

Preparing for and Passing the NBRC CRT Exam

SECTION



Using This Book and CD: Your Roadmap to Success

CHAPTER

1

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INTRODUCTION

To become a Certified Respiratory Therapist and to obtain a license to practice, you must pass the National Board for Respiratory Care (NBRC) Certification Examination for Entry-Level Respiratory Therapists (CRT exam). Preparing for and passing the CRT exam is no small task. Each year, despite intensive schooling and test-taking experience, a substantial portion of graduates fail this exam or require multiple and expensive retakes to pass it. Because in most states passing the CRT exam is a legal prerequisite to working in the field, you simply cannot afford to do poorly on this test.

To accomplish any major task, you need the right plan and the right materials. This book provides you with both. Our plan is based on our decades of experience helping thousands of candidates pass the CRT exam. Underlying our plan is a set of tried-and-true tools and materials adapted from a highly regarded online CRT examination review course that has helped hundreds of candidates achieve their goal of becoming a Certified Respiratory Therapist. Follow our plan and use the tools we provide and the strategy we recommend, and you too can achieve this important goal!

THE PLAN

A good plan has clear focus and structure. *Unlike many other review books, this one focuses exclusively on the CRT exam.* Some review texts mix preparation for both the CRT and Registered Respiratory Therapist (RRT) exams. Others attempt to review essentially all the topics covered in a typical respiratory therapy program curriculum. *To make the most of your preparation time, you need to focus solely on what is covered on the CRT exam.* You don't need to review everything you learned in school, nor do you need to confuse yourself by studying the different knowledge and skills required for the RRT exam.

Our exclusive focus on the CRT exam is reflected in the structure of this book. Each chapter corresponds *exactly* to a specific content area covered on the current CRT exam. Moreover, we present the topics in the same order as published by the NBRC in its CRT examination matrix (see Appendix A). This approach lets you concentrate on the exact knowledge and skills tested in each area at the levels set by the NBRC for that specific content. Organizing the book by NBRC content areas also helps you if you are preparing to retake the CRT exam. If you fall into this category, you likely scored below expectations in some content areas but did well in others. The best way to ensure success when retaking the exam is to focus your efforts on those content areas where you previously did poorly. Fortunately, this book makes that task easy. Simply review your NBRC score report to identify the content areas where you scored lowest, then focus your work on the corresponding text chapters.

THE TOOLS AND MATERIALS

Book Overview

This book and its supplemental resources provide you with all the tools and materials you need to pass the CRT exam. In addition to this overview chapter, Chapter 2 (Test-Taking Tips and Techniques) provides essential guidance to help you prepare for the exam. The next 17 chapters focus on the specific knowledge and skills needed in each of the current 17 CRT exam content areas. Finally, there is an additional chapter on performing relevant calculations (Chapter 20). Furthermore, the accompanying CD provides post-tests for each of the content area chapters, a mock CRT exam, links to carefully selected Web resources, and other materials useful in preparing for the CRT exam.

Chapter Structure and Content

Each of the 17 content-area chapters has a consistent structure designed to help make your exam preparation as efficient as possible.

Introduction, Objectives, What to Expect, and What's New

Each chapter begins with a short introduction, a set of explicit objectives, and a brief description of the category. The introduction emphasizes the relative importance of that content area and the recommended preparation time. The objectives correspond to the specific knowledge you need to master that section of the exam. The category description specifies the number and type of questions you can expect in this content area on the current NBRC exam. In addition, especially for those who took the exam prior to July 2009, we provide a section called *What's New for 2009*. This section specifies all new topics that the NBRC added to its CRT exam matrix for test administrations beginning in July 2009.

You will immediately note that the chapters in this text vary greatly in length. This variation is by design, based on the defined scope and weight of each NBRC content area. For example, Chapter 6 (Manipulate Equipment by Order or Protocol) is among the longest in the book because this category constitutes nearly 20% of the CRT exam content. In contrast, Chapter 18 (Assisting the Physician with Special Procedures) is among the shortest chapters because the current CRT exam contains only two questions in this category. It is based on these differences that the editors and contributing authors recommend more or less exam preparation time for each chapter.

Pre-Test Questions with Answers and Explanations

All chapters begin with a short practice test of the relevant objectives and content and end with the correct answers and explanations for each practice test question. Similar to chapter length, the number of questions on each pre-test varies with the relative emphasis given that content area on the CRT exam. In total, the 17 chapter pre-tests provide over 275 practice questions, answers, and explanations to help you prepare for the CRT exam.

A word of warning: We have found that many exam candidates try to memorize as many practice questions and answers as possible in hopes that doing so will help them pass the CRT exam. *This is a huge mistake and a waste of your time.* The likelihood of seeing the exact same questions from any review source (including this text) on the actual CRT exam is miniscule. Instead, we recommend that you use each chapter's pre-test to assess your existing knowledge of each content area. This information will help you (1) identify content areas needing priority and (2) adjust the amount of time you spend on each chapter.

In terms of prioritizing what to study, *use the practice questions to help you differentiate between the concepts you have mastered and those you still need to work on.* For example, if you notice that you consistently get practice questions on ventilator peak and plateau pressures wrong (or always have to guess at them), you have identified a shortcoming in your understanding of the mechanics of ventilation. You then would ideally seek out and review the relevant content, including (in this example) the meaning and measurement of total impedance, airway resistance, and compliance.

In general, the first source to review for any pre-test question you get wrong is the explanation of the correct answer provided at the end of the chapter. To ensure content mastery, you should always

thoroughly review these explanations so that you understand *why* the correct answer is the right choice. If you are still unclear about a concept after reviewing a question's explanation, you should seek out the more detailed information provided in the chapter or on the CD.

Finally, based on how many concepts you identify by pre-testing as still needing your attention, you should adjust the total amount of time you plan to spend on each chapter according to your individual needs.

What You Need to Know: Essential Content

The *Essential Content* section is the “meat” of each chapter, containing the vital information you need to succeed on the CRT exam. Every effort has been made to distill this essential content down to the key *need-to-know* information most likely to appear on the exam. To do so, we have purposefully chosen a format that emphasizes outlines and tables with a minimum of long-winded narrative.

In addition, we have carefully organized chapter content to coincide directly with the objectives, making it easy for you to find any of the specific information covered in the NBRC CRT exam matrix. For example, if you need to review manipulating resuscitation devices (current NBRC matrix content area II-A-5), you will find a section by that name in Chapter 6.

Common Errors to Avoid

One of the unique aspects of this text is its use of prior candidates' common testing mistakes. We have identified these common errors by analyzing a large pool of question statistics from those who have previously taken an online CRT examination review course. These statistics allowed us to identify the most common mistakes on questions in each of the CRT exam's 17 content areas. The *Common Errors to Avoid* section of each chapter provides a short summary of these common areas of misunderstanding. You can improve your score on the CRT exam by avoiding these mistakes.

Sure Bets

Although you probably have been taught to be on guard for absolutes in questions (e.g., “always”), there are a few relative certainties that apply to responding to questions in each content area of the CRT exam. We have taken the time to highlight these *Sure Bets* at the end of each chapter. As with avoiding common mistakes, knowing in advance what is always the right approach to a clinical problem or scenario can add extra points to your CRT exam score!

Supplementary CD

The supplementary CD extends the resources provided in the book to include a post-test for each of the content area chapters, a mock CRT exam, links to carefully selected Web resources, and other materials useful in preparing for the CRT exam.

Post-Tests

A post-test for each chapter is available on the accompanying CD. Instructions for taking these post-tests are provided in Appendix B. In combination, these 17 post-tests provide hundreds of additional practice questions to help confirm your mastery of each chapter's objectives. We recommend that you take the applicable post-test after completing each chapter and before moving on to review any other content areas. Based on our experience, a score less than 75% correct on any post-test indicates that you need to spend additional time on that chapter's content and/or review the supplementary resources on the CD applicable to that chapter.

Mock Exam

The CD also provides a customizable mock CRT exam that draws questions from the entire item pool. We recommend that you take this mock exam only after completing all 17 of the book's content chapters, including passing each of the accompanying post-tests.

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Web Resources

The supplementary CD offers you direct access to the wealth of resources available on the World Wide Web. The editors and authors have sought out, evaluated, and selected the very best respiratory care resources on the Internet and organized them for you based on the NBRC matrix. If you need additional review in any specific content area, you simply need to start up the CD, select the relevant chapter/NBRC content area, and click on the selected Web subject matter.

Other Materials

More details on the CD contents, including additional valuable resources compiled after book production, are described in Appendix B.

THE STRATEGY

Figure 1-1 outlines the strategy we recommend you follow to prepare for and pass the CRT exam. *You should devote at least 6 to 8 weeks to this process.* One of the most common reasons candidates do not pass the CRT exam is hasty or last-minute preparation. Do yourself a favor and follow a deliberate and unhurried process. Remember, it was the turtle who won the race, not the hare!

Some of you will implement this strategy on your own, while others may be guided in their preparation while still in a respiratory therapy program. In either case, it's important to proceed systematically through each chapter and not move forward until you are satisfied that you have mastered the relevant content.

For Those Who Have Previously Taken the CRT Exam

If you have previously taken the CRT exam, you are using this book because you did not achieve a passing score. Although you likely are unhappy with this outcome, this event actually gives you a significant advantage over those who have never taken this exam. First, you are experienced with the testing procedures, so you know what to expect. Second, your score report tells you *exactly* where on the exam you did well and where you did poorly. We recommend that you compute the percentage of correct questions for each of the 17 subscores on your NBRC score report. For example, based on the following section of an NBRC score report:

II. Equipment Manipulation, Infection Control, and Quality Control	Subscore
A. Manipulate Equipment by Order or Protocol	11/22

you would compute the percentage correct for the Manipulate Equipment by Order or Protocol subsection of the CRT exam as $11/22 = 0.50 \times 100 = 50\%$.

After computing the percentage correct for each subsection, we recommend that you flag every subsection on which you got less than 75% of the questions correct. You should then focus your primary attention on these flagged subsections and their corresponding book chapters in preparing to retake the CRT exam. You should still review the book chapters corresponding to NBRC subsections where you scored above 75%, *but only after attending to your high-priority needs.*

Chapter Review Process

For this strategy to succeed, it is essential that you proceed systematically through each content area chapter. This normally involves the following steps:

1. Take and score the chapter pre-test
2. Review the pre-test to determine your shortcomings
3. Prioritize chapter content based on identified shortcomings
4. Review the applicable chapter content
5. Take and pass the chapter post-test (on CD)
6. Repeat steps 1 to 5 for each chapter

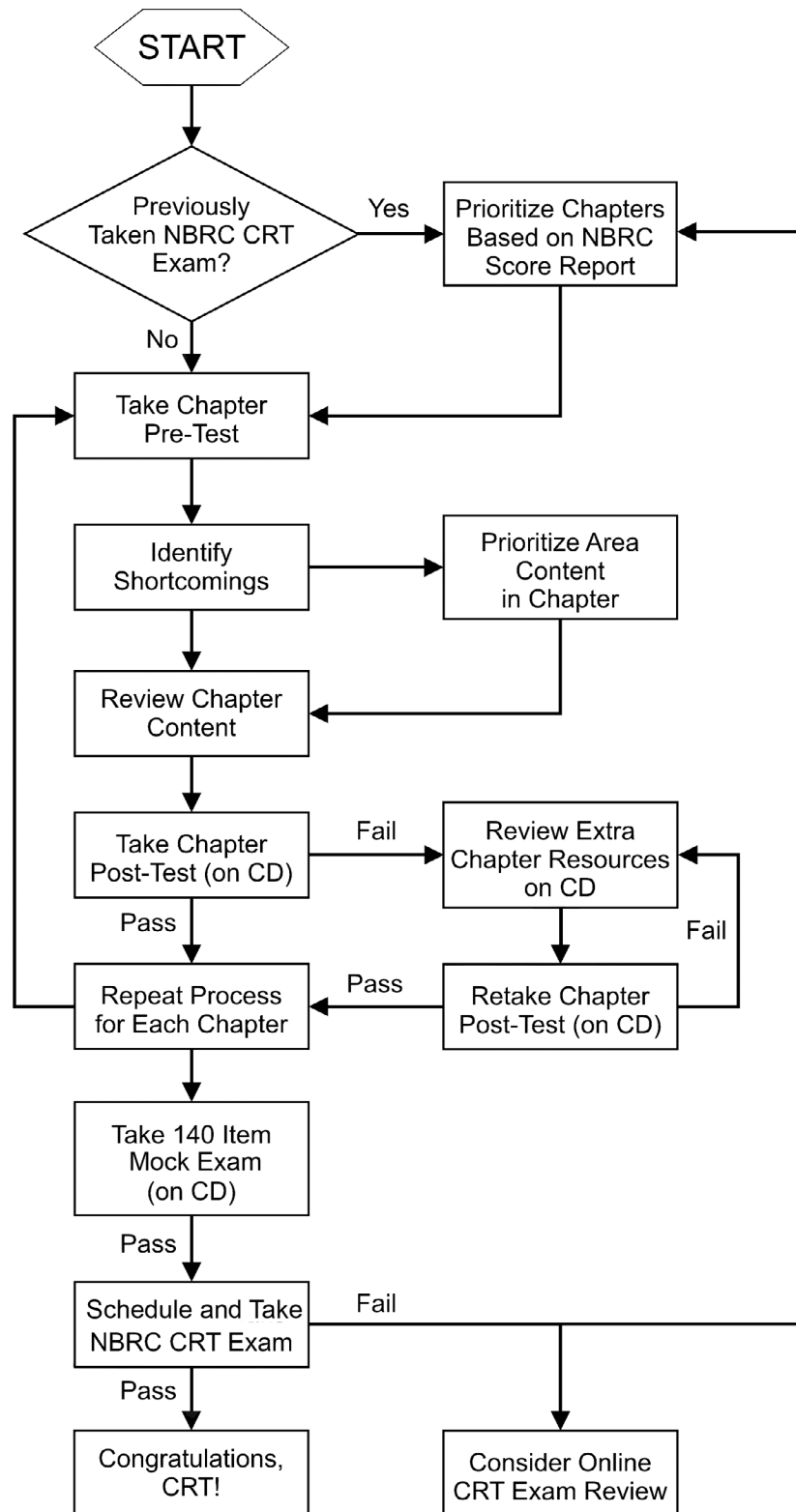


Figure 1-1 Recommended Strategy for Passing the CRT Exam. Spend at least the 6 to 8 weeks preceding the exam date systematically reviewing the text (about 2 to 3 chapters per week). Upon completing all NBRC content-area chapters and fully examining Chapter 2 (Test-Taking Tips and Techniques), take the mock CRT exam on the CD. Only after successfully completing the mock exam should you schedule and take the NBRC CRT exam.

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In regard to step 5 (taking and passing chapter post-tests), we recommend that you set a goal of achieving at *least 75% correct* on each chapter post-test. In addition, your post-test scores generally should be higher than your pre-test scores. The greater this difference, the more you have learned!

What if you fail a chapter post-test? Because chapter post-tests provide explanations for all answers, your first job should be to review these explanations thoroughly so that you understand *why* the correct answer is the right choice. We then recommend that you take full advantage of the CD and review the additional resources provided for the chapter in question. After reviewing both the post-test answers and the extra resources on the CD, *retake the applicable chapter post-test until you achieve at least 85% correct*. We suggest this higher “pass” score for post-test retakes due to the presence of some repeat questions. Lastly, we recommend that you not move forward with any new chapter until you are satisfied that you have mastered each preceding one.

Take the Mock Exam

The mock CRT exam is intended to simulate taking the real CRT exam. Like the chapter pre- and post-tests, our mock exam also gives you feedback on each and every question, including the correct answers and their explanations.

With this feedback, our mock exam becomes a critical learning tool in your path to success on the CRT exam. First, your overall score on this exam tells you how well you have learned and retained the content covered in the book and on the CRT exam. Second, careful review of the test item explanations should help further your understanding of the important concepts likely to be tested on the CRT exam. Last, review of the test item explanations on the mock exam also can help you identify any remaining areas of weakness that you need to address before scheduling your CRT exam date. Because the mock exam serves as a bridge between the book and the CRT exam, we recommend that you take it only after completing all 17 of the book’s content chapters, including passing each of their post-tests. We also recommend that you complete our mock exam at least 2 weeks before you are scheduled to take the CRT exam. This way you will have time to review any persistent areas of misunderstanding you have identified as well as avoid the anxiety that last-minute cramming always causes. Instructions on how to take the mock CRT exam are provided in Appendix B.

Should you set a time limit for taking the mock exam? We definitely recommend timing your test. *Because the CRT exam requires that you answer 20 extra nongraded questions (160 total) in 3 hours, you will need to pace yourself to complete about 1 question per minute*. If you take significantly longer to answer each question, you will need to work on your pacing before taking the actual NBRC CRT exam.

What if you do not score well on our mock exam? If you carefully follow the strategy we outline here, it is highly unlikely that you will do poorly on our exam. In the unusual case that you score below 75% on this exam, it’s “back to the books.” In this case, careful review of the test items you get wrong on our mock exam should help you identify the content areas and book chapters that need review.

Schedule and Take the CRT Exam

After successfully completing all book chapters, their post-tests, and the mock CRT exam, it is time to schedule and take the real thing. If you have not already done so, we strongly recommend that you use some of the time you have set aside before sitting for the NBRC CRT exam to review Chapter 2 (Testing Tips and Techniques). Also, consider using a portion of your set-aside time to take a practice trip to and from your designated NBRC testing center, ideally during the same time period your exam is scheduled. This run through can help you gauge the travel time involved (including the likely traffic) and iron out little details like parking arrangements and where to get a light meal or cup of coffee before the exam.

What if you do not pass the CRT exam? There are several DOs and DON’Ts associated with a failed attempt on the exam. First, the DON’Ts:

- Don’t get disheartened
- Don’t give up
- Don’t immediately reschedule a retake

Instead, take a proactive approach. DO the following:

- Do carefully analyze your NBRC score report
- Do use your score report to prioritize content areas needing further study
- Do revisit the key content area resources we provide in the book and on the CD
- Do give yourself adequate time to implement your new study plan (a minimum of 3 to 4 weeks)

Lastly, if you want or need access to *unlimited* practice testing based on a 2,800+ item pool of NBRC-like questions (all automatically scored and provided with answer explanations), we recommend that you consider the online CRT examination review course described in Appendix C. Purchasers of this book are eligible for a discounted enrollment fee for this course.