This content outline reflects the results of the Practice Analysis conducted in 2025. Starting May 22, 2026, the a-IPC™ examination will cover the topics listed in the outline below. This list is not exhaustive and is only meant to be used as an overall guide to help direct candidates' preparation. The a-IPC™ is an objective, multiple-choice examination consisting of 100 questions. 85 of these questions are used in computing the score.

1. Processes to Identify Infectious Diseases (14 items)

a. Identification, Transmission, and Stewardship

1. Recognize the relevance of diagnostic, radiologic, laboratory reports (e.g., multidrug resistant organism [MDRO]) and interventional documentation (e.g., patient care notes, surgical site infections [SSI])
2. Identify appropriate practices for specimen collection, handling, storage, and transportation e.g., blood sample collection, transportation of dangerous goods [TDG], red biohazard bin, personal protective equipment [PPE])
3. Identify clinical signs, symptoms and test results of possible infectious diseases (e.g., urinary tract infection [UTI], bloodstream infections, tuberculosis [TB], malaria)
4. Differentiate between colonization, infection, and pseudo infection (e.g., contamination)
5. Differentiate between prophylactic, empiric, and therapeutic uses of antimicrobials (e.g., prophylactic antibiotic therapy prior to surgery)
6. Recognize risk factors for infectious diseases (e.g., travel, vaccination status, immunocompromising factors)
7. Stay informed about current and emerging local and global health threats (e.g., local, national, and international public health organizations)

2. Surveillance and Epidemiologic Investigation (17 items)

a. Design of Surveillance Systems

1. Assist with conducting a risk assessment (e.g., geographic location, demographics of the population served, care, treatment, services provided, analysis of data, evidence-based guidelines, and regulatory requirements)
2. Participate in the development of goals, objectives and a surveillance plan based on the findings of the risk assessment (e.g., vaccination, isolation)
3. Apply established surveillance standards (e.g., risk assessment, monitoring, feedback)
4. Identify epidemiologically significant findings and notify relevant parties (e.g., nursing unit, health department, leadership)
5. Participate in surveillance activities across health care settings (e.g., ambulatory, home health, long term care, acute care, behavioral)
6. Follow established processes for identifying individuals with communicable diseases requiring transmission-based precautions and/or follow up (e.g., reporting to health department)

7. Participate in the evaluation of surveillance plans and goal progress (e.g., central line-associated bloodstream infection [CLABSI], catheter-associated urinary tract infection [CAUTI], carbapenem-resistant Enterobacterales [CRE])

b. Collection and Compilation of Data
   1. Collect surveillance data using established definitions (e.g., medical records, reporting systems, case definitions, validate data)
   2. Utilize a systematic approach to obtain and record surveillance data (e.g., notifiable diseases, vital records, registries)
   3. Assist with organizing data in preparation for analysis (e.g., charts and graphs, line lists)
   4. Calculate the incidence and/or prevalence of infections (e.g., new cases versus total number of existing cases)
   5. Assist with calculating specific infection rates/ratios (e.g., provider specific, unit specific, device specific, procedure specific)

c. Interpretation of Data
   1. Validate surveillance data (e.g., demographic characteristics, organism)
   2. Use basic statistical techniques to describe, analyze, and interpret data (e.g., mean, standard deviation, rates, ratios, proportions)
   3. Compare surveillance results to published data and/or other relevant benchmarks (e.g., prior surveillance data, national databases)
   4. Participate in monitoring and interpreting the relevance of surveillance data (e.g., antimicrobial susceptibility patterns, reportable infectious diseases)
      Assist with preparing and presenting findings in a format that is relevant to the audience/stakeholders (e.g., graphs, tables, charts)

d. Outbreak and Exposure Investigation
   1. Verify existence of outbreak or exposure (e.g., diagnosis, case control, cohort studies)
   2. Notify appropriate stakeholders (e.g., senior leadership, medical providers, risk management, public health)
   3. Collaborate with appropriate personnel to establish the case definition, period of investigation, and case finding methods
   4. Collaborate with appropriate personnel to define the problem using time, place, person, and risk factors
   5. Aid in formulating a hypothesis on source and mode of transmission (e.g., fomites, direct or indirect transmission, airborne, droplet)
   6. Collect additional data (e.g., environmental samples, active surveillance cultures)
   7. Contribute to the design and implementation of control measures (e.g., ongoing surveillance)
   8. Provide assistance with preparing and disseminating reports (e.g., manuscripts, meeting reports, seminars)

3. Preventing/Controlling the Transmission of Infectious Agents (14 items)

a. Standard Precautions
    1. Follow infection prevention policies and procedures (e.g., evidence-based guidelines, national standards, laws and regulations, manufacturer's instructions for use)
    2. Ensure effective infection prevention practices are implemented and followed (e.g., hand hygiene)
    3. Promote adherence to personal protective equipment (PPE) procedures (e.g., availability, selection, use, disposal)
    4. Ensure appropriate patient placement, transfer, and discharge (e.g., contact precautions, cohorting)
    5. Promote respiratory hygiene and cough etiquette among patients, visitors, and staff (e.g., provide masks)
    6. Ensure proper use and handling of patient-care equipment and products to avoid cross-contamination (e.g., glucometer, IV pole, blood pressure monitor)
    7. Promote safe injection practices (e.g., parenteral medication administration, single use of syringes and needles, appropriate use of single and multi-dose vials)

b. Transmission-Based Precautions
    1. Implement strategies related to transmission-based precautions (e.g., droplet, contact, airborne)
    2. Collaborate with appropriate personnel to adapt transmission-based precautions (e.g., healthcare setting, facility design characteristics, patient interaction)

c. Antimicrobial Stewardship
    1. Monitor the relevance of antimicrobial susceptibility patterns (e.g., antibiogram, engage with pharmacy)

d. Emergency Preparedness and Management
    1. Collaborate with relevant partners in planning community/facility responses to known/suspected communicable diseases (e.g., bioterrorism, emerging infectious diseases, syndromic surveillance)
    2. Provide assistance in identifying infection prevention's role in emergency/disaster management (e.g., mass casualty incidents, mitigate spread of infection, protect health of communities)
    3. Integrate infection prevention strategies into the four phases of emergency/disaster response in the emergency operations plan (e.g., mitigation, preparedness, response, recovery)

4. Employee/Occupational Health (7 items)

a. Infection Prevention
    1. Partner with occupational health on identification and decisions for communicable disease exposures, illnesses, and transmission risk to patients, coworkers, and communities (e.g., employee counseling, follow-up, work restriction, positive tuberculosis test)

2. Collaborate with occupational health to evaluate infection prevention data and assist with recommendations (e.g., needle stick injuries, splashes)
3. Consult with appropriate personnel on use of alternative infection prevention options (e.g., allergies to products)
4. Assist with assessing the risk of occupational exposure to infectious diseases (e.g., Mycobacterium tuberculosis [Mtb], bloodborne pathogens, hepatitis)
5. Educate on safe work practices (e.g., personal protective equipment [PPE], safe injection practices, hand hygiene)

5. Management and Communication of the Infection Prevention Program (7 items)

a. Quality and Performance Improvement

1. Recognize quality improvement initiatives (e.g., cost benefit assessments, evaluation of prevention practices, standardization of products and processes, performance indicators)
2. Participate in performance improvement and patient safety activities related to infection prevention (e.g., emergency response planning, plan do study act [PDSA])
3. Participate in developing, evaluating, revising goals/objectives, and recommending changes in practice (e.g., regulation, critically appraised literature, clinical outcomes, and financial implications)
4. Implement with assistance recommendations of resources to support the infection prevention program (e.g., specific equipment, personnel, information technology)
5. Apply appropriate performance improvement tools (e.g., "fishbone" diagram, Pareto charts, flow charts, Strengths Weaknesses Opportunities Threats [SWOT], gap analysis)

b. Communication

1. Provide infection prevention findings and recommendations, and report adverse/sentinel events to appropriate stakeholders (e.g., department lead)
2. Support implementation of policies, procedures, and recommendations (e.g., resources, training)
3. Follow established processes to communicate notifiable diseases to internal and external stakeholders (e.g., health authority, receiving facility, transitions of care)
4. Evaluate and facilitate compliance with accreditation standards/regulatory requirements (e.g., employee required vaccinations [influenza, hepatitis], bloodborne pathogens training, staff competency)
5. Identify chain of command (e.g., organizational chart, media inquiry)

6. Education and Research (6 items)

a. Education

1. Assess needs and develop goals/objectives for preparing educational offerings (e.g., decrease transmission, multidrug-resistant organism [MDRO], Clostridioides difficile infection [CDI], COVID-19, measles, Candida auris)

2. Disseminate educational content that is appropriate for the audience (e.g., staff training, practical vs. clinical knowledge, learning style)
3. Provide immediate feedback, education, and training to healthcare personnel when lapses in practice are observed (e.g., personal protective equipment [PPE], proper cleaning and disinfection of equipment, safe injection practices)
4. Facilitate education of patients, families, and others regarding prevention and control measures (e.g., hand hygiene, cough etiquette)
5. Assess the effectiveness of education and learner outcomes (e.g., observation of practice, process measures)

b. Research

1. Conduct a literature review (e.g., basic research terminology, scientific databases and electronic resources, ethical considerations, peer reviewed resources)
2. Report applicable research findings to relevant personnel (e.g., emerging infections, different diagnostic methods)
3. Identify opportunities for research (e.g., knowledge and practice gaps)

7. Environment of Care (10 items)

a. Environmental Safety

1. Recognize key elements of a safe care environment (e.g., laundry, environmental cleaning, waste disposal)
2. Collaborate on the evaluation and monitoring of environmental cleaning, disinfection practices, and technologies (e.g., select and evaluate products for Clostridioides difficile infection [CDI], Candida auris, Pseudomonas aeruginosa)
3. Monitor infection prevention processes related to product recalls (e.g., equipment, food, medications, supplies)
4. Monitor for environmental pathogens (e.g., Legionella pneumophila, Aspergillus fumigatus)

b. Construction and Renovation

1. Participate in evaluating infection risks (e.g., infection control risk assessment)
2. Contribute to risk mitigation during phases of construction, renovation, and maintenance (e.g., establish negative pressure, type of barrier, foot traffic reroute, dust control)

8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment (10 items)

a. Reprocessing Practices

1. Identify appropriate cleaning, disinfection, and sterilization methods based on intended use (e.g., Spaulding classification, manufacturer's instructions for use)
2. Assist in reviewing product use and reprocessing requirements (e.g., single-use, on-site reprocessing, outsourced reprocessing)

3. Identify critical steps for reprocessing instrumentation (e.g., directly observing practices, cleaning/low level disinfection, high level disinfection, sterilization, dirty-clean-sterile workflow)
4. Audit process documentation for regulatory and policy compliance (e.g., sterilization logs, biological indicator, chemical indicator, packaging integrity)
5. Participate in incident investigation (e.g., suspected reprocessing failure)