

Who's Afraid of the CIC Exam

Sheila MacDonald and Sharon Krystofiak, CBIC
A Webber Training Teleclass

Who's Afraid of the CIC Exam?



Sheila MacDonald RN, BN, CIC
Manager, Capital Health Infection Control
Halifax, Nova Scotia
2007 CBIC President

Sharon Krystofiak, MS, MT, CIC
Manager, Infection Control
Mercy Hospital of Pittsburgh
2007 CBIC Test Committee Chair

Hosted by Paul Webber
paul@webbertraining.com

www.webbertraining.com

What is CBIC?



- ❖ Voluntary, autonomous, multidisciplinary board
- ❖ Develops and administers the certification examination process for infection control professionals

What is CBIC?



- ❖ Consists of Board Members with a broad range of IC experience
- ❖ Specific by laws govern business

What is CBIC?



- ❖ Accredited by National Commission for Certifying Agencies (NCCA)

CBIC Board of Directors



- ❖ 13-14 Directors
- ❖ Composition requires at least
 - 1 medical doctor
 - 1 medical technologist or medical microbiologist with a BS degree
 - 1 master's or higher degree in education
 - 4 registered nurses
 - 1 Canadian ICP
 - 1 ICP from non acute care setting
 - 1 ICP from LTC
 - 1 Consumer Director
- ❖ All except the consumer director must be certified

CBIC Mission



“To develop and administer a certification process designed to measure basic knowledge of infection prevention and control and applied epidemiology”

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Certification & Recertification



- ❖ If you achieved your CIC in 1985.....
- ❖ Is it sustainable over the course of your career?
- ❖ Does it ensure competence to deal with today's ICP requirements?

Certification & Recertification

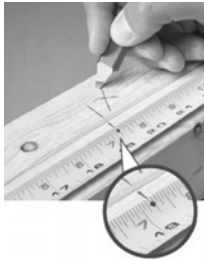


- ❖ CBIC believes that:

Continuing education does NOT demonstrate competence

Demonstrating competence is an ongoing process requiring repeat measurement

Measuring Competency



- ❖ While licensure assures minimal competency to practice in a field, certification indicates mastery of a defined body of knowledge

How Do We Measure Competency?

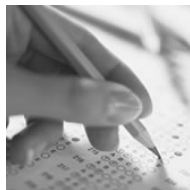


- Through a comprehensive examination that measures the skills and abilities expected of an ICP

The Certification Examination:



- Comprehensive and job-related
- 150 multiple choice questions
- Developed from a Practice Analysis (PA) of ICPs in the U.S. and Canada and Saudi Arabia
- Recognized by APIC and CHICA-Canada as the standard for certification



How Do We Develop The CIC Examination?



- ❖ First step –development of a Practice Analysis Survey (PA)

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What is a Practice Analysis?

The process of systematically collecting information that describes behaviors and activities performed by occupants of a specific job for the purpose of defining or validating the content of a certification examination.



The Practice Analysis

- ❖ Describes the core functions of the ICP role
- ❖ Determines the core functions that should be assessed on a certification examination
- ❖ Necessary for a legally defensible certification program



The Practice Analysis

- ❖ CBIC conducts the PA every 5 years
Why?
 - A valid certification examination must reflect current practice
 - Example – would a PA conducted in 1991 reflect current practice today?



Professional Testing Agency

- ❖ CBIC contracts with a professional testing agency to provide guidance and direction, and to assure validity and reliability of the PA
- ❖ Applied Measurement Professionals (AMP) serves as CBIC's testing agency



The Practice Analysis Survey

- ❖ The PA Survey is developed by a panel of expert ICPs – 12 member Advisory Committee



PA Advisory Committee Membership

- Members of the CBIC Board
- Members of the CBIC Test Committee
- Diverse educational backgrounds, work settings, and regional locations
- Other certified individuals
- Demonstrated expertise in IPC
- Must be certified
- AMP psychometrician

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Practice Analysis Survey

- ❖ E-mailed to practicing ICPs – Canada, US, Saudi Arabia
- ❖ Based on North American practice standards (US & Canada)



Survey Response Rating Scale

- ❖ In your role as an ICP, considering both **importance and frequency**, how significant is the task to safe and effective performance?
 - 0 – not necessary for the job
 - 1 – minimally significant
 - 2 – somewhat significant
 - 3 – quite significant
 - 4 – extremely significant



Survey Results

- ❖ Reviewed by PA Advisory Committee
- ❖ Statistical analysis identifies:
 - core tasks
 - how each task group should be weighted on the exam
- ❖ Result – content outline for the CIC Exam



Classification of Core Tasks

- ❖ Identification of Infectious Diseases Processes
- ❖ Surveillance & Epidemiologic Investigation
- ❖ Preventing/Controlling the Transmission of Infectious Agents
- ❖ Employee Health/Occupational Health
- ❖ Management and Communication
- ❖ Education
- ❖ Research



Practice Analysis (PA)

- ❖ PA completed in 2005-2006
- ❖ Mailed to 9500 ICPs
- ❖ 1809 responses (21.8%)
- ❖ New content outline developed based on the survey results



Summary Data From Survey Responses

- ❖ Over 60% of ICPs had 7 or more years experience
- ❖ Almost 50% work in community based acute care facilities
- ❖ >75% of respondents came from facilities with 101 or more beds

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Summary Data From Survey Responses



- ❖ 60% had 1FTE
- ❖ Approx. 52% work 40 or more hours/week
- ❖ 53% certified

What Is Different This Time?




- ❖ A number of tasks were removed from the content outline based on the decision making rules for the survey (remember the scale):
For example – “Contributing to the development of surveillance systems for noninfectious adverse events.”

What Is Different This Time?



- For example:
Added the tasks– “Contributes to the development of systems for syndromic surveillance”
and
“Collaborates with public health agencies in planning community responses to biological agents (e.g. anthrax, influenza)”

Revised Examination Content Outline



- ❖ Examples of revision:
Changed- Preventing/Controlling the Transmission of Infectious Agents to:
Infection Prevention and Control

Employee/Occupational Health changed to:
Infection Control Aspects of Employee Health

Revised Examination Content Outline



- ❖ Identification of Infectious Disease Processes
- ❖ Surveillance and Epidemiologic Investigation
- ❖ Infection Prevention and Control
- ❖ Program Management and Communication
- ❖ Education
- ❖ Infection Control Aspects of Employee Health

After the PA was analyzed



- All questions in the item banks were reviewed and reclassified if necessary.
- If questions no longer fit the Content Outline, they were deleted.
- It was shown that ICPs with 2 years of experience were doing the same job tasks as the those with 7 years of experience in the field (recertifiers).

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You can find more about the Content Outline online and in the Candidate Handbook



- Available online on CBIC website
- Hard copy can be requested
- Has all the answers in 26 pages



Who's Afraid of the CIC Exam
part 2- the exams...the fears...



First, the general reassurances

- We would like all competent candidates to be able to successfully pass the exams- there is no intention to create trick questions.
- There is a practice requirement.
- There is a training requirement.
- Earning the CIC credential says something about the practitioner.

CBIC has a Values Statement

- CBIC endorses the concept of certification for all professionals meeting the educational and practice requirements.
 - We believe certification is in the best interest of the public and the profession.
 - We adhere to the highest standards of certification.
 - We are customer focused.
 - We are fiscally and ethically responsible and accountable.
 - We value our partnerships.
 - We are responsive to the external environment.
 - We accept change and support excellence.

Our Philosophy on Certification



Education and Practice Requirements

1. Have a current license or registration as a medical technologist or clinical laboratory scientist, physician, registered nurse or have a minimum of a baccalaureate degree.
2. All candidates for initial certification must have practiced IC for a minimum of two years within the most current five year period and with a minimum of 800 hours worked prior to the date of the exam.
3. Practice requirements must be met for initial or lapsed certification only, not recertification.

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Definition of IC Practice

- Analysis and interpretation of collected infection control data.
- The investigation and surveillance of suspected outbreaks of infection;

And at least three of the following:

- The planning, implementation and evaluation of infection prevention and control measures.
- The education of individuals about infection risk, prevention and control.
- The development and revision of infection control policies and procedures.
- The management of infection prevention and control activities.
- The provision of consultation on infection risk assessment, prevention and control strategies.

The initial exam- the "CBT"



- Must be used for initial certification but can also be used for recertification purposes instead of the SARE
- Cost is \$310 for initial certification and \$275 for recertification
- Administered at 140 Assessment Centers throughout the United States and 10 centers in Canada
- Sites are listed on the AMP web site, www.goamp.com link from www.CBIC.org
- You schedule the date and time
- Identification required for security purposes
- In the U.S. sites, you get instant scoring.



Validity of the Exams



- The examinations are developed under the guidance of the measurement arm of AMP, our independent testing agency. AMP also oversees delivery and scoring of the examination.
- Each test item undergoes both content expert and statistical scrutiny before use.
- Passing scores are calculated to compensate for item difficulty and differences between examinations
- Acknowledged by the Joint Commission as an element of an effective infection control program

Breakdown of the Test Questions

- Each section of the content outline has a defined number of questions
- Questions vary in degree of difficulty
- Each question must have a current reference from the approved reference list



All exam questions are analyzed by AMP professionals



- Was appropriate wording used (not slang)?
- How many candidates got each question correct?
- Were all possible answers selected by a reasonable number of candidates?
- Did the "high scoring" candidates get it correct?

And somehow they come up with impressive statistics for each question



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All questions are based on **cognitive** learning principles

- Recall
 - Can you complete the sentence without even seeing the options?
- Application
 - Apply knowledge of subject to select the correct answer.
- Analysis
 - Highest level of knowledge measured.
 - Evaluate situation and use analytical skills to select the correct answer.



Each exam we put together must be equivalent to previous tests

- Based on the Content Outline
- Percentage of easy/difficult questions
- Approximate passing score
- The AMP specialist pulls potential questions based on statistics, but the Test Committee can reject items that are no longer relevant or that they otherwise don't like for some reason.



The Test Committee evaluates each question

- Are the stem and options grammatically correct with "hospital terminology?"
- Is it written clearly so everyone will understand?
- Have any recommendations been changed?
- Have new products entered the market, changing the practice?



For example...

- A patient has been admitted to one of the General Medicine nursing units in your hospital. The person is homeless, a known drug abuser, and has been admitted for investigation of a chronic cough and weight loss. A PPD has been ordered. The test is administered in the following manner:
 - A. Subcutaneous
 - B. Intramuscular
 - C. Intradermal
 - D. Orally



Sample Question – revised by Test Committee

The appropriate administration route of a TST (tuberculin skin test) is:

- a) Subcutaneous
- b) Intrathecal
- c) Intramuscular
- d) Intradermal



Additional reassurances

- Although the exams are currently based on North American practice, they are being taken all over the world!!
- We've eliminated references to national organizations, such as OSHA and JCAHO
- Questions should be applicable to the practice of infection prevention and control everywhere.



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There are NO Trick questions

- The purpose of the exam is to measure your knowledge, not your test taking skills
- There are no special tricks- such as "if in doubt, pick A..."
- We are working to eliminate negatively worded and "all of the above EXCEPT..." type questions.
- We have read your comments and take them quite seriously.

We've heard you-

"But, your scenarios don't apply to me..."

- Re-read the question
- Drill down to what you are being asked to determine
- Try to put YOUR work situation into the same question



The exam is designed to measure your knowledge of IP & C principles

- The CIC credential you receive when you successfully pass the exam means that you are marketable throughout the wonderful world of healthcare.
- Today, you may be working in a correctional facility
- Tomorrow, you may be offered a position in a large metropolitan health center



In case you're more afraid of the computer based part than the exam itself...

- An online Practice Exam is available
- Consists of 70 questions- some are retired from previous exams, some are totally new
- Familiarize yourself with the computerized testing process in your own setting
- Administration charge is \$50
- Available at www.cbic.org



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.

Cover Help A [] ! Time [] < 6 > >>

Practice Exam



- Proportionally matches the content, cognitive levels, and difficulty of the CBIC certification examination.
- For the \$50 charge, you can access the exam as many times as you like, 24 hours a day, for 60 days from the time of purchase.
- When you complete the PE and request scoring, you are able to review the questions and explanations again, but you can't retake the exam.

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The Practice Exam

- After completing the PE, you will receive a score report via email. The report indicates your overall score in each area.
- References are provided so that you can find more information about topics that you may not be familiar with.
- You shouldn't assume that performance on the PE will exactly replicate your performance on the certification examination, but it will give you a clue to your weak areas and familiarize you with what to expect from the computer based test experience.

Comparison of recertification options

Retesting- CBT or SARE

- Based on Practice Analysis- which changes
- Requires research- active method of learning
- No travel required
- Can get CEUs for SARE
- Shows continuing competency
- Must successfully answer a certain percentage of questions

CEUs

- ICP gets to pick topics of interest, which may be limited or selected by others
- Seminar format is passive learning
- Speaker quality varies
- May require travel
- No testing process-no passing grade



Are you ready to become certified?



- Do you value the best interest of the public and the profession?
- Do you want to have a meaningful certificate that says you are competent to perform your job?
- Are you customer focused?
- Are you ethically responsible and accountable?
- Are you responsive to the external environment?
- Can you accept change and support excellence?

Prepare for the Examination



- Review the Content Outline
- Review current infection control references, books, journals, standards
- Some may prefer to form study groups
- Practice Exam is available for purchase



We're working on a new motto-

- Elevating the professional**
- Elevating the profession**
- We'd love to add your name to our roster.
- P.S. Did you notice it's our 25th anniversary??
- Thanks for listening!**

The Next Few Teleclasses

- | | |
|----------|---|
| April 19 | Bacterial Resistance to Biocides in the Healthcare Environment ... with Dr. Jean Yves Maillard, University of Cardiff, UK |
| April 25 | Making Infection Control Really Work ... with Prof. Seto Wing Hong, University of Hong Kong |
| April 26 | Environmental Surveillance for Infection Control ... with Andrew Streifel, University of Minnesota |
| May 8 | Panton-Valentine Leucodidin Producing S. aureus ... with Brenda Dale & Adam Brown, National Health Service, UK |
| May 10 | Infection Control in the Dialysis Clinic ... with Dr. Charmaine Lok, University of Toronto |

For the full teleclass schedule – www.webbertraining.com
For registration information www.webbertraining.com/howtoc8.php