



## Infectious Disease

### Certification Examination Blueprint

#### What Does the Examination Cover?

The exam is designed to evaluate the extent of the candidate's knowledge and clinical judgment in the areas in which an infectious disease specialist should demonstrate a high level of competence. Expertise in the broad domain of Infectious Disease and the diagnosis and treatment of both common and rare conditions that have important consequences for patients, will be assessed.

Exam content is consistent with a pre-established blueprint, or table of specifications. The blueprint is developed by the Subspecialty Board on Infectious Disease and is reviewed and revised annually to ensure that it is current. In addition, practicing infectious disease specialists, Infectious Disease trainees, and training program directors are surveyed periodically to provide feedback on the blueprinting process. The blueprint is used as a guide in developing the exam.

The majority of questions (over 75 percent) are based on patient presentations occurring in settings that reflect current medical practice. Questions requiring simple recall of medical facts are in the minority; the majority of questions require integration of information from several sources, prioritization of alternatives, and/or utilization of clinical judgment in reaching a correct conclusion. Some questions require interpretation of pictorial material, such as imaging studies (including radiographs, computed tomograms, PET scans and MRI scans) and Gram stains.

Medical Content Category	Relative Percentage
Microbial Diseases:	
Bacteria	16%
Viruses and prions	7%
Mycobacteria	5%
Parasites	5%
Fungi	5%
Rickettsia and Chlamydia	3%
HIV	15%
Surgical consultations and critical care medicine	8%
Immunologic diseases (other than AIDS) and vaccines	4%
Infections in transplant patients,	5%
Antimicrobial therapy	9%
Epidemiology, infection control, and bioterrorism	5%
Sexually transmitted diseases	3%
General (general internal medicine and ethics)	10%
Total	100%

Please note that these are the clinical syndromes and patient populations that are emphasized in the ACGME materials about fellowship training in infectious diseases. Questions from categories such as bacteria, viruses, mycobacteria, parasites, and fungi will often be related to these clinical syndromes and patient populations.

<b>Clinical syndromes</b>
Pleuropulmonary infections
Infections of the head and neck
Infections and other complications in patients with 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
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

<b>Patient Populations</b>
Patients who are neutropenic
Patients with leukemia, lymphoma, or other malignancies
Patients following solid organ or bone marrow transplantation
Patients with HIV/AIDS or patients immunocompromised by other disease or medical therapies
Pregnant women
Travelers and immigrants

## Content Outline of the Certification Examination

This content outline describes a *typical* Infectious Disease Certification Examination; actual content on a specific examination may vary. Each medical content category from the examination blueprint is listed in boldface below, along with target blueprint percentage and total number of questions in the category.

The content areas covered and their relative proportions on the exam are as follows:

Medical Content Category (Relative Percentage)
<b>Bacteria (16%)</b> (28-32 questions in the following areas)
Gram-positive cocci
Gram-positive rods
Gram-negative cocci/bacilli
Gram-negative rods
Anaerobes
Actinomycetes
Clinical microbiology

Medical Content Category (Relative Percentage)
<b>Viruses and Prion Disease (7%)</b> (13-15 questions in the following areas)
DNA Viruses
RNA Viruses
Other/Non-viruses

Medical Content Category (Relative Percentage)
<b>Mycobacteria (5%)</b> (9-10 questions in the following areas)
<i>M. tuberculosis</i>
<i>M. tuberculosis</i> complex
Non-tuberculous mycobacteria
Leprosy

Medical Content Category (Relative Percentage)
<b>Parasites (5%)</b> (9-10 questions in the following areas)
Blood-borne parasitic infections
Intestinal & other protozoal infections
Helminth infections
Cestode infections
Trematode infections
Ectoparasitic infections
General principles of travel medicine

Medical Content Category (Relative Percentage)
<b>Fungi (4%)</b> (7-8 questions in the following areas)
Yeast
Endemic mycoses
Moulds
Superficial and subcutaneous mycoses
Therapy

Medical Content Category (Relative Percentage)
<b>Immunologic diseases, and vaccines (10%)</b> (18-20 questions in the following areas)
Immunology
Vaccinations

Medical Content Category (Relative Percentage)
<b>Antimicrobial therapy (8%)</b> (15-17 questions in the following areas)
Antibacterials
Antivirals (non-HIV)
Antimalarials
Antiparasitics
Antifungals
Antimycobacterials
Asymptomatic states
Mechanisms of resistance

Medical Content Category (Relative Percentage)
<b>Epidemiology, infection control, and bioterrorism (4%)</b> (6-9 questions in the following areas)
Infection control
Epidemiology
Bioterrorism

Medical Content Category (Relative Percentage)
<b>Sexually transmitted diseases (2%)</b> (3-6 questions in the following areas)
Bacteria
Fungal
Viruses & related conditions
Parasites
General principles

Medical Content Category (Relative Percentage)
<b>General (general internal medicine and ethics) (10%)</b> (18-20 questions in the following areas)
Malignancies
Endocrinology
Collagen vascular/Autoimmune
Dermatology
Hematology
Other non-infectious diseases
Bites/Stings/Toxins
Ethics

Medical Content Category (Relative Percentage)
<b>HIV (14%)</b> (23-29 questions in the following areas)
Epidemiology
Pathogenesis
Laboratory testing
Antiretroviral therapy
Opportunistic infections/malignancies
Immune reconstitution inflammatory syndrome (IRIS)
Other complications of HIV (e.g., Thrombocytopenic disorders, Castleman's disease)
Related issues (e.g., mental health, substance abuse)

Medical Content Category (Relative Percentage)
<b>Rickettsia and Chlamydia (4%)</b> (6-9 questions in the following areas)
Rickettsia
<i>R. rickettsiae</i> (Rocky Mountain spotted fever)
<i>R. akari</i> (rickettsialpox)
<i>R. prowazekii</i> (epidemic typhus)
<i>R. typhi</i>
<i>Orientia tsutsugamushi</i> (scrub typhus)
<i>R. coronii</i>
<i>R. parkeri</i>
<i>R. africae</i>
<i>Coxiella burnetii</i>
<i>Erhlichia chafeensis</i>
<i>Erhlichia ewingii</i>
<i>Anaplasma phagocytophilum</i>
Chlamydiae
<i>Chlamydia trachomatis</i>
<i>Chlamydophales pneumoniae</i>
<i>Chlamydia psittaci</i>

Medical Content Category (Relative Percentage)
<b>Surgical consultations and critical care medicine (10%)</b> (18-22 questions in the following areas)
Surgical consultations
Orthopedic/Skin/Soft tissue
Neurosurgical
ENT
Ophthalmologic
Cardiothoracic
Gastrointestinal/abdominal
Urologic
Obstetric/gynecologic
Trauma
Prosthetic material and surgical device infections
Pre-operative antimicrobial prophylaxis
Pulmonary disease/ICU
Sepsis and septic shock
Complicated pleuropulmonary infections
Nosocomial infections