
Job Analysis Report for the CBIC a-IPC Examination

Conducted on behalf of



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Prepared by:



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We would like to thank the many individuals who provided invaluable assistance throughout the conduct of the Certification Board of Infection Control and Epidemiology, Inc. (CBIC) associate-Infection Prevention and Control (a-IPC) Job Analysis Study.

Above all, we thank the many dedicated professionals who generously contributed their time and expertise. Over 1,000 individuals participated in different phases of the job analysis including Task Force members, survey pilot test participants, survey respondents, and Test Specifications members.

At CBIC, Debbie Slutzky, Senior Certification Manager, provided excellent support throughout the project.

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EXECUTIVE SUMMARY

The mission of the Certification Board of Infection Control and Epidemiology, Inc. (CBIC) is to “provide pathways to demonstrate and maintain competence in infection prevention and control.”¹ CBIC requested a Job Analysis Study from Prometric for the associate-Infection Prevention and Control (a-IPC) examination.

A job analysis study is designed to obtain descriptive information about the tasks performed on a job and the knowledge, skills, and abilities (KSAs) needed to adequately perform those tasks. The purpose of the job analysis study was to:

- validate the tasks and KSAs important for novice Infection Preventionists; and,
- develop test specifications for the a-IPC exam.

Conduct of the Job Analysis Study

The job analysis study consisted of several activities: background research, collaboration with subject matter experts (SMEs) to ensure representativeness of the task and KSA statements, survey development, survey dissemination, compilation of survey results, and test specifications development. The successful outcome of the job analysis study depended on the excellent information provided by Infection Prevention professionals.

Survey Development

Survey research is an effective way to identify the tasks and KSAs that are important for novice Infection Preventionists. The statements included on the survey covered eight domains of practice. The development of the survey was based on a draft of task and KSA statements developed from a variety of resources included in the job analysis desk study.

Survey Content

The survey, disseminated in July and August of 2025, consisted of four sections. Prometric distributed the survey to Infection Prevention professionals who held either the a-IPC or the CIC certification. As an incentive to complete the survey, participants could enter a drawing to win a gift card.

Survey Sections
Section 1: Background & General Information
Section 2: Knowledge, Skills & Abilities
Section 3: Test Content Recommendations
Section 4: Comments

¹ <https://www.cbic.org/CBIC/About-CBIC.htm> retrieved Sep 2025.

Results

Survey Response

A total of 1057 Infection Prevention professionals submitted completed surveys. Based on the analysis of survey responses, a representative group of professionals completed the survey in sufficient numbers to meet the requirements for statistical analysis of the results. This is evidenced by review of the responses for each of the background and general information questions as well as confirmation by the Test Specifications Committee.

Survey Ratings

Participants were asked to rate each task by the importance for competent performance for a novice Infection Preventionist using a five-point scale (0 = *No importance* to 4 = *Very important*).

Additionally, participants were asked to rate the cognitive level required for these tasks using a five-point rating scale (0 = *Unnecessary* to 4 = *Mastery*).

Content Coverage

Evidence was provided for the comprehensiveness of the content coverage within the domains. If the task and KSA statements within a domain are adequately defined, then it should be judged as being well covered. Respondents indicated that the content within each domain was well to very well covered, thus supporting the comprehensiveness of the defined domains.

Test Specifications Development

In September of 2025, a Test Specifications Committee convened to review the results of the job analysis and to create the test content outline that will guide the development of the a-IPC exam.

Summary

In summary, this study used a multi-method approach to identify the tasks and KSAs that are important to the competent performance of novice Infection Preventionists. The job analysis process allowed for input from a representative group of Infection Prevention professionals and was conducted within the guidelines of professionally sound practice. The results of the job analysis can be used by CBIC to develop the a-IPC examination.

RESULTS AT A GLANCE

WHO COMPLETED THE SURVEY

A total of 1057 responses were included in the analysis. The majority of respondents reported working in Infection Prevention and Control or related fields for three years or more. Many participants identified Acute Care Hospital as their primary practice setting. Additionally, respondents predominantly held a Bachelor's degree or higher.

IMPORTANCE RATINGS

A total of 79 of the 79 tasks achieved high importance ratings for the overall group.

INTRODUCTION

The mission of the Certification Board of Infection Control and Epidemiology, Inc. (CBIC) is to “provide pathways to demonstrate and maintain competence in infection prevention and control.”² CBIC requested a Job Analysis Study from Prometric for the associate-Infection Prevention and Control (a-IPC) examination.

This report describes the job analysis study including the:

- rationale for conducting the job analysis study;
- methods used to define tasks and knowledge, skills, and abilities;
- types of data analyses conducted and their results; and
- outcomes and conduct of the test specifications meeting.

Job Analysis Study & Adherence to Professional Standards

A job analysis study refers to procedures designed to obtain descriptive information about the tasks performed on a job and the knowledge, skills, or abilities (KSAs) requisite to the performance of those tasks. The specific type of information collected during a job analysis study is determined by the purpose for which the information will be used.

For purposes of developing credentialing examinations, a job analysis study should identify tasks and KSAs deemed important by and for the professional role that is the subject of the certification, which was novice Infection Preventionists. The use of a job analysis study (also known as practice analysis, role and function study, or role delineation) to define the content domain(s) is a critical component in establishing the content validity of the certification. Content validity refers to the extent to which the content covered by an examination is representative of the tasks, knowledge, skills, and abilities of a job.

A well-designed job analysis study should include the participation of a representative group of subject matter experts (SMEs) who reflect the diversity within the profession. Diversity refers to regional or job context factors and to factors such as experience, gender, and race/ethnicity. Demonstration of content validity is accomplished through the judgments of SMEs. The process is enhanced by the inclusion of large numbers of experts who represent the diversity of the relevant areas of expertise.

*The Standards for Educational and Psychological Testing*³ (2014) (*The Standards*) is a comprehensive technical guide that provides criteria for the evaluation of tests, testing practices, and the effects of test use. It was developed jointly by the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME). The guidelines presented in *The Standards*, by professional consensus, have come to define the necessary components of quality testing. As a consequence, a testing program that adheres to *The Standards* is more likely to be judged to be valid and defensible than one that does not.

As stated in Standard 11.13:

“The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale and evidence should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in that occupation and are consistent with the purpose for which the credentialing program was instituted.... Typically, some form of job or practice analysis provides the primary basis for defining the content domain...” (pgs 181-182)

The job analysis study for the a-IPC exam was designed to follow the guidelines presented in *The Standards* and to adhere to accepted professional practice.

² <https://www.cbic.org/CBIC/About-CBIC.htm> retrieved Sep 2025.

³ American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *The Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association.

METHOD

The job analysis study for the a-IPC exam involved a multi-method approach that included meetings with SMEs and a survey. This section of the report describes the activities conducted for the job analysis study.

First, experts identified the tasks and KSAs they believed were important to the practice of novice Infection Preventionists. Then, a survey was developed and disseminated to Infection Prevention professionals. The purpose of the survey was to obtain verification (or refutation) that the tasks and KSAs identified by the SMEs are important to the work of novice Infection Preventionists.

Survey research functions as a “check and balance” on the judgments of the experts and reduces the likelihood that unimportant areas will be considered in the development of the test specifications. The use of a survey is also an efficient and cost-effective method of obtaining input from large numbers of experts and makes it possible for analysis of ratings by appropriate subgroups of respondents.

The survey results provide information to guide the development of test specifications and content-valid examinations. What matters most is that a certification examination covers the important tasks and KSAs needed to perform job activities.

The steps of the job analysis study are described in detail below:

1. Conduct of a Planning Meeting

In March of 2025, CBIC representatives and the Prometric staff responsible for the conduct of the job analysis held an online planning meeting. During the planning meeting, the selection of the Task Force Committee members and Test Specifications Committee members, workshop dates and logistics, and survey delivery were topics of discussion.

2. Development of the Survey

Conduct of the Job Analysis Study Task Force Meeting

The Task Force Committee was comprised of a representative group of Infection Preventionists. In total, 17 Infection Prevention professionals comprised the committee. A list of the Committee members appears in Appendix A1.

The Task Force workshop was conducted via online meetings on May 15, 20, 22 and 28, 2025. The purpose of the meetings was to develop the survey content. Prometric staff facilitated the workshop and sent a pre-meeting document to the Committee that included the agenda and expectations. This document is included in Appendix A2.

During the meetings, participants reviewed and, where necessary, revised the major domains, tasks, and KSAs essential for the competent performance of novice Infection Preventionists. The draft list presented to the Task Force was based on findings from the job analysis desk study, which compiled a preliminary set of tasks and KSAs by examining information about this role. Sources included the old a-IPC test specifications, references, job descriptions, SME interviews, and other relevant materials provided by CBIC. Survey rating scales, along with background and general information questions, were also presented, discussed, and refined as needed.

STEPS OF THE JOB ANALYSIS STUDY

1. Conduct of a planning meeting
2. Development of the online survey
3. Dissemination of the survey
4. Analysis of the survey data
5. Development of the test specifications

Survey Construction & Review Activities

Survey Construction

Upon completion of the Task Force meetings, Prometric staff constructed the draft survey, which covered the following domains:

1. Processes to Identify Infectious Diseases
2. Surveillance and Epidemiologic Investigation
3. Preventing/Controlling the Transmission of Infectious Agents
4. Employee/Occupational Health
5. Management and Communication of the Infection Prevention Program
6. Education and Research
7. Environment of Care
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment

Survey Review by Task Force Committee

Each Task Force member received a copy of the draft survey. The purpose of the review was to provide the Committee with an opportunity to evaluate their work and recommend any revisions.

Comments provided by the Task Force Committee for the survey were compiled by Prometric staff and reviewed with the Committee via online meeting on June 12, 2025. Refinements, as recommended by the Committee, were incorporated into the survey in preparation for a pilot test.

Survey Pilot Test

The purpose of the small-scale pilot test was to have professionals in the field, who had no previous involvement in the development of the survey, review it and offer suggestions for improvement. A total of 37 participants received the survey link, 18 of whom completed the pilot survey.

Pilot participants reviewed the survey for clarity of wording, ease of use, and comprehensiveness of content coverage. Comments were compiled by Prometric staff and reviewed with the Task Force Committee via online meeting on June 26, 2025. The Task Force revised and finalized the survey based on the review of the pilot test comments.

Final Version of the Survey

The final version of the online survey consisted of four sections: Section 1: *Background & General Information*, Section 2: *Knowledge, Skills & Abilities (KSAs)*, Section 3: *Test Content Recommendations*, and Section 4: *Comments*.

In Section 1: *Background & General Information*, survey participants responded to general and background information about themselves and their professional activities.

In Section 2: *Knowledge, Skills & Abilities (KSAs)*, survey participants rated the statements using the importance and cognitive level scales shown below.

Importance
How important is each task and knowledge statement to competent performance for a novice Infection Preventionist?
0 = No importance
1 = Little importance
2 = Moderate importance
3 = Important
4 = Very important

Cognitive Level
To what level should the knowledge required to perform this task be attained at the time of earning the credential?
0 = Unnecessary (not required)
1 = Exposure (be aware of the knowledge)
2 = Comprehension (interpret/ discuss concepts)
3 = Application (solve basic, concept-based problems)
4 = Mastery (apply, integrate, and evaluate knowledge to address complex problems)

Survey participants were also asked to provide a rating measuring the representativeness of each domain. Respondents made their judgments using the five-point rating scale shown below.

Content Coverage
How well do the knowledge, skill, and ability (KSA) statements in Domain (#) cover important aspects of (Domain name)?
1 = Very Poorly
2 = Poorly
3 = Adequately
4 = Well
5 = Very Well

Respondents could note any topics that were not covered within a specific domain in an open response field.

In Section 3: *Test Content Recommendations*, survey participants indicated the content weights that the areas below should receive on the exam:

1. Processes to Identify Infectious Diseases
2. Surveillance and Epidemiologic Investigation
3. Preventing/Controlling the Transmission of Infectious Agents
4. Employee/Occupational Health
5. Management and Communication of the Infection Prevention Program
6. Education and Research
7. Environment of Care
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment

This was accomplished by distributing 100 percentage points across the eight domains. These distributions represented the allocation of examination items survey participants believed should be devoted to each area.

In Section 4: *Additional Comments*, survey respondents were given the opportunity to answer the following open-ended questions:

- Do you think the name associate-Infection Prevention and Control (a-IPC)[™] clearly reflects the credential for a novice IP? Do you have suggestions on what this certification should be called?
- What additional professional development and/or continuing education could you use to improve your performance in your current work role?
- How do you expect your work role to change over the next 5 years? What tasks will be performed and what knowledge will be needed to meet changing job demands?
- Do you have any additional comments regarding your role as an IP/ the Infection Prevention and Control profession?

3. Dissemination of the Survey

On July 8, 2025, Prometric administered the online survey to a list of participants provided by CBIC. This list included Infection Prevention professionals who held either the a-IPC or CIC certification. To encourage participation, respondents were offered the opportunity to enter a prize draw for a gift card. Appendix B contains the full survey.

4. Analysis of the Survey Data

The purpose of the survey was to validate the tasks and KSAs that relatively large numbers of Infection Prevention professionals judged to be relevant (verified as important) to their work. This objective was accomplished through an analysis of the mean importance ratings for the task statements. The derivation of test specifications from those statements verified as important by the surveyed professionals provides a substantial evidential basis for the content validity of credentialing examinations.

Based on information obtained from the survey, data analyses by respondent subgroups (e.g., practice setting) are possible when sample size permits. A subgroup category is required to have at least 30 respondents to be included in the mean analyses. This is a necessary condition to ensure that the mean value based upon the sample of respondents is an accurate estimate of the corresponding population mean value.

The following quantitative data analyses were produced:

- Importance means, standard deviations, and frequency (percentage) distributions for tasks
- Cognitive level means, standard deviations, medians, modes, and frequency (percentage) distributions for tasks
- Means, standard deviations, and frequency (percentage) distributions for content coverage ratings
- Means and standard deviations for test content recommendations; and
- Index of agreement values for designated subgroups.

Criterion for Interpretation of Mean Importance Ratings

Since a major purpose of the survey is to ensure that only validated statements are included in the development of the test specifications, a criterion (cut point) for inclusion needs to be established.

A criterion used in similar studies is a mean importance rating that represents the midpoint between moderately important and important. For the importance rating scale used across many studies, the value of criterion is 2.50.

Definition of Pass, Borderline & Fail Categories for the KSA Importance Mean Ratings

	<u>Means</u>
Pass:	At or above 2.50
Borderline:	2.40 to 2.49
Fail:	Less than 2.40

This criterion is consistent with the intent of content validity. Therefore, for this job analysis, Prometric recommended the value of this criterion should be set at 2.50. Accordingly, the task statements were grouped into one of three categories: Pass, Borderline, or Fail as determined by their mean importance ratings.

- The Pass Category contains those statements whose mean ratings are at or above 2.50, and are eligible for inclusion in the development of test specifications.
- The Borderline Category contains those statements whose mean ratings are between 2.40 and 2.49. The Borderline Category is included to provide a point of discussion for the Task Force to determine if the statement(s) warrant(s) inclusion in the test specifications.
- The Fail Category contains those statements whose mean ratings are less than 2.40. It is recommended that statements in the Fail Category be excluded from consideration in the test specifications.

5. Development of the Test Specifications

The Task Force workshop was conducted via online meetings on September 9 and 11, 2025. A list of the Test Specifications Committee members appears in Appendix A1. Prometric staff facilitated the workshop and sent a pre-meeting document to the Committee that included the agenda and expectations. This document is included in Appendix A2. The meetings focused on:

- finalizing the task and KSA statements that are important for inclusion based on the survey results;
- developing a crosswalk between the old content outline and the new test specifications; and
- establishing the percentage test content weights for each area on the examination.

RESULTS

Survey Responses

A total of 12,008 survey invitations were sent and 2,067 responses were received. Of these, 1,057 were used for analysis (those that were 55% or more complete), resulting in a response rate of 8.80%. Based on the analysis of survey responses, a representative group of Infection Prevention professionals completed the survey in sufficient numbers to meet the requirements to conduct statistical analysis. This was evidenced by the distribution of responses for each of the background information questions and was confirmed through discussion with the Test Specifications Committee.

Demographic Characteristics of Survey Respondents

The profile of survey respondents is presented below. All responses to the background and general information section of the survey are provided in Appendix C1. Write in responses to “Other (please specify)” options are provided in Appendix C2. The figures below reflect the sample size of 1057 used in the analysis.

Figure 1: Demographic Question 1

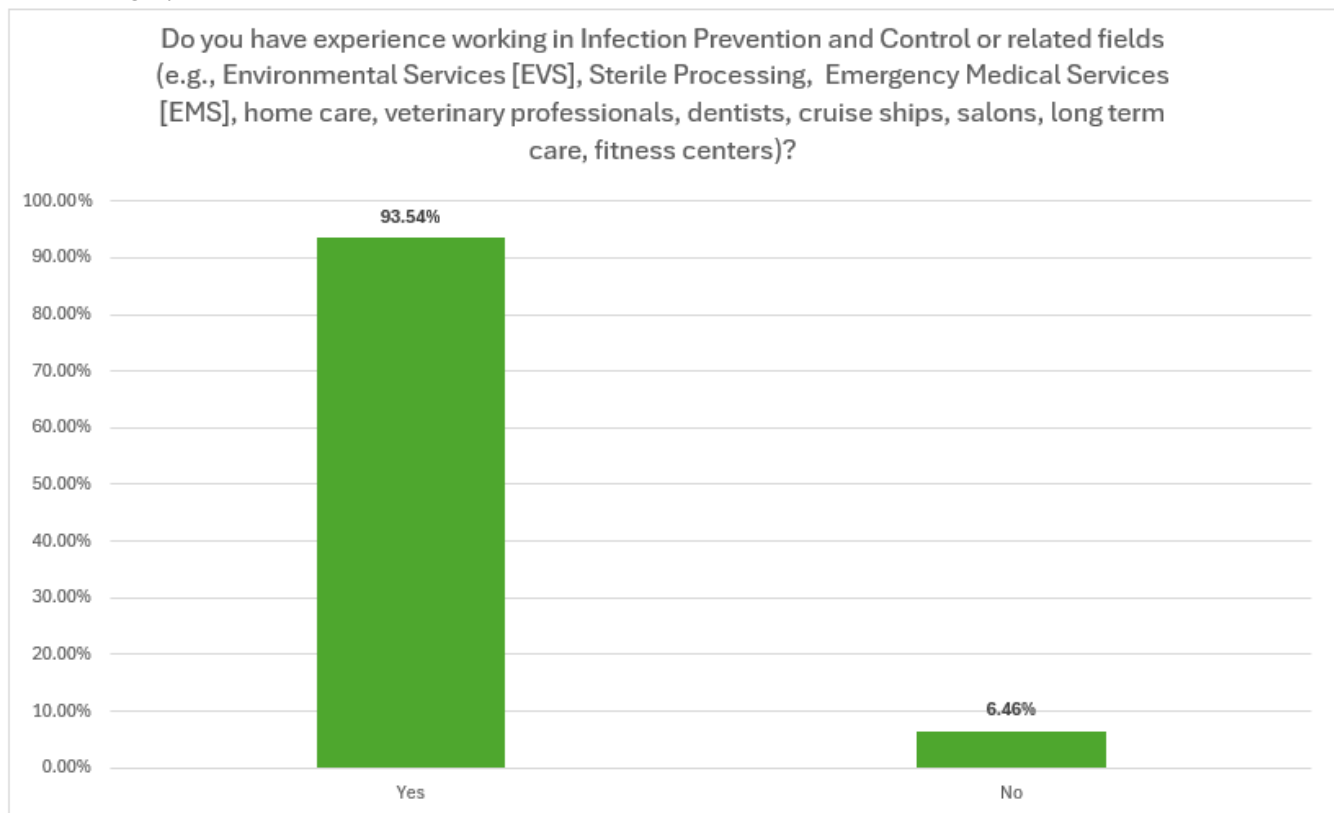


Figure 2: Demographic Question 2

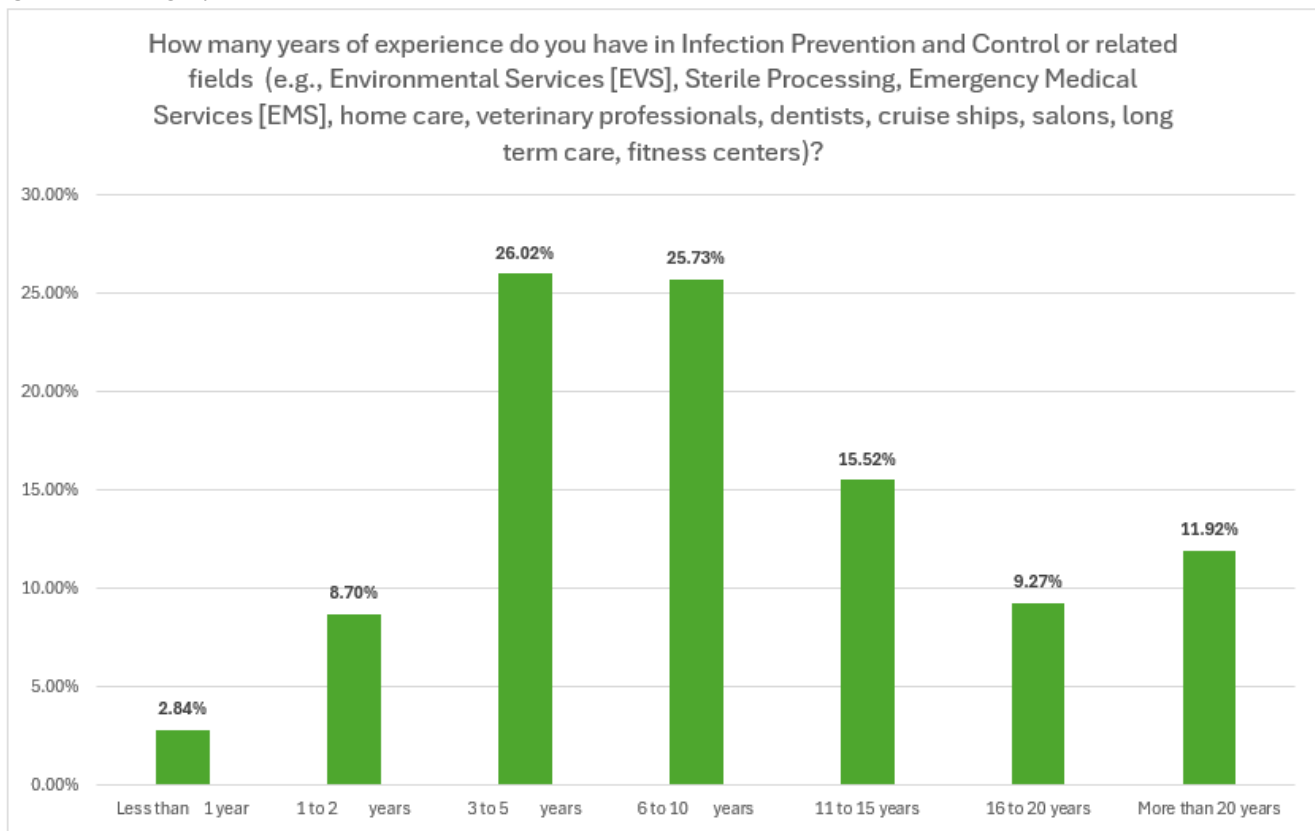


Figure 3: Demographic Question 3

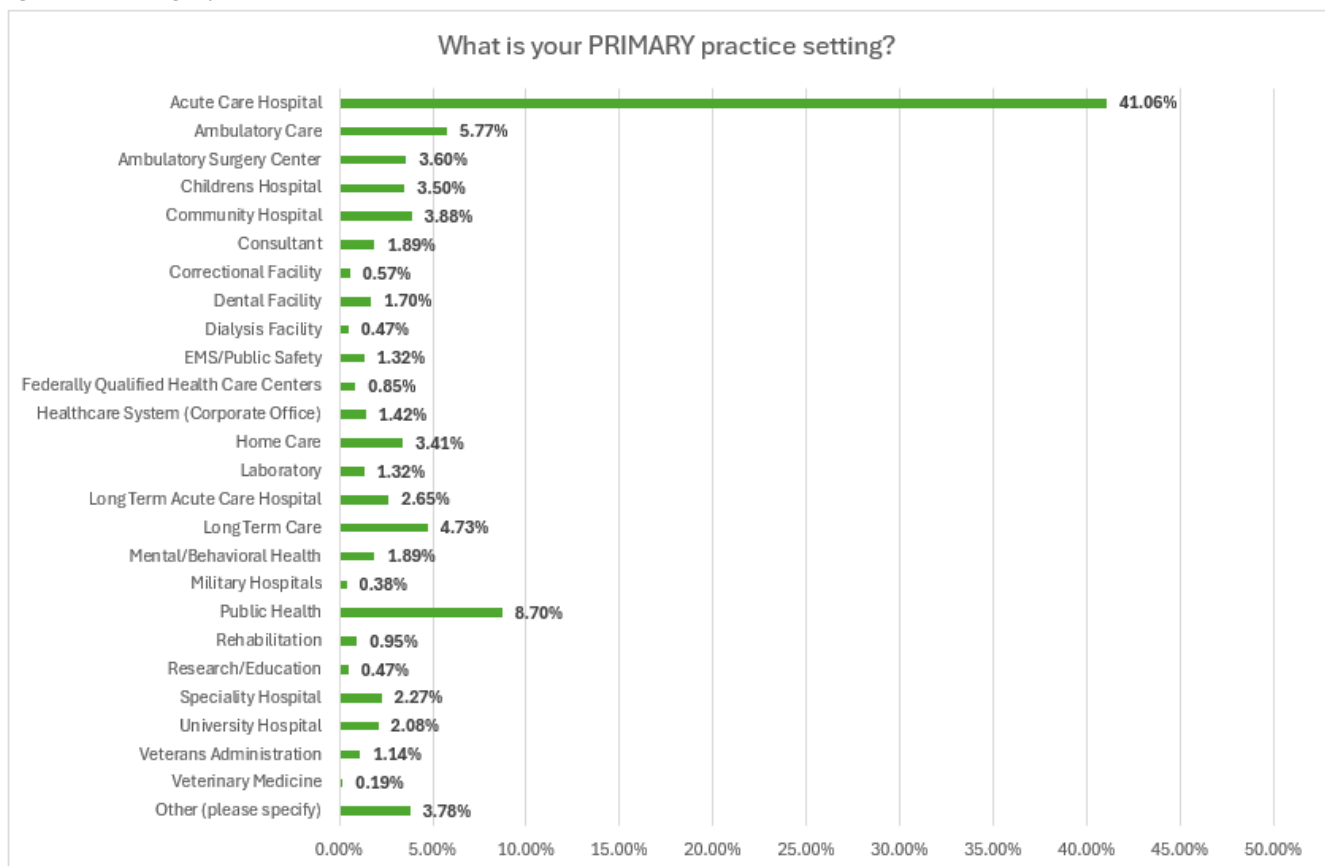


Figure 4: Demographic Question 4

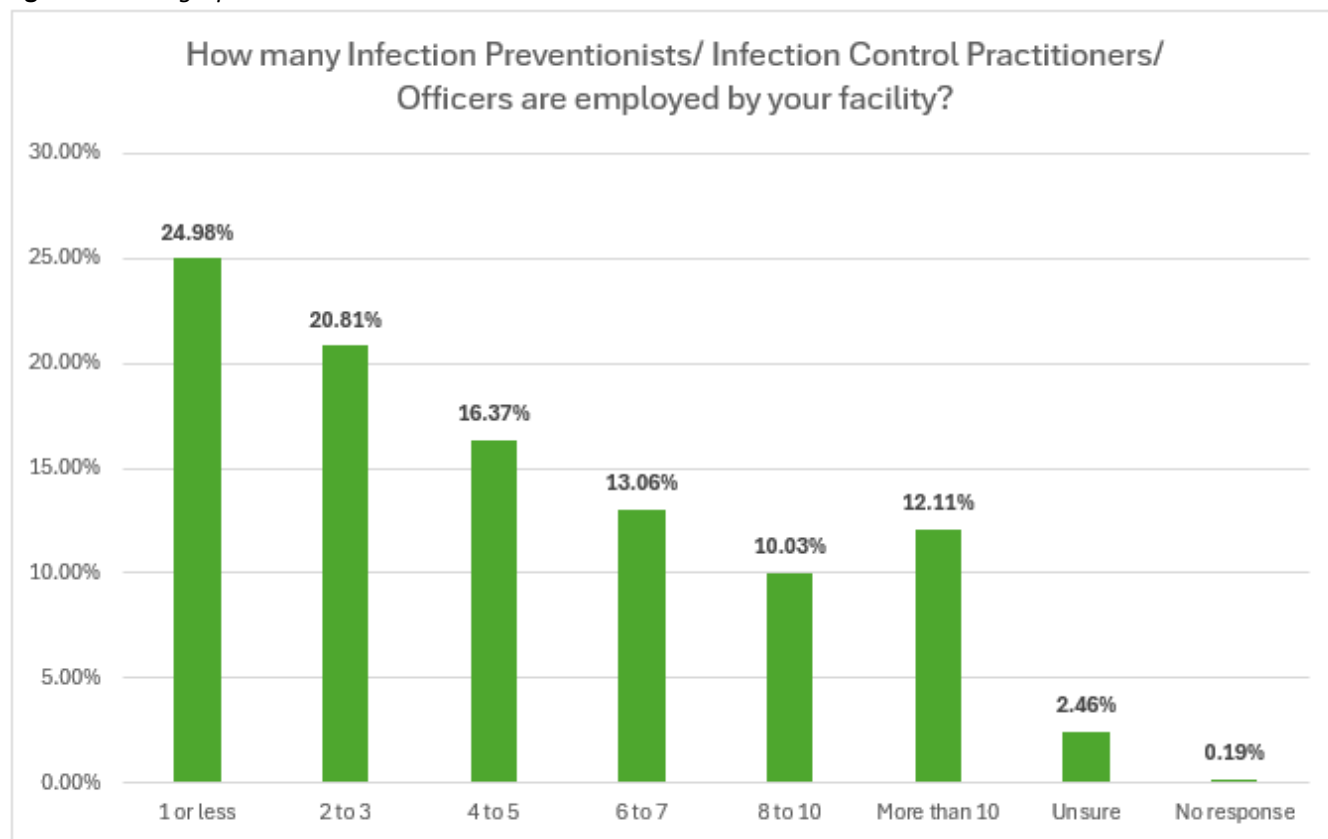


Figure 5: Demographic Question 5

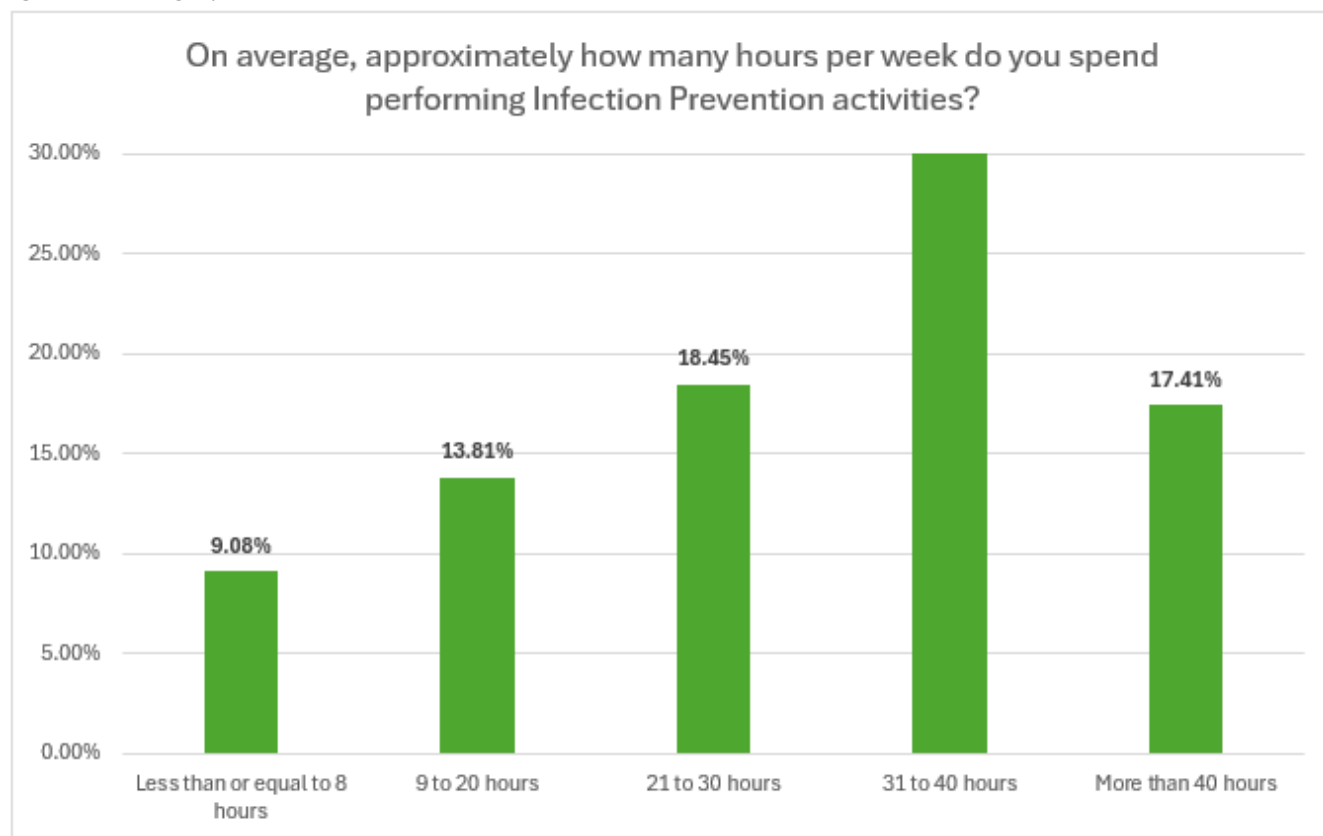


Figure 6: Demographic Question 6

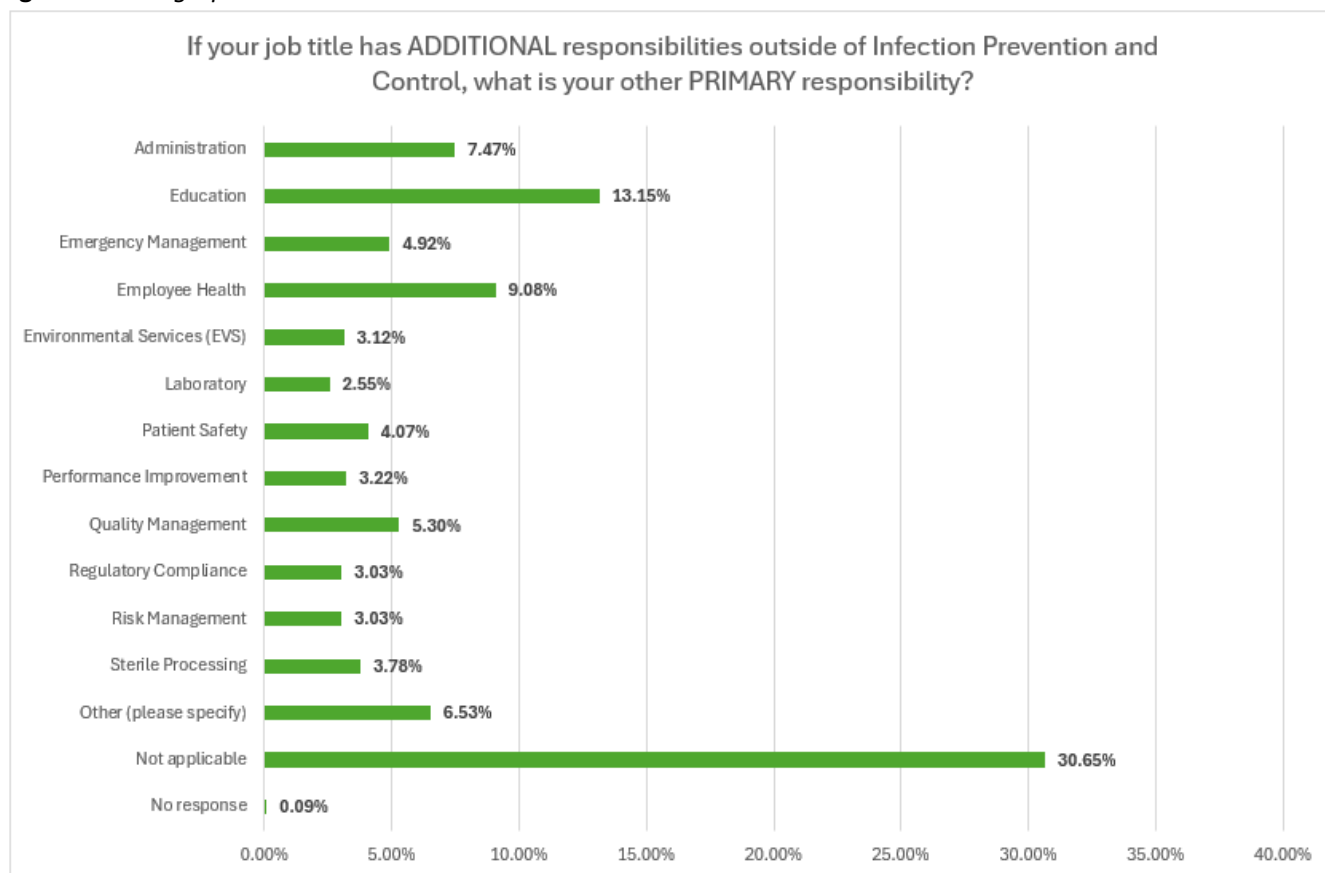


Figure 7: Demographic Question 7

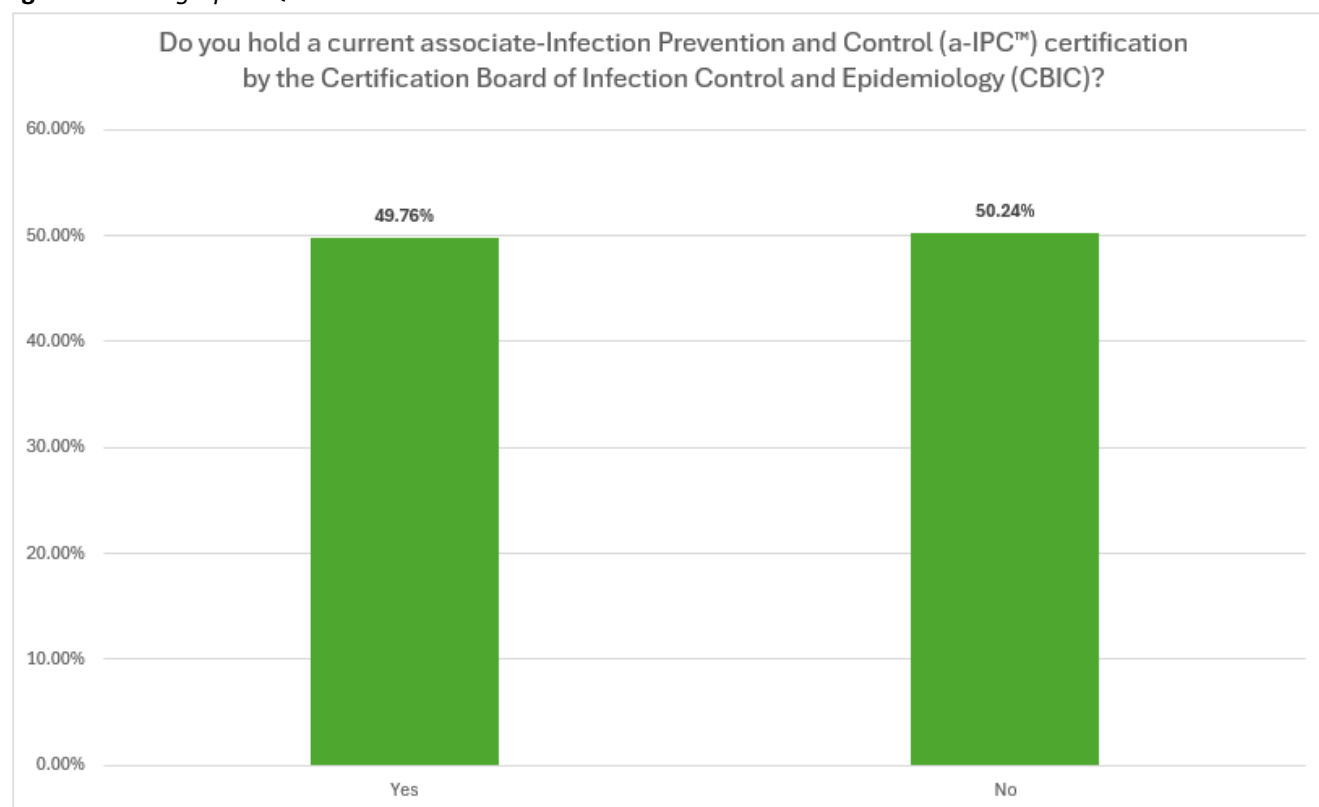


Figure 8: Demographic Question 7a

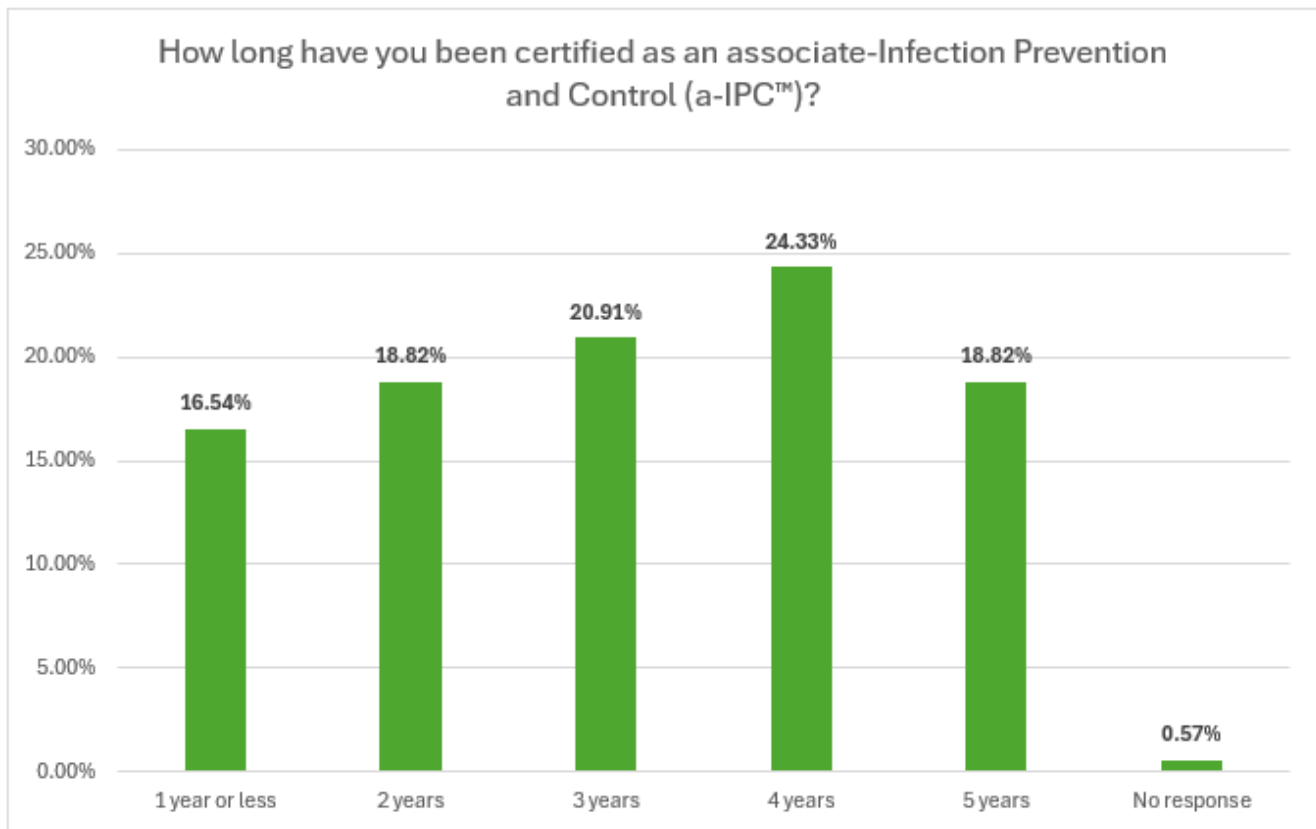


Figure 9: Demographic Question 7b

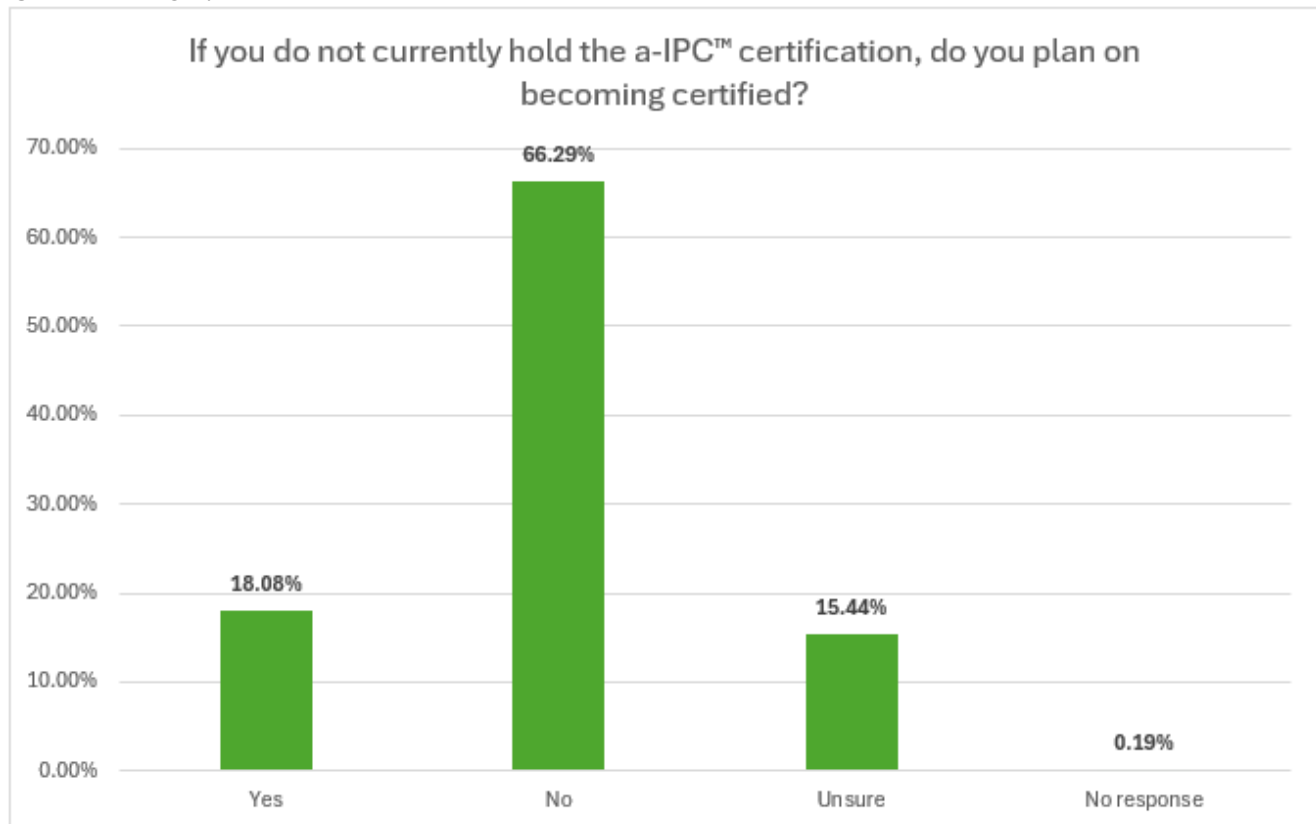


Figure 10: Demographic Question 7c

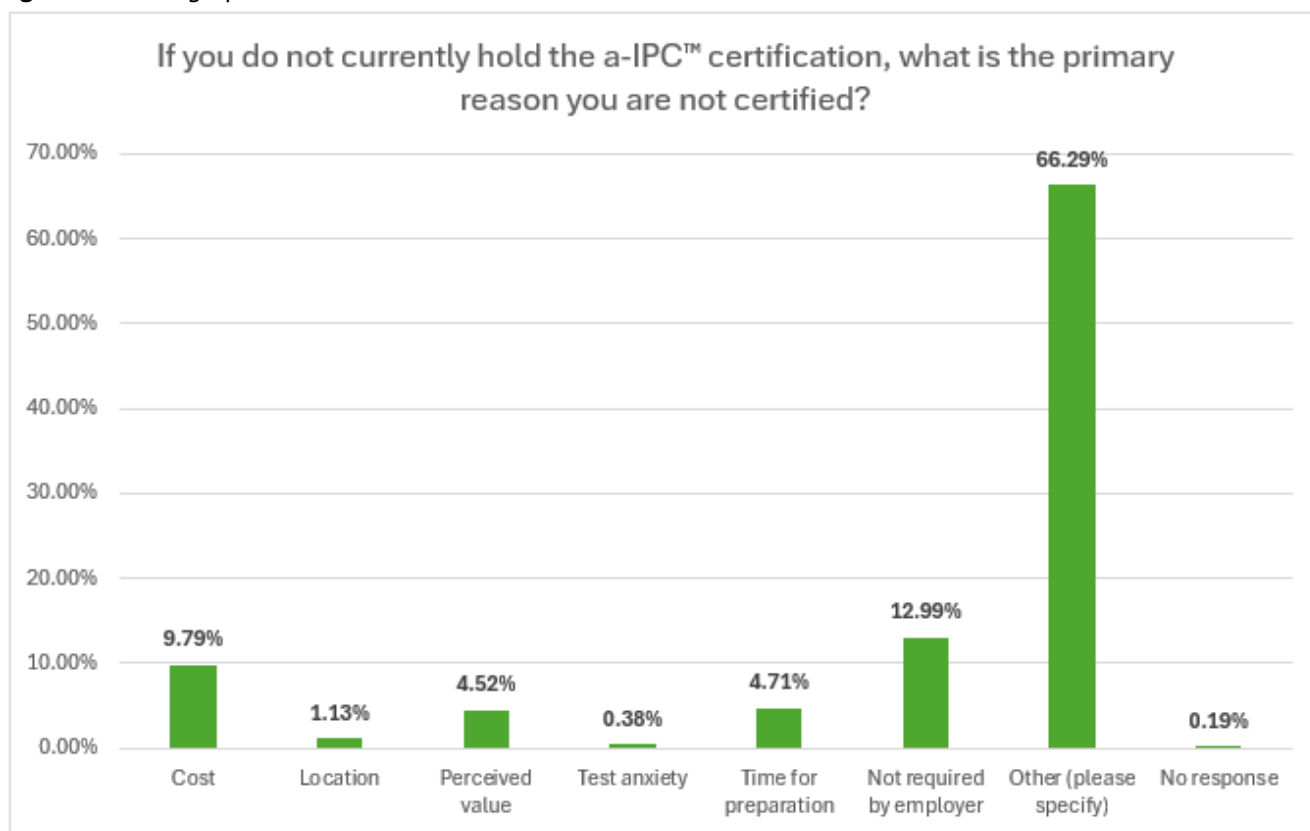


Figure 11: Demographic Question 8

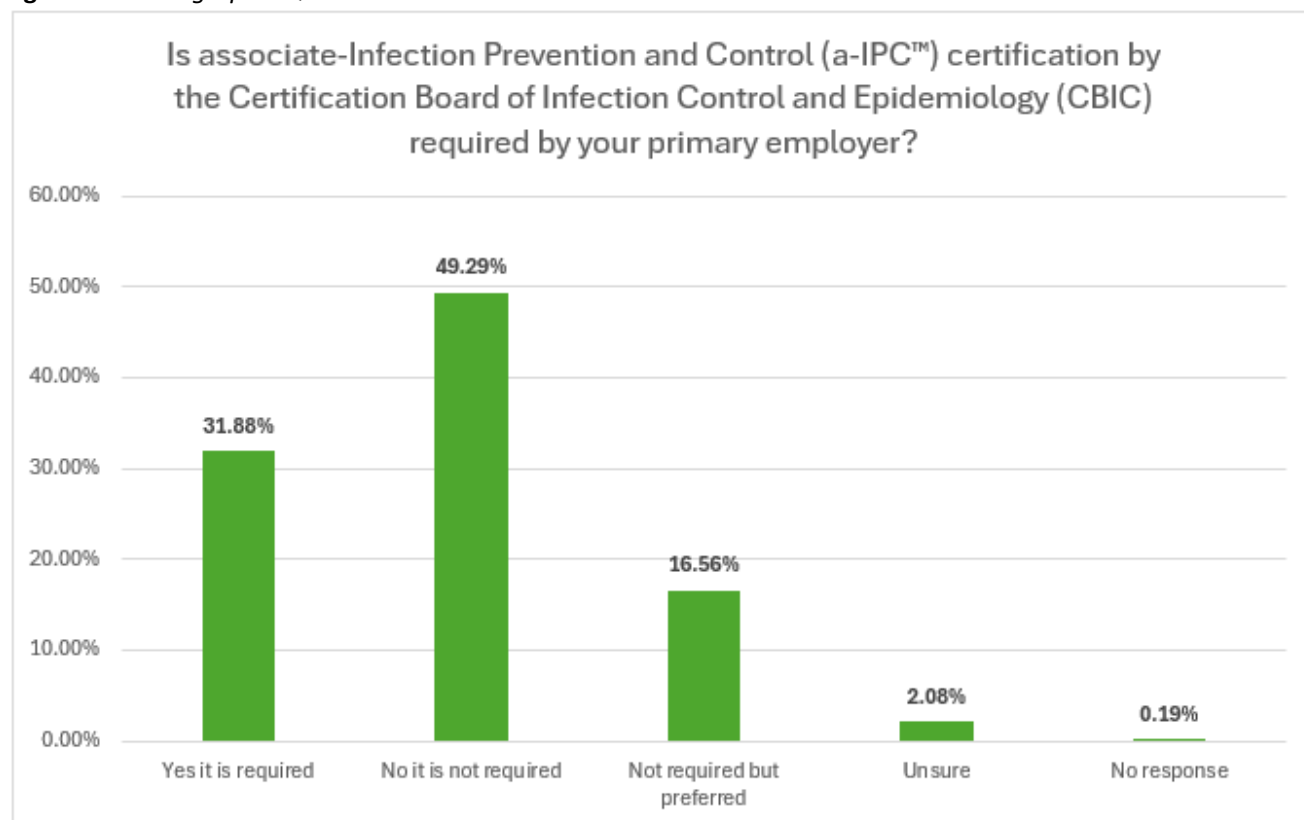


Figure 12: Demographic Question 9

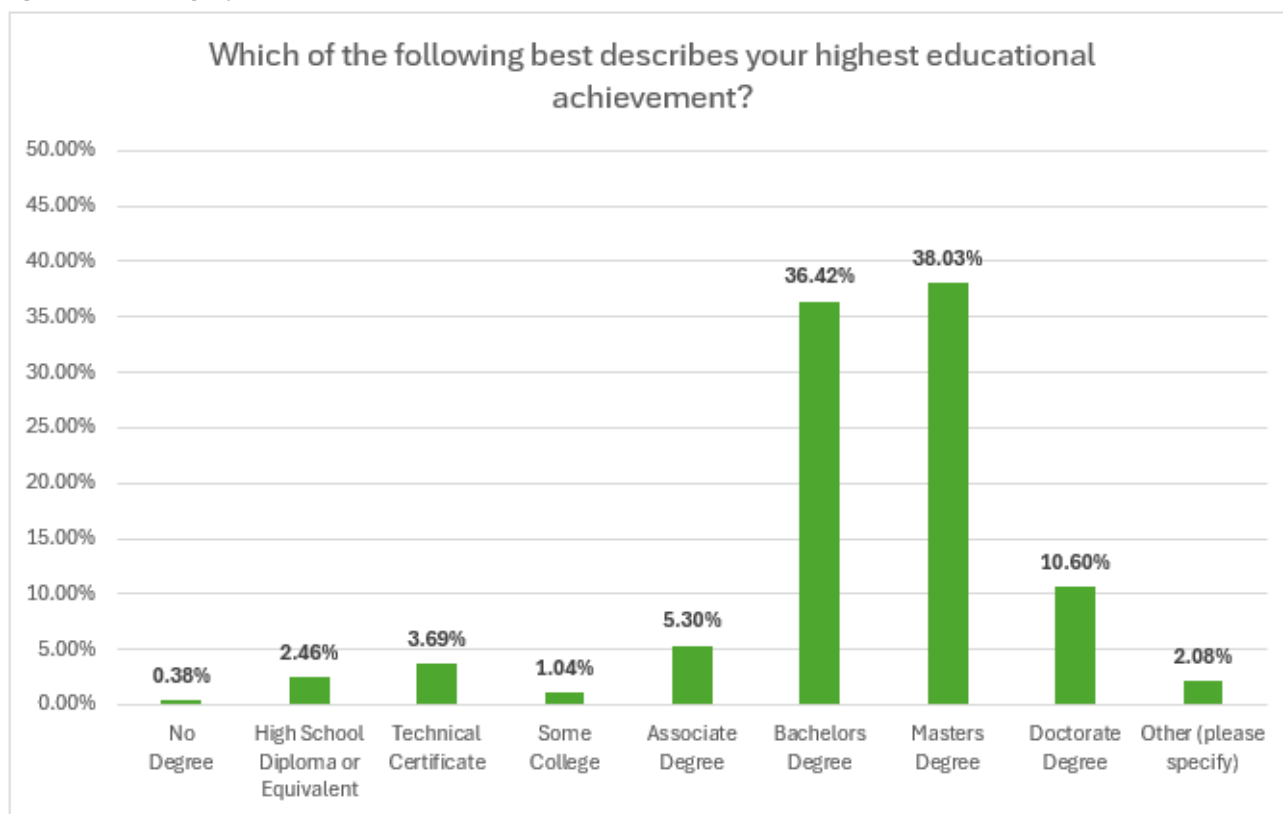


Figure 13: Demographic Question 10

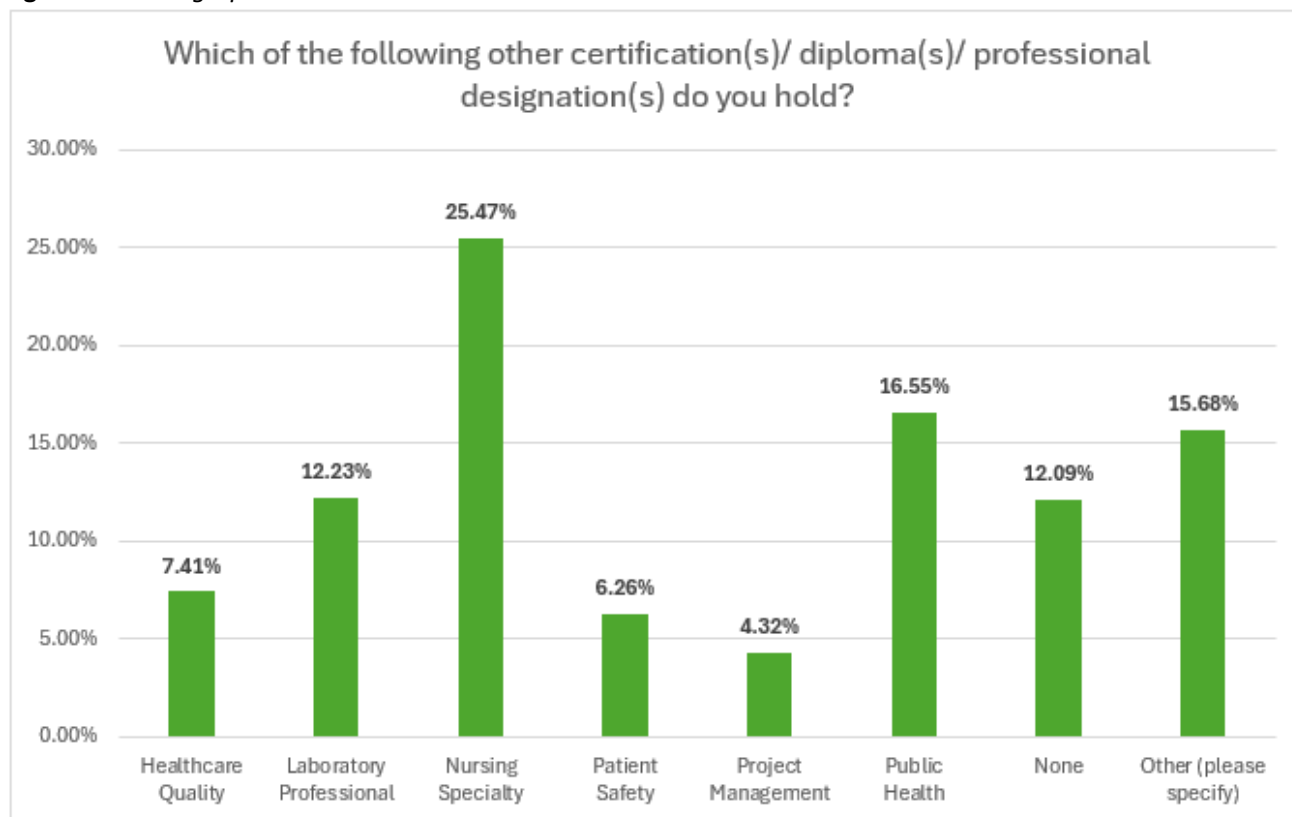


Figure 14: Demographic Question 11

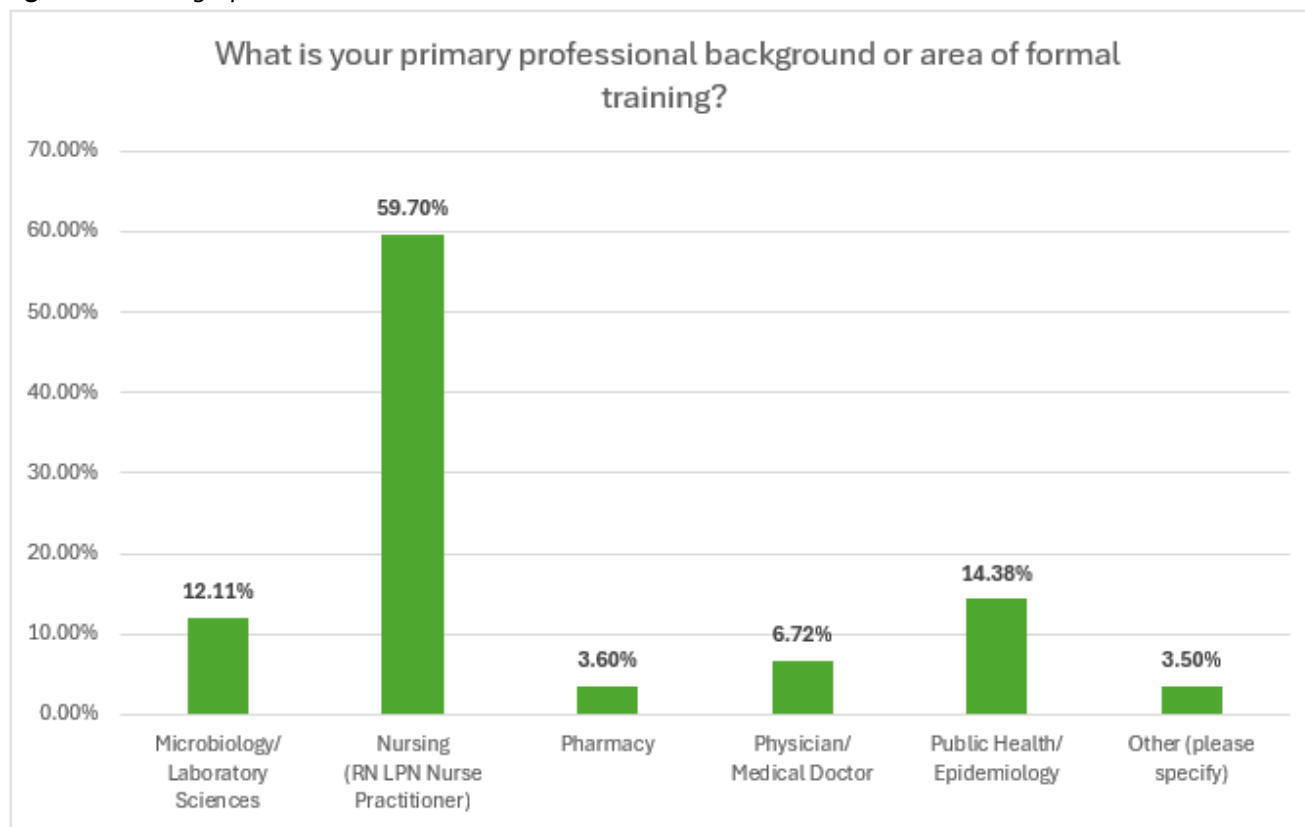
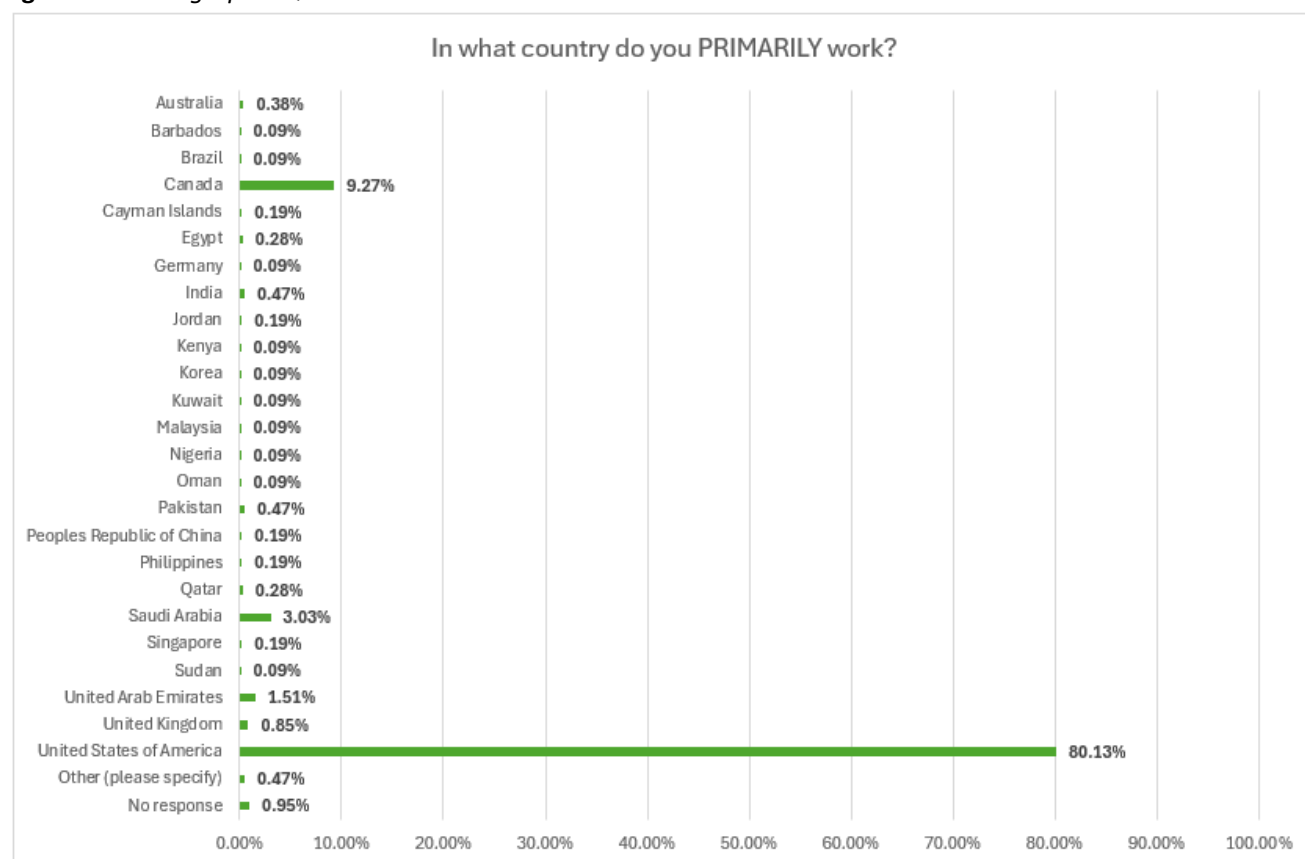


Figure 15: Demographic Question 12 ⁴



⁴ The table associated with BIQ 12 displays only the response options selected by participants. For a complete list of all available response options, please refer to Appendix C1.

Figure 16: Demographic Question 12a

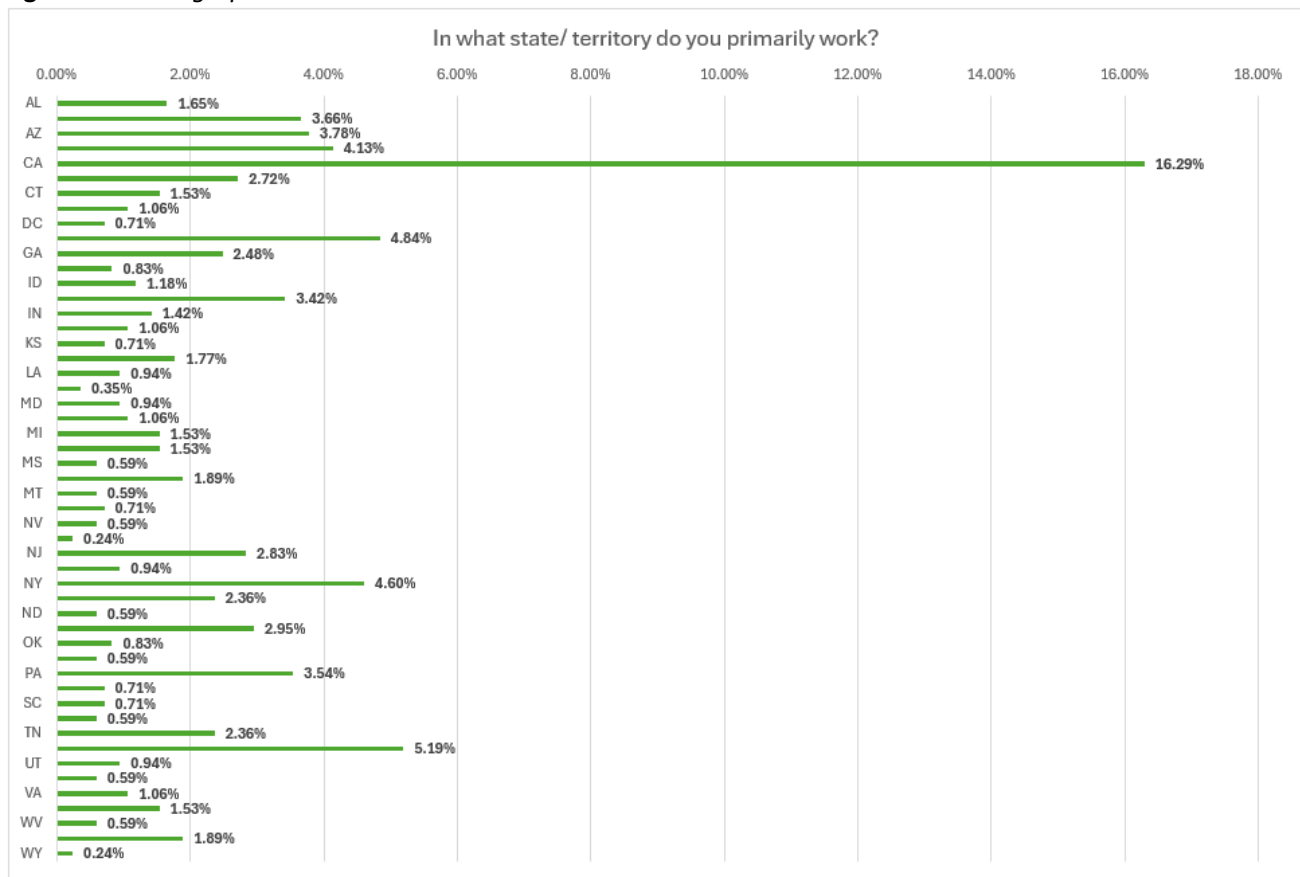


Figure 17: Demographic Question 12b

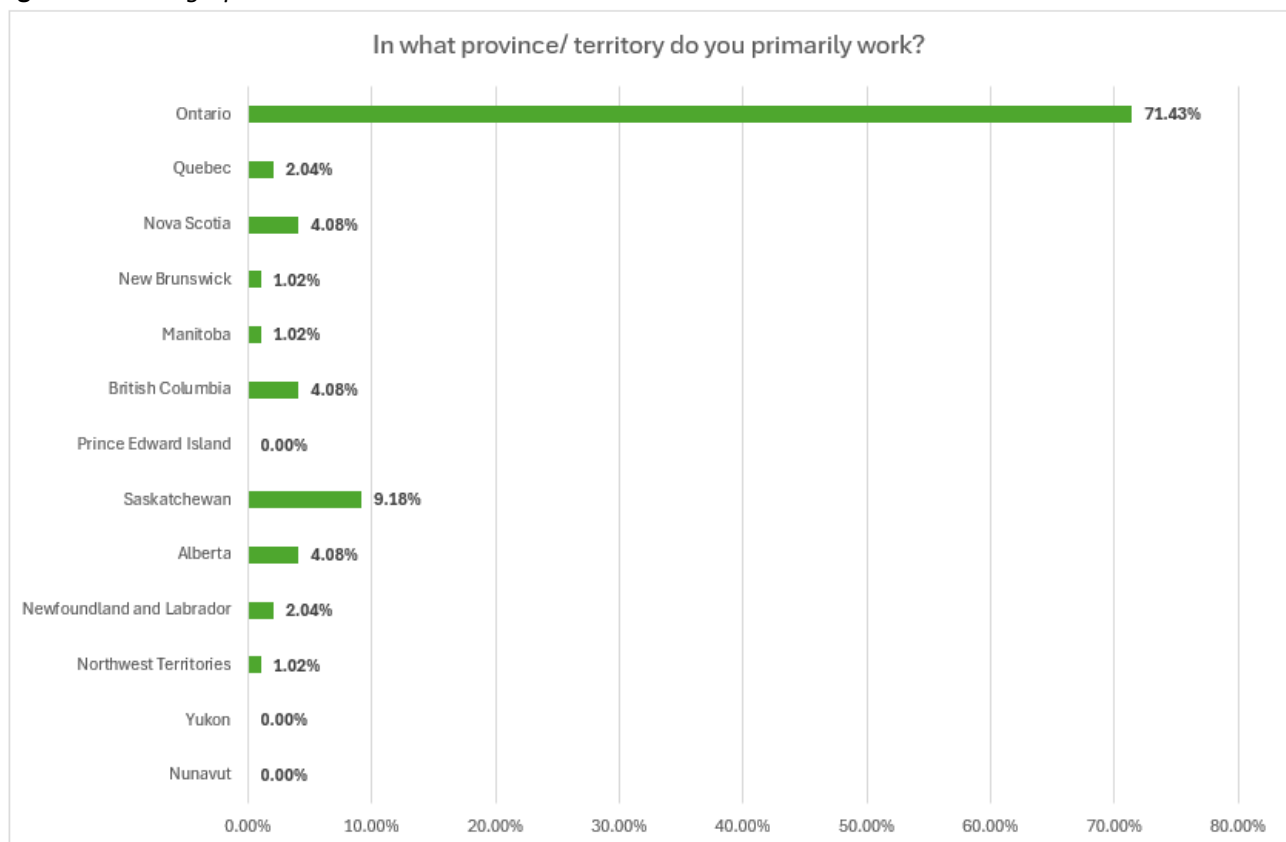


Figure 18: Demographic Question 13

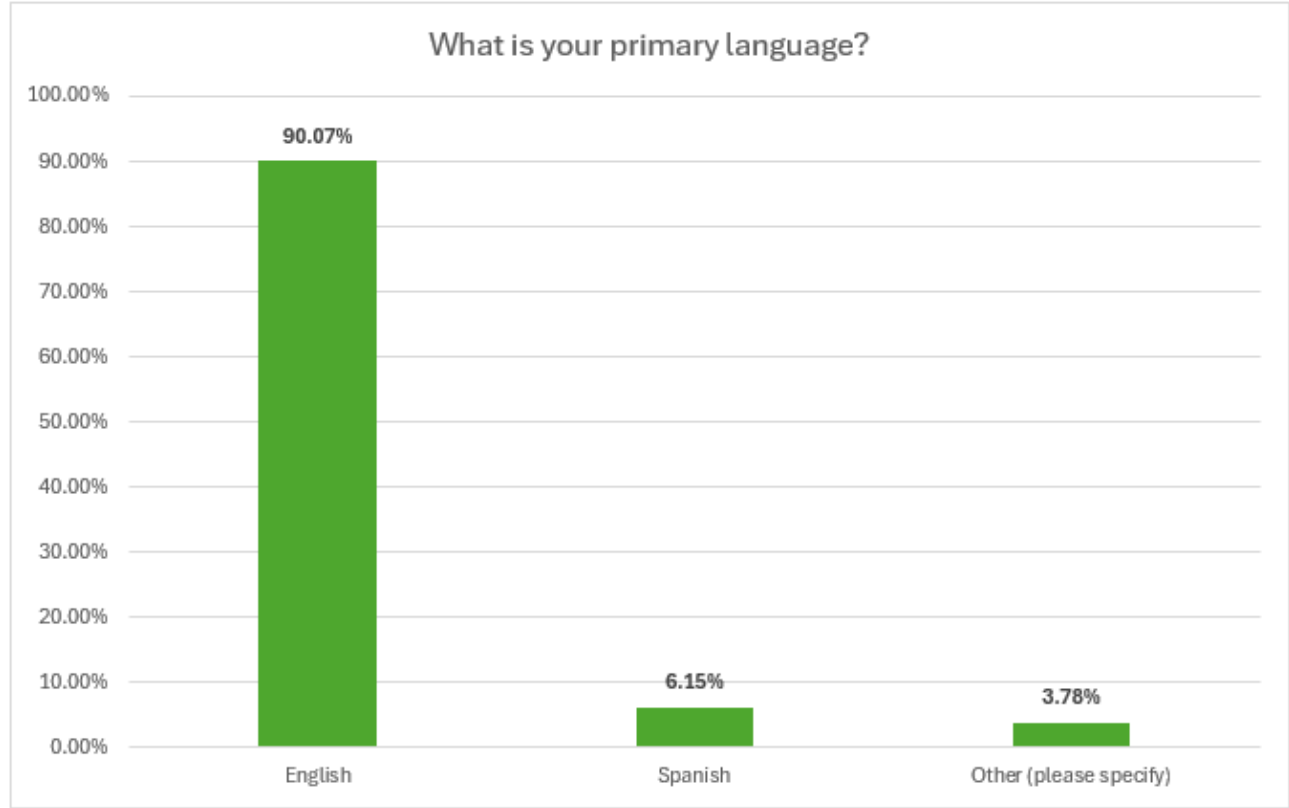


Figure 19: Demographic Question 14

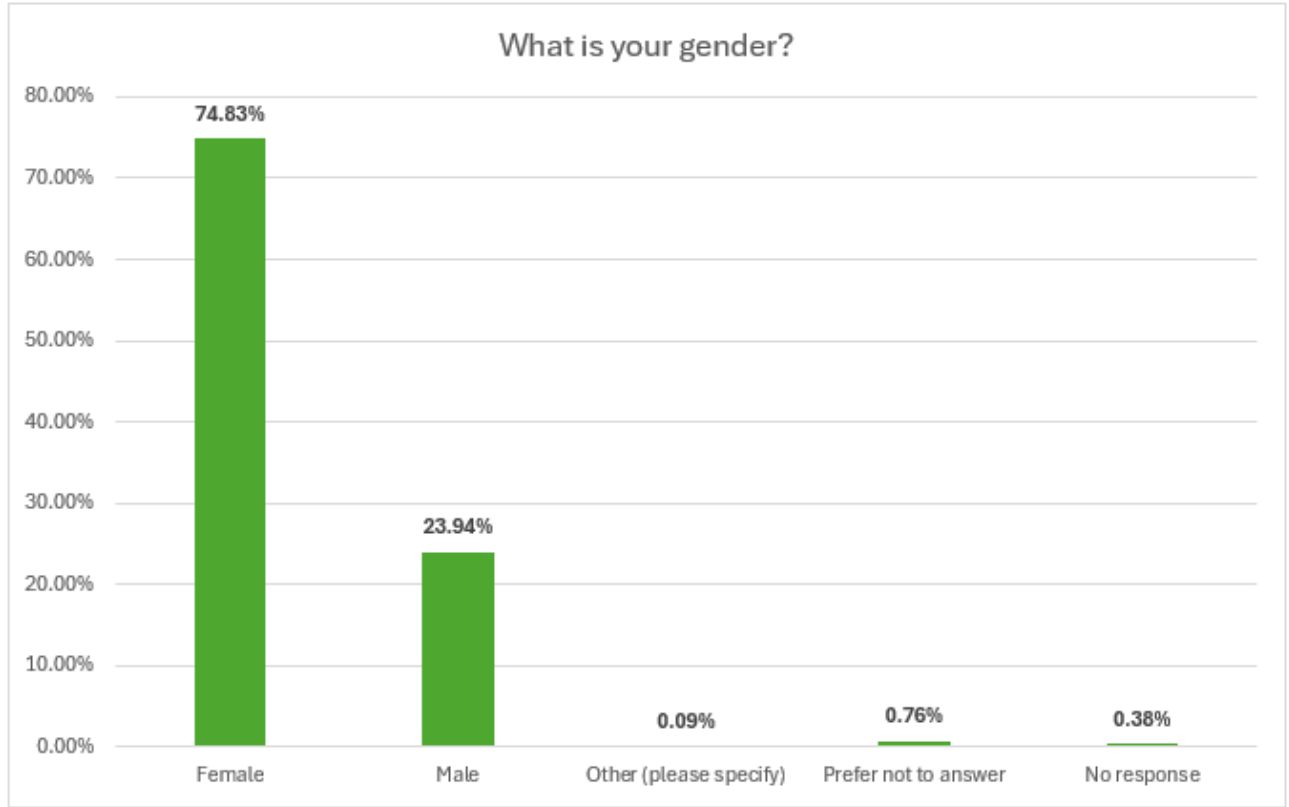


Figure 20: Demographic Question 15

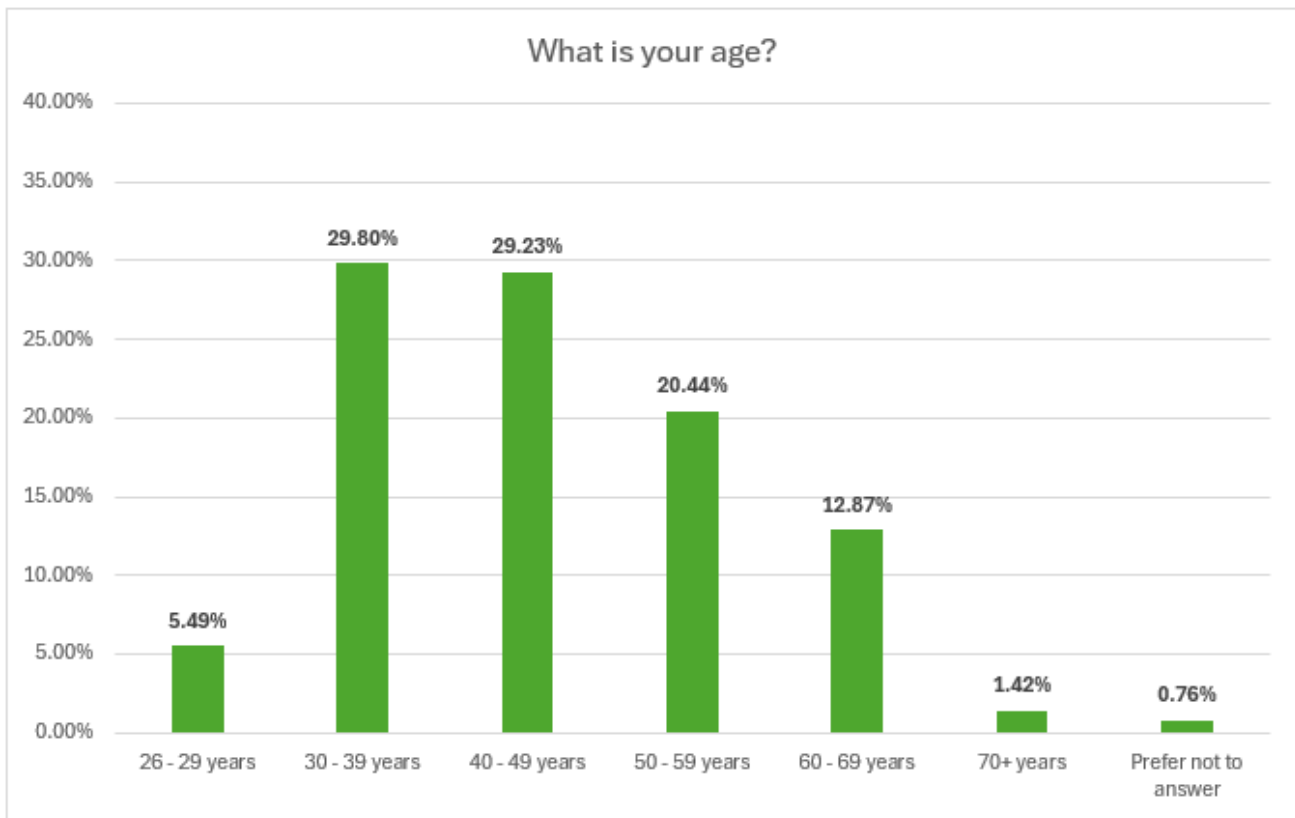
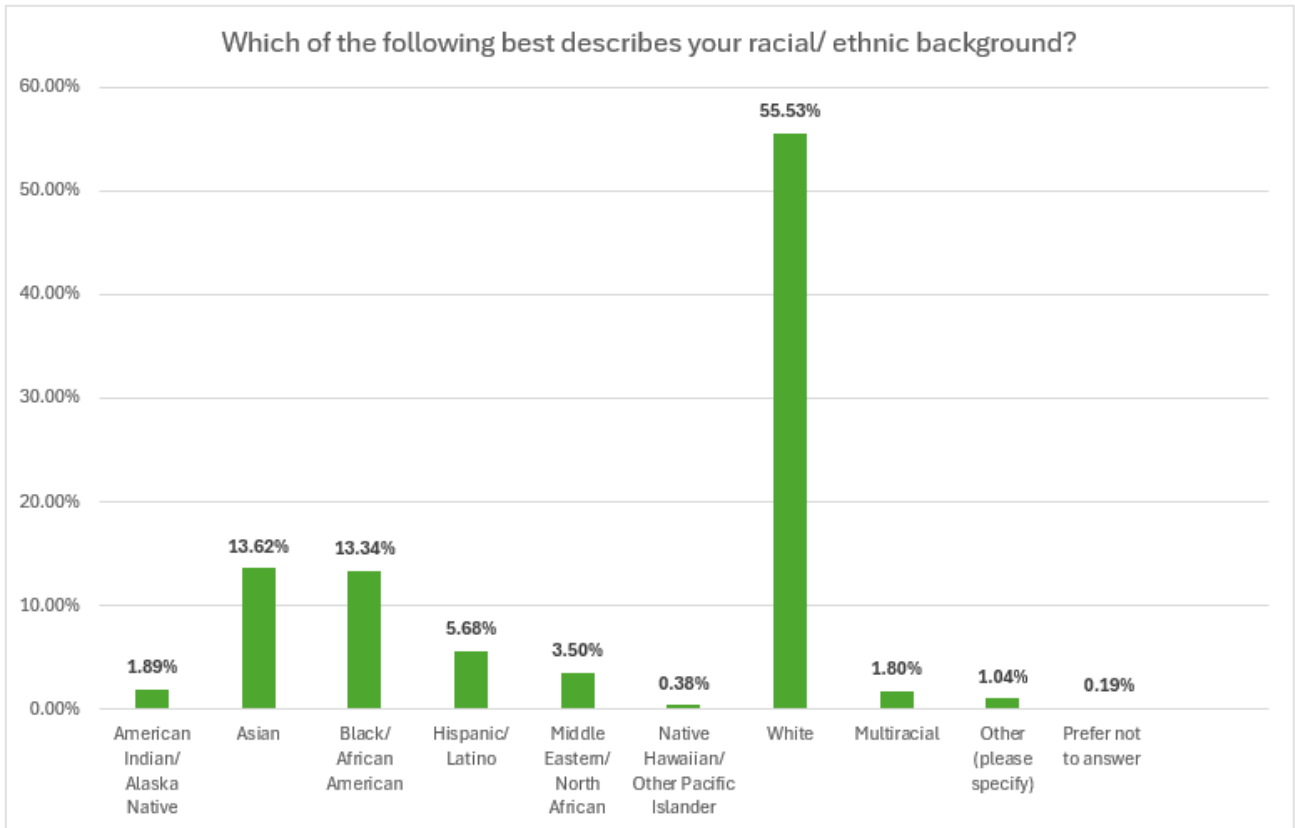


Figure 21: Demographic Question 16



Importance Ratings

This section provides a summary of survey respondents' importance ratings of the task statements. Respondents passed 79 (100%) of the 79 task statements. Means and standard deviations for the tasks included on the survey are in Appendix D1. Table 1 shows the delineation of the tasks in Pass, Borderline, and Fail categories by domain.

Table 1: Tasks by Pass, Borderline & Fail Categories

Domains	# of Tasks	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.40)
1. Processes to Identify Infectious Diseases	7	7	0	0
2. Surveillance and Epidemiologic Investigation	25	25	0	0
3. Preventing/Controlling the Transmission of Infectious Agents	13	13	0	0
4. Employee/Occupational Health	5	5	0	0
5. Management and Communication of the Infection Prevention Program	10	10	0	0
6. Education and Research	8	8	0	0
7. Environment of Care	6	6	0	0
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	5	5	0	0
Total	79	79	0	0

Cognitive Level Ratings

The following information summarizes how survey respondents rated the cognitive level of each task statement. Means, standard deviations, medians, modes, and frequency percentage distributions for the task responses for this rating scale are provided in Appendix D2. Table 2 presents tasks that were placed in each of the frequency categories from the secondary rating scale by domain.

Table 2: Cognitive Level Responses for Tasks by Category

Domains	# of Tasks	0 = Unnecessary	1 = Exposure	2 = Comprehension	3 = Application	4 = Mastery	Total
1. Processes to Identify Infectious Diseases	7	0.59%	8.98%	23.66%	36.55%	30.22%	100.00%
2. Surveillance and Epidemiologic Investigation	25	0.68%	9.12%	23.36%	37.21%	29.63%	100.00%
3. Preventing/Controlling the Transmission of Infectious Agents	13	1.56%	8.97%	19.34%	36.44%	33.69%	100.00%
4. Employee/Occupational Health	5	0.74%	9.76%	22.87%	36.98%	29.65%	100.00%
5. Management and Communication of the Infection Prevention Program	10	1.18%	11.75%	23.51%	35.18%	28.38%	100.00%
6. Education and Research	8	1.33%	10.64%	24.34%	35.53%	28.16%	100.00%
7. Environment of Care	6	0.71%	8.18%	21.49%	37.64%	31.98%	100.00%
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	5	0.98%	8.88%	21.48%	36.27%	32.39%	100.00%

Subgroup Analysis Ratings

The index of agreement (IOA) is a measure of the extent to which subgroups of respondents agree on which tasks and KSAs are important. Using the mean importance ratings for tasks, indices of agreement were computed:

- If the subgroup means are above the critical importance value (mean ratings at or above 2.50), then they agree that the content is important.

- If the subgroup means are below the critical importance value (mean ratings less than 2.50), then the subgroups agree that the content is considered less important.
- By contrast, if one subgroup's (for example, female) mean ratings are above the critical importance value and another subgroup's (for example, male) means are below the critical importance value then the subgroups are in disagreement as to whether the content is important.

The index of agreement provides a method of computing the similarity in judgments between groups and is tailored to the purpose of a job analysis study more than the correlation coefficient. Although the correlation coefficient measures the tendency toward agreement along the full range of possible ratings, the agreement index focuses on whether two groups agree that the content should (or should not) be included in an examination.

As one of the major purposes of this job analysis study is to identify appropriate test content, the agreement index provides a statistical method to address this question at the subgroup level. Furthermore, the agreement index requires only 30 respondents per subgroup for computation, whereas the correlation coefficient requires at least 100 respondents per subgroup to provide a reliable measure of agreement.

An illustrative example for two groups on a survey with 100 knowledge areas shows how to compute the index. If two groups passed the same 96 knowledge areas and failed the same 2 knowledge areas (out of the 100 total knowledge areas in the survey), the consistency index would be computed as $Agreement = (96 + 2)/100 = 0.98$. Values of 0.80 or less show less than optimal agreement and therefore additional mean analyses are required.

The index of agreement coefficients for tasks are in Appendix E. Agreement coefficients were produced on the following background question:

- What is your PRIMARY practice setting?

All subgroups were perfectly aligned for importance, reaching very high index of agreement coefficients between 0.97 and 1.00. Since the agreement coefficients for all groups were greater than 0.80, no additional mean analysis was required.

Content Coverage Ratings

Survey participants indicated how well the statements within each of the domains covered important aspects of that area. These responses provide an indication of the comprehensiveness of the survey content.

The five-point rating scale included was 0 = *Very Poorly*, 1 = *Poorly*, 2 = *Adequately*, 3 = *Well*, and 4 = *Very Well*. The means and standard deviations for the ratings are provided in Table 3. The means ranged from 3.09 to 3.20, providing evidence that the domains were well to very well covered on the survey.

Table 3: Means, Standard Deviations & Frequency Distribution Percentages of Domain Content Coverage

Domain	Content Coverage						
	Mean	SD	Frequency Percentage				
			Very Poorly 1 =	Poorly 2 =	Adequately 3 =	Well 4 =	Very Well 5 =
1. Processes to Identify Infectious Diseases	3.15	0.80	0.38%	1.61%	18.16%	42.01%	37.37%
2. Surveillance and Epidemiologic Investigation	3.17	0.78	0.19%	1.89%	16.37%	42.76%	37.94%
3. Preventing/Controlling the Transmission of Infectious Agents	3.17	0.80	0.19%	1.51%	18.64%	39.45%	39.55%
4. Employee/Occupational Health	3.18	0.76	0.00%	1.42%	16.75%	43.33%	37.75%
5. Management and Communication of the Infection Prevention Program	3.15	0.80	0.09%	1.80%	18.92%	40.11%	37.46%
6. Education and Research	3.09	0.80	0.09%	2.08%	20.34%	41.63%	33.87%
7. Environment of Care	3.16	0.78	0.19%	1.51%	17.79%	41.72%	36.61%
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	3.20	0.80	0.09%	1.80%	17.60%	37.37%	40.96%

Survey respondents could write in KSAs or tasks that they believe should be included in the test specifications. See Appendix F for the content coverage write-in comments. The Test Specifications Committee reviewed the comments to determine whether there were important statements not covered on the survey that should be included in the test specifications.

Test Content Recommendations

In survey Section 3: *Test Content Recommendations*, participants were asked to assign a percentage weight to each domain. The sum of percentage weights was required to equal 100. This information guided the Test Specifications Committee in making decisions about how much emphasis the domains should receive on the test content outline. The mean weights across all survey respondents are in Table 4.

Table 4: Survey Respondents' Test Content Recommendations by Mean Percentages & Standard Deviations

Domain	Mean (%)	SD (%)	Range	
			Min	Max
1. Processes to Identify Infectious Diseases	17.50	15.28	0	100
2. Surveillance and Epidemiologic Investigation	14.04	6.72	0	50
3. Preventing/Controlling the Transmission of Infectious Agents	15.34	7.02	0	50
4. Employee/Occupational Health	8.85	4.82	0	30
5. Management and Communication of the Infection Prevention Program	9.59	5.02	0	29
6. Education and Research	8.07	4.60	0	30
7. Environment of Care	13.02	8.36	0	52
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	13.60	9.14	0	100

Write-In Comments

Many survey respondents provided responses to the open-ended questions in Section 4: *Comments* about the following information:

- Do you think the name associate-Infection Prevention and Control (a-IPC)™ clearly reflects the credential for a novice IP? Do you have suggestions on what this certification should be called?
- What additional professional development and/or continuing education could you use to improve your performance in your current work role?
- How do you expect your work role to change over the next 5 years? What tasks will be performed and what knowledge will be needed to meet changing practice demands?
- Do you have any additional comments regarding your role as an IP/ the Infection Prevention and Control profession?

The write-in comments can be found in Appendices G1 through G5. Appendices G1 and G2 contain responses to the first question regarding the name of the certification. Appendix G1 presents a summarized version, while Appendix G2 includes all individual comments.

DEVELOPMENT OF TEST SPECIFICATIONS FOR THE a-IPC EXAMINATION

The test specification meetings for the a-IPC exam were held via online meetings on September 9 and 11, 2025. The steps involved in the development of the test specifications included the following:

- presentation of the job analysis project and results to the Test Specifications Committee;
- identification of the KSA and task statements to be included on the a-IPC test specifications;
- development of the test content weights for the exam; and
- creation of a crosswalk between the old content outline and the new test specifications.

Presentation of the Job Analysis Project & Results to the Test Specifications Committee

The first activity involved in the test specifications development was to provide the Test Specifications Committee an overview of the job analysis activities that were conducted and to present the results of the study.

Identification of the KSA and Task Statements to be Included on the a-IPC Exam

The Test Specifications Committee reviewed the KSAs, tasks, and associated results to make final recommendations about the areas that should be included on the exam.

The survey results served as the primary source of information used by the Test Specification Committee members to make test content decisions. Recommendations were based on the following criteria:

- the importance mean ratings for all respondents;
- the importance frequency distribution of ratings for all respondents; and,
- the appropriateness of the content for the examination.

KSAs Recommended for Inclusion

All 17 KSA statements included in the survey were reviewed and approved by the Test Specifications Committee. As a result, each statement has been incorporated into the final test specifications. These KSA statements are categorized as Subdomains, which are detailed in Appendix D1.

Tasks Recommended for Inclusion

The survey included 79 KSA statements, all of which received mean ratings of 2.50 or higher, placing them within the “Pass” category. Based on these results, each statement was approved for inclusion in the final test specifications.

During the review process, one KSA statement was revised to incorporate an additional example. This adjustment was made to improve clarity and ensure consistent correct interpretation of the statement.

Details of the updated statement are presented in Table 5, which highlights the specific modification made and its rationale.

Table 5. *Task Statement Modified on the Test Specifications*

Domain	Subdomain	Task	Rationale
6. Education and Research	2. Research	1. Conduct a literature review (e.g., basic research terminology, scientific databases and electronic resources, ethical considerations, peer reviewed resources)	Additional example added based on Test Specifications Committee's discussion to ensure peer reviewed resources are addressed in the content outline

Development of Test Content Weights

The Test Specifications Committee participated in an exercise to assign percentage weights to each domain within the examination framework. Every member independently provided their estimates, which were compiled into a spreadsheet and shared with the group. This allowed the committee to compare their individual assessments with the test content weights derived from survey responses, prompting a productive discussion about the optimal distribution of content across the exam.

Table 6 presents the Committee's final recommendations, including the agreed-upon percentage weights and the corresponding number of examination questions for each content area. The complete test specifications is provided in Appendix H.

Table 6: *a-IPC Test Content Weights Recommended by the Test Specifications Committee*

Domains	# of Tasks	% Weight	# of Scored Items	# of Unscored Items
1. Processes to Identify Infectious Diseases	7	16%	14	2
2. Surveillance and Epidemiologic Investigation	25	20%	17	3
3. Preventing/Controlling the Transmission of Infectious Agents	13	16%	14	2
4. Employee/Occupational Health	5	8%	7	1
5. Management and Communication of the Infection Prevention Program	10	9%	7	2
6. Education and Research	8	7%	6	1
7. Environment of Care	6	12%	10	2
8. Cleaning, Disinfection, Sterilization of Medical Devices and Equipment	5	12%	10	2
Total	79	100%	85	15

Crosswalk

The Test Specifications Committee was tasked with reviewing the previous a-IPC test specifications and comparing it to the newly developed list of task KSA statements. This review involved a detailed examination of each content area from the old specifications, with committee members asked to identify the corresponding areas within the updated framework. The results of this mapping exercise are documented in Appendix I.

After the crosswalk exercise a comprehensive gap analysis of the entire item bank will be conducted. This approach will help to identify any content areas that may require the development of new examination questions. The crosswalk provided a structured mapping between the old content blueprint and the revised test specifications, ensuring continuity and alignment across versions.

SUMMARY & CONCLUSIONS

The job analysis study for the a-IPC examination identified the tasks and knowledge, skills, and abilities (KSAs) essential to the work performed by novice Infection Preventionists. The data collected through this process informed the development of the a-IPC test specifications, which will serve as the foundation for the examination.

The task and KSA statements were developed through an iterative process involving collaboration among CBIC, subject matter experts, and Prometric staff. These statements were incorporated into an online survey and distributed to Infection Prevention professionals for validation. Survey participants were asked to rate the importance of these statement.

The results of the study support the following:

- All of the statements that were verified as important through the survey provide the foundation of empirically derived information from which to develop test specifications for the a-IPC exam.
- Evidence was provided in this study that the comprehensiveness of the content within the domains was well covered.
- The process utilized and all of the information that resulted from the analysis supported the creation of the test specifications.

In summary, the study employed a multi-method approach to identify and validate the core competencies required of novice Infection Preventionists. The outcomes of this process were used to develop the test specifications for the a-IPC examination, ensuring alignment with current professional practice.