

BRADY

WORKBOOK

PARAMEDIC EMERGENCY CARE

THIRD EDITION

ROBERT S. PORTER

Featuring

- National Registry Practical Examinations
- Emergency Drug Cards
- Patient Care Scenario Cards



BRYAN E. BLEDSOE • ROBERT S. PORTER • BRUCE R. SHADE

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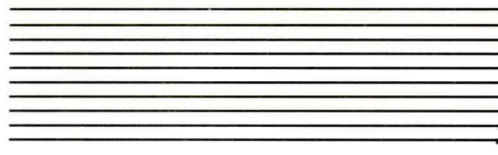
NOTICE ON CARE PROCEDURES

It is the intent of the author and publisher that this workbook be used as part of a normal EMT-Paramedic program taught by qualified instructors and supervised by a licensed physician. The procedures described in this workbook are based upon consultation with EMT and medical authorities. The author 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 workbook 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.

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WORKBOOK

 **BRADY**

PARAMEDIC

EMERGENCY CARE

T H I R D E D I T I O N

INTRODUCTION

to the Self-Instructional Workbook

PARAMEDIC EMERGENCY CARE

Welcome to the third edition of the Self-Instructional Workbook for *Paramedic Emergency Care*. We have received many comments about prior editions from both students and instructors and have used them to make the workbook even more helpful and easy to use. Like the prior editions, this book can be used either as a stand-alone workbook or with instructor supervision. It addresses the National Standard Curriculum for Paramedic training and meets the content described by the DOT Objectives.

This workbook is designed to help you identify the important principles presented in *Paramedic Emergency Care* and direct you to review any material you don't truly understand. The workbook addresses each case study presented in the accompanying text and explains why certain aspects of care are offered. Content Self-Evaluations test your reading comprehension and prepare you for the tests within your training course and for state examination.

NEW AND EXPANDED CONTENT

This new edition includes new and expanded content designed to help you integrate the material in *Paramedic Emergency Care* and think on your feet, much as you must do in the field.

- Engaging and easy-to-follow design format
- Enhanced Guidelines to Better Test-Taking
- Labeling and Sequencing questions
- Appendix chapter that corresponds to the textbook Appendix on 12 Lead ECG Monitoring
- Trauma Patient Care Scenario Cards

POPULAR FEATURES FROM PREVIOUS EDITION

Objective Review

Each chapter of the workbook begins with a short review of the focus of each learning objective. Use these objectives and the associated comments to identify what is important to learn during your reading of *Paramedic Emergency Care*.

Case Study Review

The workbook reviews the case study beginning each chapter of the text. It identifies principles and special considerations of care. It can help you learn about the elements of field care associated with each chapter of the text.

Content Self-Evaluation

Each chapter contains between 10 and 55 questions that test your comprehension. Take each self-evaluation carefully and then check your answers against the Answer Key in the back of this workbook. For the questions you missed, review the text pages listed in the Answer Key.

Ambulance Report Form

The workbook enhances the information given in selected case studies and then asks you to record the appropriate information on an ambulance report form. Check your documentation against the form found in the Answer Key for completeness and inclusion of the essential points of the run report.

Drug Math Worksheets

The Drug Math Worksheets let you practice working with drug dosages and math required to calculate flow rates and administer field medications. Take the drug math and drip calculation exercises and again check your answers and the math against the key in the back of the book.

ECG Rhythm Strips

Two exercises in the recognition of ECG dysrhythmias are included in Chapters 21 and 29 to assist you in learning how to recognize dysrhythmias that are clinically significant in the care of the patient with

cardiovascular problems. Review these dysrhythmia examples until you feel comfortable with your performance.

Division Reviews

After each unit, a division review helps you recall and build on your knowledge through scenario-based questions. The scenarios discuss the aspects of care from the preceding chapters and bring all the information learned together.

Emergency Drug Cards

The workbook contains alphabetized perforated 3" × 5" cards that present the emergency drug name, description, indications, contraindications, precautions, and dosage/route of the drugs included in Chapter 13: Emergency Pharmacology. Detach the cards and use them in a flash card fashion. Practice until you can give the correct route, dosage, indications, and contraindications for each drug.

Patient Care Scenario Cards

Included at the back of the workbook are 47 patient scenario flash cards. Each describes the signs and symptoms of a medical or trauma emergency on one side and the field diagnosis and steps of care on the other. Detach the cards and use them to practice your recognition of common medical emergencies. Then practice prescribing the appropriate emergency care steps.

With these special features and the addition of many new self-evaluation questions, this revised and expanded workbook aims to smooth your way on the very demanding and rewarding road to becoming a paramedic.

DEDICATION

This effort is dedicated to Russell, my son, whose endless desire for knowledge and naive outlook on life have served as an inspiration to me while authoring this workbook.

ACKNOWLEDGMENTS

Patient Care Scenarios

The Patient Care Scenario cards found at the end of this workbook have been developed to help you put together the concepts of disease and injury recognition and patient care. Their development was accomplished by James E. Moshinskie, Ph.D., EMT-P. Jim is a well respected educator in Texas, and the Director of EMS Education and Assistant Professor of Emergency Medicine for Texas A&M University, College of Medicine, Temple, Texas.

Reviewers

The reviewers listed below provided many excellent suggestions for improving this workbook. Their assistance is greatly appreciated.

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GUIDELINES TO BETTER TEST-TAKING

The knowledge you will gain from reading the textbook, completing the exercises in the workbook, listening in your paramedic class, and participating in your clinical and field experience will prepare you to care for patients who are seriously ill or injured. However before you can practice these skills, you will have to successfully pass several classroom written exams and your state's certification exam. Your performance is not only dependent on your knowledge but also on your ability to answer test questions correctly. The following guidelines are designed to help your test performance and better reflect your knowledge of prehospital emergency care.

1. Relax and be calm during the test.

A test is designed to measure what you have learned and to tell you and your instructor how well you are doing. An exam is not designed to intimidate or punish you. Consider it a challenge and just try to do your best. Get plenty of sleep prior to the examination. Avoid coffee or other stimulants for a few hours before the exam and be prepared.

Reread the text chapters, review the objectives in the workbook, and review your class notes. It might be helpful to work with one or two other students and ask each other questions. This type of practice helps everyone better understand the knowledge presented in your class work.

2. Read the questions carefully.

Read each word of the question and all the answers slowly. Words such as except or not may change the entire meaning of the question. If you miss them you may answer the question incorrectly even though you know the right answer.

EXAMPLE:

The art and science of Emergency Medical Services involves all of the following except

- A. sincerity and compassion.
- B. respect for human dignity.
- C. placing patient care before personal safety.
- D. delivery of sophisticated emergency medical care.
- E. none of the above

The correct answer is C unless you miss the except

3. Read each answer carefully.

Read each and every answer carefully. While the first answer may be absolutely correct, so may the rest, thus the best answer might be "all of the above."

EXAMPLE:

Indirect medical control is considered to be

- A. treatment protocols.
- B. training and education.
- C. quality assurance.
- D. chart review.
- E. all of the above

While answers A, B, C, and D are correct, the best and only acceptable answer is "all of the above," E.

4. Delay answering questions you don't understand and look for clues.

When a question seems confusing or you don't know the answer, note it on your answer sheet and come back to it later. This will ensure that you have time to complete the test. You will also find that other questions in the test may give you hints to the one you've skipped over. It will also prevent you from being frustrated with an early question and have it affect your performance.

EXAMPLE:

Upon successful completion of a course of training as an EMT-P, most states will

- A.** certify you. (correct)
- B.** license you.
- C.** register you.
- D.** recognize you as a paramedic.
- E.** issue you a permit.

Another question, later in the exam, may suggest the right answer.

The action of one state recognizing the certification of another is called

- A.** reciprocity. (correct)
- B.** national registration.
- C.** licensure.
- D.** registration.
- E.** extended practice.

5. Answer all questions.

Even if you do not know the right answers, do not leave a question blank. A blank question is always wrong, while a guess might be correct. If you can eliminate some of the answers, do so. It will increase the chances of a correct guess.

EXAMPLE:

When a paramedic is called by the patient (through the dispatcher) to the scene of a medical emergency, the medical control physician has established a physician/patient relationship.

- A.** True
- B.** False

A True/False question gives you a 50% chance of a correct guess.

The hospital health professional responsible for sorting patients as they arrive at the emergency department is usually the

- A.** emergency physician.
- B.** ward clerk.
- C.** emergency nurse.
- D.** trauma surgeon.
- E.** A and C (correct)

A multiple choice question with five answers gives a 20% chance of a correct guess. If you can eliminate one or more incorrect answers, you increase your odds of a correct guess to 25%, 33%, and so on. An unanswered question has a 0% chance of being correct.

Just before turning in your answer sheet, check to be sure you have not left any items blank.

Self-Instructional Workbook

PARAMEDIC EMERGENCY CARE

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CHAPTER 1

ROLES AND RESPONSIBILITIES OF THE PARAMEDIC

REVIEW OF CHAPTER OBJECTIVES

With each chapter of the workbook we will identify the objectives and the important elements they describe. You should review them and refer to the pages listed if the elements are not clear.

After reading this chapter, you should be able to:

1. Define the role of the EMT-Paramedic. p. 4

- Provide competent medical care
- Provide emotional support for the patient
- Concentrate on the care and well-being of the patient
- Provide care to those who may not appreciate the service

2. Define and give examples of professional ethics. pp. 6–9

Ethics are rules or standards of conduct primarily for the benefit of the patient. They are not laws, but standards for honorable behavior. As a paramedic you are responsible to the patient, society, health professionals, and your profession.

3. Define and give examples of behavior that characterizes the health care professional. p. 9

- Sincerity, compassion, grace, respect for human dignity
- Proficient technician
- Respectful of patient rights and feelings
- Patient well-being placed above all except personal safety
- Professionalism
 - Patient first
 - Skills mastery
 - Continuing education
 - Prepared for response—vehicle, equipment, personally
 - Respectful of other health care and public safety personnel

4. List the duties of the EMT-Paramedic in preparation for handling emergency medical responses. p. 10

- Physically fit
- Familiar with system policies and procedures, communications, equipment, geography, and support agencies
- Personal attributes of self confidence, credibility, inner strength, self control, leadership, and willingness to accept responsibility

5. List the duties of the EMT-Paramedic during an emergency response. pp. 10–11

- Drive responsibly
- Size up the scene, call for needed assistance, and assure scene safety
- Conduct patient assessment, assign care priorities
- Develop a treatment plan and communicate the plan to team members

Provide basic and advanced emergency medical care in accordance with local protocols
Assess the results of care
Communicate with team members and medical control
Direct patient transport to the appropriate medical facility
Maintain rapport with the patient and public safety and hospital personnel

6. List the duties of the EMT-Paramedic after an emergency response. pp. 11–12

Accurately and objectively document all elements of the response
Restock the ambulance, assure all equipment is cleaned and operational
Review the call with team members

7. List the post-graduation responsibilities of the EMT-Paramedic. pp. 12–13

Obtain and maintain licensure, certification
Maintain knowledge and skills
Update knowledge and skills
Educate the public—first aid, CPR, etc.

8. Recognize differences among certification, licensure, and reciprocity. pp. 12–13

Certification is recognition by an agency or association that an individual has met a standard of performance

Licensure is the granting of permission by a governmental agency to engage in an occupation

Reciprocity is the granting of certification or licensure for comparable certification or licensure by another agency

9. State the benefits and responsibilities of continuing education for the EMT-Paramedic. p. 13

Maintain initial skills and knowledge
Obtain new skills and knowledge to assure quality patient care

10. State the major purposes of a national organization. pp. 13–14

Share ideas and concerns
Speak with a unified voice to the issues facing Emergency Medical Service
Continue education (newsletters and conferences)

11. List some national organizations for EMS providers. p. 13

National Association of Emergency Medical Technicians (NAEMT)
National Flight Paramedics Association (NFPA)
National Association of Search and Rescue (NASAR)
National Council of State EMS Training Coordinators (NCSEMSTC)
National Association of State EMS Directors (NASEMSD)
National Association of EMS Physicians (NAEMSP)

12. State the major purposes of the National Registry of Emergency Medical Technicians. p. 14

National testing of First Responders, EMT-Basic, EMT-Intermediate, and EMT-Paramedic
Establishes standards for re-registration
Basis for inter-state reciprocity

13. Describe the major benefits of subscribing to professional journals. p. 14

Identifies the results of current EMS research
Continuing education
Vehicle for authorship

CASE STUDY REVIEW

As was mentioned within Paramedic Emergency Care, it is important to review each call you participate in as a paramedic. Similarly, we will review the case study that precedes each chapter. We will address the important points of scene size-up, patient assessment, patient management, patient packaging, and transport.

Reread the case study on p. 4 in Paramedic Emergency Care and then read the discussion below.

This is a two-part case study which is designed to examine the changes that have occurred over the past three decades in emergency medical services.

CHAPTER 1 CASE STUDY

July 1958:

Communications over thirty years ago were certainly not as efficient as those of today. System entry was a problem, as was the dispatch of the most appropriate ambulance. The vehicle which was dispatched was not as specialized for patient care as those of today. The design of the 1958 ambulance was for speed rather than the ability to house equipment and provide an environment that would allow for patient care while en route to the hospital.

Training of personnel was also very different. As identified by the care given, the “Ambulance Drivers” were not concerned with stabilizing injuries or providing any comfort to the patient. Their job was simply rapid transport to a hospital where (presumably) the patient could receive life-saving care.

The Present:

Today the picture is dramatically better. System entry is much improved, as is the response from the personnel. The system is accessed by the 9-1-1 telephone system in a large percentage of the country and a trained dispatcher takes the needed information. First responders are quick to arrive, while the paramedic is moving rapidly but safely to the scene. She readies the equipment and places it on the stretcher in preparation for the potentially severe trauma called in by the passer-by and confirmed by the first responders. As the Advanced Life Support ambulance arrives, the first responder communicates the nature and extent of injury for each of the five patients. The authority for patient care is smoothly transferred to the senior paramedic, and personnel are directed to each of the patients.

Specialized prehospital emergency care equipment, not available in 1958, is brought from the unit to the patient's side and she is stabilized quickly. Advanced life support is provided and the most severe patient transported only minutes after the first ambulance arrives. During transport the hospital is alerted to the incoming patients and the nature of the young lady's injuries. As the ambulance backs into the emergency entrance, the trauma team waits to take the patient to the trauma suite.

The paramedic gives a quick update regarding the patient condition and answers a few questions before the doctor and team assume responsibility for the patient. The reports are filed and the IV solutions, trauma tubing, and IV initiation materials are replaced. The ambulance is taken to the base, washed out, and inspected before the team is reported as ready for service.

The EMS team sits down over lunch and critiques the call. Jane, the lead paramedic, compliments her assisting EMT for anticipating the equipment she needed. She also is complimentary about the rapid and secure application of the cervical collar and spinal immobilization device. They talk about better patient calming and reassurance and review the setup for a rapid infusion of fluid for the hypovolemic trauma patient. Later, Jane calls the hospital to find how the patient is doing and asks if the medical command physician felt there was anything the crew could have done better.

Over the past thirty-five years there have been great strides in prehospital care. The equipment is extensive and specially designed for the rigors and unique applications of field service. Training is just as extensive and specially designed. The entire EMS system will continue to evolve as we learn more about trauma and the medical emergency.

CONTENT SELF-EVALUATION

Each of the chapters within this workbook include a short content review. The questions are designed to test your ability to remember what you read. At the end of this workbook, you can find the answers to the questions as well as the pages where the topic of the question is discussed in the text. If you answer the question incorrectly, review the pages listed.

MULTIPLE CHOICE

- _____ 1. The process by which an organization grants recognition that an individual has met its standards of performance is called
A. licensure. D. reciprocity.
B. certification. E. none of the above
C. an ethic.
- _____ 2. The rules or standards governing the conduct of members of a particular group or profession are called
A. ethics. D. certification.
B. morals. E. registration.
C. licensure.
- _____ 3. Since EMS is a science, paramedics seldom face moral dilemmas.
A. True
B. False
- _____ 4. One of the greatest impacts upon the public's feelings toward the Emergency Medical Services system came from the television program "Emergency." Which of the following are aspects of that program's presentation of the paramedics.
A. clean-cut D. skillful and compassionate
B. responded promptly E. all of the above
C. remained calm
- _____ 5. The art and science of Emergency Medical Service involves all of the following except
A. sincerity and compassion. D. delivery of sophisticated
B. respect for human dignity. emergency medical care.
C. placing patient care before E. scene security.
personal safety.
- _____ 6. As members of the Allied Health Professions, paramedics must recognize a responsibility to
A. their patients. D. themselves.
B. society. E. all of the above
C. other health professionals.
- _____ 7. Which organization is responsible for testing the various levels of EMTs on a national level?
A. National Association of EMTs D. National Association of EMS Physicians
B. National Registry of EMTs E. none of the above
C. National Association of Search
and Rescue
- _____ 8. Accepting standards established by another agency or state is called
A. licensure. D. registration.
B. certification. E. none of the above
C. reciprocity.
- _____ 9. The paramedic is often responsible for supervising members of the emergency medical services team.
A. True
B. False

- _____ **10.** The ambulance run report should include which of the following?
- A.** accurate and complete documentation
 - B.** clear and concise opinions
 - C.** objectively recorded observations
 - D.** A and C
 - E.** A and B
- _____ **11.** Upon successful completion of a course of training as an EMT-P, most states will
- A.** certify you.
 - B.** license you.
 - C.** register you.
 - D.** recognize you as a paramedic.
 - E.** issue you a permit.
- _____ **12.** After a call, the paramedic is responsible for
- A.** restocking the ambulance.
 - B.** completing the run report.
 - C.** ensuring that team members are not affected by stress.
 - D.** reviewing the call with team members.
 - E.** all of the above
- _____ **13.** Continuing education is intended to
- A.** maintain a paramedic's initial knowledge.
 - B.** address didactic knowledge only.
 - C.** broaden a paramedic's knowledge.
 - D.** A and C.
 - E.** none of the above
- _____ **14.** Professional journals provide the paramedic with
- A.** an opportunity to write and publish articles.
 - B.** a source of continuing education material.
 - C.** information on new procedures for the field.
 - D.** all of the above.
 - E.** none of the above.
- _____ **15.** The EMT-Paramedic will most probably spend more time preparing to perform his or her duties (cleaning and restocking the ambulance, reading and attending continuing education sessions, documenting the last call, etc.) than responding to emergency medical calls.
- A.** True
 - B.** False

DESCRIPTION

- 16.** List at least three responsibilities of the paramedic in preparation for the Emergency Medical Service response.

_____	Optional:
_____	_____
_____	_____

- 17.** List at least five responsibilities of the paramedic during the emergency response.

_____	Optional:
_____	_____
_____	_____
_____	_____
_____	_____

18. Identify at least five attributes of leadership that a paramedic should have.

_____	Optional:	_____
_____		_____
_____		_____
_____		_____
_____		_____

19. Describe the expectations the public has of the Emergency Medical Service System because of popular television programs depicting paramedics at work.

20. Review the case study for this chapter and identify at least five of the shortcomings of the 1958 EMS system.
