

What's **NEW** in Emergency Care and Transportation of the Sick and Injured TWELFTH EDITION

Overview

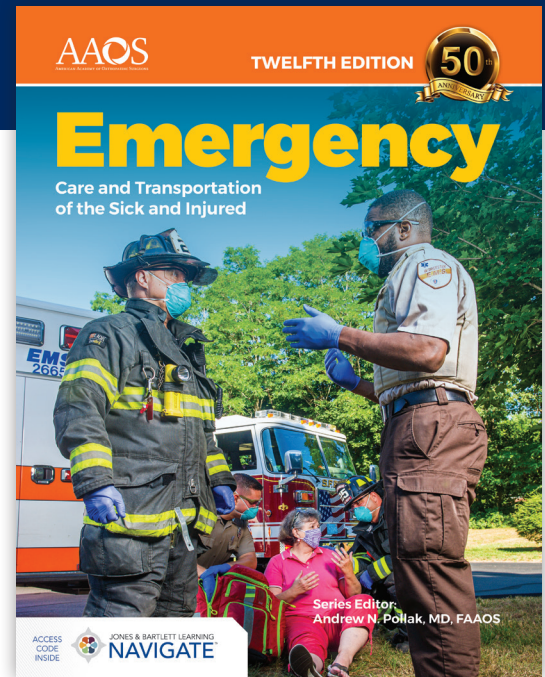
Since 1971, *Emergency Care and Transportation of the Sick and Injured* has advanced how EMS education is delivered in order to train exceptional EMS professionals around the globe. Fifty years later, the *Twelfth Edition* is now the most advanced EMT teaching and learning system ever developed.

Based on the National EMS Education Standards, *Emergency Care and Transportation of the Sick and Injured, Twelfth Edition* offers complete coverage of every competency statement, with clarity and precision, in a concise format that ensures student comprehension and inspires critical thinking. The *Twelfth Edition* content aligns with the scientific recommendations developed by the International Liaison Committee on Resuscitation (ILCOR) and is consistent with the CPR/ECC Guidelines as established by the AHA and other resuscitation councils around the world. Evidence-based medical concepts are incorporated to ensure that students and instructors have accurate, insightful interpretations of medical science as it applies to prehospital medicine today. The *Twelfth Edition* also includes updated coverage of PPE and CDC guidelines for safe patient care during the COVID-19 pandemic.

In this new edition, there is a stronger focus on career readiness and employability, including:

- Greater emphasis on soft skill development, including critical thinking, empathy, teamwork, interpersonal skills, and problem solving, and how critical these skills are for better patient outcomes.
- Enhanced content on provider mental health, wellness, and safety.
- Evolving patient case studies that deliver clinical education and help prepare students to care for patients in the field. The cases offer increased focus on EMS provider leadership and critical thinking skills.
- A new "Street Smarts" feature that helps bridge the gap between the classroom and field environment by addressing nontechnical skills that improve patient and co-worker interactions.

Additionally, the textbook design and layout have been revised to improve visualization of key content and overall readability.



The text is broken up into 9 sections for ease of learning:

Section	Chapters
1: Preparatory	1-9
2: Patient Assessment	10
3: Airway	11
4: Pharmacology	12
5: Shock and Resuscitation	13-14
6: Medical	15-24
7: Trauma	25-33
8: Special Patient Populations	34-37
9: EMS Operations	38-41

Chapter-by-Chapter Content Enhancements and Revisions

The following table provides a detailed breakdown on what's new and what's been changed in each chapter in the *Twelfth Edition*.

SECTION 1 Preparatory
<p>CHAPTER 1 EMS Systems</p> <p>Added the new NHTSA scope of practice model changes; Agenda 2050; NREMT Practice Analysis</p> <p>Revised and updated Table 1-3 per new scope and Agenda 2050</p> <p>Added discussion about education (degrees) in the profession</p>
<p>CHAPTER 2 Workforce Safety and Wellness</p> <p>Added information about Fatigue in EMS by Patterson</p> <p>Expanded coverage in the area of provider health, wellness, and safety</p> <p>Added information related to provider suicide and prevention</p> <p>Added information related to provider wellness and stress management (beyond just sleep and caffeine)</p> <p>Emphasized the importance of giving EMTs a voice so that they feel empowered to speak up as part of the team</p>
<p>CHAPTER 3 Medical, Legal, and Ethical Issues</p> <p>No major changes</p>
<p>CHAPTER 4 Communication and Documentation</p> <p>Added brief discussion about patient mobility status, especially during non-emergency transfer</p> <p>Updated to mention Health Data Exchanges (HDE) as a way of exchanging information with hospitals</p> <p>Added information about documenting medical necessity; added other documenting formats, such as SaCHART and DRAT</p> <p>Added information related to social and emotional intelligence</p>
<p>CHAPTER 5 Medical Terminology</p> <p>Added the following abbreviations: CN (cyanide); CPAP (continuous positive airway pressure); CT or CAT (computerized axial tomography); SG (supraglottic); PA (physician assistant); NP (nurse practitioner)</p> <p>Updated to include more medical terms</p> <p>Noted that medical abbreviations are not always standard, and many agencies are moving away from abbreviations; thus, Chapter 5 has been revised to focus more on medical terminology and the discussion of appropriate abbreviations has been reduced</p>
<p>CHAPTER 6 The Human Body</p> <p>Updated to include more anatomical vocabulary</p> <p>Added more in-depth coverage of pathophysiology to better prepare students</p> <p>More clearly linked the connections between physiology and disease throughout the chapter</p>
<p>CHAPTER 7 Life Span Development</p> <p>No major changes</p>

CHAPTER 8 Lifting and Moving Patients

Updated information related to lifting and moving equipment

- Incorporated coverage of the Binder lift; soft-stretcher; scoop (clamshell); smooth mover; and new stair chairs that assist with movement up stairs as well as down
- Included a more detailed discussion about how to approach lifting and moving in a way that decreases the risk of provider/patient injury
- Prefaced section on manual lifts with statements indicating that manual lifts should only be used when emergency conditions exist that preclude the use of proper lifting devices (e.g., soft stretcher) and the appropriate number of people are assisting
- Updated devices for moving patients to include motorized cots
- Updated discussions of current field practice in the use of backboards

Incorporated coverage of the Binder lift; soft-stretcher; scoop (clamshell); smooth mover; and new stair chairs that assist with movement up stairs as well as down

Included a more detailed discussion about how to approach lifting and moving in a way that decreases the risk of provider/patient injury

Prefaced section on manual lifts with statements indicating that manual lifts should only be used when emergency conditions exist that preclude the use of proper lifting devices (e.g., soft stretcher) and the appropriate number of people are assisting

Revised section on restraint

- Added discussion of proper packaging of the trauma patient, including the use of long spine boards being found to be more harmful than beneficial

Updated devices for moving patients to include motorized cots

Updated discussions of current field practice in the use of backboards

Added discussion of proper packaging of the trauma patient, including the use of long spine boards being found to be more harmful than beneficial for the patient

CHAPTER 9 The Team Approach to Health Care

Enhanced coverage of team-based approaches, pit crew, and crew resources management. Chapter was moved up from Chapter 41 (in the Eleventh Edition) to introduce these critical concepts to students early on in their learning.

SECTION 2 Patient Assessment

CHAPTER 10 Patient Assessment

Added content on nasal capnography and its importance

Added information about the use of waveform capnography to determine the amount of carbon dioxide a patient is exhaling.

SECTION 3 Airway

CHAPTER 11 Airway Management

Incorporated discussion of new technologies and new medical procedures, such as NC oxygen at 15LPM for pre-oxygenation

Revised CPAP content to ensure that it is covered at the appropriate depth (and at a higher level), since it is included in the new Scope of Practice (SOP)

Updated chapter to ensure consistency with current AHA guidelines

SECTION 4 Pharmacology

CHAPTER 12 Principles of Pharmacology

Expanded upon commonly prescribed medications within the pharmacology and medical assessment sections

Added content on the connections between medications that patients take and how those medications play into their "whole" health picture

Updated list of medications (e.g., metoprolol)

Added a table that addresses drugs that impair clotting (anti-platelets, anticoagulants)

SECTION 5 Shock and Resuscitation

CHAPTER 13 Shock

Revised organization of chapter to ensure that content is presented in a clear and logical manner

CHAPTER 14 BLS Resuscitation

Added content on minimally interrupted CPR and Pit Crew

Added discussion on the importance of minimizing pre- and post-shock pauses

Added references to up-to-date literature on active compression/decompression CPR with ITD

Emphasized that CPR assist devices are not widely used nationally at the EMT level

Added information related to mechanical CPR devices (e.g., Lucas) and their increased use

SECTION 6 Medical

CHAPTER 15 Medical Overview

No major changes

CHAPTER 16 Respiratory Emergencies

Expanded pathophysiology content and linked home medications

Incorporated discussion of CPAP for emphysema

CHAPTER 17 Cardiovascular Emergencies

Expanded 12-lead content to encompass obtaining an ECG and basic interpretation, including how to acquire a 12-lead and transmit to the hospital

Incorporated 2020 AHA guidelines

Improved the language related to the use of CPAP for pulmonary edema

Added nitroglycerin for the treatment of cardiac pulmonary edema

CHAPTER 18 Neurologic Emergencies

Added new content related to AHA Stroke BE-FAST

Revised content to employ current terminology from the Neurologic and Epilepsy Foundation

Added atrial fibrillation as a risk factor for embolic stroke

Verified that seizure language is consistent with latest classification system from the International League Against Epilepsy

Added other stroke assessment tools (e.g., LAMS)

Added components of the NIH stroke assessment

Added coverage of recognition of objects and reading

CHAPTER 19 Gastrointestinal and Urologic Emergencies

Added more information about dialysis patients

Emphasized that a BP cuff should not be placed over a fistula

Added information about the possibility of infection from peritoneal dialysis in patients in the home and correct EMT response

CHAPTER 20 Endocrine and Hematologic Emergencies

Expanded content related to glucometry

Updated information in the diabetes section related to devices and sensors

Updated information about current care methods (pumps and home medications)

Expanded discussion on symptoms of hyperglycemia

CHAPTER 21 Allergy and Anaphylaxis

Previously called “The Immunologic Emergencies” chapter in the 11th Edition, the chapter name was changed to reflect the focus on allergic reactions, which are the key immunologic emergencies an EMT will treat

CHAPTER 22 Toxicology

Added coverage of fentanyl

CHAPTER 23 Behavioral Health Emergencies

Previously called “Psychiatric Emergencies” in the Eleventh Edition, the chapter title was changed to reflect an update to more recent terminology that has less stigma attached to it

Added more information on behavioral health

Added discussion of trauma-informed care

Added more detail related to restraint (e.g., anchor points, types of restraints, verbal de-escalation)

Incorporated more detailed content about discussions between patients and providers because it is a commonly overlooked area

CHAPTER 24 Gynecologic Emergencies

No major changes

SECTION 7 Trauma

CHAPTER 25 Trauma Overview

Added more detail on CDC 2011 field triage guidelines

CHAPTER 26 Bleeding

Placed additional emphasis on the importance of using tourniquets immediately for obvious life-threatening bleeding to an extremity

Added content related to junctional tourniquets

Added content related to wound packing

Added content related to pelvic binders

CHAPTER 27 Soft-Tissue Injuries

No major changes

CHAPTER 28 Face and Neck Injuries

Updated content to ensure consistency with NAEMSP spinal guidelines

CHAPTER 29 Head and Spine Injuries

Included NAEMSP spinal guidelines

CHAPTER 30 Chest Injuries

No major changes

CHAPTER 31 Abdominal and Genitourinary Injuries

No major changes

CHAPTER 32 Orthopaedic Injuries

Removed majority of content regarding air splints

Added content related to compartment syndrome

Increased clarification about compartment syndrome; suspect if there was recent anesthesia or surgery

Added content related to splinting

CHAPTER 33 Environmental Health Emergencies

Updated section on water rescue to ensure consistency with current recommendations

SECTION 8 Special Patient Populations

CHAPTER 34 Obstetrics and Neonatal Care

Added a brief section related to neonatal resuscitation
Added current AHA neonatal guidelines

CHAPTER 35 Pediatric Emergencies

Added discussion of the pediatric Pit Crew CPR

CHAPTER 36 Geriatric Emergencies

Added content of syncope and falls in older adults
Expanded coverage of falls

CHAPTER 37 Patients with Special Challenges

Expanded content related to autism and homelessness
Included additional information on alternative transport considerations other than to a hospital
Added discussion of home oxygen compressors

SECTION 9 EMS Operations

CHAPTER 38 Transport Operations

Added more information on transport operations, incident management, and terrorism response and disaster management
Incorporated new content from recent ems.gov documents

CHAPTER 39 Vehicle Extrication and Special Rescue

No major changes

CHAPTER 40 Incident Management

No major changes

CHAPTER 41 Terrorism Response and Disaster Management

Incorporated information about Hartford consensus
Updated and added information about school shootings, multi-agency planning, and the recent Pulse nightclub shooting

Navigate Package Comparisons

We've made important changes to the packages for the *Twelfth Edition* based on your feedback. Fisdap Scheduler and Skills Tracker are now available as an optional add-on rather than a standard component of each package. Additionally, the new Soft-Skill Simulations can be added to the Essentials package. More information on the Soft-Skill Simulations, as well as other items listed in the below chart, can be found on **page 9**.

BEST VALUE			
Premier		Advantage	Essentials
Hybrid Classroom A comprehensive education solution that facilitates student engagement and virtual learning.	or	Flipped Classroom An integrated suite of resources that transform the traditional classroom into a student-directed learning environment.	Foundational resources that prepare students for the National Registry Exam and the field.
Content Textbook Audiobook eBook		Content Textbook Audiobook eBook	Content Textbook Audiobook
Instruction Assessments Analytics Slides Active Learning Activities +		Instruction Assessments Analytics Slides Active Learning Activities Lesson Plans	Instruction Assessments Analytics Slides
Student Learning Materials Practice Activities ++ TestPrep Flashcards Virtual Mentor Lectures Soft-Skill Simulations Interactive Lectures Virtual Ride Alongs		Student Learning Materials Practice Activities ++ TestPrep Flashcards Virtual Mentor Lectures Soft-Skill Simulations Interactive Lectures Virtual Ride Alongs Lesson Guides	Student Learning Materials Practice Activities ++
Print + Digital Access ISBN: 978-1-284-22719-2		Print + Digital Access ISBN: 978-1-284-37603-6	Print + Digital Access ISBN: 978-1-284-22722-2
Digital Access Only ISBN: 978-1-284-22721-5		Digital Access Only ISBN: 978-1-284-20430-8	Digital Access Only ISBN: 978-1-284-24374-1

+ Limited quantities available in lower package levels. ++ Only available when assigned by instructors.

Customize your package by adding select student learning materials:

- Fisdap Scheduler
- Fisdap Skills Tracker
- Fisdap Exams (Multiple Available)
- Interactive Lectures
- Soft-Skill Simulations
- Student Workbook

Contact your sales representative for pricing and order information.

The table below outlines how the new packages compare to the Navigate packages offered in the *Eleventh Edition*. Beneath the table, you will also find a glossary that more clearly defines some of the items in each package.

Navigate Package Name	Eleventh Edition	Changes for the Twelfth Edition
FLIPPED CLASSROOM	Textbook Audiobook eBook Assessments Analytics Slides Flashcards Practice Activities Engaging Classroom Activities TestPrep Interactive Lectures Virtual Mentor Lectures Virtual Ride Alongs Lesson Guides	Now includes: Soft-Skill Simulations
PREMIER	Textbook Audiobook eBook Assessments Analytics Slides Flashcards Practice Activities TestPrep Interactive Lectures Virtual Ride Alongs	Now includes: Active Learning Activities (limited quantities available) Virtual Mentor Lectures Soft-Skill Simulations
PREFERRED	Textbook Audiobook eBook Assessments Analytics Slides Flashcards Practice Activities Virtual Ride Alongs TestPrep	No longer offered for this edition
ADVANTAGE	Textbook Audiobook eBook Assessments Analytics Slides Flashcards Practice Activities	Now includes: TestPrep Virtual Mentor Lectures (soft-skill lectures only) Active Learning Activities (limited quantities available) Soft-Skill Simulations
ESSENTIALS	Textbook Audiobook Assessments Analytics Slides Practice Activities	No changes from Eleventh Edition

Active Learning Activities A list of activities included in Flipped Classroom that are designed to help students practice hands-on training in the classroom. Examples include races that involve practicing EMS techniques and drills on mannequins and building replicas of body parts to test students' EMS knowledge. The goal of these activities is to better prepare students for hands-on work in the field. Reduced quantities of these activities are available in the Premier and Advantage packages.

Analytics Built into Navigate, these can track and analyze student engagement and performance across a variety of assessments and subject areas, from eBook usage to quiz results. Dashboards provide deep insight into learner behaviors, effectiveness of course content, and trends that affect achievement.

Interactive Lectures These lectures function like a recorded slide presentation in which each slide is accompanied by a recorded narration. They're a great instructional tool for a hybrid or flipped classroom approach. They can also serve as:

- Homework assignments to prepare students for further reflection and discussion on the subject matter while in class to help reinforce their understanding of the material.
- Makeup assignments if a student misses a class, requires extra credit, or is challenged by subject material in a complex topic.
- Independent learning for some basic subjects that you may only touch on in class in order to devote more of your classroom time for hands-on instruction of critical topics and skills.

Lesson Guides An interactive slide deck for students to follow when completing pre-class activities in Flipped Classroom. Resources needed to complete activities are linked directly within each Lesson Guide and are available individually within each lesson. No detailed instruction is required from the instructor, as the pre-class activities are self-guided.

Lesson Plans Exclusive to the Flipped Classroom, these customizable lesson schedules assist with classroom preparations, organization of curriculum coverage, and execution of student-centered activities.

Practice Activities Pre-selected quizzes to help students gauge their comprehension of chapter content. These are included as part of the Test Bank, and the instructor needs to assign them; however, they should be thought of as another opportunity for students to practice what they've learned.

TestPrep A testing preparatory tool designed to prepare students to successfully complete certification exams using an exclusive bank of questions written by subject matter experts. TestPrep is also useful for class exam practice, preparation, and remediation. Built-in analytics provide instructors with test item analysis and granular tracking. However, the tool is not integrated with the course gradebook and is intended for practice/preparation rather than evaluation.

Soft-Skill Simulations A series of interactive scenarios that teach the importance of soft skills and provide techniques that can be used to improve overall critical thinking, communication, and teamwork. Learners can practice and get feedback to help them gain the knowledge and skills necessary to communicate effectively and manage real-life situations, helping to achieve better physical and emotional outcomes for patients and safer conditions for all.

Virtual Mentor Lectures A series of videos that supplement classroom learning and are ideal for students who are preparing for the NREMT exam. The video lectures focus on critical and complex EMS topics, with clear explanations provided for the areas where students struggle the most.

Virtual Ride-Alongs A series of real-life ride along scenarios which are precepted by an EMS expert. Each video begins with an emergency call into dispatch and concludes with the successful transportation of the patient.