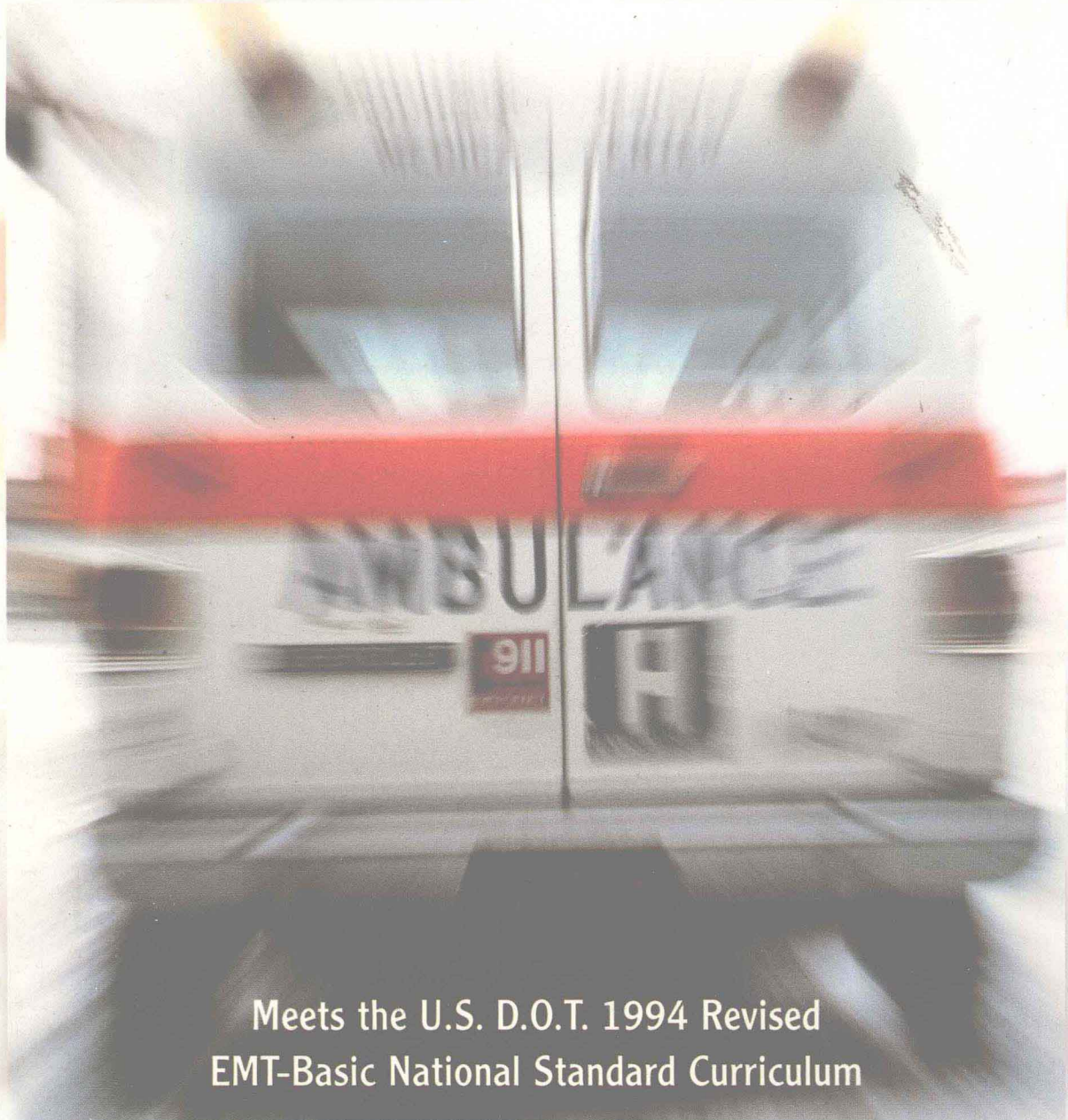


BRADY

ESSENTIALS OF EMERGENCY CARE

A REFRESHER FOR THE PRACTICING EMT-B



Meets the U.S. D.O.T. 1994 Revised
EMT-Basic National Standard Curriculum

Daniel Limmer

Bob Elling

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MEDICAL EDITOR
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It is the intent of the authors and publishers that this textbook be used as part of a normal EMT-Basic refresher program taught by qualified instructors and supervised by a licensed physician. The procedures described in this textbook are based upon consultation with EMT and medical authorities. The authors and publisher have taken care to make certain that these procedures reflect currently accepted clinical practice; however, they cannot be considered absolute recommendations.

The material in this textbook contains the most current information available at the time of publication. However, federal, state, and local guidelines concerning clinical practices, including without limitation, those governing infection control and universal precautions, change rapidly. The reader should note, therefore, that the new regulations may require changes in some procedures.

It is the responsibility of the reader to familiarize himself or herself with the policies and procedures set by federal, state, and local agencies as well as the institution or agency where the reader is employed. The authors and the publisher of this textbook and the supplements written to accompany it disclaim any liability, loss or risk resulting directly or indirectly from the suggested procedures and theory, from any undetected errors, or from the reader's misunderstanding of the text. It is the reader's responsibility to stay informed of any new changes or recommendations made by any federal, state, and local agency as well as by his or her employing institution or agency.

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Preface

Essentials of Emergency Care is a new concept in an EMT textbook. This book is designed for experienced EMTs who are beginning, or about to begin, an EMT (now called EMT-B) refresher program. Traditionally, to complete a refresher program, EMTs used their original EMT text, or a subsequent edition. Such texts are designed to present information to a person without experience or training in EMS. However, the authors of this text recognize that the refresher student is different.

The authors acknowledge and respect that you, as an experienced EMT-B, have regularly applied the skills and knowledge learned in your original coursework to your work in the field. Such skills and knowledge are easily remembered, and expansive coverage of this material is not needed in a refresher text. For example, since you have probably had much field experience in bleeding control, this text does not cover it in as much detail as your original text. However, skills and knowledge used less frequently require some “brushing up” before you take a recertification exam. Therefore, such topics are covered in concise, to-the-point presentations.

Not only has material been condensed in this text, but chapters have been combined to correspond to the formats of refresher or recertification programs. For example, the chapters on bleeding and shock have been combined with soft-tissue injuries, much as in your recertification training. If you do not take recertification classes, the book will still be helpful for exam preparation or simply to learn the new curriculum for transitional programs.

The 1994 EMT-B Curriculum

This text also serves as a transitional manual for the U.S. DOT 1994 Revised EMT-Basic National Standard Curriculum, meeting all objectives of this revised curriculum.

While there are new parts of the curriculum, much is simply an adaptation of what you are currently practicing. For example, the patient assessment process, formerly the traditional primary and secondary surveys, is now a series of assessments called scene size-up, initial assess-

ment, focused histories, detailed assessments, and ongoing assessment. Intuitively, you probably recognize that the steps outlined in the 1994 curriculum are not dramatically different from the skills in your primary and secondary surveys. Instead of presenting this as a “whole new” patient assessment process, we help you integrate the sequence into your current practice.

The curriculum does include some newer elements, such as pharmacology and medical direction. These will be new to many currently certified EMTs, and for that reason are covered in greater depth.

When writing this text, we kept several objectives in mind:

- To help you pass the test! Obviously, any textbook must present the information you will need to pass your recertification exams.
- To respect your experience. You may be tackling your first recertification or your tenth. As experienced EMS providers, we have gone through this process ourselves. We recognize the need for a textbook that presents the entire EMT-B curriculum in a clear and concise manner.
- To present the 1994 U.S. DOT Revised EMT-Basic National Standard Curriculum as well as the 1994 EMT-Basic Transitional Program in a manner that will help you easily integrate skills and knowledge into your current practice.

Features of the Book

- **Making the Transition** Each chapter opener has a section called “Making the Transition,” a brief listing that reviews how the material in each chapter is presented in the 1994 curriculum. A complete chapter-by-chapter listing is given on pages xv–xvii.
- **DOT and Transitional Curriculum Objectives** Each chapter begins with a listing of all DOT EMT-B and Transitional Curriculum objectives that apply to its content. Each objective is referenced to the page(s) in the chapter where the topic is covered.
- **On the Scene Scenarios** A real-life scenario serves as an introduction to each chapter and

integrates elements of the 1994 curriculum, such as the patient assessment steps.

- **Topic Coverage** Although condensed, topics are presented in an easy-to-read format and are often accompanied by illustrations that enhance understanding and maximize coverage.
- **Pediatric Highlights** This feature calls out topics important to pediatric emergency care. It reflects the importance of pediatric patient care and emphasizes the increased attention given to this topic throughout EMS and in the 1994 curriculum.
- **Preceptor Pearls** The experience of the recertification student is mentioned frequently throughout this text. Therefore this feature acknowledges the experienced EMT-B's role as a preceptor, mentor, or trainer. Throughout the text, Preceptor Pearls point out important topics to share with new EMT-Bs, emphasize ways to get your point across, and highlight when and how to mentor the new EMT-B.
- **Skill Summaries** To assist in review of important skills, many chapters contain visual Skill Summaries of important skills.
- **Review Questions** Each chapter ends with Review Questions to test your knowledge on the material you have just completed. An answer key at the back of this book indicates text pages where answers can be found or supported.
- **National Registry Skills Sheets** Each of the skills tested by the Registry in its performance-based skills exam is included.
- **Practice Exams** The text contains two 100-question practice exams. Designed as pre- and posttests, these exams allow you to judge your preparedness for your certification exams. Answer keys are provided for each exam at the back of this book.

A note to instructors: We are offering an Instructor's Resource Manual to accompany the *Essentials* text. The manual presents specific strategies that will help you teach with this textbook. The manual also provides slide references to your existing *Emergency Care* 7th Edition Slide Set. Since most refresher students are tested based on all the DOT EMT-B objectives, the Workbook that accompanies *Emergency Care* 7th Edition is designed to prepare students for test-taking as well.

Comments and Suggestions

We encourage you to comment on the text. Comments and suggestions will help us improve future editions of the text. Please send comments to:

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We wish you the best of luck in your continued endeavors in EMS!

Daniel Limmer
Bob Elling
Michael O'Keefe

Transition Highlights

Below is a summary of emphases and approaches presented in the 1994 U.S. DOT Revised EMT-B National Standard Curriculum. The summary below briefly outlines how this knowledge is integrated into the text.

Chapter 1 Introduction

- EMTs are now called EMT-Basics, or EMT-Bs.
- Medical direction has an increased role for the EMT-B.
- Quality improvement is included in the curriculum.

Chapter 2 The Well-Being of the EMT-Basic—Emotions and Stress, Scene Safety

- Scene size-up is a formal part of the patient assessment process.
- Size-up is performed before the initial assessment and includes determining BSI needed, scene safety, mechanism of injury/nature of illness, and the number of patients.

Chapter 3 Infection Control

- EMT-B's requirements under OSHA 1910.1030 and the Ryan White CARE Act are explained.
- Proper BSI and PPE required during all phases of an ambulance call are considered.
- Changes in EMT-Bs' attitudes regarding blood and other potentially infectious materials are emphasized.

Chapter 4 Airway

- Importance of BSI is emphasized.
- Use of the two-person bag-valve-mask technique is encouraged.
- Use of a flow-restricted, oxygen-powered ventilation device (FROPVD) is explained.
- Assisting with endotracheal tube placement is recommended.
- Simplified approach to oxygen therapy is included.

Chapter 5 Patient Assessment—Medical Patient

- The initial step in detecting and treating immediate threats to life is now called the initial assessment instead of the primary survey.
- The next steps in the assessment depend on the category into which a patient falls: medical or trauma; responsive or unresponsive; significant mechanism of injury or no significant mechanism of injury; adult, child, or infant.
- Re-evaluate stable patients every 15 minutes, unstable patients every 5 minutes.

Chapter 6 Patient Assessment—Trauma Patient

- The trauma patient with a significant mechanism of injury should receive a limited physical exam (the rapid trauma assessment) at the scene and prompt transport.
- During the physical exam, you should search for DCAP-BTLS (deformities, contusions, abrasions, punctures/penetrations, burns, tenderness, lacerations, and swelling).
- If a trauma patient is complaining of pain in the pelvis, do not compress it. You will cause the patient a great deal of pain without gathering any additional useful information.

Chapter 7 Communication and Documentation

- The 1994 curriculum describes the information you should transmit in a radio report and the order in which you should transmit it.
- A minimum data set describes the minimum information each EMS system should collect.
- Special situations require alterations in the usual manner of documenting incidents.

Chapter 8 General Pharmacology

- Medications carried on the ambulance are explained.

- Medications the EMT-B may assist the patient in taking with medical direction's approval are discussed.

Chapter 9 Medical Emergencies—Cardiac

- The emphasis in EMT-B courses has changed from distinguishing among the different causes of cardiac problems to management based on the patient's signs and symptoms.
- When your patient has chest pain, an adequate blood pressure, and his own nitroglycerin, you can now assist him in taking it.
- As an EMT-B, you are expected to be able to operate an automated external defibrillator.

Chapter 10 Medical Emergencies—Respiratory, Allergic Reactions, Environmental

- The term “breathing difficulty” is used to describe a group of previously diagnosed respiratory conditions.
- How to assist patients with the use of prescribed inhalers and epinephrine auto-injectors is explained.
- Instead of trying to decide whether a patient has heat stroke or heat cramps, the EMT-B should use skin temperature to determine the proper treatment.

Chapter 11 Medical Emergencies—Diabetes, Poisoning and Overdose, Behavioral

- Treatment of the medical emergencies involving diabetes, poisoning/overdose, and behavioral problems is driven by assessment findings.
- EMT-Bs are now able to administer oral glucose and activated charcoal.
- Dilution of some ingested poisons is recommended.
- Scene-safety is stressed before an EMT-B treats a behavioral emergency.

Chapter 12 Trauma—Bleeding, Shock, Soft Tissue

- Shock is defined as hypoperfusion.
- Pneumatic anti-shock garment (PASG) is recommended for use in the presence of pelvic instability, for controlling bleeding and shock (hypoperfusion), and for stabilizing pelvic, hip, femoral, and multiple-leg fractures.

- Early recognition and transport of patients with life-threatening conditions are emphasized.

Chapter 13 Trauma—Musculoskeletal, Head and Spine

- The assessment and emergency care of a painful, swollen, or deformed extremity are explained.
- The use of the PASG as a splint is described.
- The procedure of rapid extrication and when it is used is described.

Chapter 14 Pediatric Patients

- Developmental differences between the five pediatric age groups are described.
- Differences between pediatric anatomy and physiology and that of an adult are explained.
- Recognizing and managing pediatric respiratory emergencies are emphasized.
- Treatment of special needs of pediatric patients at home is explained.

Chapter 15 Obstetrics and Gynecology

- There are no significant changes in the procedures involving childbirth.
- The EMT-B may call on medical direction for assistance in normal and abnormal delivery situations.
- The curriculum includes identification of and treatment for meconium (fecal matter) in amniotic fluid.

Chapter 16 Lifting and Moving Patients

- Use of proper body mechanics during lifting and moving is explained.
- Safe lifting, reaching, pushing, and pulling are emphasized.
- Emergency, urgent, and non-urgent moves are classified.

Chapter 17 Operations

- Carrying the right equipment to the patient's side to ensure proper initial assessment is emphasized.

- Ambulance collision risk factors are explained.
- Medical incident command is explained in detail.

Chapter 18 Hazmat Awareness

- Ongoing education of EMT-Bs should include hazmat first responder awareness level of training in compliance with OSHA regulations.

Chapter 19 Advanced Airway Management

- How to prepare for an intubation is explained.
- How to insert and assure the proper placement of an endotracheal tube are described.
- How to perform orotracheal suctioning is explained.
- How to use an indirect advanced airway such as an EOA or EGTA is described.

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Reviewers

A textbook relies on reviewers for shaping the content as well as checking its accuracy. When writing a textbook that is a relatively new concept, this input is even more essential. We thank our reviewers for their hard work and detailed comments.

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Brief Contents

Chapter 1	Introduction	1
Chapter 2	The Well-Being of the EMT-Basic—Emotions and Stress, Scene Safety	19
Chapter 3	Infection Control	31
Chapter 4	Airway	45
Chapter 5	Patient Assessment—Medical Patient	67
Chapter 6	Patient Assessment—Trauma Patient	91
Chapter 7	Communications and Documentation	107
Chapter 8	General Pharmacology	121
Chapter 9	Medical Emergencies—Cardiac	129
Chapter 10	Medical Emergencies—Respiratory, Allergic Reactions, Environmental	151
Chapter 11	Medical Emergencies—Diabetes, Poisoning and Overdose, Behavioral	177
Chapter 12	Trauma—Bleeding, Shock, Soft Tissue	193
Chapter 13	Trauma—Musculoskeletal, Head and Spine	221
Chapter 14	Pediatric Patients	283
Chapter 15	Obstetrics and Gynecology	301
Chapter 16	Lifting and Moving Patients	315
Chapter 17	Operations	333
Chapter 18	Hazmat Awareness	373
Chapter 19	Advanced Airway Management	387
Appendix A	National Registry of Emergency Medical Technicians Skill Sheets	417
Appendix B	Pretest and Posttest	437
Appendix C	Answer Key	
	Pretest and Posttest Answers	453
	Chapter Review Answers	454
	Index	455

Detailed Contents

Patient Assessment Highlights xi
Photo Skill Summaries xii
Preface xiii
Transition Highlights xv
Acknowledgments xix
About the Authors xxi

Chapter 1

Introduction 1

MAKING THE TRANSITION 1
OBJECTIVES 2
ON THE SCENE 3
An Assessment-Based Curriculum 3
The Emergency Medical Service System 5
 System Access 6
 Levels of Training 6
 Roles and Responsibilities of the EMT-Basic 6
 Professional Attributes of an EMT-B 8
 The EMT-B as a Preceptor 8
Quality Improvement and Medical Direction 9
 Quality Improvement (QI) 9
 Medical Direction 10
 Minimum Data Set 11
Medical/Legal and Ethical Issues 12
 Scope of Practice 12
 Consent 12
 Abandonment 14
 Negligence 14
 Battery 16
 Duty to Act 16
 Confidentiality 16
 Organ Retrieval/Organ Donor 16
EMS at Crime Scenes 16
 Scene Safety 17
 Cooperating with the Police 17
CHAPTER REVIEW 18

Chapter 2

The Well-Being of the EMT-Basic— Emotions and Stress, Scene Safety 19

MAKING THE TRANSITION 19

OBJECTIVES 20
ON THE SCENE 21
Emotions and Stress 21
 Causes of Stress 21
 Signs and Symptoms of Stress 22
 Dealing with Stress 22
Scene Safety 23
 Scene-Safety Techniques 26
CHAPTER REVIEW 29

Chapter 3

Infection Control 31

MAKING THE TRANSITION 31
OBJECTIVES 32
ON THE SCENE 32
The Exposure Control Plan 33
 Purpose 33
 Occupational Exposure 34
 Universal Precautions and Body Substance
 Isolation 34
 Engineering Controls 34
 Work Practice Controls 35
 Personal Protective Equipment 35
 Housekeeping Procedures 35
 Vaccinations 35
 Post-Exposure Procedures 36
 Other Plan Requirements 36
Ryan White CARE Act 36
Tuberculosis Requirements 37
BSI and Ambulance Call Phases 38
 Before the Ambulance Call 38
 During the Ambulance Call 38
 Termination of the Ambulance Call 38
CHAPTER REVIEW 44

Chapter 4

Airway 45

MAKING THE TRANSITION 45
OBJECTIVES 46

ON THE SCENE 47
Airway Anatomy and Physiology Review 48
Opening the Airway—Medical and Trauma Patients 50
Head-Tilt, Chin-Lift Maneuver 50
Jaw-Thrust Maneuver 51
Using Airway Adjuncts 52
The Oropharyngeal Airway (OPA) 52
The Nasopharyngeal Airway (NPA) 54
Why Suction Patients? 55
Suction Devices 55
Techniques of Suctioning 57
Ventilation Management and Assistance 57
Mouth-to-Mask Ventilation 58
Bag-Valve-Mask Ventilation 58
The Flow-Restricted, Oxygen-Powered Ventilation Device (FROPVD) 61
Assisting with Endotracheal Tube Placement 62
Complications 62
Assisting with Trauma Intubation 63
Oxygen Administration 63
Indications 63
Hazards 63
Oxygen Delivery Systems 64
Delivering Oxygen to the Breathing Patient 66
CHAPTER REVIEW 66

Chapter 5

Patient Assessment—Medical Patient 67

MAKING THE TRANSITION 67
OBJECTIVES 68
ON THE SCENE 70
The Responsive Patient 71
Scene Size-Up 71
Initial Assessment 71
Focused History and Physical Exam—Medical 76
Ongoing Assessment 84
ON THE SCENE 86
The Unresponsive Patient 87
Initial Assessment 87
Focused History and Physical Exam—Medical 87
Ongoing Assessment 90
CHAPTER REVIEW 90

Chapter 6

Patient Assessment—Trauma Patient 91

MAKING THE TRANSITION 91
OBJECTIVES 92
ON THE SCENE 93
Scene Size-Up 93
Significant Mechanism of Injury 94
Initial Assessment 94
Focused History and Physical Exam—Trauma 96
Detailed Physical Exam 104
Ongoing Assessment 104
ON THE SCENE 104
No Significant Mechanism of Injury 104
Initial Assessment 106
Focused History and Physical Exam—Trauma 106
Ongoing Assessment 106
CHAPTER REVIEW 106

Chapter 7

Communications and Documentation 107

MAKING THE TRANSITION 107
OBJECTIVES 108
ON THE SCENE 109
Communications 109
General Principles of Communication 109
Radio Use 110
Reporting to the Hospital Staff 112
Documentation 112
Prehospital Care Report (PCR) 112
CHAPTER REVIEW 119

Chapter 8

General Pharmacology 121

MAKING THE TRANSITION 121
OBJECTIVES 122
ON THE SCENE 122
Medications an EMT-B Can Administer 123
Medications Carried on the Ambulance 123

Prescribed Medications 124
General Information about Medications 125
 Drug Names 125
 What You Need to Know to Give a Medication 125
 Medications Patients Often Take 126
CHAPTER REVIEW 127

Chapter 9

Medical Emergencies—Cardiac 129

MAKING THE TRANSITION 129
OBJECTIVES 130
ON THE SCENE 132
Cardiac Compromise 132
Cardiac Arrest 137
 The Chain of Survival 137
 Types of Automated External Defibrillators 139
 Using an AED 145
CHAPTER REVIEW 149

Chapter 10

Medical Emergencies—Respiratory, Allergic Reactions, Environmental 151

MAKING THE TRANSITION 151
OBJECTIVES 152
ON THE SCENE 153
Respiratory Emergencies 154
 Respiratory Anatomy and Physiology 154
 Adequate vs. Inadequate Breathing 155
 Breathing Difficulty 156
 Prescribed Inhaler 157
 Allergic Reactions 160
 Epinephrine Auto-Injector 161
Environmental Emergencies 165
 Temperature Regulation 165
 Exposure to Cold 165
 Exposure to Heat 171
 Water Emergencies 172
 Bites and Stings 173
CHAPTER REVIEW 175

Chapter 11

Medical Emergencies—Diabetes, Poisoning and Overdose, Behavioral 177

MAKING THE TRANSITION 177
OBJECTIVES 178
ON THE SCENE 180
Diabetic Emergencies 180
 Administering Oral Glucose 181
Seizures 182
Poisoning and Overdose Emergencies 182
 How Poisons Enter the Body 182
 Administering Activated Charcoal 182
Behavioral Emergencies 186
CHAPTER REVIEW 190

Chapter 12

Trauma—Bleeding, Shock, Soft Tissue 193

MAKING THE TRANSITION 193
OBJECTIVES 194
ON THE SCENE 196
Circulatory System Review 197
 The Heart 197
 The Blood Vessels 197
 Blood Composition 197
 The Pulse 197
 Blood Pressure 197
 Perfusion 198
Bleeding 198
 External Bleeding 198
 Internal Bleeding 203
Shock 203
 Use of the PASG 204
Soft-Tissue Injuries 204
 Closed Wounds 204
 Open Wounds 206
 Burn Injuries 211
 Dressing and Bandaging 220
CHAPTER REVIEW 220

Chapter 13

Trauma—Musculoskeletal, Head and Spine 221

MAKING THE TRANSITION 221

OBJECTIVES 222

ON THE SCENE 224

The Musculoskeletal System 225

The Muscles 225

The Bones 225

Musculoskeletal Injuries 227

Splinting 229

Head and Spinal Injuries 253

The Nervous System 253

Injuries to the Head 255

Injuries to the Spine 260

Immobilization Issues 262

CHAPTER REVIEW 282

Chapter 14

Pediatric Patients 283

MAKING THE TRANSITION 283

OBJECTIVES 284

ON THE SCENE 285

Approaching the Pediatric Patient 285

Determining a Pediatric Patient's Age 285

Tips for Assessing Each Age Group 286

Anatomy and Physiology Differences 287

The Head 287

The Respiratory System 288

Chest and Abdomen 289

The Skin 289

Pediatric Respiratory Emergencies 290

Maintaining an Open Airway 290

Foreign Body Airway Obstruction 290

Oral Airway Insertion 290

Respiratory Problems 291

Providing Supplemental Oxygen and Ventilations 293

Pediatric Trauma 294

Injury Patterns 294

Nonaccidental Pediatric Trauma: Child Abuse 295

Injury Prevention 296

Pediatric Medical Emergencies 296

Seizures 296

Poisoning 297

Croup and Epiglottitis 297

Sudden Infant Death Syndrome 297

Meningitis 298

Dealing with "Special Needs" 298

Tracheostomy Tubes 298

Home Artificial Ventilators 298

Central Intravenous Lines 298

Gastrostomy Tubes and Gastric Feeding 299

Shunts 299

Emotional Response of the Family and EMT-B 299

CHAPTER REVIEW 300

Chapter 15

Obstetrics and Gynecology 301

MAKING THE TRANSITION 301

OBJECTIVES 302

ON THE SCENE 303

Anatomy of Childbirth 303

Predelivery Emergencies 303

Childbirth 306

Normal Delivery 306

Care of the Newborn 309

Abnormal Deliveries 310

Childbirth Complications 311

Gynecological Emergencies 312

CHAPTER REVIEW 313

Chapter 16

Lifting and Moving Patients 315

MAKING THE TRANSITION 315

OBJECTIVES 316

ON THE SCENE 317

Body Mechanics 317

Decision Making and Planning 317

Lifting and Moving 318

Types of Moves 319

Emergency Moves 319

Urgent Moves 319

Non-Urgent Moves 319

Patient-Carrying Devices 319

The Ambulance Stretcher 327
The Folding Stair Chair 327
Scoop-Style (Orthopedic) Stretchers 330
Special Transfer Devices 330
Packaging the Patient 331

CHAPTER REVIEW 332

Chapter 17

Operations 333

MAKING THE TRANSITION 333

OBJECTIVES 334

ON THE SCENE 335

Ambulance Operations 335

Equipment Needed to Respond to a Call 335
Ambulance Inspection 339
The Emergency Medical Dispatcher (EMD) 340
Driving the Ambulance 341
Parking the Ambulance 346
Transferring the Patient to the Ambulance 346
En Route to the Hospital 348
Arrival at the Emergency Department 348
Terminating the Call 349
En Route to and Back at Quarters 349
Use of Aeromedical Evacuation 349

The EMT-B's Role at an Extrication 351

Sizing Up the Situation 351
Recognizing and Managing Hazards 353
Stabilizing the Vehicle 357
Gaining Access to the Patient 358
Disentanglement Action Plan 360

Managing the Multiple-Casualty Incident 365

Components of an Incident Management System 365
The IMS Functional Areas 366
EMS Command at an MCI 367
Psychological Aspects of MCIs 371

CHAPTER REVIEW 372

Chapter 18

Hazmat Awareness 373

MAKING THE TRANSITION 373

OBJECTIVES 374

ON THE SCENE 374

What Is a Hazardous Material? 375

Recognizing the Risks of Hazardous Materials 375

Hazmat Rules and Standards 376

SARA Title III: Planning Regulations 376

OSHA Regulations 376

National Fire Protection Association's Standards 377

EMT-B's First Responder Role 377

Establish Command and Control Zones 377

Identify the Substance Involved 379

Establish a Rehab Sector in the Cold Zone 379

Sources for Identifying Hazardous Materials 380

Container Shapes 380

Occupancy or Location Type 381

Placards and Labels 382

Markings and Colors 383

Shipping Papers and Documents 384

Other Resources 385

CHAPTER REVIEW 386

Chapter 19

Advanced Airway Management 387

MAKING THE TRANSITION 387

OBJECTIVES 388

ON THE SCENE 389

Anatomy and Physiology 390

Anatomy 390

Physiology 390

Pediatric Airway Anatomy and Physiology 392

Management of the Airway 392

Oropharyngeal Suctioning 392

Orotracheal Intubation 393

Nasogastric Intubation of a Pediatric Patient 405

Orotracheal Suctioning 407

Automatic Transport Ventilators 407

Esophageal and Multilumen Airways 409

CHAPTER REVIEW 415

Appendix A

National Registry Skill Sheets 417

Patient Assessment/Management—Trauma 421

Patient Assessment/Management—Medical 422

Cardiac Arrest Management/AED 423

Bag-Valve-Mask Apneic Patient 424