

Role Delineation Study

American Nurses Credentialing Center (ANCC)
National Healthcare Disaster Certification (NHDC®)

April 2016



PSI Services LLC

TABLE OF CONTENTS

Background2
ROLE DELINEATION STUDY OVERVIEW2
TEST CONTENT OUTLINE
ROLE OF THE CONTENT EXPERT PANELS
Survey Methodology4
SURVEY CHRONOLOGY4
SURVEY DEVELOPMENT AND MEASURES
DATA COLLECTION5
DATA ANALYSIS6
Survey Results8
DEMOGRAPHIC INFORMATION
PRACTICE SETTINGS9
PRACTICE DESCRIPTIONS9
Conclusion
Acknowledgements35
Appendix A: Task Statements
Appendix B: Demographic Data Summary18
Appendix C: Task Statement Descriptive Statistics
Appendix D: Task Statement Overall Criticality – Rank Order30

About This Report

This report pertaining to the practice of health care disaster practitioners is based on the results of American Nurses Credentialing Center's Role Delineation Study of the interprofessional health care disaster study conducted in 2015 and 2016.

This document contains information that is proprietary to American Nurses Credentialing Center and requires permission for use, in portion or in full, for any reason. This document may not be disclosed to any third party without the express written permission of American Nurses Credentialing Center.

Background

The American Nurses Credentialing Center (ANCC), which was incorporated in 1991 as a subsidiary of the American Nurses Association, is the largest nursing credentialing organization in the United States. Its vision is to be a galvanizing force for quality health care through credentialing excellence. Currently, ANCC offers twenty-eight examinations at various levels including diploma and associate degrees, baccalaureate, and advanced practice for nurse practitioners, clinical nurse specialists, and other professions. Approximately 25,000 candidates take an ANCC certification examination each year. In addition to certification, ANCC provides services such as the Magnet® and Pathways to Excellence® recognition programs for hospitals and other facilities that demonstrate excellence in nursing services, accreditation of continuing education programs, education and consultation services, and outreach to nursing organizations around the globe. ANCC began exploration of a new interprofessional certification examination program for National Healthcare Disaster in early 2014. Moving into the interprofessional credentialing space is an important initiative for ANCC. Prior to beginning this work, the management team identified the foundational set of interprofessional Core Competencies for Disaster Medicine and Public Health. This report, as the core foundational validity document recognized in the health care disaster community, was the basis for exploration of this initiative.

Role Delineation Study Overview

Role delineation or job analysis studies are typically carried out with the goal of describing current practice within a particular role or specialty. ANCC's current goal for each of its examinations is to conduct a role delineation study of the specialty at the national level every three to five years, depending on the specialty, to capture changes in task statements and the knowledge and skill areas required to perform those activities. The findings from each study are used to update the content of each specialty's respective certification examinations.

The American Nurses Credentialing Center held an Advisory Panel meeting on September 9, 2014, to gather information from stakeholders concerning the scope and inclusion of professions in the Role Delineation Study of disaster health care practitioners. The initial stakeholder engagement meeting included forty-four members over twenty-six different health care disaster-related professional groups. Based on the work of the advisory panel, ANCC management made the determination to include the following professional groups in the scope of this new examination program:

- 1) Disaster Behavioral health
- 2) Emergency management
- 3) Emergency medical services
- 4) Medicine
- 5) Nursing (RN and APRN)
- 6) Public health
- 7) Physician assistant
- 8) Pharmacy
- 9) Respiratory therapy
- 10) Social work

The intent of this initiative was to deliver a certification program that focuses on the core competencies across professional groups, resulting in a credential for the national health care disaster community. The American Nurses Credentialing Center started the Role Delineation Study of health care disaster practitioners in 2015. This study involved two sets of processes or activities that ran more or less concurrently: a national web-based survey and a linking activity. The national survey was designed to collect information on the task statements health care disaster practitioners actually perform in practice, while the linking activity identifies the major knowledge and skill areas required for performance of the task statements listed in the survey. The results of both of these processes were used in the creation of a test content outline for this examination program.

Test Content Outline

The results of this Role Delineation Study were used for the creation of the test content outline for the ANCC National Healthcare Disaster Certification examination. Examination forms produced based on the National Healthcare Disaster Certification outline developed through this study are scheduled to go into effect in May 2017.

Role of the Content Expert Panel

Throughout the study, ANCC gathered input from professionals in practice and educators who served on the Content Expert Panel for this program. During the first meeting, on January 7, 2015, experts developed the task statements and demographic items for the survey. Between the first and second panel meetings, experts were asked to individually identify linkages between the required knowledge/skill areas and the job tasks. The second expert panel meeting took place on February 3, 2016, concerning the finalization of the test content outline for the certification examination as well as the item distribution and examination reference list. All of the content experts serving on the panels were reviewed by ANCC, confirmed to be content experts in the health care disaster specialty they represented, and invited to serve on the panel based on their expertise in the disaster community. For both the first and second Content Expert Panel meetings, ANCC was able to have experts from nine of the included professional groups. During the Content Expert Panel meetings, each of the ten professional groups were represented, with the exception of physician assistant. The American Nurses Credentialing Center was unable to obtain a physician assistant panel member despite the professional group being represented in the national survey.

Survey Methodology

The purpose of the development and administration of the national survey was to collect information on the task statements health care disaster practitioners actually perform in practice. The design and composition of the ANCC Content Expert Panel was reflective of the target population, and as such provided expert guidance on the design of the survey instrument. The Content Expert Panel met for three days, January 7–10, 2015, to draft a single pilot version of the survey and to construct the initial knowledge and skill areas relevant to the task statements included in the survey.

Survey Chronology

The survey development and administration time line was as follows.

January-March 2015

- The ANCC Content Expert Panel and ANCC staff drafted the survey.
- The survey was pilot tested and revised.

April-May 2015

The survey was administered online to a national sample.

September 2015-January 2016

- The survey was readministered online to a national sample.
- Additional respondents were solicited through the following methods:
 - Outreach at targeted industry conferences
 - o Requests for assistance from noncompeting certifying bodies
 - o Amazon Mechanical Turk (MTurk), an online crowdsourcing tool

January-February 2016

- The survey activity results were analyzed.
- Content distribution weights were developed based on survey data.
- The Content Expert Panel met to review the survey results and finalize the test content outline and associated item distribution.

Survey Development and Measures

The panel members at the January 2015 meeting developed possible task statements pertaining to the current practices of the interprofessional health care disaster specialty. During the meeting, they discussed any additions, deletions, and changes they would make to update the task statement list to reflect current practice. These deliberations resulted in a list of 104 job tasks to be used in the administration of the survey. The complete text of the job tasks list is presented in Appendix C. The Content Expert Panel also identified and finalized a set of eleven demographic questions for inclusion in the survey. The complete text of the demographic questions is presented in Appendix B.

During the same meeting, the workgroup reviewed and approved three scales that respondents would use to rate the job tasks listed in the survey: Performance Expectation, Consequence, and Frequency. These three questions and the instructions for answering them are presented below.

Performance Expectation – At what point would someone in your role be expected to hold responsibility for this professional activity?

- After first six months of working within the role
- Within first six months of working within the role
- Never expected to perform this activity within the role

Frequency – How often would someone in your role be expected to perform this professional activity?

- Always
- Frequently
- Occasionally
- Seldom
- Never

Consequence – How severe are the consequences if someone in your role performed this professional activity inadequately or did not perform the activity at all?

- Severe
- Moderate
- Mild
- No

Sampling Design

Due to the unique nature of this interprofessional initiative and the lack of an existing certified population in the health care disaster area, a probability sampling design was not utilized to select prospective survey participants; rather, a purposeful sampling design was used to ensure inclusion of all groups. The approach taken was aimed at securing as many professionals within the targeted scope of the assessment as possible, with the goal of including each group in the pilot survey and, ultimately, obtaining a valid response rate from at least thirty respondents from each professional group gathered. Mean criticality ratings for each of the ten professional groups were averaged together to determine an interdisciplinary rating not influenced by professional group size.

Data Collection

Using the same procedures intended for administering the national data collection, the survey was piloted in February 2015. Health care disaster practitioners from across the nation were included in the sample of seventy-two practitioners invited to take the pilot survey. Of those, forty-seven (65%) responded. The respondents of the pilot survey in general indicated that the task statements were appropriate and reflective of the interprofessional national health care disaster field.

Beginning in April 2015, approximately seven hundred health care disaster practitioners selected to take the national web-based survey were sent three notifications via the United States Postal Service and email. Email communications consisted of an alert letter and follow-up email reminders. The alert letter explained the purpose and importance of the study as well as the eligibility criteria of the study, and stated how to access the survey via the Internet. The letter indicated that the

¹ Teddlie, C. & Yu, F. (2007). Mixed Methods Sampling: A Typology with Examples. *Journal of Mixed Methods Research*, 1(1), 77-100.

participant's responses would be kept confidential. The follow-up reminder emails were sent approximately one week and two weeks after the alert letter. They thanked recipients if they had already submitted their completed survey and encouraged them to do so if they had not already.

During the first iteration of the national survey, ANCC was unable to reach the minimum sample size of thirty practitioners for each of the ten professional groups with conventional survey methods such as email invites or web links. Beginning in September 2016, a second online iteration of the national survey was opened for health care disaster practitioners to access through a web link displayed on the ANCC website and was promoted at professional conferences. Recruitment methods were altered to focus on recruiting professionals from less responsive groups through crowdsourcing.

Amazon Mechanical Turk (MTurk) was chosen due to MTurk's flexibility and respondent population. Studies show that MTurk respondents deliver high-quality data. Through the use of MTurk, ANCC was able to obtain a sufficient number of respondents in each professional group.

Data Analysis

The rating scale for the study involved the hierarchical combination of the respondent's responses from the three ratings scales of performance expectation, consequence, and frequency into a single overall criticality scale. The hierarchy of the criticality rating scale was chosen by the initial study workgroup, which determined that the first scale, performance expectation, should be regarded as more critical than the other two scales for representing entry-level practice. The second scale, consequence, was then regarded as more critical than the third scale, frequency. This hierarchical scheme emphasized task statements that are required immediately and have the greatest impact on public health or safety. Thus, this scheme was selected as the organizing mechanism for combining the responses from the three survey scales into an overall measure of criticality.

Table 1 displays how the values of the overall criticality rating were constructed according to all the possible survey response patterns that might be given to rate an individual task statement by its performance expectation, consequence, and frequency. For example, if a respondent indicated that a particular task statement was expected to be performed within the first six months of assuming the role of a health care disaster practitioner, could result in severe negative consequences if it was performed incorrectly, and is performed occasionally, then the overall criticality rating for that response pattern would be 39. A score of 27 suggests that a task statement is generally expected to be performed within the first six months of assuming the role to have mild negative consequences if incorrectly performed, and to never be performed. Therefore, task statements with scores of 27 or higher on the overall criticality variable may be considered as highly critical. When a task statement was rated as *never expected* on the performance expectation scale, it would receive an overall criticality score of 1, as the bottom row in Table 1 indicates.

² De Soto, A. (2015). Under the Hood of Mechanical Turk. *Association for Psychological Science*, 29(3). Retrieved from http://www.psychologicalscience.org/index.php/publications/observer/2016/march-16/under-the-hood-of-mechanical-turk.html.

Table 1. Construction of the Overall Criticality Variable

Performance Expectation	Consequence	Frequency	Overall Criticality Rating
Within the first 6 months		Always	41
	Carrage magazine	Frequently	40
	Severe negative	Occasionally	39
	consequence	Seldom	38
		Never	37
		Always	36
	Moderate	Frequently	35
	negative	Occasionally	34
	consequence	Seldom	33
		Never	32
		Always	31
		Frequently	30
	Mild negative	Occasionally	29
	consequence	Seldom	28
		Never	27
		Always	26
		Frequently	25
	No negative	Occasionally	24
	consequence	Seldom	23
		Never	22
After the first 6 months		Always	21
	Severe negative consequence	Frequently	20
		Occasionally	19
		Seldom	18
		Never	17
	5	Always	16
	Moderate	Frequently	15
	negative	Occasionally	14
	consequence	Seldom	13
		Never	12
		Always	11
		Frequently	10
	Mild negative	Occasionally	9
	consequence	Seldom	8
		Never	7
		Always	6
		Frequently	5
	No negative	Occasionally	4
	consequence	Seldom	3
		Never	2
Never		ivevei	1

Survey Results

The total sample size of the national survey included 913 health care disaster professionals across ten separate professions. Respondent professions were divided into ten professional groups with at least thirty respondents each.

Table 2. Number of Completed Surveys for Health Care Disaster Practitioners by Professional Group

Professional Categories	Sample Size
Behavioral Health Professional (Counselor, MFT, Psychologist)	55
Emergency Management Professional	93
Emergency Medical Services (EMT, Paramedic)	94
Medicine (Physician)	37
Nurse (RN, APRN)	439
Pharmacist	31
Physician Assistant	47
Public Health Professional	37
Respiratory Therapist	31
Social Worker	49

A reflective survey methodology was utilized to gather respondents from each of the ten professional subgroups. An aggregated mean method was used to maintain a proportional overall criticality rating for each of the ten professional groups regardless of the number of their respondents. Each of the ten professional groups had their respondents' ratings averaged into a criticality rating, and these ten professional criticality ratings were then averaged together to create the overall criticality rating.

Out of the 913 total number of respondents obtained, 575 (63%) were obtained from an email link, 65 (7%) from a web link, and 273 (30%) via MTurk. Survey responses were used only if respondents fully completed the rating scales.

To determine whether the crowdsourcing health care disaster practitioner results were viable, an analysis was conducted on the standard deviation of crowdsourcing task statement rating scales. Health care disaster practitioners whose task statement ratings were approximately (SD>.05) were viewed as unusable data due to the responses being uniform across most if not all task statements. The analysis resulted in approximately 1% of MTurk responses being unusable relative to traditional survey methods, such as 4.5% from an open web link and 1% from email invitation responses. The analysis shows that MTurk respondents had a higher percentage of useable responses than did respondents to the traditional survey method of using an open web link.

Demographic Information

Appendix B details the responses to the survey's demographic questions, which included inquiry on health care disaster professional background and practice setting. The demographic data is reported for each of the ten professional groups. Only responses from those who indicated practicing in one of

the ten disaster health professions were used in the data analysis of the task statements. The sections of Demographic Background and Practice Settings outline the responses of a typical national survey respondent.

Demographic Background

Approximately 57% of the respondents were female, while approximately 79% reported themselves as white. In addition, 25% of the overall sample fell into the age group of 45–54 years.

Thirty-eight percent of the health care disaster practitioner respondents indicated that they held a master's as one of their highest degrees. Approximately 13% of the respondents held a doctorate degree, and 32% indicated they held an associate degree.

The average number years of experience the health care disaster practitioner respondents had in a disaster-related role was eleven years. The respondents also reported on average fifteen years of experience practicing in their primary professions.

Approximately 15% of the disaster health care respondents held the secondary profession of a registered nurse (RN). The second highest secondary profession of respondents was emergency management professional, at approximately 12%.

Practice Settings

Approximately 42% of the health care disaster respondents indicated that their primary service area was in a suburban area. Urban areas had the second-highest percent of respondents (37%). Almost 20% of the respondents indicated working in a rural practice location.

In terms of practice setting, the highest percentage of health care disaster practitioner respondents indicated they practiced in a hospital setting (27%); community/public health setting had the second-highest percentage, at 16%; and emergency medical services had the third-highest percentage, at approximately 15%.

Finally, more than 46% of the health care disaster practitioner respondents indicated that they perform disaster-related activities in both a paid and unpaid position. Approximately 34% of the respondents indicated that they perform disaster-related activities in a paid position, while 19% were in unpaid positions.

Practice Descriptions

Descriptive statistics for the three rating scales and mean overall criticality for all task statements are listed in Appendix C. Only respondents who were within the ten health care disaster professions were used for this analysis.

The scales were highly reliable. Cronbach's coefficient alpha estimates for the performance expectation, consequence, and frequency scales when applied to all the data were 0.97, 0.99, and 0.99, respectively. Cronbach's coefficient alpha, a measure of internal stability, ranges in value between 0 and 1, with higher values representing a higher degree of consistency among responses across task statements.

In Appendix D, the overall criticality statistics are presented in rank order of criticality. As indicated in Table 3, sixteen task statements were rated by health care disaster practitioner respondents as critical (with a mean overall criticality rank of 27 or above). The two task statements with the highest overall critical ratings were based on the basic safety principles of identifying life-safety and security risks and applying principles of basic aid.

Table 3. Number of Task Statements by Mean Overall Criticality Range and Population of Health Care Disaster Practitioners

Criticality Range	Number of Task Statements
37 and above	0
Between 32 and 36.9	0
Between 27 and 31.9	16
Between 22 and 26.9	52
Between 17 and 21.9	31
Between 12 and 16.9	5
Between 7 and 11.9	0
Between 2 and 6.9	0
Between 0 and 1.9	0

Tables 4 and 5 display the twenty highest-ranking and the twenty lowest-ranking task statements by mean overall criticality. Only one task statement received a criticality ranking of 16 or less. This task is number 84 and has a mean overall criticality rankings of 14.68. The lowest-rated task statement focuses on utilizing geospatial information systems (GIS) in disaster planning and response.

Table 4. Top 20 Task Statements Ranked by Mean Overall Criticality for Health Care Disaster Practitioners

	Task Statement Number and Name	Mean	Std. Dev.
4	Identify life-safety and security risks	913	31.67
61	Apply principles of basic first aid	913	31.53
11	Practice using personal protective equipment	913	30.10
38	Recognize the need for following a communication plan	913	29.93
2	Describe the signs associated with someone who is displaying the need for behavioral health intervention	913	29.19
34	Identify most likely hazards or incidents in one's environment	913	29.17
48	Identify physical, mental health, and well-being needs	913	29.10
81	Identify the chain of command within the organization	913	28.28
19	Create a list of important contact information (e.g., phone numbers, addresses)	913	28.13
15	Talk or debrief after stressful situations	913	27.78
77	Discuss principles of scene safety as they relate to disaster emergency	913	27.73
17	Assemble disaster supplies, equipment, and documents consistent with personal or family plan	913	27.32
52	Practice donning and doffing personal protective equipment	913	27.28
86	Identify personal needs for a 72-hour response	913	27.19
78	Discuss the importance of consistent and ongoing communication during an emergency or disaster	913	27.08
92	Recognize the need for the protection of privacy and confidentiality during a disaster	913	27.01
18	Become part of an information-sharing network within one's organization	913	26.98
88	Identify the basic components of medical ethics	913	26.87
26	Identify coping strategies for stressful situations	913	26.86
94	Utilize common disaster terminology	913	26.68

Table 5. Bottom 20 Task Statements Ranked by Mean Overall Criticality for Health Care Disaster Practitioners

	Task Statement Number and Name	Mean	Std Dev
65	Describe the role of social media in crisis communication	913	19.91
41	Identify the requesting process for alternative assets (e.g., local, regional, state, federal)	913	19.68
33	Identify anticipated length of time before surge assets could be available/functioning in the community	913	19.46
6	Identify redundant communication systems	913	19.29
75	Describe the sequential activation of coordinated local, state, and federal response as incident complexity increases	913	19.26
39	Identify surge capacity assets that can be utilized in organizational, agency, and/or community response plans	913	19.25
95	Recognize the process for returning the community back to normal functioning	913	19.02
68	Describe the function and purpose of the Joint Information Center (JIC)	913	18.89
70	Describe the functions of an exercise planning team	913	18.70
21	Define what constitutes surge capacity for an institution or locale	913	18.47
44	Participate in educational sessions related to legal and regulatory issues within emergency management	913	18.46
96	Describe the components and concepts of an After-Action Report and Improvement Plan (AAR/IP)	913	18.14
69	Describe the function and purpose of the Joint Information System (JIS)	913	17.92
98	Identify demobilization concepts	913	17.55
99	Recognize the components and concepts of the Homeland Security Exercise and Evaluation Program (HSEEP)	913	17.01
100	Recognize the needs for disaster finance accountability	913	16.83
13	Promote synergy between the HVA and the Threat and Hazard Identification Risk Assessment (THIRA)	913	16.54
50	Mitigate damage to the home	913	16.07
49	Identify tools (e.g., air sampling, water sampling) used to monitor general indicators and epidemiological levels	913	16.02
	Recognize uses of geospatial information systems (GIS) in	913	14.68

Conclusion

The National Healthcare Disaster Certification (NHDC) was designed to fit the certification needs of an interprofessional field that includes the ten professional groups. From among the ten professions represented in the national survey, a total of 913 practitioners responded and at least thirty respondents were obtained per professional group. The results provided information about the criticality of work activities and their associated knowledge for those who have a health care disaster role. The NHDC National Survey was used along with the input of a Content Expert Panel to establish an examination content outline and the allocation of exam items per content area.

Appendix A Task Statements

Task Statement Number and Statement

- 1 Apply strategies to strengthen personal and community resilience
- 2 Describe the signs associated with someone who is displaying the need for behavioral health intervention
- 3 Exercise evacuation and shelter-in-place plans
- 4 Identify life-safety and security risks
- 5 Identify local shelters
- 6 Identify redundant communication systems
- 7 Identify statutes and regulations related to health care delivery that may be activated or modified under a declaration of disaster or emergency
- 8 Identify mitigation strategies to address the risks identified by the Hazard Vulnerability Assessment (HVA)
- 9 Identify gaps in risk reduction between needs and resources
- 10 Participate in after-action report activities
- 11 Practice using personal protective equipment
- 12 Identify tasks to address the risks identified by the HVA
- Promote synergy between the HVA and the Threat and Hazard Identification Risk Assessment (THIRA)
- 14 Recognize that scope of practice can be modified during a declared emergency
- 15 Talk or debrief after stressful situations
- 16 Apply strategies to build personal and community resilience
- Assemble disaster supplies, equipment, and documents consistent with personal or family plan
- 18 Become part of an information-sharing network within one's organization
- 19 Create a list of important contact information (e.g., phone numbers, addresses)
- 20 Create a list of other departments/organizations amenable to partnering, to provide needed assets
- 21 Define what constitutes surge capacity for an institution or locale
- 22 Demonstrate basic knowledge of Point-of-Dispensing (POD) functions
- 23 Identify the needs of at-risk populations, through table-top, functional, or full-scale exercises
- 24 Identify common consequences resulting from various types of disasters or emergencies
- Identify the need for a communication plan involving disabled, functionally impaired, and vulnerable populations, to include pets and service animals
- 26 Identify coping strategies for stressful situations
- 27 Identify credentialing and licensing considerations during a disaster or emergency
- 28 Identify credible sources for information updates
- 29 Identify evacuation plans involving disabled, functionally impaired, and vulnerable populations, to include pets and service animals

- 30 Identify general health hazards when presented with certain data/clues
- Recognize general public health indicators that may signal the onset, exacerbation, or ending of a disaster or emergency
- Recognize that health care—related legal statutes and regulations may change in the event of disaster or emergency
- 33 Identify anticipated length of time before surge assets could be available/functioning in the community
- 34 Identify most likely hazards or incidents in one's environment
- 35 Identify principles of isolation and quarantine
- 36 Identify psychological first-aid principles and practices with responders and community
- 37 Identify ramifications of a surge to clinical resources
- Recognize the need for following a communication plan
- 39 Identify surge capacity assets that can be utilized in organizational, agency, and/or community response plans
- 40 Identify the location of at-risk populations
- 41 Identify the requesting process for alternative assets (e.g., local, regional, state, federal)
- 42 Identify types of mass casualty events and their potential impact
- 43 Participate in After-Action Report and Improvement Plan (AAR/IP) activities
- Participate in educational sessions related to legal and regulatory issues within emergency management
- 45 List types of vulnerable or at-risk populations
- 46 Identify agencies that monitor threat indicators
- 47 Identify different routes to access a local evacuation shelter
- 48 Identify physical, mental health, and well-being needs
- Identify tools (e.g., air sampling, water sampling) used to monitor general indicators and epidemiological levels
- 50 Mitigate damage to the home
- 51 Monitor hazard alert notifications
- 52 Practice donning and doffing personal protective equipment
- Practice drills involving surge capacity within your area, organization, or community
- 54 Practice personal/family/pet disaster plan annually
- Practice use of the media, including a portable emergency radio to monitor emergency alert channels (e.g., weather, evacuation, isolation)
- 56 Prepare a personal or family disaster response plan that utilizes best practices
- 57 Recognize crisis standards of care in times of scarce resources
- 58 Recognize when legal consultation is needed
- 59 Review organizational all-hazards preparedness plan
- Verbalize alternative response strategies for persons with disabilities
- 61 Apply principles of basic first aid
- Describe an Incident Action Plan (IAP) or incident report

- Describe how to minimize common physical and mental health issues that may occur as a direct result of a disaster or emergency
- Describe positions common in incident command structures
- Describe the role of social media in crisis communication
- Describe the basic principles of various decontamination processes (gross and technical)
- 67 Describe the components of the incident communication plan
- Describe the function and purpose of the Joint Information Center (JIC)
- 69 Describe the function and purpose of the Joint Information System (JIS)
- 70 Describe the functions of an exercise planning team
- 71 Describe the functions of the public information officer (PIO)
- 72 Describe the practices and principles in disaster triage
- 73 Describe the purpose of cold, warm, and hot zones
- 74 Describe the role of an Incident Action Plan (IAP) in maintaining situational awareness
- Describe the sequential activation of coordinated local, state, and federal response as incident complexity increases
- 76 Describe types of documents required during a disaster or emergency
- 77 Discuss principles of scene safety as they relate to disaster emergency
- 78 Discuss the importance of consistent and ongoing communication during an emergency or disaster
- 79 Explain the value of internal and external communication during an emergency or disaster
- 80 Identify barriers to effective multicultural communication during disasters
- 81 Identify the chain of command within the organization
- 82 Identify communication barriers that may occur during a disaster or emergency
- 83 Identify communication strategies during disasters
- 84 Recognize uses of geospatial information systems (GIS) in disaster planning and response
- 85 Identify credible sources for information while responding to a disaster
- 86 Identify personal needs for a 72-hour response
- 87 Identify reporting activities required during a disaster
- 88 Identify the basic components of medical ethics
- 89 Recognize existing guidelines for ethical standards regarding scarce resources during a disaster or emergency
- 90 Recognize psychological risk factors
- 91 Recognize staff protective (force protection) measures
- 92 Recognize the need for the protection of privacy and confidentiality during a disaster
- 93 Recognize the unique ethical challenges of disaster response
- 94 Utilize common disaster terminology
- 95 Recognize the process for returning the community back to normal functioning
- Describe the components and concepts of an After-Action Report and Improvement Plan (AAR/IP)Identify safe hazard/post-disaster cleanup
- 97 Identify demobilization concepts

- 98 Recognize the components and concepts of the Homeland Security Exercise and Evaluation Program (HSEEP)
- 99 Recognize the needs for disaster finance accountability
- 100 Identify the need for psychological or medical follow-up or referral
- 101 Identify the principles and practices of family reunification
- 102 Be aware of resources (e.g., physical, psychological, community systems, social) for short-and long-term recovery
- 103 Be aware of short- and long-term recovery groups (e.g., government groups, NGOs, volunteers)

Appendix B

Demographic Data Summary

1. What is your gender?

	N	%
Male	387	42.39
Female	524	57.39
No response	2	0.22
Total	913	100

2. What is your age?

	n	%
Under 25 years old	1	0.11
25–34 years old	252	27.60
35–44 years old	188	20.59
45–54 years old	233	25.52
55–64 years old	185	20.26
65 and older	16	1.75
No response	38	4.16
Total	913	100

3. What is your racial/ethnic background?

	n	%
American Indian and Alaska Native	9	0.99
Asian	27	2.96
Black or African American	56	6.13
Hispanic or Latino	36	3.94
Native Hawaiian and other Pacific Islander	5	0.55
White	721	78.97
Decline to state/no response	39	4.27
Other	20	2.19
Total	913	100

4. How many years have you been practicing/volunteering in a disaster-related role?

Count	Mean	Std Dev
913	11.78	9.77

5. Which best describes your primary profession? (survey grouping)

	n	%
Advanced Practice Registered Nurse (APRN)	101	11.06
Behavioral Health Counselor	26	2.85
Emergency Management Professional	87	9.53
Emergency Medical Technician	23	2.52
Marriage and Family Therapist	7	0.77
Paramedic	65	7.12
Pharmacist	31	3.40
Physician (MD or DO)	37	4.05
Physician Assistant (PA)	47	5.15
Psychologist	22	2.41
Public Health Professional	32	3.50
Registered Nurse (RN)	311	34.06
Respiratory Therapist	31	3.40
Social Worker	49	5.37
Other	44	4.82
Total	913	100

6. Which best describes your primary profession? (tally grouping)

	n	%
Behavioral Health Professional (BHC, MFT, PSY)	55	6.02
Emergency Management Professional	93	10.19
Emergency Medical Services (EMT, Paramedic)	94	10.30
Medicine (Physician)	37	4.05
Nurses (RN, APRN)	439	48.08
Pharmacist	31	3.40
Physician Assistant	47	5.15
Public Health Professional	37	4.05
Respiratory Therapist	31	3.40
Social Worker	49	5.37
Total	913	100

7. Which best describes your secondary profession, if any?

	n	%
Advanced Practice Registered Nurse (APRN)	34	4.02
Behavioral Health Counselor	27	3.20
Emergency Management Professional	100	11.83
Emergency Medical Technician	47	5.56
Emergency Medical Technicians	28	3.31
Marriage and Family Therapist	10	1.18
Paramedic	63	7.46
Pharmacist	15	1.78
Physician (MD or DO)	14	1.66
Physician Assistant (PA)	9	1.07
Psychologist	6	0.71
Public Health Professional	70	8.28
Registered Nurse (RN)	126	14.91
Respiratory Therapist	8	0.95
Social Worker	35	4.14
Not applicable	179	21.18
Other	74	8.76
Total	845	100

8. How many years have you been practicing in your primary profession?

Count	Mean	Std Dev
908	15.22	11.56

9. What best characterizes your primary service area?

	n	%
Rural	179	19.61
Suburban	387	42.39
Urban	344	37.68
No response	3	0.33
Total	913	100

10. What best describes the setting in which you deliver disaster services?

	N	%
Ambulatory Care	32	3.50
Community/Public Health	151	16.54
Consulting Firm	10	1.10
Correctional Facility	8	0.88
Educational Setting	47	5.15
Emergency Medical Services	139	15.22
Government	76	8.32
Hospital	253	27.71
Long-term/Rehab Care	11	1.20
Nongovernmental Organization	34	3.72
Private Practice	29	3.18
Rural Health	15	1.64
VA/Armed Forces	37	4.05
Other	71	7.78
Total	913	100

11. Do you perform disaster-related activities in a paid or unpaid position?

	n	%
Unpaid	175	19.17
Paid	310	33.95
Both	428	46.88
Total	913	100

12. What is your highest degree earned?

	n	%
Associate degree	97	10.62
Bachelor's degree	291	31.87
Master's degree	349	38.23
Doctoral degree	120	13.14
Technical/trade school	29	3.18
Other	27	2.96
Total	913	100

Appendix C
Task Statement Descriptive Statistics

		c	Perfor Mean	mance Expectation Std Dev Mediar	ectation Median	C Mean	Consequence Std Dev N	ce Median	Mean	Frequency Std Dev	/ Median	Overa	Overall Rank ean Std Dev
⊣	Apply strategies to strengthen personal and community resilience	913	2.64	09:0	3.00	2.41	0.89	2.60	3.43	1.04	3.60	25.29	11.78
2	who is displaying the need for behavioral health intervention	913	2.72	0.54	3.00	2.84	0.93	3.00	3.52	1.10	3.40	29.19	11.57
3	Exercise evacuation and shelter-in-place plans	913	2.49	0.70	3.00	2.63	1.02	2.90	2.93	1.13	3.00	24.29	13.34
4	Identify life-safety and security risks	913	2.77	0.54	3.00	3.09	96.0	3.25	3.75	1.15	4.05	31.67	11.39
2	Identify local shelters	913	2.52	0.74	2.90	2.19	0.93	2.10	3.01	1.22	3.10	23.11	13.04
9	Identify redundant communication systems	913	2.29	0.80	2.40	2.13	0.94	2.10	2.68	1.21	2.60	19.29	14.01
7	health care delivery that may be activated or modified under a declaration of disaster or	913	2.43	0.73	2.90	2.45	96.0	2.45	2.89	1.20	2.90	22.48	13.78
∞	emergency Identify mitigation strategies to address the risks identified by the Hazard Vulnerability	913	2.32	0.77	2.40	2.39	0.98	2.40	2.82	1.18	2.90	20.69	13.97
6	Assessment (HVA) Identify gaps in risk reduction between needs and resources	913	2.39	0.70	2.70	2.39	0.88	2.60	3.07	1.10	3.20	21.09	12.86
10	Participate in after-action report activities	913	2.55	0.64	2.80	2.32	0.83	2.20	3.39	1.18	3.40	23.62	12.14
11	Practice using personal protective equipment	913	2.69	0.59	3.00	2.94	1.03	2.90	3.53	1.25	3.80	30.10	12.26
12	Identify tasks to address the risks identified by the HVA	913	2.36	0.74	2.90	2.37	0.92	2.60	2.96	1.18	3.00	21.09	13.58
13	Promote synergy between the HVA and the Threat and Hazard Identification Risk	913	2.12	0.79	2.00	2.14	0.94	2.00	2.68	1.30	2.70	16.54	13.48
14	Assessment (THIRA) Recognize that scope of practice can be modified during a declared emergency	913	2.57	0.67	3.00	2.57	0.97	2.70	3.07	1.22	3.00	25.05	12.79
15	Talk or debrief after stressful situations	913	2.69	0.59	3.00	2.59	0.90	2.60	3.62	1.20	3.60	27.78	11.51
16	Apply strategies to build personal and community resilience	913	2.54	0.63	2.90	2.39	0.85	2.40	3.33	1.13	3.50	23.70	12.17
17	Assemble disaster supplies, equipment, and documents consistent with personal or family plan	913	2.63	0.65	3.00	2.64	1.00	2.80	3.25	1.24	3.30	27.32	12.68

		u	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev
18	Become part of an information-sharing network within one's organization	913	2.69	0.58	3.00	2.44	0.89	2.50	3.56	1.13	3.60	26.98	11.35
19	Create a list of important contact information (e.g., phone numbers, addresses)	913	2.73	0.59	3.00	2.49	0.91	2.70	3.52	1.21	3.60	28.13	11.11
20	Create a list of other departments/organizations amenable to partnering, to provide needed assets	913	2.47	0.72	2.90	2.32	0.87	2.40	3.07	1.21	3.00	22.76	13.28
21	Define what constitutes surge capacity for an institution or locale	913	2.19	0.81	2.20	2.22	96.0	2.20	2.64	1.22	2.60	18.47	13.75
22	Demonstrate basic knowledge of Point-of- Dispensing (POD) functions	913	2.36	0.78	2.75	2.28	0.93	2.20	2.87	1.28	2.80	21.12	13.98
23	Identify the needs of at-risk populations, through table-top, functional, or full-scale	913	2.40	0.72	2.90	2.43	0.93	2.60	2.96	1.15	3.00	21.87	13.22
24	exercises Identify common consequences resulting from various types of disasters or emergencies	913	2.60	0.63	3.00	2.65	0.92	2.80	3.29	1.17	3.30	26.27	12.56
25	Identify the need for a communication plan involving disabled, functionally impaired, and vulnerable populations, to include pets and	913	2.38	0.73	2.55	2.53	0.99	2.90	3.01	1.23	2.90	22.23	13.75
26	service animals Identify coping strategies for stressful situations	913	2.64	09.0	3.00	2.59	0.91	2.70	3.48	1.16	3.40	26.86	11.84
27	Identify credentialing and licensing considerations during a disaster or emergency	913	2.26	08.0	2.50	2.35	1.00	2.40	2.74	1.29	2.70	20.10	14.41
28	Identify credible sources for information updates	913	2.56	0.68	3.00	2.56	0.98	2.70	3.25	1.28	3.20	25.79	13.07
29	Identify evacuation plans involving disabled, functionally impaired, and vulnerable populations, to include pets and service animals	913	2.41	0.74	2.90	2.65	1.02	2.80	3.05	1.28	3.10	23.37	14.05
30	Identify general health hazards when presented with certain data/clues	913	2.58	0.67	2.90	2.71	0.97	2.80	3.33	1.23	3.30	26.39	13.03
31	Recognize general public health indicators that may signal the onset, exacerbation, or ending of a disaster or emergency	913	2.45	0.71	2.90	2.61	0.99	2.70	3.14	1.26	3.10	23.79	13.65

Frequency

Consequence

		u	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev
32	Recognize that health care–related legal statutes and regulations may change in the	913	2.48	0.71	3.00	2.44	0.93	2.45	2.96	1.23	2.90	73.36	13.31
	event of disaster or emergency Identify anticipated length of time before surge												
33	assets could be available/functioning in the	913	2.26	0.77	2.30	2.33	96.0	2.30	2.74	1.21	2.70	19.46	13.54
34	Identify most likely hazards or incidents in one's environment	913	2.71	0.58	3.00	2.79	0.99	2.90	3.58	1.21	3.70	29.17	12.01
35	Identify principles of isolation and quarantine	913	2.51	0.73	2.90	2.77	1.08	2.90	3.15	1.33	3.10	26.25	14.10
36	Identify psychological first-aid principles and practices with responders and community	913	2.47	0.71	2.80	2.53	0.93	2.70	3.16	1.25	3.40	23.88	13.40
37	Identify ramifications of a surge to clinical resources	913	2.30	0.73	2.50	2.41	0.97	2.40	2.84	1.17	2.80	20.16	13.33
38	Recognize the need for following a communication plan	913	2.76	0.54	3.00	2.76	06:0	2.80	3.65	1.19	4.00	29.93	11.16
39	Identify surge capacity assets that can be utilized in organizational, agency, and/or	913	2.25	0.77	2.20	2.35	0.93	2.50	2.80	1.23	2.70	19.25	13.50
40	community response plans Identify the location of at-risk populations	913	2.34	0.75	2.60	2.46	0.98	2.60	3.00	1.29	2.90	21.53	13.92
41	Identify the requesting process for alternative assets (e.g., local, regional, state, federal)	913	2.27	0.76	2.30	2.36	0.97	2.40	2.76	1.24	2.70	19.68	13.51
42	Identify types of mass casualty events and their potential impact	913	2.46	0.72	2.80	2.63	1.04	2.90	3.00	1.29	3.00	24.64	13.55
43	Participate in After-Action Report and Improvement Plan (AAR/IP) activities	913	2.36	0.72	2.60	2.38	0.91	2.30	3.04	1.25	3.10	21.11	13.09
44	Participate in educational sessions related to legal and regulatory issues within emergency management	913	2.29	0.73	2.30	2.14	0.86	2.00	2.75	1.11	2.80	18.46	12.83
45	List types of vulnerable or at-risk populations	913	2.42	0.75	2.80	2.37	0.95	2.45	2.99	1.28	3.00	22.37	13.46
46	Identify agencies that monitor threat indicators	913	2.31	0.80	2.60	2.19	96.0	2.00	2.81	1.25	2.80	19.94	13.91
47	Identify different routes to access a local evacuation shelter	913	2.40	0.78	2.70	2.37	1.02	2.20	2.85	1.33	2.90	22.29	14.12
48	Identify physical, mental health, and well-being needs	913	2.72	0.55	3.00	2.78	0.91	2.90	3.62	1.20	3.80	29.10	11.25

Frequency

Consequence

		u	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev
Identify used to epiderr	Identify tools (e.g., air sampling, water sampling) used to monitor general indicators and epidemiological levels	913	2.03	0.85	1.90	2.12	1.01	1.90	2.45	1.30	2.10	16.02	14.35
Mitiga Monit	Mitigate damage to the home Monitor hazard alert notifications	913 913	2.03	0.88	1.80	2.03	1.00	1.80	2.37	1.31	3.40	16.07	14.72
Practice do equipment	Practice donning and doffing personal protective equipment	913	2.58	69.0	3.00	2.73	1.02	2.80	3.16	1.25	3.20	27.28	13.04
Practic your a	Practice drills involving surge capacity within your area, organization, or community	913	2.33	0.76	2.50	2.43	0.94	2.60	2.80	1.17	2.80	20.93	13.49
Practice annually Practice	Practice personal/family/pet disaster plan annually Practice use of the media_including a portable	913	2.43	0.75	2.80	2.37	0.97	2.40	2.87	1.19	2.90	22.32	13.55
emerg chann	emergency radio to monitor emergency alert channels (e.g., weather, evacuation, isolation)	913	2.46	0.78	2.90	2.39	96.0	2.60	2.92	1.27	2.70	23.63	13.85
Prepa plan t	Prepare a personal or family disaster response plan that utilizes best practices	913	2.50	0.72	2.80	2.49	0.97	2.70	3.02	1.23	3.10	24.21	13.29
Recog scarce	Recognize crisis standards of care in times of scarce resources	913	2.49	0.71	2.90	2.61	1.00	2.80	3.04	1.23	3.00	24.17	13.39
Recog	Recognize when legal consultation is needed	913	2.37	0.78	2.90	2.49	1.05	2.60	2.81	1.28	2.60	22.17	14.27
Revie plan	Review organizational all hazards preparedness plan	913	2.60	0.64	3.00	2.58	0.93	2.70	3.10	1.12	3.20	25.85	12.25
Verba perso	Verbalize alternative response strategies for persons with disabilities	913	2.50	0.70	2.80	2.51	0.95	2.70	2.93	1.15	2.90	23.77	13.21
Apply	Apply principles of basic first aid	913	2.79	0.50	3.00	2.98	96.0	3.10	3.61	1.22	3.70	31.53	10.76
Descr incide	Describe an Incident Action Plan (IAP) or incident report	913	2.53	0.70	3.00	2.38	0.92	2.50	2.99	1.15	3.10	23.95	12.98
Descr menta	Describe how to minimize common physical and mental health issues that may occur as a direct	913	2.51	0.67	2.80	2.49	0.91	2.80	3.06	1.12	3.10	24.08	12.93
result Descr	result of a disaster or emergency Describe positions common in incident	913	2.40	0.76	2.70	2.25	0.95	2.40	2.96	1.26	3.00	22.34	13.58
Descr	Describe the role of social media in crisis communication	913	2.32	0.80	2.60	2.08	0.90	2.00	2.70	1.21	2.80	19.91	13.45

Frequency

Consequence

		u	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev
99	Describe the basic principles of various decontamination processes (gross and technical)	913	2.37	0.75	2.70	2.49	1.04	2.30	2.76	1.19	2.70	22.44	13.87
29	Describe the components of the incident communication plan	913	2.42	0.75	2.90	2.24	0.92	2.30	2.81	1.19	2.60	21.84	13.30
89	Describe the function and purpose of the Joint Information Center (JIC)	913	2.28	0.79	2.65	2.06	0.89	1.70	2.57	1.19	2.60	18.89	13.49
69	Describe the function and purpose of the Joint Information System (JIS)	913	2.23	08.0	2.30	2.01	0.85	2.00	2.54	1.17	2.50	17.92	13.50
70	Describe the functions of an exercise planning team	913	2.29	0.79	2.60	2.01	0.84	2.00	2.64	1.14	2.60	18.70	13.17
71	Describe the functions of the public information officer (PIO)	913	2.41	0.78	2.80	2.09	0.89	2.10	2.67	1.19	2.70	21.24	13.25
72	Describe the practices and principles in disaster triage	913	2.53	0.70	3.00	2.59	1.04	2.70	3.15	1.26	3.20	25.55	13.40
73	Describe the purpose of cold, warm, and hot zones	913	2.45	0.75	2.80	2.53	1.03	2.60	2.90	1.23	3.00	24.18	13.69
74	Describe the role of an Incident Action Plan (IAP) in maintaining situational awareness	913	2.45	0.75	2.90	2.35	0.94	2.60	2.91	1.15	3.00	22.92	13.35
75	Describe the sequential activation of coordinated local, state, and federal response as	913	2.25	0.81	2.30	2.23	0.97	2.25	2.65	1.22	2.60	19.26	14.03
92	incident complexity increases Describe types of documents required during a disaster or emergency	913	2.45	0.73	3.00	2.32	0.91	2.20	2.93	1.19	2.90	22.45	13.39
77	Discuss principles of scene safety as they relate to disaster emergency	913	2.64	0.67	3.00	2.69	1.03	2.80	3.17	1.27	3.30	27.73	12.95
78	Discuss the importance of consistent and ongoing communication during an emergency or disaster	913	2.61	99.0	3.00	2.64	0.98	2.70	3.28	1.25	3.40	27.08	12.50
79	Explain the value of internal and external communication during an emergency or disaster	913	2.52	0.73	3.00	2.52	0.97	2.50	3.07	1.24	3.10	25.00	13.54
80	Identify barriers to effective multicultural communication during disasters	913	2.36	0.77	2.80	2.35	0.92	2.40	2.85	1.23	2.90	21.32	13.62
81	Identify the chain of command within the organization	913	2.69	0.61	3.00	2.59	96.0	2.60	3.48	1.31	3.80	28.28	11.67

Frequency

Consequence

Frequency

Consequence

		u	<i>n</i> Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Std Dev
lde foll	Identify the need for psychological or medical follow-up or referral	913	2.52	69.0	2.90	2.70	96.0	2.80	3.26	1.23	3.25	25.41	13.45
lde re	Identify the principles and practices of family reunification	913	2.41	0.74	2.80	2.51	0.98	2.70	3.01	1.29	3.10	22.82	13.85
Be ps	Be aware of resources (e.g., physical, psychological, community systems, social) for	913	2.52	0.64	2.90	2.51	0.89	2.60	3.24	1.21	3.20	23.79	12.83
sho Be	short- and long-term recovery Be aware of short- and long-term recovery groups (e.g., government groups, NGOs,	913	2.40	0.70	2.45	2.35	0.89	2.40	2,99	1.20	2 90	21 17	13.09
9	volunteers)						E C)		1	

Frequency

Consequence

Appendix D
Task Statement Overall Criticality – Rank Order

CITC	canty Nank Order		Overall Kalik			
		N	Mean	Std Dev		
4	Identify life-safety and security risks	913	31.67	11.39		
61	Apply principles of basic first aid	913	31.53	10.76		
11	Practice using personal protective equipment	913	30.10	12.26		
38	Recognize the need for following a communication plan	913	29.93	11.16		
2	Describe the signs associated with someone who is displaying the need for behavioral health intervention	913	29.19	11.57		
34	Identify most likely hazards or incidents in one's environment	913	29.17	12.01		
48	Identify physical, mental health, and well-being needs	913	29.10	11.25		
81	Identify the chain of command within the organization	913	28.28	11.67		
19	Create a list of important contact information (e.g., phone numbers, addresses)	913	28.13	11.11		
15	Talk or debrief after stressful situations	913	27.78	11.51		
77	Discuss principles of scene safety as they relate to disaster emergency	913	27.73	12.95		
17	Assemble disaster supplies, equipment, and documents consistent with personal or family plan	913	27.32	12.68		
52	Practice donning and doffing personal protective equipment	913	27.28	13.04		
86	Identify personal needs for a 72-hour response	913	27.19	12.67		
78	Discuss the importance of consistent and ongoing communication during an emergency or disaster	913	27.08	12.50		
92	Recognize the need for the protection of privacy and confidentiality during a disaster	913	27.01	13.03		
18	Become part of an information-sharing network within one's organization	913	26.98	11.35		
88	Identify the basic components of medical ethics	913	26.87	13.43		
26	Identify coping strategies for stressful situations	913	26.86	11.84		
94	Utilize common disaster terminology	913	26.68	11.70		
30	Identify general health hazards when presented with certain data/clues	913	26.39	13.03		
24	Identify common consequences resulting from various types of disasters or emergencies	913	26.27	12.56		
35	Identify principles of isolation and quarantine	913	26.25	14.10		
59	Review organizational all hazards preparedness plan	913	25.85	12.25		
90	Recognize psychological risk factors	913	25.84	12.77		
28	Identify credible sources for information updates	913	25.79	13.07		
72	Describe the practices and principles in disaster triage	913	25.55	13.40		
51	Monitor hazard alert notifications	913	25.50	13.67		
101	Identify the need for psychological or medical follow-up or referral	913	25.41	13.45		
1	Apply strategies to strengthen personal and community resilience	913	25.29	11.78		

Rank	c Order		Overall I	Rank
		N	Mean	Std Dev
85	Identify credible sources for information while responding to a disaster	913	25.25	13.59
83	Identify communication strategies during disasters	913	25.14	13.38
14	Recognize that scope of practice can be modified during a declared emergency	913	25.05	12.79
82	Identify communication barriers that may occur during a disaster or emergency	913	25.01	13.18
87	Identify reporting activities required during a disaster	913	25.00	12.96
79	Explain the value of internal and external communication during an emergency or disaster	913	25.00	13.54
91	Recognize staff protective (force protection) measures	913	24.76	14.12
42	Identify types of mass casualty events and their potential impact	913	24.64	13.55
3	Exercise evacuation and shelter-in-place plans	913	24.29	13.34
56	Prepare a personal or family disaster response plan that utilizes best practices	913	24.21	13.29
73	Describe the purpose of cold, warm, and hot zones	913	24.18	13.69
57	Recognize crisis standards of care in times of scarce resources	913	24.17	13.39
63	Describe how to minimize common physical and mental health issues that may occur as a direct result of a disaster or emergency	913	24.08	12.93
62	Describe an Incident Action Plan (IAP) or incident report	913	23.95	12.98
36	Identify psychological first-aid principles and practices with responders and community	913	23.88	13.40
103	Be aware of resources (e.g., physical, psychological, community systems, social) for short- and long-term recovery	913	23.79	12.83
31	Recognize general public health indicators that may signal the onset, exacerbation, or ending of a disaster or emergency	913	23.79	13.65
60	Verbalize alternative response strategies for persons with disabilities	913	23.77	13.21
16	Apply strategies to build personal and community resilience	913	23.70	12.17
93	Recognize the unique ethical challenges of disaster response Practice use of the media, including a portable emergency	913	23.70	13.31
55	radio to monitor emergency alert channels (e.g., weather, evacuation, isolation)	913	23.63	13.85
10	Participate in after-action report activities Identify evacuation plans involving disabled, functionally	913	23.62	12.14
29	impaired, and vulnerable populations, to include pets and service animals	913	23.37	14.05
32	Recognize that health care—related legal statutes and regulations may change in the event of disaster or emergency	913	23.36	13.31
5	Identify local shelters	913	23.11	13.04

Rank	Order		Overall I	Rank
		N	Mean	Std Dev
74	Describe the role of an Incident Action Plan (IAP) in maintaining situational awareness	913	22.92	13.35
89	Recognize existing guidelines for ethical standards regarding scarce resources during a disaster or emergency	913	22.84	13.96
102	Identify the principles and practices of family reunification	913	22.82	13.85
20	Create a list of other departments/organizations amenable to partnering, to provide needed assets	913	22.76	13.28
7	Identify statutes and regulations related to health care delivery that may be activated or modified under a declaration of disaster or emergency	913	22.48	13.78
76	Describe types of documents required during a disaster or emergency	913	22.45	13.39
66	Describe the basic principles of various decontamination processes (gross and technical)	913	22.44	13.87
45	List types of vulnerable or at-risk populations	913	22.37	13.46
64	Describe positions common in incident command structures	913	22.34	13.58
54	Practice personal/family/pet disaster plan annually	913	22.32	13.55
47	Identify different routes to access a local evacuation shelter	913	22.29	14.12
25	Identify the need for a communication plan involving disabled, functionally impaired, and vulnerable populations, to include pets and service animals	913	22.23	13.75
58	Recognize when legal consultation is needed	913	22.17	14.27
23	Identify the needs of at-risk populations, through table-top, functional, or full-scale exercises	913	21.87	13.22
67	Describe the components of the incident communication plan	913	21.84	13.30
40	Identify the location of at-risk populations	913	21.53	13.92
80	Identify barriers to effective multicultural communication during disasters	913	21.32	13.62
71	Describe the functions of the public information officer (PIO)	913	21.24	13.25
104	Be aware of short- and long-term recovery groups (e.g., government groups, NGOs, volunteers)	913	21.17	13.09
22	Demonstrate basic knowledge of Point-of-Dispensing (POD) functions	913	21.12	13.98
43	Participate in After-Action Report and Improvement Plan (AAR/IP) activities	913	21.11	13.09
9	Identify gaps in risk reduction between needs and resources	913	21.09	12.86
12	Identify tasks to address the risks identified by the HVA	913	21.09	13.58
53	Practice drills involving surge capacity within your area, organization, or community	913	20.93	13.49

Ranl	c Order		Overall	Rank
		N	Mean	Std Dev
8	Identify mitigation strategies to address the risks identified by the Hazard Vulnerability Assessment (HVA)	913	20.69	13.97
37	Identify ramifications of a surge to clinical resources	913	20.16	13.33
27	Identify credentialing and licensing considerations during a disaster or emergency	913	20.10	14.41
97	Identify safe hazard/post-disaster cleanup	913	20.01	14.43
46	Identify agencies that monitor threat indicators	913	19.94	13.91
65	Describe the role of social media in crisis communication	913	19.91	13.45
41	Identify the requesting process for alternative assets (e.g., local, regional, state, federal)	913	19.68	13.51
33	Identify anticipated length of time before surge assets could be available/functioning in the community	913	19.46	13.54
6	Identify redundant communication systems	913	19.29	14.01
75	Describe the sequential activation of coordinated local, state, and federal response as incident complexity increases	913	19.26	14.03
39	Identify surge capacity assets that can be utilized in organizational, agency, and/or community response plans	913	19.25	13.50
95	Recognize the process for returning the community back to normal functioning	913	19.02	13.17
68	Describe the function and purpose of the Joint Information Center (JIC)	913	18.89	13.49
70	Describe the functions of an exercise planning team	913	18.70	13.17
21	Define what constitutes surge capacity for an institution or locale	913	18.47	13.75
44	Participate in educational sessions related to legal and regulatory issues within emergency management	913	18.46	12.83
96	Describe the components and concepts of an After-Action Report and Improvement Plan (AAR/IP)	913	18.14	13.28
69	Describe the function and purpose of the Joint Information System (JIS)	913	17.92	13.50
98	Identify demobilization concepts	913	17.55	13.54
99	Recognize the components and concepts of the Homeland Security Exercise and Evaluation Program (HSEEP)	913	17.01	13.79
100	Recognize the needs for disaster finance accountability	913	16.83	14.03
13	Promote synergy between the HVA and the Threat and Hazard Identification Risk Assessment (THIRA)	913	16.54	13.48
50	Mitigate damage to the home	913	16.07	14.72
49	Identify tools (e.g., air sampling, water sampling) used to monitor general indicators and epidemiological levels	913	16.02	14.35
84	Recognize uses of geospatial information systems (GIS) in disaster planning and response	913	14.68	13.36

Acknowledgements

The American Nurses Credentialing Center (ANCC) wishes to thank members of the Content Expert Panel who served on the 2016 Role Delineation Study of National Healthcare Disaster Certification for sustaining this effort and producing a role delineation study of such high caliber. Without their numerous hours of input and feedback, the study would not have been possible.

In addition, ANCC wishes to thank the following professional groups for support of this interprofessional credential for the National Healthcare Disaster community:

- Disaster Behavior Health
- Emergency Management
- Emergency Medical Services
- Medicine
- Nursing (RN and APRN)
- Public Health
- Physician Assistant
- Pharmacy
- Respiratory Therapy
- Social Work

Finally, we would like to thank the health care disaster practitioners who supported this study by donating their time to complete the survey questionnaire. The contributions that all of these people made to the study were essential to its success.