

Certification Board of Infection Control and Epidemiology (CBIC)
Long-Term Care (LTC) Examination
Detailed Test Specifications

Domain	Content Area	Percentage Weight	Number of Items
1. Long-Term Care Settings		10%	15
	a. Ethics		
	1. Basic ethical principles		
	2. Resident rights and hierarchy of practices for isolation precautions (e.g., precautions are used in the least restrictive way, resident privacy)		
	b. Communal Gatherings		
	1. Impact of interaction on psychosocial well-being		
	2. Infection risk associated with communal gatherings		
	c. Interdisciplinary Team		
	1. Infection risk associated with facility and care team demographics (e.g., staff composition, visitors, contracted staff, staffing turnover, ratio of licensed and unlicensed caregivers)		
	d. Normal Aging Processes		
	1. Physiology and immune system changes throughout the lifespan		
	2. Pathophysiology and the disease process (e.g., urinary tract, respiratory, skin and soft tissue, gastrointestinal, bloodborne, viral illnesses)		
	e. Special Populations		
	1. Infection risks of complex populations (e.g., residents with medical devices, on dialysis, who need memory support, have cognitive impairment, are on respite or hospice care)		
2. Management and Communication of the Infection Prevention Program		11%	16
	a. Infection Prevention Plan		
	1. Components of an infection prevention plan (e.g., regulatory and advisory requirements, facility demographics)		
	2. Emergency preparedness (e.g., mitigation, preparedness, response, recovery)		
	3. Risk assessments (e.g., how to complete and incorporate into plan)		
	b. Policies and Procedures		
	1. Best practices per regulatory and advisory agencies		
	2. Implementation science (e.g., key stakeholders, staff buy-in, dissemination, accessibility, feasibility)		
	c. Education and Training		
	1. Adult learning principles (e.g., communication techniques, just-in-time training, in-services)		
	2. Competency assessment (e.g., return demonstration, post tests, auditing)		
	d. Research		
	1. Literature review process		
	2. Research study design (e.g., peer reviewed, experimental vs. non-experimental, qualitative vs. quantitative)		
	3. Basic statistics (e.g., p value, confidence interval, appropriateness of test)		
	e. Quality Assurance and Performance Improvement		
	1. Performance improvement concepts (e.g., Failure Mode and Effects Analysis [FMEA], Plan Do Study Act [PDSA], Root Cause Analysis [RCA])		
	2. Performance indicators to achieve key outcomes		
	3. Culture of safety (e.g., reduce Healthcare-Associated Infections [HAIs], hand hygiene champions)		
	4. Product and process evaluation (e.g., cost benefit assessments, efficacy studies, standardization of products and processes)		
	f. Leadership		
	1. Leadership styles and principles		
	2. Professional development (e.g., seek knowledge, certifications, continuing education courses)		
3. Identification of Infectious Diseases		12%	18
	a. Clinical Signs, Symptoms, and Risk Factors to Identify Possible Infectious Diseases		
	1. Clinical signs, symptoms, and risk factors to identify possible infectious diseases		
	b. Diagnostic, Radiologic, Procedural, and Laboratory Reports		
	1. Interpretation of diagnostic, radiologic, procedural, and laboratory reports (e.g., chest x-ray reports, culture and sensitivity)		
	c. Specimen Collection, Transportation, Handling, and Storage		

	1. Methods of specimen collection, transportation, handling, and storage		
	d. Basic Microbiology		
	1. Basic microbiology terminology (e.g., bacteria, virus, Gram stain)		
	2. Microbial pathogenicity and host response		
	e. Epidemiologically Significant Organisms		
	1. Epidemiologically significant organisms, including Multidrug Resistant Organisms (MDROs) (e.g., susceptibility pattern interpretation)		
	2. Appropriate interventions (e.g., precautions, appropriateness of antimicrobial selection)		
4. Surveillance and Epidemiologic Investigation		16%	24
	a. General Principles of Epidemiology		
	1. Basic epidemiology		
	2. Processes for preventing and mitigating transmission (e.g., cleaning, disinfection, vaccination, transmission-based precautions)		
	b. Surveillance Design		
	1. Surveillance methods and purpose (e.g., prospective, retrospective, targeted/priority directed)		
	2. Collection and compilation of surveillance data		
	3. Surveillance plan components (e.g., goals and objectives identified from the risk assessment)		
	c. Outbreak Management		
	1. Outbreak management concepts (e.g., case definition, period of investigation, case finding methods)		
	2. Outbreak management steps (e.g., reporting, control measures)		
	d. Collaboration with Internal and External Agencies		
	1. Internal organizational structure and culture		
	2. Public health guidelines for infection prevention		
	3. Public health resources and agencies for infection prevention		
	e. Reporting		
	1. Reporting structure (e.g., internal, governmental, and regulatory agencies)		
	f. Data Management, Analysis, and Interpretation		
	1. Standardized definitions (e.g., surveillance or case definitions)		
	2. Data analysis (e.g., incidence/prevalence, provider specific, unit specific, device specific, procedure specific)		
	3. Data collection methods		
	4. Report preparation and presentation		
	5. Surveillance driven action plans		
5. Prevention and Control of Infectious and Communicable Diseases		16%	24
	a. Hand Hygiene		
	1. Key elements for a hand hygiene program		
	b. Standard and Transmission-Based Precautions		
	1. Standard and transmission-based precautions		
	2. Injection safety and safe disposal (e.g., multidose vials, IV medication, glucometers, insulin pens)		
	c. Personal Protective Equipment (PPE)		
	1. Appropriate use of Personal Protective Equipment (PPE) (e.g., selection, procurement, donning and doffing, point of care risk assessment)		
	2. Regulatory requirements associated with Personal Protective Equipment (PPE) supplies (e.g., Centers for Medicare and Medicaid Services [CMS], Occupational Safety and Health Administration [OSHA], National Institute for Occupational and Safety Health [NIOSH], Food and Drug Administration [FDA], Health Canada)		
	d. Food Safety		
	1. Safe food handling (e.g., regulatory requirements, Hazard Analysis and Critical Control Point [HACCP])		
	e. Resident Immunizations		
	1. Immunization recommendations for residents		
	f. Ancillary Services		
	1. Infection prevention practices required for ancillary services (e.g., podiatry, dental, environmental services)		
6. Environment of Care		12%	18
	a. Environmental Safety		
	1. Safe care environment (e.g., management of ventilation, water, waste, laundry; environmental cleaning; infestation; pets)		

	2. Environmental cleaning and disinfection practices and technologies		
	3. Environmental pathogens (e.g., Legionella, Aspergillus)		
	b. Construction and Maintenance		
	1. Infection risks associated with construction and maintenance (e.g., Infection Control Risk Assessment [ICRA])		
	2. Risk mitigation strategies (e.g., barriers, change air flow, move residents, Personal Protective Equipment [PPE] for maintenance/construction staff)		
	7. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	10%	15
	a. Cleaning, Disinfection, and Sterilization Practices		
	1. Cleaning, disinfection, and sterilization practices based on intended use (e.g., Spaulding classification)		
	2. Cleaning, disinfection, and sterilization methods (e.g., UV light, autoclave sterilizer, disinfectant solutions)		
	8. Antimicrobial Stewardship	7%	11
	a. Core Elements of Antimicrobial Stewardship		
	1. Core elements of antimicrobial stewardship in Long-Term Care		
	2. Antimicrobial susceptibility (e.g., antibiogram, antimicrobial resistance patterns)		
	3. Antimicrobials (e.g., prophylactic, empiric, and therapeutic uses of antimicrobials; broad and narrow spectrum)		
	b. Colonization, Infection, and Contamination		
	1. Colonization, infection, and contamination		
	2. Appropriate antimicrobial use (e.g., overuse harm, risks, ability to treat)		
	3. Diagnostic stewardship (e.g., no urinalysis [UA]/culture asymptomatic resident, standardized Situation Background Assessment Recommendation [SBAR] forms)		
	9. Employee/Occupational Health	6%	9
	a. Occupational Exposure		
	1. Occupational exposure, infections, and infectious diseases (e.g., management, treatment, risks)		
	2. Requirements for compliance with regulatory and advisory agencies (e.g., respiratory protection programs, sharps safety)		
	b. Fitness for Duty		
	1. Work restrictions associated with communicable diseases (e.g., exposure, illness, compliance with Personal Protective Equipment [PPE] procedures)		
	c. Employee Immunizations		
	1. Immunization recommendations for staff		
Total		100%	150 items