



**Association for Professionals in
Infection Control and Epidemiology**

Preparing for Certification

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News! – New Certification Initiatives

Entry-Level Pathway Associate - Infection Prevention & Control (a-IPC)

- 6 Beneficial for the novice IP and those interested in pursuing careers in infection prevention and control
 - 6 Promoting patient safety through verified basic infection prevention competency
 - 6 Experience or job-specific requirements not necessary
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CIC® Recertification Alternate Pathway

- 6 Available to all candidates eligible for CIC® recertification starting in 2020, as an alternate method to recertification by examination
- 6 Demonstrating proficiency and expertise in infection prevention and control
- 6 Recertification by continuing competency achieved through the completion of IP-related academic education, research, publications, presentations, and more

- **Identification of Infectious Disease Processes (22 items)**
 - Interpret diagnostic and laboratory reports
 - Practices for specimen collection, handling, and storage
 - Correlate clinical s/s with infectious disease processes
 - Differentiate colonization, infection, and contamination
 - Differentiate prophylactic, empiric, and therapeutic uses of antimicrobials

- **Surveillance and Epidemiologic Investigation (24 items)**
 - Design of Surveillance Systems
 - Collection and Compilation of Surveillance Data
 - Interpretation of Surveillance Data
 - Outbreak Investigation

- **Preventing/Controlling the Transmission of Infectious Agents (25 items)**
 - Develop evidence-based/informed infection prevention and control policies and procedures
 - Collaborate with relevant groups and agencies in planning community/facility responses to biologic threats and disasters
 - Identify and implement infection prevention and control strategies

- **Employee/Occupational Health (11 items)**
 - Develop screening and immunization programs
 - Evaluate data and develop work restriction recommendations related to communicable diseases and/or exposures
 - Recognize healthcare personnel who may represent a transmission risk to patients, coworkers, and communities
 - Assess risk of occupational exposure to infectious diseases (e.g., *Mycobacterium tuberculosis*, bloodborne pathogens)

- **Management and Communication (13 items)**
 - Infection Prevention program planning
 - Communication and Feedback
 - Evaluate and facilitate compliance with accreditation standards/regulatory requirements
 - Quality Performance Improvement and Patient Safety

- **Education and Research (11 items)**
 - Education
 - Assess needs, develop goals and measurable objectives
 - Prepare, present, or coordinate educational content that is appropriate for the audience
 - Research
 - Conduct a literature review
 - Critically appraise the literature
 - Facilitate incorporation of applicable research findings into practice

- **Environment of Care (14 items)**
 - Elements important for a safe care environment
 - Assess infection risks of design, construction, and renovation
 - Evaluation and monitoring of environmental cleaning and disinfection
 - Selection and evaluation of environmental disinfectant products

- **Cleaning, Sterilization, Disinfection, Asepsis (15 items)**
 - Identify and evaluate appropriate cleaning, sterilization and disinfection practices
 - Collaborate with others to assess products under evaluation for their ability to be reprocessed
 - Identify and evaluate critical steps of cleaning, high level disinfection, and sterilization

Sample Test Questions

1. A 55-year-old male who is admitted to an emergency department with a high fever and myalgias rapidly develops respiratory distress that requires ventilation. When questioning the family, the Infection Preventionist (IP) learns that the only change in his routine activities was cleaning out an abandoned storage shed near the family home approximately 2 weeks previously. Which of the following infectious diseases MOST likely results in these symptoms?

- A. Hantavirus
- B. Plague
- C. Lyme disease
- D. Q Fever

Discussion:

1. What are the important clues in the question?
2. How are each transmitted?
3. What are the symptoms?

2. A 68-year-old male is admitted for progressive stroke and pneumonia. He has a low-grade fever and had previously been admitted on a bi-monthly basis. He has been diagnosed with *Candida* esophagitis. Which of the following is the **MOST** likely underlying condition?

- A. tuberculosis (TB)
- B. chlamydial infection
- C. cytomegalovirus (CMV)
- D. HIV

Discussion:

1. What symptoms give the best clues?
2. How do each present as chronic conditions?

3. A patient is admitted for aggressive chemotherapy and on hospital day 13, the patient develops high fevers and consolidation on chest x-ray. A chest CT shows left lower lobe patchy infiltrate with dense central consolidation. Which of the following is the most likely cause?

A. *Aspergillus*

B. *Legionella*

C. *Candida tropicalis*

D. *Nocardia asteroides*

Discussion:

1. What factors go into the response?
2. What are the s/s?
3. What is the BEST match for unilateral infiltrate?

4. Over a 3 month period, eight patients were diagnosed with *Legionella* pneumonia. The location of the patients were: 4 in the liver transplant unit, 2 in the trauma unit, and 1 each in the pediatric and psychiatric unit. To control *Legionella* in this facility, the ICP should:

- A. Review engineering department's schedule for changing the HEPA filters
- B. Discontinue the use of the air conditioners on the affected units
- C. Focus surveillance on pediatric and psychiatric units
- D. Culture water supplies from the affected units

Discussion:

1. What is the problem?
2. Do the different types of units matter?
3. What risk factors are involved?

5. A pediatric patient has had erythema of the cheeks for 2 weeks, particularly when in sunlight. A PCR test for B19 DNA is found positive by laboratory study. This child MOST likely has

- A. Lyme disease
- B. Fifth disease**
- C. Leprosy
- D. Streptobacillosis

Discussion:

1. What is the best clue?
2. What s/s are present?
3. How do each disease typically present?

6. A patient who has undergone cardiopulmonary resuscitation is subsequently diagnosed as having meningococcal meningitis. Which of the following employees should receive prophylaxis?

- A. anesthetist who performed endotracheal intubation
- B. physician who administered intravenous medications
- C. technician who performed the EKG
- D. nurse who performed chest compressions

Discussion:

1. Focus on the actions. What risk factors are involved?
2. Rank the risk from highest to lowest.

7. Which of the following organisms is a spiral-shaped rod associated with gastroenteritis?

- A. *Shigella sonnei*
- B. *Campylobacter jejuni***
- C. *Escherichia coli*
- D. *Salmonella enteritidis*

Discussion:

1. Are there any we can exclude?
 1. One of these things is not like the other. One of these things does not belong...

Follow-up. Which of the following diseases is caused by a spiral-shaped bacterium?

- 1. Leptospirosis**
- 2. Lyme Disease**
- 3. Relapsing Fever**
- 4. Syphilis**

- A. 2 and 3
- B. 1 and 4
- C. All of the above**
- D. None of the above

Discussion:

1. Are there any we know that we can exclude?
2. Are there any we know that we can include?



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Preventing infection.®