review local protocols relating to treatment and transport of patients suffering from behavioral health emergencies and application of restraints.

## Support Materials

- Lecture PowerPoint presentation

- Case Study PowerPoint presentation
- Skill Drill PowerPoint presentation
  - Skill Drill 23-1, Restraining a Patient PowerPoint presentation
- Various soft restraints for examination and practice—one set per six students
- One ambulance stretcher per six students • Skill Evaluation Sheet
  - Skill Drill 23-1, Restraining a Patient

## Chapter 24

### Gynecologic Emergencies

#### Unit Summary

After students complete this chapter and the related course work, they will understand the anatomy and physiology, including the developmental changes during puberty and menopause, of the female reproductive system and identify and describe assessment and treatment for gynecologic emergencies. Special considerations and precautions that an EMT must observe when arriving at the scene of a suspected case of sexual assault or rape are also discussed.

#### National EMS Education Standard Competencies

##### Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

##### Gynecology

- Recognition and management of shock associated with
  - Vaginal bleeding (pp 885–889)
- Anatomy, physiology, assessment findings, and management of
  - Vaginal bleeding (pp 882–883, 885–889)
  - Sexual assault (to include appropriate emotional support) (pp 890–893)
  - Infections (pp 882–890)

1. Describe the anatomy and physiology of the female reproductive system; include the developmental changes that occur during puberty and menopause. (pp 882–883)

2. Discuss the special, age-related patient management considerations EMTs should provide for both younger and older female patients who are experiencing gynecologic emergencies. (p 883–884)
3. List three common examples of gynecologic emergencies; include the causes, risk factors, assessment findings, and patient management considerations. (pp 884–886)
4. Explain how an EMT would recognize conditions associated with hemorrhage during pregnancy. (p 885–886)
5. Discuss the assessment and management of a patient who is experiencing a gynecologic emergency; include a discussion of specific assessment findings. (pp 886–889)
6. Explain the general management of a gynecologic emergency in relation to patient privacy and communication. (pp 886–889)
7. Give examples of the personal protective equipment EMTs should use when treating patients with gynecologic emergencies. (p 889)
8. Discuss the special considerations and precautions EMTs must observe when arriving at the scene of a suspected case of sexual assault or rape. (pp 890–892)
9. Discuss the assessment and management of a patient who has been sexually assaulted or raped; include the additional steps EMTs must take on behalf of the patient. (pp 890–893)

## Skills Objectives

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There are no skills objectives for this chapter.

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Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured, Twelfth Edition***, Chapter 24, and all related presentation support materials.

- Access local protocols on the treatment of sexual assault patients.

- 
- Lecture PowerPoint presentation
  - Case Study PowerPoint presentation



## GENERAL EDUCATION OUTCOMES:

This course fulfills the following General Education Outcomes: Communication Skills, Critical Thinking, and Self & Professional Development. Upon completion of this course, the student will be able to:

Communicate effectively.

Use effective listening skills to be able to respond appropriately.

Artifact: EMS 104 Skills Evaluation

Think critically; Utilize inductive and /or deductive reasoning skills.

Devising a reasonable plan for resolving a problem / issue

Artifact: EMS 104 Skills Evaluation

Self and professional development. Respond appropriately to challenging situations.

Artifact: EMS 104 Skills Evaluation

## Part III: Grading and Assessment

### EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS\*:

Students' performance will be assessed, and the weight associated with the various measures/artifacts are listed below.

#### EVALUATION\*

Module Tests	45%
Cumulative Test (Mid-Term & Final)	15%
Chapter Quizzes	20%
<u>EMS Testing Unit Exams</u>	<u>20%</u>
	100%

***\*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

### GRADING SYSTEM:

In accordance with South Carolina's Department of Health and Environmental Control, Horry Georgetown Technical College's EMS program will adhere to the following grading schedule  
A = 100 – 90, B = 89- 80, C = 79 – 75, D = 75 – 60, F = 59 and below.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor

about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

## Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll.

**In accordance with South Carolina Department of Health and Environmental Control – Division of EMS a student may miss 10% of the total classroom hours for any reason.** Under *extenuating circumstances*, the program coordinator MAY allow the student to miss **up to a total** of 20% of the total classroom hours.

The student is responsible for documenting in writing, to the program coordinator's satisfaction, the extenuating circumstances. The program coordinator is under NO obligation to accept the student's documentation or extend the student the additional 10% in allotted absences.

The student should also understand that arriving to class late or leaving class early counts towards the allotted hours of time missed.

Once the student exceeds the hours of absences, the student will be terminated from the course and will not be eligible to attempt the National Registry examination.

Students withdrawn from a course due to excessive absences will receive a grade of Withdraw ("W") up to the 2/3 point of the semester. Thereafter, a Withdraw ("W") or Withdraw Failing ("WF") will be assigned dependent upon his/her academic status at the time of last date attended.

Attendance records begin on the first day of class for both new and returning students,

regardless of when he/she registers during the five-day registration and add/drop period at the beginning of each term.

Students are responsible for all course work and class assignments; therefore, they are expected to regularly and promptly attend each meeting of classes for which they are enrolled. Students should limit absences to those that are unavoidable and, with the professor's consent, should make up all work missed.

Unannounced quizzes will *not* be made up and late homework will *not* be accepted. Two consecutive absences will result in a student/advisor conference.

Making up the class – missed work should not be construed as attendance. Attendance cannot be “made up” with work.

Tardiness should always be avoided. Three tardies will count as one absence.

### **Lab Attendance Requirements**

The lab class attendance is included in the above attendance policy. Your attendance in lab class will be combined with the lecture section for the **10%** of allowed total absences. Students may not miss more than **4.5** total lab hours for the entire semester. Those 4.5 hours count toward the cumulative total of **13.5 hours** allowed to be missed.

**Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

## **Part V: Student Resources**



### **THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):**

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at [ssc@hgtc.edu](mailto:ssc@hgtc.edu) or self-schedule in the Penji iOS/Android app or at [www.penjiapp.com](http://www.penjiapp.com). Email [ssc@hgtc.edu](mailto:ssc@hgtc.edu) or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



### STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

1. **Getting around HGTC:** General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.



### HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the [Library](#) website for more information or call (843) 349-5268.

### STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L.
- Test administered in writing on paper.
- Test administered through Publisher Platforms (which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our

online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

### **DISABILITY SERVICES:**

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability Services staff will review documentation of the student's disability and, in a confidential setting with the student, engage in an interactive process to develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided. Students will need to reach out to the Accessibility and Disability Services staff each semester to renew their accommodations.

### **COUNSELING SERVICES:**

HGTC Counseling Services strives to optimize student success through managing personal and academic concerns that may interfere with achieving educational goals. Staff are available to every student for assistance and guidance on personal matters, academic concerns and other areas of concern. HGTC offers free in-person and telehealth counseling services to students. For more information about counseling services, please reach out to [counseling@hgtc.edu](mailto:counseling@hgtc.edu) or visit the website the [Counseling Services webpage](#).

### **STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:**

Horry-Georgetown Technical College shall not discriminate in employment or personnel decisions or in student admissions or in student decisions, or in all other segments of the College community on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation, in the educational programs and activities which it operates, and the college is prohibited from discrimination in such manner by applicable laws. Practices and requirements for nondiscrimination extend to the enrollment of students in programs and activities of the College and employment by the College.

All inquiries regarding the federal laws as they relate to discrimination on the basis of sex may be directed to Tamatha Sells, Title IX Coordinator, Horry-Georgetown Technical College, Building 1100C, Room 107B, 2050 Hwy 501 E, PO Box 261966, Conway,

SC 29528-6066, 843-349-5218, [tamatha.sells@hgtc.edu](mailto:tamatha.sells@hgtc.edu) or to the US Department of Education Office of Civil Rights. (Telephone: 800-421-3481/Email: [OCR@ed.gov](mailto:OCR@ed.gov)).

Other employee and applicant inquiries concerning the federal laws and their application to the College may be directed to Jacquelyne Snyder, Vice President, Human Resources and Employee Relations & the College's Affirmative Action/Equal Opportunity Officer, Horry-Georgetown Technical College, Building 200C, Room 205B, 2050 Hwy 501 E, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, [jacquelyne.snyder@hgtc.edu](mailto:jacquelyne.snyder@hgtc.edu).

Other student and prospective student inquiries concerning the federal laws and their application to the College or any student decision may be directed to Dr. Melissa Batten, Vice President, Student Affairs, Section 504 & Title II Coordinator Horry-Georgetown Technical College, Building 1100C, Room 107A, 2050 Hwy 501 E, PO Box 261966, Conway, SC 29528-6066, 843-349-5228, [melissa.batten@hgtc.edu](mailto:melissa.batten@hgtc.edu).

### **TITLE IX REQUIREMENTS:**

Title IX of the Education Amendments of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination.

HGTC prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking and will provide students, faculty, and staff with necessary information regarding prevention, policies, procedures, and resources.

Any student, or other member of the college community, who believes that they have been a victim of sexual harassment, domestic violence, dating violence, sexual assault, or stalking may file a report with the college's Title IX Coordinator or campus law enforcement\*.

\*Faculty and Staff are required to report these incidents to the Title IX Coordinator when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

For more information, contact Tamatha Sells, Title IX Coordinator, Conway Campus, Building 1100C, Room 107B, 843-349-5218, [tamatha.sells@hgtc.edu](mailto:tamatha.sells@hgtc.edu).

### **PREGNANCY ACCOMMODATIONS**

Under Title IX, colleges must not exclude a pregnant student from participating in any part of an educational program. Horry-Georgetown Technical College is committed to ensuring that pregnant students receive reasonable accommodations to ensure access to our educational programs.

Students should advise the Title IX Coordinator of a potential need for accommodations as soon as they know they are pregnant. It is extremely important that communication between student, instructors, and the Title IX Coordinator begin as soon as possible. Each situation is unique and will be addressed individually.

Title IX accommodations DO NOT apply to Financial Aid. Financial Aid regulations do not give the College any discretion in terms of Financial Aid eligibility.

Certain educational programs may have strict certification requirements or requirements mandated by outside regulatory agencies. Therefore, in some programs, the application of Title IX accommodations may be limited.

To request pregnancy accommodations, please complete the [\*\*Pregnancy Intake Form\*\*](#).