

**1<sup>st</sup> Edition**



# Certification Companion

**MASTERING THE CERTIFICATION  
IN INFECTION CONTROL (CIC®) EXAM**



**APIC®**

Association for Professionals in  
Infection Control and Epidemiology

# Certification Companion

**Mastering the Certification in  
Infection Control (CIC®) Exam**



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Carol McLay, DrPH, MPH, RN, CIC, FAPIC has nothing to declare.

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## PREFACE

Congratulations on your decision to sit for the Certification in Infection Prevention and Control (CIC®) exam! The CIC credential identifies healthcare professionals who have demonstrated mastery of knowledge needed to practice infection prevention and control. Achievement of the CIC qualification is a significant milestone in the Infection Prevention Competency Model as it represents the career transition point from novice to proficient and clearly shows your employer and colleagues that you are dedicated to your professional growth.

This Certification Companion was created to help you prepare to take the certification exam. It provides study tips as well as specific guidance for reviewing primary and secondary resources used by the Certification Board of Infection Control to write the exam. The questions in this guide were written by a team of experts in the field of infection prevention to assist you in assessing your knowledge and preparedness for the exam. Questions have been reviewed by a panel of infection preventionists for accuracy. Every question includes a rationale for the correct answer,

The questions and content in this book reflect the eight domains of the exam content outline that came into use in 2021. We hope that this resource will support your path to earning the CIC.

Whether you are just beginning the journey to certification or you are preparing to recertify, remember: success begins with a positive mindset. Positive thinking helps with stress management and can even improve your health. Positive thinking can produce a positive attitude, and a positive attitude leads to positive results. You can succeed!

Warm regards,

Carol McLay, DrPH, MPH, RN, CIC, FAPIC

## INTRODUCTION: HOW TO USE THIS GUIDE

APIC's Certification Companion was written to reflect current infection prevention practices as assessed by the Certification Board of Infection Control (CBIC) practice analysis.

### Key Features

- This study guide contains more than 650 practice questions spanning eight review chapters and three practice exams. Questions are formatted similar to those on the actual Certification in Infection Prevention and Control (CIC®) exam.
- Questions have been written by a team of experts in the field of infection prevention and control and reviewed by a panel of infection preventionists.
- Most of the questions are written at the higher levels of cognitive domain (application or analysis). Practicing with more difficult questions is one of the keys to success!
- The answer and rationale section that is included with each question set and practice exam provide immediate feedback and explanations when answering questions. This section is located at the end of each question set to mimic an actual exam and enable you to assess your progress as you study.
- The guide was designed to function as a workbook—use the notes area in the outside margins of the review chapters and practice exams to capture your thoughts or to work through a problem.
- Although this guide is primarily focused on preparing candidates for initial certification via CBIC's Computer Based Test (CBT), it may also be used to review material in preparation for the Self- Achievement Recertification Exam (SARE).



## Book Organization

This resource is divided into three sections:

**Section I** consists of two chapters and provides background information and orientation to the CIC® exam as well as test-taking strategies and recommendations for international and repeat test-takers.

**Section II** consists of eight chapters that correspond to the areas of testing defined by the Certification Board of Infection Control (CBIC).

1. Identification of Infectious Disease Processes
2. Surveillance and Epidemiologic Investigation
3. Preventing/Controlling the Transmission of Infectious Agents
4. Employee/Occupational Health
5. Management and Communication
6. Education and Research
7. Environment of Care
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment

Each chapter lists key concepts followed by a series of practice questions specific to that content area and an answer key with rationales for the correct answers. This information will facilitate your review of specific topics in preparation for the CIC® exam.

**Section III** includes three comprehensive exams reflecting all of the eight core competencies that are measured in the CIC® exam. All three of these exams include 135 questions—the same number of questions that is used to compute your score on the CIC® exam.

## How to Use This Study Guide

Candidates planning to take the CIC exam should read the introductory chapters of this book in order to become familiar with the structure of the exam. It is important to understand what is being tested before creating your study plan. This guide also provides test-taking strategies and helpful tips that can be followed as you prepare for the exam.

Once you have read the introductory chapters, you are ready to develop your study plan. You can start by reviewing pertinent sections of the primary references used by CBIC; these will be your principle study sources (see Chapter 1). Use this Companion to focus your efforts and reinforce the information learned from the primary references. Answer the practice questions in Chapters 3 through 10 and review the rationales for the correct answers. This will provide you with important information that will help you to understand the basis for the correct answer. When you are ready, dive into the practice exams. Once you complete an exam, review the answers and rationales for each of the questions. Use the score analysis at the end of each exam to identify content areas that may need further review.

**SECTION I**  
PREPARING FOR THE  
CERTIFICATION OF INFECTION  
CONTROL (CIC®) EXAM

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# Chapter 1

## THE CIC<sup>®</sup> EXAM

This chapter provides a summary overview of the Certification in Infection Prevention and Control (CIC<sup>®</sup>) exam. A detailed description of the exam, eligibility requirements, scoring methods, and more can be found in the *Candidate Handbook* provided by the Certification Board of Infection Control and Epidemiology (CBIC) at [www.cbic.org](http://www.cbic.org).

### DESCRIPTION OF THE CIC<sup>®</sup> EXAM

The CIC<sup>®</sup> exam is developed by CBIC. CBIC's responsibilities include determining the exam content outline and specifications, developing and maintaining an item bank of approved exam questions, approving exams for administration, and setting the passing score that indicates successful achievement and attainment of the CIC<sup>®</sup> credential. CBIC also sets the criteria for eligibility for those applying to sit for the exam. Prometric manages the test sites, administers the exam, and scores and conducts statistical analysis of the exam.

The CIC<sup>®</sup> exam is currently administered in two forms—the CIC<sup>®</sup> Initial Certification exam and the CIC<sup>®</sup> Recertification exam, also called the Self-Achievement Recertification Examination (SARE). The Initial Certification exam is intended for initial (first-time) certification and is also an option for recertification. The Recertification exam or SARE is an open-book examination intended for recertification of currently certified professionals only. Once certified, the CIC<sup>®</sup> credential is valid for a five-year period from the year it is attained.

Effective January 1, 2026, the CIC<sup>®</sup> Recertification (SARE) examination will no longer be offered. Recertification will be obtainable by either submitting a continuing education portfolio with a minimum of 40 approved infection prevention units (IPUs), or by retaking the initial CIC<sup>®</sup> proctored exam.

The CIC<sup>®</sup> exam is offered at testing centers throughout the United States and Canada, and at select international sites. Candidates may also take the exam at home via Prometric's live remote proctoring option, Pro Proctor.

## CIC® INITIAL CERTIFICATION EXAM

This is an objective, multiple-choice exam consisting of 150 questions. The candidate's score is based on 135 of those questions. Fifteen of the 150 questions are pretest questions and are not included in the final score.

### Testing Time

Candidates have three hours to complete the exam.

### Content

The exam content for both the initial and recertification exams is based upon results of a practice analysis that CBIC conducts via survey every five years. This is in accordance with certification industry best practices and is intended to ensure that the CIC® exam focuses on current infection prevention practice.

As of the date of publication of this Companion, the topics identified by the most recent practice analysis and included in the current exam are as follows (the number of questions for each topic on the exam is in parentheses):

1. Identification of Infectious Disease Processes (22 questions)
2. Surveillance and Epidemiologic Investigation (22 questions)
3. Preventing/Controlling the Transmission of Infectious Agents (22 questions)
4. Employee/Occupational Health (11 questions)
5. Management and Communication (14 questions)
6. Education and Research (12 questions)
7. Environment of Care (14 questions)
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment (18 questions)

### Construction of Test Items

The components of the multiple-choice questions on the exam are as follows:

- The stem of the question. The stem includes the description of the situation or presents the central problem. It includes a question or an incomplete situation; this is the question that must be answered.
- Three incorrect answers called distractors
- The correct answer

All items have four options: A, B, C, or D.

The distractors are written to appear as logical answers to the question. They may be based on information provided in the stem, but they do not actually answer the question, are incorrect, or may not reflect best practice.

All items have only one correct choice. There is no penalty for wrong answers; candidates should guess when they do not know the answer.

## Cognitive Levels

Exam items are divided into three cognitive levels.

### ***Level 1: Recall***

Level 1 exam questions test the memorization or recall of practice-specific information, such as specific facts, generalizations, concepts, principles, processes, procedures, or theories. This is the lowest level of learning outcomes in the cognitive domain. Questions may use verbs such as define, list, state, identify, label, and name or inquiry words such as who, when, where, or what. Twenty-five percent of the questions on the exam will be Level 1.

### ***Level 2: Application***

Application questions test simple interpretation or application of limited data. This requires the ability to apply rules, methods, concepts, principles, laws, or theories and to recognize the elements and relationships among data. Questions at this level will ordinarily be structured in an “if/then” or “how can x be used to y” fashion. Sixty percent of the questions on the exam will be Level 2.

### ***Level 3: Analysis***

Analysis questions primarily test the evaluation of data, the analysis of the relationships between parts, or the organizational principles involved. Questions may use verbs such as differentiate or compare/contrast, or ask “how does x relate to y?” Fifteen percent of the questions will be Level 3.

## **CIC® RECERTIFICATION EXAM/SELF-ACHIEVEMENT RECERTIFICATION EXAM (SARE)**

This is a 150-question, multiple-choice, web-based exam designed to assess the knowledge of professionals in infection prevention and control and epidemiology who are seeking recertification. The questions are not identical to any of the questions in the active pool of questions used on the initial certification exam but were developed by the CBIC Test Committee specifically for this exam. Like the initial certification exam, questions on the recertification exam are based on the most current CBIC practice analysis, and the content outline is identical to the other exams. The questions developed are held to the same standards and analysis as the other exams.



However, this exam is geared toward the advanced infection prevention and control recertifier who is, at minimum, a five-year practitioner. For this reason, some questions may be more difficult than those on the initial certification exam, which is geared toward a two-year practitioner. The purpose/goal of the recertification exam is to demonstrate continued knowledge and mastery in the field of infection prevention and control.

Candidates are required to purchase the exam in the same calendar year that recertification is due. The exam may be ordered no later than November 30 and must be submitted by December 31 of the recertifying year. Candidates are able to log in and out as many times as necessary to complete the exam (within the recertification and submission deadline).

## REFERENCES

Nearly all questions in both the initial and recertification exams are based on chapters in the primary references. However, CBIC also uses the secondary references listed below, and these may be useful to help clarify more detailed issues in specific practice settings or in content areas such as microbiology.

### Primary References

Dean R, Popescu, S, eds. *APIC Text*. 2024. Available at: <https://text.apic.org/>

Meehan, AK, Campbell, EA, Dudeck, MA, Edwards, JR, & Herzig, C. *Fundamental Statistics & Epidemiology in Infection Prevention*, 1st ed., APIC, 2016.

Kulich P, Taylor D, eds. *The Infection Preventionist's Guide to the Lab*, APIC, Washington, DC, 2012.

Brooks, Kathy. *Ready Reference for Microbes*, 4th ed., APIC; 2018.

### Secondary References

Current Recommendations of the Advisory Committee on Immunization Practices (ACIP).

Current guidelines, standards, and recommendations from CDC, SHEA, HICPAC, and Public Health Agency of Canada.

AORN guidelines for perioperative practice.

The Pink Book - Epidemiology and Prevention of Vaccine Preventable Diseases.

American Academy of Pediatrics "Red Book Online". Available at: <https://publications.aap.org/redbook?autologincheck=redirected>

Ontario Agency for Health Protection and Promotion (Public Health Ontario), *Provincial Infectious Diseases Advisory Committee. Best practices for environmental cleaning for prevention and control of infections in all health care settings*. 3rd ed. Toronto, ON: Queen's Printer for Ontario; 2018.

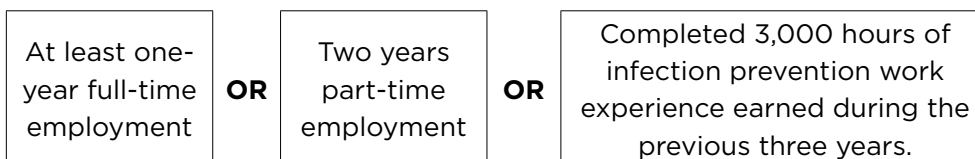
Ontario Agency for Health Protection and Promotion (Public Health Ontario), *Provincial Infectious Diseases Advisory Committee. Interim guide for infection prevention and control of Candida auris*. Toronto, ON: Queen's Printer for Ontario; 2019.

## ELIGIBILITY REQUIREMENTS

Successful certification indicates competence in the practice of infection prevention and control and healthcare epidemiology, and is intended for individuals who are actively accountable for the infection prevention and control program within their current position. It is recommended (but not required) that applicants have at least two years of full-time experience in infection prevention and control.

In order to qualify to sit for your initial (first-time) certification, or if your certification has lapsed and you wish to renew your certification, you must meet the following CBIC requirements:

1. Completed post-secondary education in a health-related field including but not limited to medicine, nursing, laboratory technology, public health, or biology. A diploma RN, an LPN/LVN, DPN, and a health-related Associate's degree, Bachelor's, Master's, or Doctorate would be eligible. Post-secondary education includes public or private universities, colleges, community colleges, and so forth.
2. Within their role this person is directly responsible for providing consultation to departments or assigned practice settings on infection prevention and control program elements, practices and processes, as well as products used within healthcare facilities.
3. Work experience, defined as active engagement in infection prevention, determined by a current job description, for compensation, for a minimum of:



Infection prevention activities include:

<ol style="list-style-type: none"> <li>1. Identification of infectious disease processes</li> <li>2. Surveillance and epidemiologic investigation</li> <li>3. Preventing and controlling the transmission of infectious agents</li> <li>4. Environment of care</li> <li>5. Cleaning, disinfection, sterilization, and asepsis</li> </ol>	<b>AND</b>	<p>At least two (2) of the remaining three (3) components:</p> <ol style="list-style-type: none"> <li>1. Employee / occupational health</li> <li>2. Management and communication</li> <li>3. Education and research</li> </ol>
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Candidates will be required to submit the following documentation with their application:

- Attestation Statement
- Proof of Degree
- CV/Resume
- Job Description (on official letterhead with supervisor signature)

## REQUESTS FOR SPECIAL ACCOMMODATIONS

Candidates who have a learning disability, a psychological disability, or other disability that requires an accommodation in testing should check the Request for Special Accommodations box during the application process, then complete and upload the Documentation of Disability Form and Request for Special Examination Accommodations Application.

Typical accommodations include:

- Providing a reader for the exam (physical testing center)
- Time extension
- Reduction in distractions in the environment (physical testing center)
- Taking food/drink into the testing area (physical testing center)
- It is not possible to request a pencil and paper exam as the exam is computer-based.

## SCHEDULING THE EXAM

After the exam application process has been completed, candidates are sent an email containing instructions on how to schedule their CIC® exam through the Prometric online scheduling portal.

Once your exam application has been approved, you have 90 days to sit for it.

You have the option to take your exam at a Prometric Testing Center or as a remotely proctored exam.

Procedures for proctor and testing room may be found at:  
<https://www.prometric.com/test-takers/frequently-asked-questions>.

## PASSING SCORE

The minimal qualifications, represented by a passing score, are determined through a formal process called a standard setting study, where a panel of content experts recommends a standard and a passing score to CBIC. The raw passing score chosen by CBIC is set to equal a scaled score of 700.

Scaled scores are determined by converting the number of questions answered correctly to a scaled score that ranges from 300 to 900. A candidate needs a total test scaled score of at least 700 to pass the exam. Scaled scores provide a uniform frame of reference based on the standard adopted by CBIC of the threshold at which a candidate demonstrates minimum competency in infection control. The scaled scores account for variation among forms, so candidates are held to the same standard regardless of which form they take.

Candidates will receive their scaled score instead of the number of questions answered correctly.

If you pass the exam, you will be notified immediately and will receive further instructions about your certification.

If you do not pass the exam, you will be immediately notified and given your scaled score, which can range from 300 to 699. In addition, you will be provided with diagnostic performance levels in each content area to guide you in future study, should you decide to retake the exam.

If you do not pass the exam, there is a mandatory 90-day waiting period between the date of your last exam and a new exam eligibility period. You may reapply after 90 days.