


02 – How to Prepare for Certification and Re-Certification Exams

Speaker: Helen Boucher, MD



INFECTIOUS DISEASE BOARD REVIEW
TWENTY TWENTY-ONE
ID BR 2021

How to Prepare for Certification and Re-Certification Exams

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Disclosures of Financial Relationships with Relevant Commercial Interests

- Editor
 - ID Clinics of North America
 - Antimicrobial Agents and Chemotherapy
 - Sanford Guide
- Treasurer, Infectious Diseases Society of America
- Member, ID Board, American Board of Internal Medicine
- Voting Member, Presidential Advisory Council on Combating Antibiotic Resistant Bacteria (PACCARB)

Website

www.abim.org

<https://www.abim.org/~media/ABIM%20Public/Files/pdf/exam-blueprints/certification/infectious-disease.pdf>

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Times are Changing at ABIM!
Infectious Diseases Certification

- Initial Certification Exam – no change
- Maintenance of Certification is Changing - Options:
 - Every 10 year MOC exam
 - Every 2 year Knowledge Check-in (KCI)
 - Offered thru 2021 (but not offered in 2022)
 - New Ongoing Assessment: Longitudinal Knowledge Assessment (LKA) begins 2023 with 1 year waiver
- **If you are due for MOC assessment in 2022, you can either take the 10 year MOC or take nothing and start the LKA in 2023**

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Certification Exams

- One day computer exam
- All questions: multiple choice, single best answer only
- **Initial Certification:**
 - Four 2-hour sessions: up to 60 questions each = 240
 - Time remaining for each session on computer screen
 - Message box will tell you when 5 minutes left in a session
 - Including registration, optional tutorial (up to 30 minutes), instructions, test, breaks ~ 10 hours.
- **Maintenance of Certification (formerly recertification):**
Three 2-hour exam sessions ~ 8 hours or KCI
 - available through 2021

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Knowledge Check-in (KCI) Exam

- Every 2 years
- Officially ends in 2022 but will not be offered after 2021
 - One year waiver will be offered for LKA
- Up to Date allowed (different environment so take the practice exam to become familiar)
- Home or Test Center
 - Special monitoring at home
 - Video camera must be on for the entire time
 - Desk must be clear, internet connection strong, etc.
 - Can be disqualified for irregularities (e.g., someone enters the room)

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New Option: Longitudinal Knowledge Assessment (LKA)

Rethink your Maintenance of Certification experience with the Longitudinal Knowledge Assessment

| | | | |
|------------------------------|------------------------------|--------------------------|------------------------------|
| Any place, any time. | Meet the topic. | Use any resource. | Maximize convenience. |
| • Accessible from any device | • Tailored to your specialty | • Use any resource | • Flexible scheduling |

Current Plan (subject to change):

- 5 year recertification period
- 30 questions emailed every 3 months
 - Don't need to answer all at one time; can spread out over the quarter
- Four minutes to answer online
 - Open book
 - Correct answer and rationale then provided
- Must answer 100 Q's per year (out of 120)
- Earn 0.2 MOC credits/correct answer
- After 5 years and at least 500 questions answered, ABIM provides pass/fail notification
- 500 correct answers fulfills required 100 MOC points

<https://www.abim.org/lka/>

ABIM COVID Updates for MOC

NO ONE WILL LOSE CERTIFICATION IF THEY AREN'T ABLE TO COMPLETE AN MOC REQUIREMENT THIS YEAR.

If you had an assessment, points or an attestation requirement due in 2020 or 2021, you now have until the end of 2022 to complete it.

If you are due for an assessment in 2020, 2021 or 2022, you'll be able to participate in the longitudinal assessment when it launches in your specialty (see the [longitudinal availability and rollout schedule](#)).

If you're among this group and certified in Critical Care Medicine, Hospital Medicine, **Infectious Diseases**, Pulmonary Disease, you'll receive an additional year to take an assessment. This means you can wait until 2023 and choose from the traditional, 10-year MOC exam or longitudinal assessment at that time.

We will not be offering the Knowledge Check-in after 2021.

<https://blog.abim.org/abim-to-extend-all-moc-requirement-deadlines-through-2022/>

Longitudinal Knowledge Assessment (LKA)

Longitudinal Knowledge Assessment Rollout Schedule

| 2022 | 2023 |
|---|----------------------------|
| Cardiovascular Disease | Critical Care Medicine |
| Endocrinology, Diabetes, and Metabolism | Hospital Medicine |
| Gastroenterology | Infectious Diseases |
| Geriatric Medicine | Pulmonary Disease |
| Hematology | |
| Hospice and Palliative Medicine | |
| Internal Medicine | |
| Interventional Cardiology | |
| Medical Oncology | |
| Nephrology | |
| Rheumatology | |
| Sleep Medicine | |

<https://blog.abim.org/abim-quarterly-news-note-spring-2021/>

Exam

- Can change answer until 60 question section over. Note ones unsure of and review them at end of session
- Roughly 20% of questions don't count = new questions being pretested

Exam

- Little less than two minutes per question.
- Unanswered questions marked wrong, so guess if don't know
- Read the whole question!
- If question seems ambiguous, or seems to have two correct answers, you might be right. It may be a new question being tested for first time.
Give your best answer and don't fret.

Breaks

- Breaks are optional. Take them!
- 3 breaks during day: total 100 minutes
- 1 break after each of first 3 test sessions.
- Can use some or all of break time.
- Amount of break time used after each session subtracted from total time.
 - For example: if take 10 minute break after session one, amount of break time remaining for exam is 90 minutes.
- 80 minutes break time for MOC exam (2 breaks).

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Exam

- Confirmation email will specify appointment time and give driving directions to test center
- Check out site before exam:
 - Where is it? Where to park? Where to eat?
- Arrive ½ hour early
- Each testing center has 8 -25 workstations
- An administrator will be present
- At start of exam: see several screens reviewing instructions about taking exam, and asked to agree to a Pledge of Honesty

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Exam

- You will need **personal ID (2 types)**:
government-issued ID with photo and signature (driver's license, passport, etc.)
And
another form of ID with signature or photo (Social Security card, credit card, ATM card, etc.)
- Not allowed to take exam with expired ID
- Palm vein scan, security wand, signature and photograph will be taken

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Exam



- Short orientation then taken to computer workstation
- May request left-handed mouse
- May request instructions adjust height and contrast of computer
- Erasable notepads provided and can type and save notes in pop-up box that accompanies each question
- Can request headphones or earplugs; cannot bring your own
- Any problem: **Don't get up!** Raise your hand
- Electronic fingerprint each time enter and exit testing room - allow 10 min to check back in

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Disabled Test Takers

- ABIM complies with the Americans with Disabilities Act (ADA)
 - They will make reasonable modifications to exam procedures as necessary, but there are limits
- Each request individually evaluated
- For more info see Forms of Accommodation on ABIM website

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Not allowed in test room (small storage locker provided)

- Electronic devices: cell phone, PDA, pager, beeper
- Calculator, calipers, camera
- Watch – clock is in testing room
- Wallet, purse
- Briefcase, backpack
- Jacket, coat (sweater OK)
- Books, scratch paper, pens, pencils (noteboards provided)
- Medications require prior approval (contact us feature on website)
- Food and drink
- (Bring drinks for breaks to keep in locker; can bring lunch, but no refrigeration)



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Questions about exam day

- Call ABIM 1-800-441-ABIM (2246)
Mon-Fri: 8:30AM – 8PM
Saturday: 9AM – 12PM

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Exam Tutorial

- Examples of the exam question formats are available in a tutorial at the ABIM website:
 - <https://www.abim.org/certification/exam-information/infectious-disease/exam-tutorial.aspx>

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Exam Format

Exam is composed of multiple-choice questions with a single best answer, predominantly describing patient scenarios.

- Questions ask about the work done (that is, tasks performed) by physicians in the course of practice: Making a diagnosis
- Ordering and interpreting results of tests
- Recommending treatment or other patient care
- Assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

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- >75% patient case presentations
 - not trying to trick you
- Normal lab values provided
- Pediatric questions not likely
- Very little basic science:
 - mechanisms of resistance - ESBL, KPC
- Very little clinical microbiology (occasional clues):
 - things you could do to help lab
 - * e.g. oil on media for lipophilic yeast
 - Iron and 30° incubation for *M. haemophilum*

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Exam Content

- Exam content determined by a pre-established blueprint
 - Different for initial certification and MOC
- Primary medical content categories are

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2019 ID Exam Blueprint

| Medical Content Category | % of Exam |
|---|-----------|
| Bacterial Diseases | 27% |
| Human Immunodeficiency Virus (HIV) Infection | 15% |
| Antimicrobial Therapy | 9% |
| Viral Diseases | 7% |
| Travel and Tropical Medicine | 5% |
| Fungi | 5% |
| Immunocompromised Host (Non-HIV Infection) | 5% |
| Vaccinations | 4% |
| Infection Prevention and Control | 5% |
| General Internal Medicine, Critical Care, and Surgery | 18% |
| | 100% |

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Clinical Syndromes

- Pleuropulmonary infections
- Infections of the head and neck
- Infections and other complications in HIV/AIDS
- Cardiovascular infections
- Central nervous system infections
- Gastrointestinal and intra-abdominal infections
- Liver and biliary tract infections
- Skin and soft tissue infections
- Bone and joint infections

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Clinical Syndromes (con't.)

- Infections of prosthetic devices
- Infections related to trauma
- Bloodstream infections and sepsis syndromes
- Nosocomial infections
- Urinary tract infections
- Sexually-transmitted diseases and reproductive tract infections
- Fever (infectious and non-infectious) and hyperthermia

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Patient Populations

- Patients who are neutropenic
- Patients with:
 - Leukemia, Lymphoma, or other malignancies
- Patients following solid organ or bone marrow transplantation/HSCT
- Patients with HIV/AIDS or patients immunocompromised by other disease or medical therapies
- Pregnant women
- Travelers and immigrants

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Exam Content

- More specific details of content can be found on ABIM website.

For example.....

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Bacterial Diseases (27%)*

| | <u>Approximate % of total exam</u> |
|-------------------------------|------------------------------------|
| • Gram-positive cocci | 4.5% |
| • Gram-positive rods | <2% |
| • Gram-negative cocci/bacilli | 2% |
| • Gram-negative rods | 2.5% |
| • Anaerobes | 2.5% |
| • Actinomycetes | <2% |
| • Mycobacteria | 5% etc. |

* percentages describe content of typical exam and are approximate

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Bacterial Diseases (27%) - details

- | | <u>Approximate % of total exam</u> |
|----------------------|------------------------------------|
| • Gram-positive rods | <2% |
- Which may include:
- Listeria
 - Corynebacterium
 - Bacillus
 - Erysipelothrix

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Bacterial Diseases (27%) - details

- | | <u>% of total exam</u> |
|--------------------------------------|------------------------|
| • Syndromes with bacterial pathogens | 3% |
- Which may include:
- Head and neck, Respiratory, Gastrointestinal, Ophthalmologic, Genitourinary, Dermatologic (including skin and soft tissue infections), Musculoskeletal, Neurologic, Cardiovascular

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HIV Infection (15%)

| | <u>Approximate % of exam</u> |
|--------------------------------|------------------------------|
| • Epidemiology | <2% |
| • Pathogenesis | <2% |
| • Laboratory testing | <2% |
| • HIV treatment regimens | 4.5% |
| • Opportunistic conditions | 5% |
| • Malignancies | <2% |
| • Immune reconstitution (IRIS) | <2% |
| • Other complications of HIV | 2% |
| • Related issues | <2% |

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HIV Infection (15%) - details

| | <u>Approximate % of exam</u> |
|---|------------------------------|
| • Other complications of HIV | 2% |
| Which may include: | |
| Thrombocytopenic disorders | |
| Hypercoagulability, Castelman's disease | |
| HIV infection of specific organs | |
| Endocrine manifestations | |
| • Related issues | <2% |
| Which may include: | |
| Substance abuse, Organ transplantation, Primary care, | |
| Non-HIV-related complications more common in HIV | |

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Viral Diseases (7%)

| | <u>Approximate % of exam</u> |
|---------------|------------------------------|
| • DNA Viruses | 4% |
| • RNA Viruses | 2.5% |
| • Prions | <2% |

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General Medicine, Critical Care and Surgery (18%)

| | <u>Approximate % of exam</u> |
|---|------------------------------|
| • General Internal Medicine: | 7.5% |
| Malignancies, Hemophagocytic Syndrome, | |
| Collagen vascular and autoimmune disorders, | |
| Dermatologic disorders, Bites, stings and toxins, | |
| Non-infectious central nervous system disease, | |
| Drug fever, Ethical and legal decision making. | |
| • Critical Care Medicine: | 8% |
| SIRS and sepsis, Ventilator-assoc. pneumonias, | |
| Non-infectious pneumonias (ARDS), Hyperthermia | |
| and hypothermia, Near drowning and Scedosporium | |
| (Pseudallescheria) infection | |

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Infection Prevention and Control (5%)

More details on website, e.g.

| | <u>Approximate % of exam</u> |
|--|------------------------------|
| • Applied epidemiology and biostatistics | <2% |
| Outbreak investigation, | |
| Healthcare quality improvement, | |
| Informatics | |
| • Prevention of HAIs in special patients | <2% |
| Obstetrics, Spinal cord injury, | |
| Neoplastic diseases, Organ transplant, | |
| Stem cell transplant. | |

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Fungi (5%)

| | <u>Approximate % of total exam</u> |
|--|------------------------------------|
| • Yeasts, Endemic mycoses, Molds | <2% each |
| • Superficial / subcutaneous mycoses | <2% |
| Mycetoma, Chromoblastomycosis, | |
| Malassezia, Dermatophytes | |
| • Therapy | <2% |
| • Pneumocystis | <2% |
| • Therapy | <2% |
| • Diagnostic testing* | <2% |
| • Syndromes | <2% |
| *histopathology, culture, nonculture methods | |

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Other

- Pharm and OPAT 2.5%
- Note:
 - <2% of 240 = about 5 questions

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Note:

I recommend you take a look at the website and review the lists.

.....as an example

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Rickettsia (2.5%)

- R. rickettsii (Rocky Mountain Spotted Fever)
- R. akari (rickettsial pox)
- R. prowazekii (epidemic typhus)
- R. typhi
- Orientia tsutsugamushi (scrub typhus)
- R. conorii
- R. parkeri
- R. africae
- Coxiella burnetii

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Exam

- Takes couple of years for new question to appear on exam and count. So new developments in last 2 years less likely to be on exam and count.
 e.g. COVID-19, new Ebola treatment, Zika virus
- Things that were hot and now not, are unlikely to appear:
 - anthrax
 - monkeypox
- Effort made not to have “look up” questions:
 - e.g. Treatments for uncommon parasitic diseases
 - Malaria - yes
 - Filariasis – no

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Pass rates

First-time Takers- Initial certification

| Year | # of Examinees | Pass Rate |
|------|----------------|-----------|
| 2008 | | 86% |
| 2009 | | 93% |
| 2010 | 359 | 91% |
| 2011 | 348 | 96% |
| 2012 | 342 | 95% |
| 2013 | 364 | 87% |
| 2014 | 361 | 86% |
| 2015 | 347 | 94% |
| 2016 | 348 | 98% |
| 2017 | 339 | 97% |
| 2018 | 338 | 98% |
| 2019 | 362 | 98% |
| 2020 | 364 | 94% |

<https://www.abim.org/Media/yeqjumdc/certification-pass-rates.pdf>

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How is MOC/KCI Content Different?

Detailed content outline for the Infectious Disease MOC exam and Knowledge Check-In

● High Importance: At least 70% of exam questions will address topics and tasks with this designation.
● Medium Importance: No more than 20% of exam questions will address topics and tasks with this designation.
● Low Importance: No exam questions will address topics and tasks with this designation.
 LF - Low Frequency: No more than 15% of exam questions will address topics with this designation, regardless of task or importance.

| BACTERIAL DISEASES (27% of exam) | Diagnosis | Testing | Treatment/ Care Decisions | Risk Assessment/ Prognosis/ Epidemiology | Pathophysiology/ Basic Science |
|----------------------------------|-----------|---------|---------------------------|--|--------------------------------|
| GRAM-POSITIVE COCCI | | | | | |
| Staphylococcus aureus | ● | ● | ● | ● | ● |
| Streptococcus | ● | ● | ● | ● | ● |
| Enterococcus | ● | ● | ● | ● | ● |
| GRAM-POSITIVE RODS | | | | | |
| Listeria | LF | ● | ● | ● | ● |
| Corynebacterium | | ● | ● | ● | ● |
| Bacillus | | ● | ● | ● | ● |

<https://www.abim.org/Media/ut0j30zs/infectious-disease.pdf>

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MOC Pass rate

- Maintenance of Certification (recertification):
 - Questions were from same pool as initial exam – now different blueprint

| Year | #Examinees | Pass Rate (%) |
|------|------------|---------------|
| 2015 | 301 | 89% |
| 2016 | 467 | 94% |
| 2017 | 350 | 90% |
| 2018 | 367 | 93% |
| 2019 | 296 | 91% |
| 2020 | 216 | 89% |

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What to do from now to exam

- Start Early!
 - Make notes of items to review just before the exam
- Know that this Board Review Course is excellent preparation
- Review questions and images from IDBR website to identify areas needing further study
- Go to ABIM website (www.abim.org) and:
 - Take the tutorial
 - Read about Exam Day: What to expect
 - See details about ID exam (blueprints, etc.)

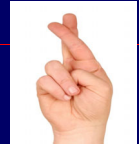
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What to do from now to exam

- From binders/on line presentations for this course, pull out the “handouts” covering your weak areas and make a little “binder” (e.g. parasites, fungi, mimic syndromes)
- Review your “little binder” just before exam

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Thank You: Jack Bennett & Bennett Lorber

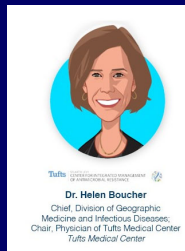


Good Luck
To You All !

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Questions, Comments?

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