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General Information

About the Certification Examination

The infection control certification examination is the standardized measure of the basic knowledge, skills and abilities expected of professionals working in infection prevention and control. The initial certification examination is offered five to seven days a week at testing centers throughout the United States, Canada, and select international sites. The initial certification exam is available in English and Canadian French.

The initial certification exam is an objective, multiple-choice examination consisting of 150 questions (135 of these questions are used in computing the score, as discussed later in this handbook). The examination content is based upon results of a practice analysis, which is a survey of practicing professionals in infection prevention and control that is conducted by the Certification Board of Infection Control and Epidemiology, Inc. (CBIC®) every 4-5 years. The most recent practice analysis was conducted in 2014. The practice analysis determines the scope of knowledge and responsibilities that are currently required by, and are representative of, individuals practicing infection prevention and control. It is important to recognize that examination content is based on this information, even though all elements of the examination may not seem to be directly relevant to every individual taking the exam.

CBIC is responsible for determining the examination content outline, developing and maintaining an item bank of approved examination questions, approving individual exam applications, and setting the standard for minimum competency in the form of the exam passing score.

Individual eligibility for admission to the examination is based on criteria set by CBIC. Our testing company Prometric is responsible for the examination administration, examination security, scoring and statistical analysis of examination content.

CBIC is a Charter member of the Institute for Credentialing Excellence (ICE). CBIC is accredited by the National Commission for Certifying Agencies (NCCA). NCCA accreditation signifies that CBIC has met the highest standards for establishing a valid, reliable, and secure certification process.

Objectives of Certification/Recertification

The purpose of the certification and recertification process is to protect the public by:

Certification Quick Facts

How many questions are on the exam?

There are 150 multiple-choice questions on the exam, 135 of which are scored.

What is on the exam?

<u>Click here</u> or scroll down to p17 to view the examination content outline.

What is the timeframe to take the initial examination?

The initial examination is offered throughout the year. Once your application is approved, you have a *90-day period* to schedule and sit for your exam.

Where is my closest Prometric testing center?

Visit www.prometric.com/cbic to locate your nearest center.

How often do I need to renew my certification?

Recertification must successfully be completed every five years.

How is recertification completed?

Recertification is completed by passing the online recertification examination. More information this is found on p11.



- 1. Providing standardized measurement of current essential knowledge needed for persons practicing infection prevention and control;
- 2. Encouraging individual growth and study, thereby promoting professionalism among professionals in infection prevention and control; and
- 3. Formally recognizing professionals in infection prevention and control who fulfill the requirements for certification and recertification.

Professionals in infection prevention and control must meet the eligibility requirements and pass the initial certification exam to become certified. Certification in infection prevention and control is valid for five years from the year of successful examination. For example, candidates who certify in 2015 must recertify in 2020, 2025, etc. This is because changes in infection prevention best practices occur frequently. Certified professionals who do not recertify before their certification period expires will lose their CIC® designation as of December 31st of the last year of the certification period. Use of the CIC® designation is prohibited until they have reapplied and successfully passed the initial certification exam.

Eligibility Requirements for Initial Certification

In order to qualify to sit for your initial certification, you must apply to take the initial certification examination. In order to be eligible to take the initial certification exam, you must meet ALL of the following requirements:

First-time candidates, candidates who have not successfully passed the examination, and lapsed certificants must:

- 1. Be accountable for the infection prevention and control activities/program in your setting and this is reflected in the current job description.
- 2. Have a post-secondary degree from an accredited institution.

Or

Have a three-year Diploma RN degree (applicable through December 31, 2020 only)

- 3. Have had sufficient experience (recommended: two years) in infection prevention and control which includes all three (3) of the following:
 - Identification of infectious disease processes
 - Surveillance and epidemiologic investigation
 - Preventing and controlling the transmission of infectious agents
- 4. And at least two (2) of the remaining five (5) components:
 - Employee/occupational health
 - Management and communication
 - Education and research
 - Environment of care
 - Cleaning, sterilization, disinfection, and asepsis



The assessment of "sufficient experience" is individual to the candidate and can vary; CBIC recommends two years of experience in infection prevention and control. Candidates who are comfortable with their knowledge and experience may sit for the exam whenever they are ready. However, analysis of our data has demonstrated greater success amongst candidates with at least two years of experience in the field.

Renewing Lapsed/Expired Certification

If you fail to recertify when you are due and later decide that you would like to once again be certified, you must meet the criteria for initial certification and reapply as a new candidate.

Recertification

Recertification by examination is required in order to maintain the CIC® designation. All currently certified (CIC®) professionals in infection prevention and control are eligible for recertification during the year that their certification is due to expire.

Recertifying candidates who do not pass the internet-based recertification examination cannot apply to retake the recertification examination but may apply to recertify by the initial certification examination. In order to maintain their certification after failing the recertification examination, they must pass the initial certification exam before the certification cycle ends. *An individual may retake the initial certification examination a maximum of four times per year, and no more than once every 90 days.* Because the initial certification examination is available by appointment only at designated testing sites, candidates are encouraged to purchase and complete their recertification examination early in the year to allow time to apply, schedule and take the initial certification exam in the event that they fail their recertification exam.

To maintain current certification, the internet-based recertification examination must be completed by 11:59 pm Greenwich Mean Time (6:59 pm EST) on December 31 of the CICs recertifying year. If a candidate fails to successfully recertify by the deadline, his/her certification will be considered to be expired and the CIC® designation can no longer be used. The candidate will then be required to apply for and pass the initial certification examination, meeting all of the eligibility requirements, in order to once again be considered certified and use the CIC® designation again.

The recertification examination is offered in an English-only, internet-based format.

Copyrighted Examination Questions

All examination questions are the copyrighted property of CBIC. It is forbidden under federal copyright law to copy, reproduce, record, distribute or display these examination questions by any means, in whole or in part. Doing so may subject the candidate to civil and criminal penalties. Candidates are forbidden from describing or sharing examination content.

Statement of Non-Discrimination

CBIC offers examinations to all eligible persons regardless of age, gender, race, religion, national origin or disability.



Information on Initial Certification

Applying for the Examination

To apply online:

Go to www.cbic.org and select the "Examination Application" link under the Certification tab.

To apply using a paper application:

Complete the paper application and mail or fax it, along with the required documents, to the CBIC Office at the following address:

CBIC 555 East Wells Street Suite 1100 Milwaukee, WI 53202

Fax: (414) 276-3349.

You must include ALL of the following with your completed application form:

- 1. Proof of diploma/degree or transcript
- 2. Completed attestation statement form signed by your supervisor/director, attesting that you meet all of the eligibility requirements above (see Eligibility Requirements, page 2).
- 3. Official job description for the position in which you are currently employed.
- 4. A copy of your CV or resume.
- 5. <u>Self-employed applicants only</u>: Candidates must have client attestation statements completed by three (3) clients whom they have provided infection prevention and control services to in the past 2 years. The client attestation statement form for self-employed candidates can be downloaded from the CBIC website. Attestation statements should be directly forwarded by the person completing them to the CBIC Office at 555 East Wells St., Suite 1100, Milwaukee, WI 53202.
- 6. Payment of the examination fees. If using a paper application, payment in U.S. dollars may be made by personal check, cashier's check, money order or credit card. If applying online, payment must be made by credit card.

CBIC reserves the right to verify all information supplied by the candidate. An application is considered complete when:

- 1. all requested information has been submitted and determined to be accurate,
- 2. examination fees have been submitted,
- 3. the candidate has been determined eligible for the examination.

Once an application has been successfully submitted, the candidate will receive an email notifying them of submission, after which the application is reviewed. If the applicant is deemed eligible to take the exam, they will receive a second email containing exam appointment scheduling instructions, typically within five (5) business days of application submission.



If an application is incomplete or there is not sufficient proof of eligibility, a CBIC staff member will contact the applicant via the email address provided on the application with further instructions. Once the required materials have been received and the candidate is deemed eligible to take the exam, they will receive a second email containing exam appointment scheduling instructions within five business days of application submission.

Examination fees for accepted applications will be refunded minus a \$72 processing fee if cancelled by candidate. Examination fees for ineligible applications will be fully refunded.

Examination Fees

The fee for the initial certification examination is \$375. Candidates must submit the appropriate fee with a complete examination application.

Examination fees will be forfeited and will not be refunded if the eligible candidate who is approved to take the examination:

- does not schedule an examination within the 90-day eligibility period;
- requests to reschedule the examination less than five days before the scheduled test date;
- fails to report for an examination appointment;
- arrives more than 30 minutes late for an appointment; or
- fails to present appropriate identification on the day of the examination.

If fees have been forfeited and the candidate still wishes to take the examination, a new application and the appropriate examination fee must be submitted.

Confirmation of Eligibility

Your application is not complete until you receive an email confirmation of eligibility containing instructions on how to schedule your examination. CBIC sends candidates an email confirmation of eligibility to the candidate within seven (7) business days of acceptance of the application. If eligibility is denied, you will be contacted by CBIC. If a confirmation notice is not received within two weeks of submission, contact CBIC at (414) 918-9796 or info@cbic.org.

The confirmation of eligibility email includes instructions detailing how to schedule an examination appointment with Prometric online or by phone.

Scheduling the Examination

A candidate's eligibility is valid for 90 days after receiving the email confirmation notice from CBIC. *The* examination must be scheduled and taken within this 90-day period. A candidate who fails to schedule an exam appointment within the 90-day eligibility period forfeits his/her examination fees and must submit a new completed application and the appropriate examination fee in order to schedule an examination appointment.

Examination appointments are scheduled for a 3.5 hour window of time – three hours for the examination itself, and fifteen minutes on each end for completion of the tutorial and the post-exam survey.

Candidates can schedule their examination by one of two methods:



- 1. By telephone: (800) 278-6222 (US and Canada only)
- 2. Online at www.prometric.com/cbic.

To schedule an exam online:

- 1. Access www.prometric.com/cbic
- 2. Click on "Schedule My Test"
- 3. Select the location at which you would like to test
- 4. Follow the instructions provided in your confirmation email for finding and selecting a test center location and test date and time.

To schedule an exam by phone:

- 1. Call (800) 278-6222 between 8:00 am and 8:00 pm EST Monday Friday and follow the prompts utilizing the eligibility number sent to you in your confirmation email.
- 2. At the end of the call, you will be given a number confirming your appointment. Record and keep this confirmation number for your records.

Rescheduling Your Appointment

You may reschedule or cancel your appointment on line at www.prometric.com/cbic or by calling (800) 278-6222.

Prometric rescheduling fees are as follows:

- Rescheduling 30 days or more in advance No Charge
- Rescheduling between 5 and 29 days in advance \$30 Fee
- No rescheduling or cancellations are allowed within 5 days of your appointment; examination fees will be forfeited.

Emergency Closings

Severe weather or an emergency could require canceling scheduled exams. If this occurs, Prometric will attempt to contact candidates by phone or email; however, you may check for testing site closures by calling Prometric or logging on to https://www.prometric.com/en-us/pages/sitestatus.aspx. If the site is closed, your exam will be rescheduled without a rescheduling fee.

If a testing center is open for testing and you choose not to appear for testing, your fee will be forfeited and you will need to pay another full exam fee. Please call CBIC with any concerns regarding missed appointments due to unforeseen circumstances.

Special Arrangements for Candidates with Disabilities

In compliance with the Americans with Disabilities Act (ADA) and Title VII of the Civil Rights Act, special testing accommodations will be considered for individuals with disabilities recognized by the ADA. Request for special accommodations must be made at the time of application. Please complete the Request for Special Accommodations and Documentation of Disability forms, found on the CBIC website, in order to be eligible.

If you require any special accommodations, please contact CBIC at info@cbic.org before submitting your examination application, and the staff will be happy to assist you in meeting your testing needs.



Taking the Initial Certification Examination

What to Bring to the Exam

You should arrive at least *30 minutes before* your scheduled exam appointment. You will be required to present one valid, government-issued ID (e.g., driver's license or passport, other federal or military ID), with your signature and a recognizable photograph. The identification document must be in Latin characters. If you are testing outside of your country of citizenship, you must present a valid passport.

All other personal items, including watches, must be secured in a locker for test security purposes, so please limit what you bring to the testing center. You will be screened with a metal detector during check-in. Please review the testing rules and regulations found on the Prometric website at www.prometric.com/cbic.

New Accessories Policy

Beginning on October 15th, 2016, Prometric is conducting stricter inspections of *any and all* eyeglasses, jewelry and other accessories to inspect for camera devices that could be used to capture exam content:

- All candidates are required to remove their eyeglasses for close visual inspection by testing
 center staff. These inspections will take a few seconds and will be done at check-in and again
 upon return from breaks.
- Jewelry outside of wedding and engagement rings is prohibited. Candidates may not wear other jewelry to the test center.
- Hair accessories are subject to inspection. Candidates should refrain from wearing ornate clips, combs, barrettes, headbands, and other hair accessories as they may be prohibited from wearing them in to the testing room and asked to store them in their locker.
- If candidate is caught with a camera device prior to entering the testing room, Prometric will confiscate and they won't be able to test.
- If a candidate is caught with a camera device while in the testing room, Prometric will confiscate and the exam will be terminated.

Important

- If you do not provide correct identification at the time of the exam, it is considered a missed appointment. You will be required to pay another full exam fee before choosing another appointment.
- If you arrive more than 30 minutes late for an appointment, examination fees will be forfeited.

Test Center Regulations

To ensure that all candidates are tested under equally favorable conditions, the following regulations and procedures will be observed at each test center. Failure to follow any of these security procedures may result in the disqualification of your examination and removal from the testing center. Prometric reserves the right to audiotape and videotape any examination session.



References

No reference materials, papers or study materials are allowed at the test center.

If you are found with these or any other aids, you will not be allowed to continue the exam and your answers will not be scored. Candidates do not need to bring a calculator into the examination room with them – an onscreen calculator is provided for your convenience.

Personal Items

Prometric is not responsible for items left in the reception area of the test center. While lockers are provided, it is recommended that personal items not be brought into the test center. Note the following:

- Electronic equipment— cell phones, PDAs, pagers, cameras, tape recorders, etc.—are not permitted in the testing room and must be powered off while stored in a locker.
- Other personal items—watches, outerwear such as sweaters and jackets not being worn while testing, briefcases, purses, etc.—are not permitted in the testing room.
- Candidates may bring their own foam ear plugs into the examination room with them if they are sensitive to the noise of other candidates taking exams.

Breaks

Every time you enter the test room, you will be asked to turn your pockets inside out to confirm that you have no prohibited items. The test center administrator will collect any materials that are in violation of the rules.

If you leave the testing room while an exam is in progress, you must sign out/in on the roster and you will lose the exam time of the absence. You are not allowed to use any electronic devices or phones during breaks.

Visitors

No guests, visitors or family members are allowed at the test center.

Misconduct or Disruptive Behavior

Candidates who engage in any kind of misconduct or disruptive or offensive behavior maybe dismissed from the examination. Examples are: giving or receiving help, taking part in an act of impersonation, removing test materials or notes from the testing room, using rude or offensive language and behavior that delays or interrupts testing.

Weapons

Weapons are not allowed at the test center.

Copyrighted Questions

All test questions are the property of the Certification Board of Infection Control and Epidemiology, Inc. (CBIC) and are protected by copyright. Federal law provides severe civil and criminal penalties for the unauthorized reproduction, distribution, or exhibition of copyrighted materials.

Test center administrators are not allowed to answer any questions pertaining to the exam content. If you do not understand a question on the examination, you should answer the question to the best of your ability. Opportunity for feedback will be provided in the post-exam questionnaire.



Information on Recertification

Recertification

All recertification candidates are required to take the internet-based recertification examination. Candidates who fail the recertification examination will need to apply to recertify via the initial certification examination at a testing center, as outlined in the policy below. Recertification must be completed before the certification cycle ends.

About the Recertification Examination

The recertification exam is a 150-mulitple choice question, internet-based examination designed to assess the knowledge of professionals in infection prevention and control and epidemiology. Recertification questions have been developed by CBIC specifically for the recertification examination. Like the initial certification exam, recertification questions are based on the most current CBIC practice analysis. The content outline is similar to the one used for the initial certification examination however, the scored domains and number of items in each domain area may vary slightly. The questions developed are held to the same standards as are used for the initial certification exam.

Unlike the initial certification exam that is completed at a three-hour appointment, time to complete the recertification examination is unlimited, provided it is submitted by December 31 of the year in which certification expires. Recertification candidates can log into and out of the exam site repeatedly, and are able to research the answers to questions prior to submitting their responses. The purpose of the recertification examination is to demonstrate continued knowledge mastery in the field of infection prevention and control.

Applying for the Recertification Examination

Application for the recertification examination must be submitted before December 20 of the same calendar year the candidate is due for recertification. Candidates are encouraged to purchase their examination early in their recertification year.

To apply online:

Go to www.cbic.org and proceed to the Recertification tab, and then to the "Online Application" link.

Recertification Quick Facts

How often do you need to recertify?

Your certification expires on December 31st of the fifth year of your certification regardless of when you first certified.

How do you recertify?

Recertification is attained by achieving a passing score on the recertification exam.

Does CBIC offer CEUs for recertification?

No.

When can you purchase the recertification examination?

You may purchase the recertification exam beginning in January of your recertification year.

How long do I have to complete the recertification exam?

You have the entirety of your recertification year to recertify. Therefore if you buy the exam in January you have the whole year to take the test. However, if you buy the exam in December, you have one month to take the exam.

What is the deadline to purchase the exam?

December 20th of your recertification year.



To apply using a paper application:

Complete the paper application and mail or fax it to the CBIC Office:

555 East Wells St. Suite 1100 Milwaukee, WI 53202

Fax: (414) 276-3349

The cost of the recertification examination is \$375. Payment in U.S. dollars must be included with the application. Payment can be made by personal check, cashier's check, money order or credit card. The fee is non-refundable.

The deadline to purchase the recertification exam is December 20 of the year in which current certification expires. The recertification exam must be submitted by December 31 of the same year. There are no extensions to this deadline for any reason. Candidates should allow themselves ample time to complete the recertification exam, researching information as needed.

Recertification Schedule

Purchase Deadline	December 20
Completion Deadline	11:59 pm Greenwich Mean Time on December 31

Taking the Recertification Examination

Within seven (7) business days of receipt of an application for the recertification exam, the candidate will receive a confirmation email with specific instructions on how to log in to the examination. Candidates will be able to log in and out as many times as necessary, prior to certification expiration, to complete the examination. Responses provided during previous sessions will be saved; however, it is important to read all instructions prior to exiting each session.



Following the Examination

Score Report

For candidates taking the initial certification, a "pass" or "fail" one-page printed report will be given to the candidate immediately after completing their exam by Prometric testing site staff. For candidates taking the recertification examination, an instant notification in the candidate's web browser, immediately following exam submission, will indicate a "pass" or "fail". Confirmation letters containing score reports will be mailed to recertification candidates in the weeks following submission of their exam.

Candidates who pass either examination are given their overall score on the examination. Because candidates who pass the examination have successfully demonstrated minimum competency in the field, there is no need to provide candidates with diagnostic information on the individual sections.

Candidates who fail either examination are given their overall score, as well as diagnostic information on their performance in each exam section, in order to guide their preparation for their next exam attempt. Please see the diagram below for information on the diagnostic levels used to indicate the performance of failed candidates.

Levels of Diagnostic Representation	Performance Level Description
High	Your performance on this content area is above the minimally acceptable level. However, a review of this content area may be helpful to you prior to retaking the examination.
Medium	Your performance on this content area is around the minimally acceptable level. Further study of this content area is recommended prior to retaking the examination.
Low	Your performance on this content area is below the minimally acceptable level. Substantial study of this content area is recommended prior to retaking this examination.

Although the examination consists of 150 questions, the candidate's score is based on 135 questions. Fifteen questions on each exam are "pretest" questions and are used as part of the item evaluation for inclusion in subsequent exams. The method used to set the minimum passing score is the Angoff method, in which content experts have evaluated each examination question and determined how many correct answers are necessary to demonstrate the knowledge and skills required to pass.

A candidate's ability to pass the examination depends on the knowledge and skill he/she displays, and not on the performance of other candidates. Passing scores may vary slightly for each version of the examination. To ensure fairness to all candidates, a process of statistical equating is used. This involves selecting an appropriate mix of individual questions for each version of the examination that meets the content distribution requirements of the examination content blueprint. Because each scored question has been pretested, a difficulty level can be assigned. The process then considers the difficulty level of each question selected for each version of the examination, attempting to match the difficulty level of



each version as closely as possible. Slight variations in difficulty level between different versions of the exam are addressed by adjusting the passing score up or down, depending on the overall difficulty level statistics for the group of scored questions that appear on a particular version of the examination.

Details of incorrectly answered examination questions, and correct answers to questions, will not be provided to the candidate. This practice is in accordance with best practices in the field of professional accrediting.

Candidates Who Pass the Examination

Candidates who pass their examination are allowed to use the designation CIC® after their name for the five-year period in which their certification is valid.

CBIC reserves the right to publicly recognize any candidate who has successfully completed a CBIC certification examination, thereby earning the certification credential. Official certificates will be mailed four to six weeks after completion of the exam.

A directory of all certified infection prevention and control professionals is published and updated daily on the CBIC website (<u>www.cbic.org</u>). This list can be found using the "Find a CIC®" page. Please note that some certificants choose to opt out of the public directory. Information on the current certification status of an individual will be provided in writing upon request.

Candidates Who Do Not Pass the Examination

First Time Applicants or Lapsed Applicants

Candidates who do not pass the initial certification examination must submit a new application, including appropriate documentation and fees, and be determined eligible to retake the exam. An individual may retake the initial certification exam a maximum of four times per year, and no more than once every 90 days.

Recertifying Applicants

Candidates who do not pass the recertification cannot retake it, but may apply for, schedule and take the initial certification exam before the current certification cycle ends to maintain their CIC[®]. An individual may retake the initial certification exam a maximum of four times per year, and no more than once every 90 days.

Scores Cancelled by CBIC or Prometric

CBIC and Prometric are responsible for the integrity of the scores they report. On occasion, occurrences such as computer malfunction or misconduct by a candidate may cause a score to be suspect. CBIC and Prometric are committed to rectifying such discrepancies as expeditiously as possible. CBIC may void examination results if, upon investigation, violation of its regulations is discovered.



Code of Ethical and Professional Conduct

Preamble

The Certification Board of Infection Control and Epidemiology is an autonomous multidisciplinary board that provides direction for and administers the certification process for professionals in infection control and applied epidemiology. By completing and passing the certification exam, a certified professional is setting a standard of quality care the public expects, demands and deserves. The codes outlined herein are to guide candidates and certified professionals in the performance of their professional responsibilities and to promote the mission of CBIC; to protect the public through the development, administration and promotion of an accredited certification in infection prevention and control.

Professional Care and Competence

- a) Applicants and certified professionals shall act in a manner that justifies public trust and confidence, enhances the reputation of the profession and safeguards the interests of individuals and clients.
- b) Applicants and certified professionals shall act diligently in accordance with applicable technical and professional standards when providing professional services.
- c) Applicants and certified professionals shall pursue excellence in performing their duties.
- d) Applicants and certified professionals shall meet and comply with all terms, conditions, or limitations of any professional credential they hold.

Professional Integrity and Objectivity

- a) Certified professionals shall maintain a professional knowledge and skill level required to ensure that employers receive competent professional service based on current developments in practice, legislation, and techniques.
- b) Certified professionals shall pursue excellence in performing their duties.
- c) Certified professionals shall conduct all business transactions at arm's-length and free from offers and solicitation of gifts and favors, or other improper inducements.
- d) Certified professionals shall ensure accuracy of information and soundness of recommendations forwarded to another involved professional, agency or institution.

Fraud-Related Conduct

- a) An applicant or certified professional shall not present fraudulent documents when applying for certification or recertification.
- b) An applicant or certified professional shall not use a title designation, credential or license, company name, letterhead, publication, term, title or document which states or implies an ability, relationship or qualification that does not exist.
- c) An applicant or certified professional shall cooperate with a CBIC disciplinary investigation or proceeding.
- d) An applicant or certified professional shall not attempt to prevent or interfere with a complaint being filed or CBIC disciplinary investigation or proceeding to occur. Interference attempts may include but are not limited to:
 - 1. The use of threats or harassment against, or an inducement to, any person in an effort to prevent or attempt to prevent a complaint from being filed, prosecuted or completed;
 - 2. The use of threats or harassment against, or an inducement to, any consumer or witness in an effort to prevent them from providing evidence in an investigation, disciplinary proceeding or any other legal action; and



- 3. The willful misrepresentation of facts before the disciplinary authority or its authorized representative.
- e) Judicial Review for applicants and certified professionals will adhere to the codes and bylaws of the Judicial and Ethics process, herein detailed in the Policy & Procedures Manual under Section 2, Category 5 Judicial and Ethics Process.

Revocation of Certification

Certified professionals or persons wrongfully using the CIC® designation are subject to disciplinary action as defined in CBIC's Judicial and Ethics Policy and Procedures for the following types of actions: falsification of an application, violation of examination procedures or misrepresentation of the certification status. A copy of the Judicial and Ethics Policy and Procedures can be found on the website at http://www.cbic.org/about-cbic#judicial_policy or by contacting the CBIC Office:

555 East Wells Street Suite 1100 Milwaukee, WI 53202-3823

info@cbic.org www.cbic.org

Appeals

Our goal is to provide a quality exam and a pleasant testing experience for every candidate. If you are dissatisfied with either and believe we can correct the problem, we would like to hear from you. We also provide an opportunity for general comments at the end of your exam. Our personnel will review your comments, but you may not receive a direct response.

If you have an examination issue that you would like to have directly addressed, please contact the CBIC office at info@cbic.org or (414) 918-9796 and CBIC will respond to your concerns. Processes for specific issues are outlined below.

To appeal an eligibility decision, please submit a detailed letter to info@cbic.org that describes the reason for the eligibility decision appeal.

- Please attach all supporting documentation that provides evidence for your appeal.
- Once the CBIC office has received this information, it is sent to the Exam Advisory Committee, who review all of the details and supporting evidence. This process may take 5-7 business days to complete.
- Once a decision has been made, the CBIC office will contact you via email with the decision. If
 the Exam Advisory Committee has decided not to grant the appeal, a detailed explanation will
 be provided for why that decision was made. In the event that the appeal is granted, application
 processing will continue and you should expect to receive your scheduling instructions email
 within 2-3 business days.

To appeal an examination score, please contact the CBIC office within a reasonable window of time from the date of your examination requesting a re-score of your examination.

• The CBIC office will put you in contact with our team at Prometric. With all exam re-score requests, there is a \$50 fee paid to Prometric.



 Note: Prometric does not recommend that candidates have their examination re-scored, as the exam goes through two separate automated scoring processes before the score is presented to the candidate at the testing center. The likelihood of the exam being scored incorrectly is very unlikely.

To request an extension for your 90-day eligibility period, please send a detailed email to info@cbic.org explaining why you are requesting an extension and the length of extension you are requesting.

- CBIC reviews extension requests upon receipt. If reasonable, extension requests are granted. A decision will be sent to you within 5-7 business days.
- If the request is granted, the CBIC office will be in contact with you via email. With the exception of unusually emergent and unavoidable circumstances, all candidates granted an extension request are required to pay a \$72 administrative fee via an invoice sent by the CBIC office.
- If you currently have a scheduled appointment and are requesting an extension, please take note of the Prometric policy regarding appointment cancellation and rescheduling found at the bottom of your scheduling instructions email (also on page 6 of the Candidate Handbook).
- The extension invoice must be completed and returned to the CBIC office within two weeks of receiving the invoice, or the extension will be cancelled and you will forfeit all exams and fees for the current application.
- Once you complete and return the invoice, it can take 5-7 business days to complete processing, at which time you will receive a new scheduling email that includes your new eligibility end date.



Preparing for the Examination

This section of the handbook outlines resource materials recommended by CBIC for examination preparation. The expanded examination content outline provided below, is a useful tool for course and curriculum preparation and to judge the relevance of topics to the content of the examination. The below content outline is for the initial certification examination. *Please note:* The recertification examination content outline contains the same content as listed below but the scored domains and number of items in each domain area may vary slightly. This section also contains reference lists for all examinations, as well as information about the CBIC practice examination.

2019 Examination Content Outline

1) Identification of Infectious Disease Processes (22 items)

- a. Interpret the relevance of diagnostic and laboratory reports
- b. Identify appropriate practices for specimen collection, transportation, handling, and storage
- c. Correlate clinical signs and symptoms with infectious disease process
- d. Differentiate between colonization, infection and contamination
- e. Differentiate between prophylactic, empiric and therapeutic uses of antimicrobials

2) Surveillance and Epidemiologic Investigation (24 items)

- a. Design of Surveillance Systems
 - Conduct a risk assessment on the population served, services provided, and regulatory or other requirements
 - 2. Develop goals and objectives based upon the risk assessment
 - 3. Develop a surveillance plan based on the goals identified from the risk assessment
 - 4. Evaluate periodically the effectiveness of the surveillance plan and modify as necessary
 - 5. Create a notification system based on surveillance plan including epidemiologically significant findings
 - 6. Integrate surveillance activities across health care settings (e.g., ambulatory, home health, long term care, acute care)
 - 7. Establish mechanisms for identifying individuals with communicable diseases requiring follow-up and/or transmission based precautions

b. Collection and Compilation of Surveillance Data

- 1. Use a systematic approach to record surveillance data
- 2. Organize and manage data in preparation for analysis
- 3. Calculate the incidence or prevalence of infections
- 4. Calculate specific infection rates/ratios (e.g., provider-specific, unit-specific, device-specific, procedure-specific, Standardized Infection Ratio)
- Use of standardized definitions



c. Interpretation of Surveillance Data

- 1. Generate, and validate surveillance data
- 2. Use basic statistical techniques to describe data (e.g., mean, standard deviation, rates, ratios, proportions)
- 3. Monitor and interpret the relevance of antimicrobial susceptibility patterns
- 4. Compare surveillance results to published data and/or other relevant benchmarks
- 5. Analyze and interpret data using appropriate methods
- 6. Prepare and present findings in an appropriate format that is relevant to the audience/stakeholders (e.g., graph, tables, charts)
- 7. Develop and facilitate corrective action plans based on surveillance findings
- 8. When to implement an epidemiological study to investigate a problem (e.g., case control, cohort studies)

d. Outbreak Investigation

- 1. Verify existence of outbreak
- 2. Collaborate with appropriate persons to establish the case definition, period of investigation, and case-finding methods
- 3. Define the problem using time, place, person, and risk factors
- 4. Formulate hypothesis on source and mode of transmission
- 5. Implement and evaluate control measures, including ongoing surveillance
- 6. Prepare and disseminate reports

3) Preventing/Controlling the Transmission of Infectious Agents (25 items)

- a. Develop evidence-based/informed infection prevention and control policies and procedures
- b. Collaborate with relevant groups and agencies in planning community/facility responses to biologic threats and disasters (e.g., public health, anthrax, influenza)
- c. Identify and implement infection prevention and control strategies related to:
 - 1. Hand hygiene
 - 2. Cleaning, disinfection, and sterilization
 - 3. Wherever healthcare is provided (e.g., patient care units, operating room, ambulatory care center, home health, pre-hospital care)
 - 4. Infection risks associated with therapeutic and diagnostic procedures and devices (e.g., dialysis, angiography, bronchoscopy, endoscopy, intravascular devices, urinary drainage catheter)
 - 5. Recall of potentially contaminated equipment, food, medications, and supplies
 - 6. Transmission-based Precautions
 - 7. Appropriate selection, use, and disposal of Personal Protective Equipment
 - 8. Patient placement, transfer, and discharge
 - 9. Environmental pathogens (e.g., Legionella, Aspergillus)
 - 10. Use of patient care products and medical equipment
 - 11. Immunization programs for patients
 - 12. The influx of patients with known/suspected communicable diseases (e.g., bioterrorism, emerging infectious diseases, syndromic surveillance)



- 13. Principles of safe injection practices (e.g., parenteral medication administration, single use of syringes and needles, appropriate use of single and multi-dose vials)
- 14. Identifying, implementing and evaluating elements of Standard Precautions/Routine Practices (e.g., respiratory hygiene/cough etiquette)
- 15. Antimicrobial stewardship

4) Employee/Occupational Health (11 items)

- a. Review and/or develop screening and immunization programs
- b. Collaborate regarding counseling, follow up, and work restriction recommendations related to communicable diseases and/or exposures
- c. Collaborate with occupational health to evaluate infection prevention-related data and provide recommendations
- d. Collaborate with occupational health to recognize healthcare personnel who may represent a transmission risk to patients, coworkers, and communities
- e. Assess risk of occupational exposure to infectious diseases (e.g., *Mycobacterium tuberculosis*, bloodborne pathogens)

5) Management and Communication (13 items)

a. Planning

- 1. Develop, evaluate, and revise a mission and vision statement, goals, measurable objectives, and action plans for the Infection Prevention and Control Program
- 2. Assess needs then recommend specific equipment, personnel, and resources for the Infection Prevention and Control Program
- 3. Participate in cost benefit assessments, efficacy studies, evaluations, and standardization of products
- 4. Recommend changes in practice based on current evidence, clinical outcomes, and financial implications
- 5. Incorporate business modeling to assign value to prevention of and/or presence of healthcare-associated infection (e.g., cost/benefit analysis, return on investment)

b. Communication and Feedback

- 1. Provide infection prevention and control findings, recommendations, and reports to appropriate stakeholders
- 2. Facilitate implementation of policies, procedures, and recommendations
- 3. Communicate effectively with internal and external stakeholders (e.g., transitions of care, reporting of notifiable diseases)
- Collaborate with internal and external stakeholders in the identification and review of adverse and sentinel events
- 5. Evaluate and facilitate compliance with accreditation standards/regulatory requirements
- 6. Perform and create a personalized development plan. (e.g., set goals, maintain competence)



c. Quality Performance Improvement and Patient Safety

- Participate in quality/performance improvement and patient safety activities related to infection prevention and control (e.g., failure mode and effects analysis, plan-do-studyact)
- 2. Develop, monitor, measure, and evaluate performance indicators to drive quality improvement initiatives
- 3. Select and apply appropriate quality/performance improvement tools (e.g., "fishbone" diagram, Pareto charts, flow charts, Strengths-Weaknesses-Opportunities-Threats, Gap Analysis)

6) Education and Research (11 items)

a. Education

- 1. Assess needs, develop goals and measurable objectives for preparing educational offerings
- 2. Prepare, present, or coordinate educational content that is appropriate for the audience
- 3. Provide immediate feedback, education, and/or training when lapses in practice are observed
- 4. Evaluate the effectiveness of education and learner outcomes (e.g., observation of practice, process measures)
- 5. Facilitate effective education of patients, families, and others regarding prevention and control measures
- 6. Implement strategies that engage the patient, family, and others in activities aimed at preventing infection

b. Research

- 1. Conduct a literature review
- 2. Critically appraise the literature
- 3. Facilitate incorporation of applicable research findings into practice

7) Environment of Care (14 items)

- a. Recognize and monitor elements important for a safe care environment (e.g., Heating-Ventilation-Air Conditioning, water standards, construction)
- b. Assess infection risks of design, construction, and renovation that impact patient care settings
- c. Provide recommendations to reduce the risk of infection as part of the design, construction, and renovation process
- d. Collaborate on the evaluation and monitoring of environmental cleaning and disinfection practices and technologies
- e. Collaborate with others to select and evaluate environmental disinfectant products

8) Cleaning, Sterilization, Disinfection, Asepsis (15 items)

a. Identify and evaluate appropriate cleaning, sterilization and disinfection practices



- b. Collaborate with others to assess products under evaluation for their ability to be reprocessed
- c. Identify and evaluate critical steps of cleaning, high level disinfection, and sterilization

Please note: In the CIC® exam, the term "standards precautions" is equivalent to the Canadian term "routine practices."

2019 References

References have been categorized as primary and secondary sources for content information. Most questions are based on material in the primary references. Secondary references may be useful to help clarify more detailed issues in specific practice settings or content areas such as microbiology.

Primary References

- APIC Text of Infection Control and Epidemiology, 4th ed., Volume I, Volume II and Volume III, APIC, Washington, DC, 2014.
- Kulich P, Taylor D, eds. *The Infection Preventionist's Guide to the Lab*, APIC, Washington, DC, 2012.
- Heymann, D., ed. *Control of Communicable Diseases Manual*, 20th ed., Washington, DC: American Public Health Association; 2015.
- 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, APIC, SHEA, and Public Health Agency of Canada.
- Pickering, Larry K, ed. *Red Book*, 30th ed., Elk Grove Village, IL: American Academy of Pediatrics: 2015.

CBIC Practice Examination

CBIC offers an online practice examination, available on our website at www.cbic.org. The CBIC practice examination is a 70-question multiple choice computer-based test, and can be purchased for \$50. Once purchased, the practice examination must be taken immediately, and expires three hours after purchase.

The online practice examination allows candidates to familiarize themselves with the testing software. It is an excellent tool for applicants to become comfortable with the computer-based testing format. Please note that this practice examination is not intended as a content-based study tool, and does not accurately reflect the current content on the CIC® examinations. For this reason, the practice examination does not provide answers for the questions after submission, but merely reflects a "pass" or "fail" to the candidate.

Please note: Good performance on this practice examination does not guarantee that candidates will pass the CIC® exam and should not be used as an assessment of readiness

For more information about the CBIC practice examination, visit the CBIC website at the following address: www.cbic.org/products/practice-exam.



Sample Examination Questions

The following sample questions are illustrative of the format found in the examination, but do not necessarily represent the level of difficulty:

- 1. In an outbreak of probable foodborne illness, patients developed symptoms two to four hours after eating turkey salad. The MOST likely causative organism is:
 - a. Salmonella enteritidis.
 - b. Staphylococcus aureus.
 - c. Vibrio parahaemolyticus.
 - d. Clostridium perfringens.
- 2. The presence of which of the following antibodies to hepatitis A virus confirms the diagnosis of acute hepatitis A?
 - a. IgG
 - b. IgM
 - c. IgE
 - d. IgD
- 3. In investigating an epidemic, cases should be categorized according to:
 - a. time, place, and person.
 - b. agent, host, and environment.
 - c. agent, host, and date of onset.
 - d. time, person, and date of onset.
- 4. The lengths of stay for patients with healthcare associated infections are 12, 12, 12, 13, 15, 16, 20, and 30 days. What is the median length of stay?
 - a. 12 days
 - b. 15 days
 - c. 16 days
 - d. 25 days
- 5. The risk of healthcare-associated urinary tract infections in spinal cord injury patients is BEST reduced by:
 - a. prophylactic antibiotics.
 - b. bladder instillation of antiseptic.
 - c. intermittent catheterization.
 - d. placement of all patients with urinary catheters in the same area.
- 6. Which of the following precautions MUST be taken when using respiratory ventilators?
 - a. Use gloves while assembling equipment.
 - b. Use only disposable equipment.
 - c. Use only sterile fluids in reservoirs.
 - d. Discard unused portions of medication daily.
- 7. A student demonstrates appropriate tracheostomy suctioning technique to an instructor. This is an example of:
 - a. cognitive learning.



- b. psychomotor learning.
- c. affective learning.
- d. theoretical learning.
- 8. A long-term care facility has 180 residents, 50 of whom have indwelling urinary catheters. An infection preventionist (IP) notes 15 catheterized residents have developed urinary tract infections during 1 month. Which of the following is the attack rate?
 - a. 3.0%
 - b. 8.3%
 - c. 28.0%
 - d. 30.0%

ANSWER KEY:				
1. B	5. C			
2. B	6. C			
3. A	7. B			
4. B	8. D			

Certification Examination Fees

First-time Candidates (applicants not yet certified or lapsed certifiers)	
Lapsed Candidates (applicants previously certified but whose certification has expired)	
Recertifying CICs	\$375



Application and Order Forms

Online Application Form

Please visit www.cbic.org/certification to apply online

Paper Application Form

- Initial Certification Examination
- Recertification Examination

Attestation Form (Self-Employed)

Special Accommodations

- Request for Special Accommodations
- Documentation of Disability Related Needs

Application Quick Facts

How long does it take to process applications?

Applications take up to seven business days to process, including those for recertification. This timeframe is typically shorter for those applications submitted online.

Can applications be emailed?

Applications may be emailed to info@cbic.org.

Can I fax my application?

Applications can be faxed to (414) 276-3349. Please email or call to confirm all faxes.

What if my application is not approved?

CBIC will make efforts to obtain further documentation from a candidate if the submitted documentation is incomplete or does not prove eligibility. If a candidate is ultimately determined ineligible, the candidate will be refunded its application fee in full.

What if I want to cancel my application?

Applications will be refunded minus a \$72 processing fee.