

OVERVIEW:

Each chapter in the AAOS 10th edition includes an introduction that includes some key points that will be covered within the chapter. Additionally, each chapter includes a "You are the Provider" case scenario broken up into sections, reinforcing the information that is covered in the chapter. The various chapter scenarios allow the student to begin engaging in the critical thinking process from the onset of the textbook and demonstrate the relevance of the information provided. Each chapter also includes information pop-outs such as "Special Populations," "Words of Wisdom," and "Safety" that highlights important information. Every chapter concludes with an "Assessment in Action" that provides a scenario to the student and reviews the information learned in the chapter.

SECTION 1: PREPARATORY

Chapter 1 EMS Systems (Brady 11e Chp. 1)

Pages 4 – 31 (Brady 4 – 19)

This chapter introduces emergency medical technician (EMT) students to the four levels of prehospital certification, an overview of the training requirements for each level of training, and a synopsis of the skills and care each level is allowed to provide to the patient. Also covered in chapter one is the history of emergency medical services (EMS), the components of the EMS system, and the roles and responsibilities of being an EMT.

Chapter 2 Workforce Safety and Wellness (Brady 11e Chp.2)

Pages 32 – 77 (Brady 20 – 46)

This chapter introduces students to the concepts of safety and well-being that will allow the student to have a long career in EMS. The various types of personal protective equipment (PPE) are introduced to the student, as are the routes of transmission. The types of stress and proper stress management are discussed in-depth, examples of stressful situations are provided. Workplace issues such as diversity, sexual harassment, substance abuse, and are also included in this chapter. "Skill Drills" are introduced in this chapter and are featured in subsequent chapters allowing students to practice newly learned skills.

Chapter 3 Medical, Legal, and Ethical Issues (Brady 11e Chp.3)

Pages 78 – 105 (Brady 47 – 64)

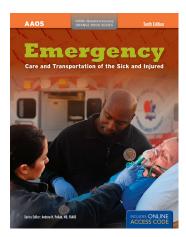
Students are introduced to important legal considerations such as confidentiality, consent, duty to act, and scope of practice. This chapter also includes information on advanced directives and the EMT's ethical responsibilities, and both presumptive and the conclusive signs of death. Students are also taken through the phases of the legal process.

Chapter 4 Communications and Documentation (Brady 11e Chp.13 & Chp. 14)

Pages 106 – 141 (Brady 318 – 351)

Verbal, nonverbal, and written communication is discussed in this chapter and the potential problems that EMT's can encounter when interacting with various age groups and physical impairments. Recommendations for accommodating the patients communication style are broken down by category. A solid foundation in written communication is established including patient care reports and special situations. An overview of radio equipment and the essentials of radio communications are provided.





Chapter 5 The Human Body (Brady 11e Chp.4)

Pages 142 – 199 (Brady 65 – 103)

An all-encompassing look at anatomy and physiology is provided in this chapter. Students are introduced to topographic anatomy and directional terms. As the chapter moves into the structures and functions of the human body and the information is provided in a manner that builds from the inside out. Students begin with the skeletal system and move through each system in a manner that is easy for students without a background in anatomy and physiology to understand. Each body system is accompanied by highly detailed diagrams that are well placed for quick reference.

Chapter 6 Life Span Development (Brady 11e Chp. N/A)

Pages 200 – 377

This chapter is an exploration of the physical and psychosocial changes that occur as humans move through each phase of life beginning with infancy and progressing through late adulthood. Within each phase of development both the physical and psychosocial changes are discussed to better prepare the EMT student to interact with each age group. A significant amount of information is provided regarding the changes that "Late Adults" experience.

SECTION 2: PHARMACOLOGY

Chapter 7 Principles of Pharmacology (Brady 11e Chp. 15)

Pages 220 – 247 (Brady 354 – 366)

In this chapter students are presented with pharmacology and pharmacodynamics. The information within this chapter goes beyond the EMT level to begin exposing students to advanced level certification skills and knowledge. All routes of administration are discussed within this chapter as are the medications that the EMT is responsible for assisting with and/ or administering. Students are introduced to the medications that the EMT is responsible for either assisting with or administering.

SECTION 3: PATIENT ASSESSMENT

Chapter 8 Patient Assessment (Brady 11e Chapters 7-12)

Pages 250 – 315 (Brady 188 – 317)

This chapter is a detailed look at the most complex skill EMT students must learn to master. Following the new National EMS Education standards AAOS has reintroduced the primary and secondary assessment. The information is presented in a chunking manner, breaking down each section of the assessment to elaborate on the various phases of the patient assessment and the expectations of each phase. The importance of conducting an organized and thorough assessment is the key theme of the chapter.

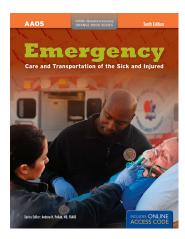
SECTION 4: AIRWAY

Chapter 9 Airway Management (Brady 11e Chp. 6)

Pages 318 – 377 (Brady 134 – 187)

Airway is the cornerstone of high-quality patient care. Students are taken through an in-depth review of anatomy and the physiology of breathing to ensure a clear understanding of airway management. Information in this chapter includes basic airway adjuncts, oxygen delivery devices, and special airway considerations. Continuous Positive Airway Pressure (CPAP) is also introduced and a significant amount of information is provided to ensure the student has a complete understanding of the indications, contraindications, and complications the EMT may encounter.





SECTION 5: SHOCK AND RESUSCITATION

Chapter 10 Shock (Brady 11e Chp. 26)

Pages 380 – 411 (Brady 631 – 641)

The shock chapter is a new breakout chapter that provides a detailed look at the causes, pathophysiology of the four categories of shock. Students are introduced to the concept of acid/base balance and the importance of providing oxygen therapy then treating a patient suffering from hypoperfusion. Each category of shock is broken down into the types of shock that make up each category and their causes and treatments, which is reviewed at the conclusion of the chapter in the form of an "Assessment and Emergency Care of Shock" algorithm.

Chapter 11 BLS Resuscitation (Brady 11e App. B)

Pages 380 – 411 (Brady 1080 – 1096)

This is an all-encompassing review of BLS and Cardio-pulmonary resuscitation with an emphasis on proper techniques. This chapter meets the 2005 American Heart Association (AHA) guidelines.

SECTION 6: MEDICAL

Chapter 12 Medical Overview (Brady 11e Chp. 11)

Pages 452 - 473 (Brady 289 - 305)

This chapter takes a global look at the patient assessment process as it pertains to medical patients. Also included in this chapter are common communicable diseases that the EMT may encounter while providing patient care which reinforces the importance of body substance isolation (BSI).

Chapter 13 Respiratory Emergencies (Brady 11e Chp. 16)

Pages 474 – 523 (Brady 367 – 388)

Respiratory emergencies are a common patient complaint, and this chapter takes a comprehensive look at the disease processes affecting the respiratory system, such as chronic obstructive pulmonary disease (COPD), asthma, spontaneous pneumothorax, and pulmonary embolism.

Chapter 14 Cardiovascular Emergencies (Brady 11e Chp. 17)

Pages 524 – 565 (Brady 389 – 429)

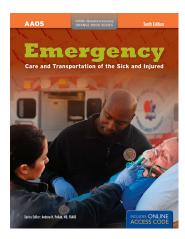
According to the AHA, cardiovascular disease has been the leading killer in the United States since 1900. This chapter reinforces the severity of cardiac emergencies and explores the most significant cardiac emergencies affecting Americans and the currently accepted prehospital treatments. The featured topics include atherosclerosis, acute coronary syndrome, congestive heart failure, and hypertensive emergencies.

Chapter 15 Neurologic Emergencies (Brady 11e Chp. 19)

Pages 566 – 597 (Brady 458 – 465)

There are vast arrays of disease processes that can cause neurologic impairment. Students are introduced to the various medical emergencies that can cause an altered mental status, their presenting signs and symptoms, and the differential diagnoses. Also included in this chapter is an in-depth look at strokes and seizures.





Chapter 16 Gastrointestinal and Urologic Emergencies (Brady 11e Chp. 18)

Pages 598 – 619 (Brady 430 – 446)

It can be challenging to determine the cause of a patients abdominal emergency, and this chapter focuses on providing the students with the information necessary to recognize the signs and symptoms of a life-threatening emergency. This chapter discusses both emergent and non-emergent abdominal complaints to reinforce the mindset that it is unnecessary to determine the root cause of the pain, but rather the significant number of causes of abdominal pain.

Chapter 17 Endocrine and Hematologic Emergencies (Brady 11e Chp. 19 and N/A)

Pages 620 – 645 (Brady 447 – 457)

With increasing cases of diabetic-related health problems in the United States, it is important to take an in-depth look at the disease process and complications that can result from mismanagement. Also included in this chapter is a new section dedicated blood-related illnesses, specifically sickle cell disease, thrombophilia, and hemophilia.

Chapter 18 Immunologic Emergencies (Brady 11e Chp. 20)

Pages 646 – 667 (Brady 473 – 488)

The causes of and the ability to correctly identify the signs and symptoms of an allergic reaction is thoroughly discussed in this chapter.

Chapter 19 Toxicology (Brady 11e Chp. 21)

Pages 668 – 699 (Brady 489 – 515)

This chapter takes an ample look at common toxicological emergencies that the EMT may encounter, the pathophysiology of each, and the four routes poisons are introduced into the body. Some of the toxicological emergencies discussed include recreational drugs, such as alcohol, opioids, and hallucinogenics.

Chapter 20 Psychiatric Emergencies (Brady 11e Chp. 23)

Pages 700 – 723 (Brady 547 – 561)

There are many causes of psychiatric illness; information is provided on both organic and functional causes. Also included are the legal considerations when dealing with a psychiatric patient, guidelines for patient restraint, and the risk factors of a potentially violent patient.

Chapter 21 Gynecologic Emergencies (Brady 11e Chp. 24)

Pages 724 – 743 (Brady 593 – 595)

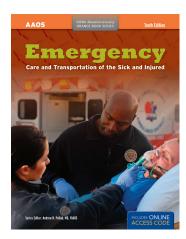
A detailed review of female anatomy is provided to the student, but the primary focus of this chapter is to prepare EMT students to interact with victims of sexual assault and the preservation of evidence.

SECTION 7: TRAUMA

Chapter 22 Trauma Overview (Brady 11e N/A)

Students are introduced to Newton's Laws and how they relate to the trauma patient, blunt and penetrating trauma, blast injuries, and multisystem trauma. The importance of minimal scene time, appropriate transport method, and selecting the appropriate trauma center are incorporated. There are numerous high-quality pictures both artistic interpretations and real-life traumatic injuries.





Chapter 23 Bleeding (Brady 11e Chp. 26)

Pages 776 – 803 (Brady 614 – 630)

The primary focus of this chapter is the importance of early recognition and treatment of both external and internal bleeding.

Chapter 24 Soft-Tissue Injuries (Brady 11e Chp. 27)

Pages 804 – 849 (Brady 642 – 692)

The primary focus of this chapter is the recognition and treatment of various types of injuries including lacerations, eviscerations, impaled object and bites. A large portion of this chapter is dedicated to burn injuries. The text provides a large amount of information on the classification, determining the extent of the burn, and the five types of burn injuries and appropriate treatments of each.

Chapter 25 Face and Neck Injuries (Brady 11e Chp. 29)

Pages 850 – 885 (Brady 757 – 765)

A detailed review of the anatomy of the eyes and face along with the treatment of injuries involving these areas, this chapter is accompanied by numerous high-quality photographs of traumatic injuries. A large portion of this chapter is dedicated to eye injuries, such as impaled objects, burns, lacerations, and blunt trauma.

Chapter 26 Head and Spine Injuries (Brady 11e Chp. 29)

Pages 886 – 934 (Brady 747 – 791)

A review of the anatomy and physiology of the nervous system and the skeletal system is provided for the student. Also provided is an all-encompassing look at the types of head injuries ranging from scalp lacerations to traumatic brain injury (TBI) and the causes of intracranial pressure. The importance of proper spinal immobilization and the various methods of immobilizing patients are introduced to the student.

Chapter 27 Chest Injuries (Brady 11e N/A)

Pages 934 - 965

Chest injuries are a common in trauma patients and there are a vast number of potentially life-threatening injuries the EMT can encounter. Students are taken through a thorough review of the anatomy of the chest and the mechanics of ventilation to ensure the EMT student has a complete understanding of the importance of early recognition of a significant injury. The injuries included in this chapter range from rib fractures to pneumothorax to cardiac tamponade.

Chapter 28 Abdominal and Genitourinary Injuries (Brady 11e Chp. 27)

Pages 966 – 999 (Brady 668 – 670)

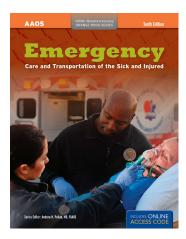
Just as in Chapter 16, Gastrointestinal and Urologic Emergencies, students are encouraged to focus on the early recognition of the signs and symptoms of life-threatening injuries rather than identifying the specific organ injured.

Chapter 29 Orthopedic Injuries (Brady 11e Chp. 28)

Pages 1000 - 1059 (Brady 693 - 746)

Students are introduced to the fundamentals of splinting and this chapter provides numerous "Skill Drills" demonstrating the applications of numerous types of commercial splints in a step-by-step format. Students are provided with a significant number of real life photos depicting the various types of orthopedic injuries that can be encountered by the EMT.





Chapter 30 Environmental Emergencies (Brady 11e Chp. 22)

Pages 1060 – 1103 (Brady 516 – 546)

Students explore both hypothermic and hyperthermia injuries and the contributing factors to these injuries. Students are provided with ample information on the different levels of injury for both hypothermic and hyperthermia and the appropriate treatments for each illness. Also covered in this section are diving emergencies, high altitude injuries, lightning strikes, and commonly encountered snakes and spiders.

SECTION 8: SPECIAL PATIENTS

Chapter 31 Obstetrics and Neonatal Injuries (Brady 11e Chp. 24)

Pages 1106 – 1145 (Brady 562 – 593)

Students are taken through a normal childbirth and the commonly encountered complications, such as preeclampsia, eclampsia, and gestational diabetes. While complicated births are rare, students will be thoroughly prepared for such an event. A detailed color-coded algorithm is included at the end of the chapter for easy reference by the student.

Chapter 32 Pediatric Emergencies (Brady 11e Chp. 31)

Pages 1146 – 1213 (Brady 806 – 863)

Pediatric patients present problems not seen in adult patients and therefore cannot be treated as such. This chapter elaborates on the information that was provided in Chapter 6, Life Span Development and explores the intricacies of each subset. Numerous "Skills Drills" are provided to allow the EMT student to practice treatments step-by-step. Students are also exposed to child abuse his or her responsibility in these instances.

Chapter 33 Geriatric Patients (Brady 11e Chp. 33)

Pages 1214 – 1259 (Brady 881 – 897)

This chapter examines the anatomical changes that the geriatric patient has gone through over time and delves into the necessary alterations that EMT's need to make when assessing these patients. This chapter concludes with the signs of elder abuse and neglect and the EMT's responsibility in these instances.

Chapter 34 Patients with Special Challenges (Brady 11e Chp. 32)

Pages 1260 - 1281

Because of the improvements in medications and technology a number of special needs patients can live outside of the hospital and extended care facility settings. A number of developmental disabilities are discussed as are common physical impairments and the special equipment that may be encountered by the EMT.

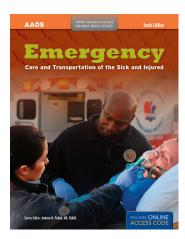
SECTION 9: EMS OPERATIONS

Chapter 35 Lifting and Moving Patients (Brady 11e Chp. 34)

Pages 1284 – 1329 (Brady 918 – 921)

An essential component of providing quality patient care is the ability to lift and move patients. This chapter stresses the importance of correct lifting techniques so that the EMT can have a long healthy career and ensure the safety of the patient. The various types of equipment used to facilitate patient movement are also included in this chapter, folding stretchers, scoop stretchers, and stair chairs.





Chapter 36 Transport Operations (Brady 11e Chp. 34)

Pages 1330 – 1365 (Brady 900 – 918)

A look at the equipment carried in an ambulance, the safe operation of ground ambulances, and a familiarization of air medical operations.

Chapter 37 Vehicle Extrication and Special Rescue (Brady 11e Chp. 36)

Pages 1366 – 1386 (Brady 963 – 994)

Students are exposed to the various aspects of special rescues including extrication, technical rescue, tactical support, and structure fires.

Chapter 38 Incident Management (Brady 11e Chp. 36)

Pages 1386 – 1425 (Brady 977 – 991)

The various sections of the incident command system and the components that make up each section are identified. Students are also introduced to hazardous materials with an emphasis on recognition.

Chapter 39 Terrorism Response and Disaster Management (Brady 11e Chp. 37)

Pages 1426 – 1459 (Brady 995 – 1028)

Students are introduced to both international and domestic terrorism so that they are prepared to recognize the indicators of a terrorist event. Students are also introduced to several types of weapons of mass destruction, including biological agents, chemical agents, and radiological dispersal devices.

SECTION 10 ALS TECHNIQUES

Chapter 40 ALS Assist (Brady 11e Appendix A)

Pages 1465 – 1505 (Brady 1069 – 1079)

To serve the patient the EMT should be familiar with the ALS techniques used by both the AEMT and Paramedic. Some of the skills and devices covered include endotracheal intubation, single lumen, multilumen airways, gastric tubes, and intravenous therapy.

