

UNIVERSITY OF SOUTH FLORIDA

Developing Core Competencies for Disease Intervention Professionals



CENTER FOR PUBLIC HEALTH
**WORKFORCE
DEVELOPMENT**
ASPPH

Contributors

This body of work was produced by the University of South Florida for reporting period October 1, 2024 – September 29, 2025:

Prepared by:

Ismael Hoare, PhD, MPH

Facilitators:

Ismael Hoare, PhD, MPH

Academic Director of DISTA Project; Associate Professor, Lead Global Health Practice Concentration, College of Public Health

Charurut Somboonwit, MD, FACP, FIDSA

Director, HIV Clinical Research Unit; Chair of Appointment, Promotion and Tenure Committee; Associate Director, Division of Infectious Disease & International Medicine, Department of Internal Medicine

Mahmooda Khaliq Pasha, PhD, MHS, CPH

Director, WHO Collaborating Center of Social Marketing and Social Change; Associate Professor, College of Public Health

DeAnne Turner, PhD, MPH

Assistant Professor, College of Nursing

Project Staff:

Karah Y. Greene, MSW

Graduate Research Assistant, College of Nursing

This body of work was overseen and coordinated by the Association of Schools and Programs of Public Health (ASPPH):

Emily Burke, EdD, MPH, CPH

Senior Director of Workforce Development and Applied Practice

Beth Handler, MPH

Director of Public Health Credentialing and Continuing Education

Sara McDowell, MPH, CPH

Senior Manager of Public Health Training and Credentialing

Acknowledgements

Report publication support was provided by Maanasa Kanimilli, MPH (formatting and publication support), Stella J. Carter, MFA (creative direction and brand oversight), Isabella Padilla (graphic design and layout), and Sarah Murray (copyediting).

Acknowledgement of Federal Funding: Funding for the Certified in Disease Intervention (CDI) Program was provided through CK20-2003 *Improving Clinical and Public Health Outcomes through National Partnerships to Prevent and Control Emerging and Re-Emerging Infectious Disease Threats* from the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services (HHS) as part of financial assistance award NU50CK000612 funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, the U.S. Government, or ASPPH.

Table of Contents

Summary	2
Project Purpose and Background	4
Objective.....	6
Plan of Action	
Activities Undertaken - Methods	7
Systematized Review: Job Task Analysis and Classification Scan	7
Listening Sessions	9
Core Competencies Validation Consultation	10
Drafting Competencies	10
Results	12
Systematized Review: Job Task Analysis and Classification Scan	12
Listening Sessions	16
<i>Infection Knowledge</i>	<i>16</i>
<i>Ethics and Evidence-Based Practices</i>	<i>17</i>
<i>Positionality</i>	<i>18</i>
<i>Planning and Case Analysis</i>	<i>19</i>
<i>Interviewing and Case Management Activities</i>	<i>20</i>
<i>Field Services and Outreach Activities</i>	<i>20</i>
<i>Surveillance and Data Collection.....</i>	<i>21</i>
<i>Collaboration</i>	<i>22</i>
<i>Outbreak Response and Emergency Preparedness.....</i>	<i>22</i>
Core Competency Validation Consultations	23
<i>Infection Knowledge</i>	<i>26</i>
<i>Ethics and Evidence-Based Practices</i>	<i>26</i>
<i>Positionality</i>	<i>27</i>
<i>Planning and Case Analysis</i>	<i>27</i>
<i>Interviewing and Case Management Activities</i>	<i>27</i>
<i>Field Services and Outreach Activities</i>	<i>28</i>
<i>Surveillance and Data Collection.....</i>	<i>28</i>
<i>Collaboration</i>	<i>29</i>
<i>Outbreak Response and Emergency Preparedness.....</i>	<i>29</i>
Finalized Competencies for DI Professionals.....	29
Challenges.....	31
Next Steps.....	32
References	33
Appendices	36

Summary

Title: Developing Core Competencies for Disease Intervention Professionals

Background and Project Description

Post-COVID workforce shortages, the resurgence of congenital syphilis, ongoing HIV transmission, outbreaks such as Mpox, and growing threats of antimicrobial resistance warrant a need for national standards to strengthen readiness, improve consistency, and ensure the sustainability of the disease intervention (DI) workforce. DI professionals are the frontline workforce responsible for preventing and controlling the spread of infectious diseases. Despite their critical role, the US lacks a standardized national framework for DI training and practice. This gap has created wide variability in job expectations, skill requirements, and workforce preparedness across states. Between October 1, 2024 and September 29, 2025, the University of South Florida (USF), in collaboration with the Association of Schools and Programs of Public Health (ASPPH), undertook a multi-phase project to define core competencies for DI professionals.

Methods

A systematized review was conducted using the READ method (a framework for systematic document analysis, especially in health policy research) to analyze 187 documents, including job postings, organizational charts, and workforce reports from 29 states. Job task analysis and classification scans identified required knowledge, skills, and abilities (KSAs). Thirty-nine DI professionals represented their jurisdiction at one of eight listening sessions, held from July to August 2025, provided qualitative insights into field realities, training gaps, and emerging needs. Using insights from systemized review, job task analysis and listening sessions, a list of core competencies was developed. The draft competencies were validated and refined through validation consultations with field experts, employing ranking, prioritization, and consensus building.

Key Findings

- **Inconsistency across states:** Educational requirements ranged from high school diplomas to graduate degrees; job roles varied from disease-specific to generalist.
- **Core expectations:** Confidentiality, informed practices, communication, and field readiness were universally cited as essential.
- **Emerging gaps:** Outbreak response, emergency preparedness, and informed practices were inconsistently mentioned despite increasing importance.
- **New domains:** In addition to the six Certified in Disease Intervention (CDI) job domains, three new domains emerged—Infection Knowledge, Positionality (how a person's background and experiences shape their worldview), and Ethics and Evidence-based Practices.
- **Workforce challenges:** Funding instability, evolving job titles, and role confusion hinder recruitment, retention, and career progression.

Recommendations

- 1. Establish a National Competency Framework:** Adopt the six CDI domains as the baseline and integrate the three new domains validated by DI professionals.
- 2. Strengthen Preparedness & Quality Improvement:** Standardize competencies in outbreak response, surge capacity, and emergency management at all career levels.
- 3. Develop Tiered Training & Credentialing Pathways:** Create structured modules and certifications aligned with field, manager, and executive roles to support career ladders.
- 4. Promote Workforce Sustainability:** Advocate for consistent funding and integration of DI professionals into broader public health structures to reduce reliance on short-term grants.

By aligning practice expectations with evidence-based competencies, this project provides a roadmap for the professionalization and sustainability of the DI workforce. Adoption of this framework will enhance national preparedness, improve workforce mobility, and ensure that DI professionals are equipped to respond to future public health challenges.

Project Purpose and Background

Disease intervention (DI) professionals are an essential part of the public health workforce, supporting the prevention and control of infectious diseases through activities such as case investigation, contact tracing, partner services, care coordination, outbreak response, and community engagement. Although DI work has historically focused on sexually transmitted infections (STIs) and tuberculosis (TB), DI professionals increasingly support responses to emerging and re-emerging public health threats. As the scope of disease intervention has expanded, so has the need for a standardized approach to preparing, training, and recognizing this workforce.

To address this need, the Centers for Disease Control and Prevention (CDC), in collaboration with national public health partners, initiated efforts to establish the Certification in Disease Intervention (CDI) program. The CDI program is designed to standardize and validate the knowledge, skills, and abilities of DI professionals, improve the quality and consistency of disease intervention services, and strengthen recruitment, retention, and professionalization of the workforce.

The CDI project has advanced through several phases over more than a decade. In 2013, CDC and the National Association of County and City Health Officials (NACCHO) collaborated on a feasibility assessment to evaluate the potential for a national DI certification program. NACCHO supported stakeholder engagement and contracted with International Credentialing Associates to assess workforce needs, training gaps, operational requirements, and sustainability considerations. Beginning in 2014, the Public Health Accreditation Board (PHAB) served as the coordinating organization for the assessment phase, leading foundational activities such as the DI workforce registry, Job Task Analysis, workforce enumeration studies, and evaluation of certification models. This work helped define DI competencies and supported the selection of a test-based certification model.

In 2022, the Association of Schools and Programs of Public Health (ASPPH) assumed leadership of the CDI project through a CDC-funded cooperative agreement. In partnership with the National Board of Public Health Examiners (NBPHE), subject matter experts, and national public health partners, ASPPH has supported certification infrastructure, examination development, stakeholder engagement, and strategies to strengthen pathways into the DI workforce.

As the CDI program moves toward implementation, establishing a standardized competency framework for disease intervention practice has become increasingly important. Although DI professionals perform critical functions in infectious disease prevention and response, formal national competencies for the profession have not previously existed. Variability in educational backgrounds, job responsibilities, jurisdictional requirements, and training approaches has contributed to inconsistencies in workforce preparation across the United States. At the same time, workforce shortages, turnover, and the growing complexity of public health threats have highlighted the need for clearly defined expectations and competencies that support workforce readiness, professional development, and career advancement.

To address this need, ASPPH awarded a subaward to the University of South Florida (USF) College of Public Health to develop proposed core competencies for DI professionals. The purpose of this project was to estab-

lish a consensus-based competency framework that reflects the knowledge, skills, and abilities required for contemporary disease intervention practice. Using findings from the DI Job Task Analysis, stakeholder listening sessions, and a competency validation process, the project sought to identify and define the foundational competencies that align with CDI job domains and support certification, training, and workforce development efforts.

The proposed competency framework is intended to provide a foundation for recruiting, training, supporting, and retaining the future DI workforce. By establishing a shared set of expectations for disease intervention practice, this work contributes to the broader goals of the CDI initiative and supports the development of a prepared, competent, and sustainable public health workforce.

Objective

Objective

The primary objective of this project was to develop a complete set of core competencies needed for DI professionals to complete their duties.

Plan of Action

These core competencies were developed through a two-phase process. Firstly, the draft competencies were developed from findings obtained through a systematized document review, a scan of DI positions descriptions, and a job classification document review and analysis, and through listening sessions. Secondly, the draft core competencies were validated through consultation with listening session participants who chose to provide further feedback on competency development.

Activities Undertaken - Methods

Systematized Review: Job Task Analysis and Classification Scan

The READ approach, developed by Dalglish et al., informed the systematized review of the literature (2021). The READ approach consists of four steps: 1) ready materials, 2) extract data, 3) analyze data, and 4) distill findings. The systematized review occurred in January 2025.

For step one (ready materials), documents were considered for inclusion if they were: 1) published between January 2022 and December 2024 and 2) were specific to the DI professional workforce. The search range was set from January 2022 to December 2024 to avoid contextual factors specific to the height of the COVID-19 pandemic, pre-2022. Specifically, publications, employment postings, and information that provided insight on the qualities of a successful DI professional, expected skills and competencies of DI professionals, and current educational institution programs and trainings for DI professional workforce development were examined. Websites associated with the following organizations were also searched for relevant documents: American Public Health Association (APHA), Association of Schools and Programs of Public Health (ASPPH), Association of State and Territorial Health Officials (ASTHO), National Association of County and City Health Officials (NACCHO), National Coalition of STD Directors (NCSD), National Alliance of State and Territorial AIDS Directors (NASTAD), National Tuberculosis Controllers Association (NTCA), Society for Public Health Education (SOPHE), and Centers for Disease Control and Prevention (CDC).

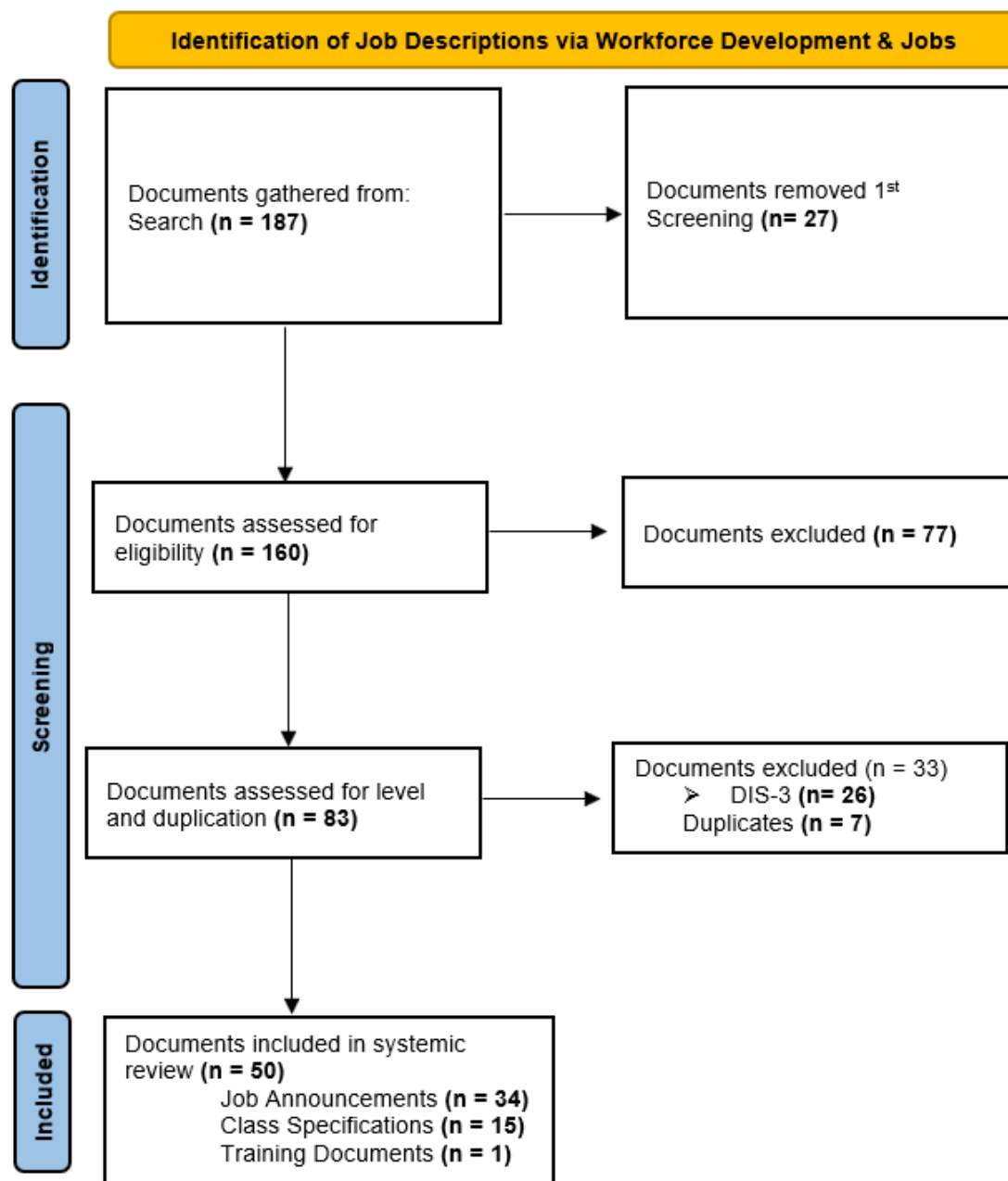
Table 1.
Search Engines and Terms Used to Inform Job Scan and Task Analysis

Job Platforms	Search Terms
Glassdoor Indeed ZipRecruiter USAJOBS.gov GovtJobs.com PublicServiceCareers.org	disease intervention specialist infectious disease communicable disease health educator biological scientist health services representative STD/STI epidemiologist

Additionally, visual representations of organizational charts were collected to contextualize job positions within the public health workforce. A total of 187 documents from 29 states were compiled in step one.

For step two, data extraction was conducted for all job postings gathered during step one (ready materials). At this stage, a classification scan was conducted on all job descriptions and training documents collected in step one (n=50) (Figure 1 presents the PRISMA diagram for step one). Extraction included the hiring agency/organization, date of publication, stated competencies needed for DI professionals, required and preferred position requirements, job tasks, position/supervisory level, and location (e.g., state) of position. Pertinent information was placed into an Excel spreadsheet (Appendix A). Data extraction ended after reaching thematic saturation of job tasks and DI professional expectations/competencies.

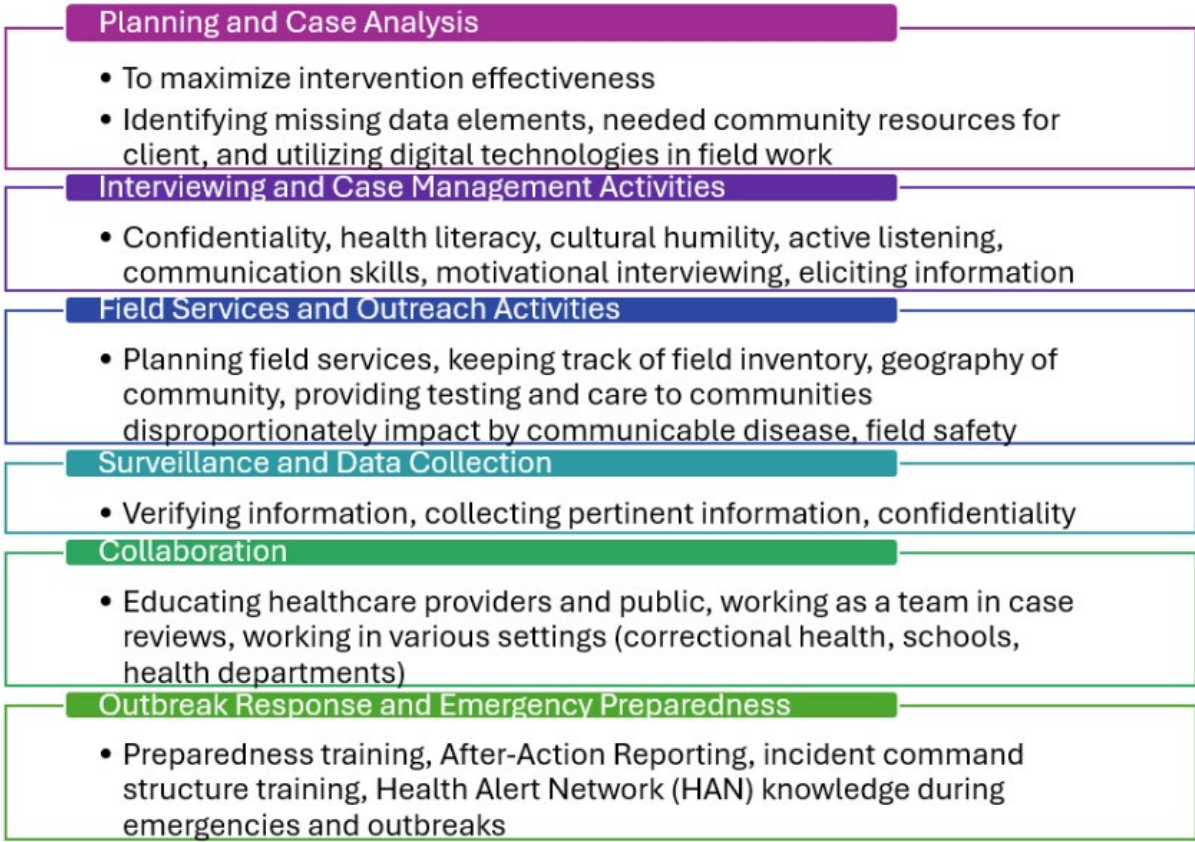
Figure 1
PRISMA Diagram of Selection Criteria



For steps three and four, document analysis included examination of the salient KSAs that DI professionals must possess to be successful. At this stage of the project, alignment with existing CDI job domains informed our analysis strategy. Keywords, phrases, and themes associated with each of the six CDI domains (planning and case analysis; interviewing and case management activities; field services and outreach activities; surveillance and data collection; collaboration; and outbreak response and emergency preparedness) were identified and extracted from the job postings (Figure 2). To distill our findings, organization/agency-level documents were used to map specific responsibilities, tasks, and duties associated with DI roles within organizations/public health departments, which informed the classification scan of our project components. With the organizational information and available employment postings, we examined the specific skills

possessed by successful DI professionals.

Figure 2
Key Words, Phrases, and Themes from Postings Aligning with Certified in Disease Intervention (CDI) Job Domains



Listening Sessions

From July to August 2025, we conducted eight listening sessions over Zoom with DI professionals (n=39) from eight states and territories (Florida, Georgia, Maryland, Massachusetts, Nebraska, Nevada, US Virgin Islands, and Tribal Nations). Each listening session was used to obtain insights on education, training, certifications, core competencies, and workforce development needs for the DI profession.

Recruitment. Agency personnel and employers of DI professionals were recruited by contacting national leaders in STI prevention and leadership at state health departments in all four regions of the US (northeast, south, midwest, west), as well as the US Caribbean region. Each agency personnel/employer of DI professionals was asked to refer DI staff for the listening sessions. Identified DI staff were sent an email from a member of our project team with a survey link from Qualtrics, an AI-powered customer service software provider. This link provided dates and times of listening sessions from which the DI professional could choose, a consent form covering listening session procedures, and the option for the DI professional to identify themselves as Field Staff (n=23) or Leadership (n=16) in their current DI role.

Data collection. Listening sessions lasted up to 60 minutes and followed a semi-structured guide available in Appendix B. Listening session participants were asked to reflect on their experiences in the DI workforce, the

minimal skills and competencies they would expect for a DI professional to complete their job responsibilities successfully, and situations they felt ill-equipped to respond to as a new DI professional. Participants were offered a stipend for their time.

Data analysis. The project team verified the qualitative transcripts created by Zoom (Version 6.5.9) to ensure correct transcription, then imported the proofread transcripts into the data analysis software of MaxQDA (VERBI software, 2025) for qualitative analysis. Using applied thematic analysis (Guest et al., 2012), an initial codebook was created based on the topic areas of the listening session guide, alignment with existing CDI domains, and emerging codes. Two team members trained in qualitative data analysis coded the same transcript independently before discussing revisions and edits for the codebook. To refine the codebook, an additional transcript was then coded by the same two team members. Coding continued until interrater reliability (IRR), a consistency rating measure, reached Kappa=.80 (Cole, 2023). After IRR was reached, one team member coded the remaining transcripts.

Listening sessions were determined not to be research and were exempt from University of South Florida Institutional Review Board review (Study # 008461) (Appendix C).

Core Competencies Validation Consultation

Validation consultations were conducted concurrently with qualitative data analysis of the listening sessions. By consulting a panel of experts comprising DI professionals who participated in listening sessions, our proposed competencies were informed and validated by the same type of professionals for whom we were seeking to develop professional competencies. The process for the validation consultations was as follows:

Recruitment. At the end of the listening sessions, participants were asked whether they were interested in participating in a second stage of the project (i.e., validation consultations), 27 of which responded with interest. Listening session participants from Tribal Nations were not included in the validation consultation, as they participated in listening sessions after we had collected validation consultation data.

Drafting Competencies

DI professional competencies were drafted concurrently with qualitative data analysis of the listening sessions. The notes and themes that aligned with the CDI domains (Appendix D) were then compared to the KSAs identified during the systematized review. By comparing preliminary listening session findings with job descriptions and KSAs in the systematized review, job task analysis, and classification scan, the project team determined that foundational knowledge of STIs and non-STIs was implied in the current CDI domains but not explicitly stated. The project team also identified personal self-awareness, a willingness to learn and grow, and an ability to work with individuals from various backgrounds and experiences as necessary to DI work. Therefore, the team proposed three additional competency domains: Infection Knowledge, Positionality, and Ethics and Evidence-based Practices.

IRB. Validation consultation procedures were determined not to be research and were exempt from University of South Florida Institutional Review Board review (Study # 008461) (Appendix C).

Data Collection. A template was developed using Qualtrics that captured the core DI professional competencies and definitions. To prevent order effects, the competencies were presented in a random order. Prior to administration, the Qualtrics template was tested internally to assess flow and ease of use. Experts at ASPPH also reviewed and refined the template prior to administration (see Appendix E for finalized validation consultation template). Then in late August 2025, the Qualtrics template was distributed to the panel of experts via email. The experts were asked to rank each competency on relevance and importance, using a five-point scale ranging from one (“not important/relevant”) to five (“essential/directly relevant”).

Data Analysis. Statistical analysis based on mean and median value was conducted for each competency. Participant responses were evaluated to validate proposed competencies and to examine alignment with listening session and systematized review findings.

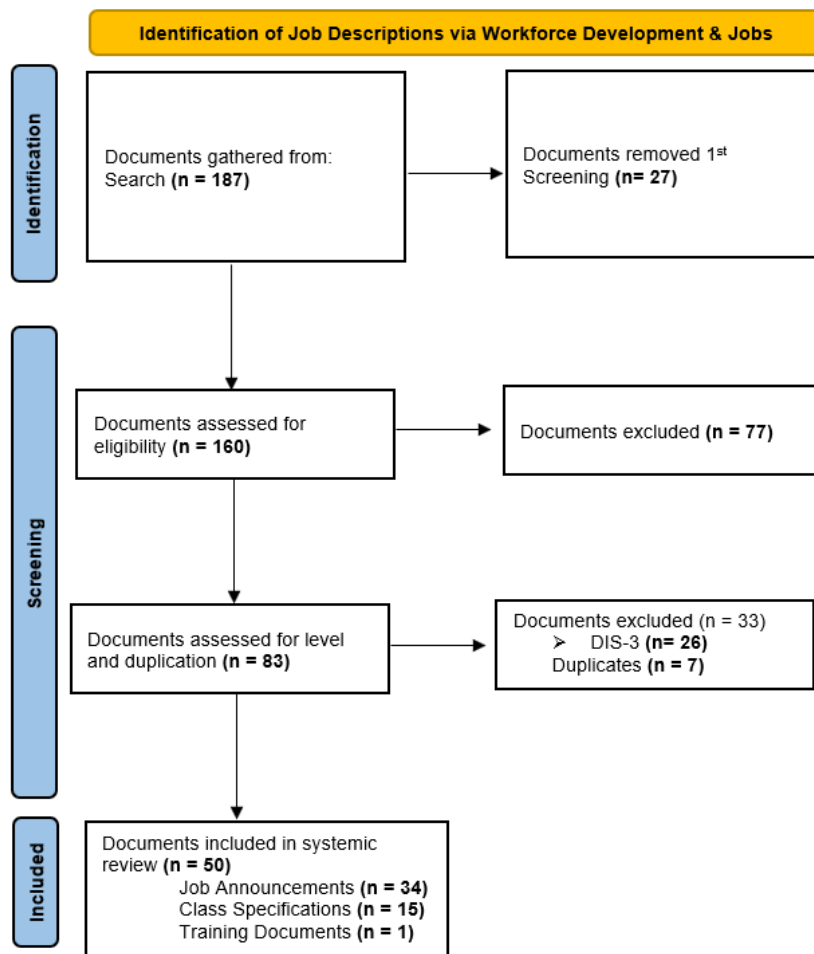
Results

Systematized Review: Job Task Analysis and Classification Scan

Of the documents (n=187) from 29 states initially gathered for the systematized review, n=26 were job postings for leadership positions in disease intervention, and n=27 were organizational, state, or federal public health workforce reports. A total of 84 documents were excluded from further analysis because they lay outside the scope of DI professional work (n=77) (i.e., primarily epidemiological responsibilities) or duplicate job postings (n=7). In total, 50 documents from 25 states (Alabama, Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Iowa, Idaho, Illinois, Maine, Michigan, Minnesota, Montana, North Carolina, New Mexico, Nevada, New York, Ohio, Oregon, Pennsylvania, Tennessee, Texas, and Washington) were included in the job task analysis and classification scan (Figure 1).

Figure 1

PRISMA Diagram of Selection Criteria



Among the 50 job postings, there was a lack of consistency in four primary areas:

- Educational requirements
- Role specialization
- Field practice standards
- The funding base for the position

Educational requirements ranged widely from a minimum of a high school diploma to, in some cases, a graduate degree in public health or health sciences. State and jurisdictional disease trends influenced whether or not disease-specific functions were needed (such as HIV) or if more generalist disease intervention (covering all STIs) was needed. For some positions, previous venipuncture/phlebotomy experience, laboratory testing knowledge, use of a personal vehicle, and a valid driver’s license, and/or bilingual proficiency (specifically Spanish) were required. Notably, some positions were grant-funded, which created variability in job security and sustainability.

Across all job postings, DI professionals were expected to take on more complex cases such as congenital syphilis or clients with co-morbid conditions commensurate with level of experience in disease intervention. All job postings listed as requirements for employment the following: confidentiality, the ability to manage sensitive information, and personal capacity to perform fieldwork (to varying degrees/involvement). Foundational knowledge of public health, communicable diseases, and interpersonal communication/ counseling principles were also consistently observed across job postings.

Table 2
Comparison of Job Task Descriptions Across States

Similarities	Differences
Job structure Increased and similar responsibility depending on level (Field Level to Manager/Supervisor levels)	Educational requirements From a high school diploma with relevant experience to a bachelor’s or advanced degree
Baseline requirements Adherence to confidentiality, capacity to perform fieldwork, and ability to manage sensitive information	Role specialization Separate DI roles by disease specialty or population such as TB DI vs. STD/HIV DI, whereas others combine responsibilities into a generalist role
Core knowledge areas Foundational public health knowledge, understanding of communicable diseases, and knowledge of communication/counseling principles	Field practice standards Requirements for field readiness—such as mandatory phlebotomy, bilingual skills, or use of personal vehicles
	Supervisory expectations Variations in the number of years of prior supervision experience required
	Funding for position Some positions are grant funded

Evaluation of the KSAs listed in the job descriptions revealed consistent KSAs across states, although the depth of expertise varied by position level. For example, foundational knowledge— such as modes of transmission, signs, and symptoms, and treatment for STIs—was expected in order to carry out job duties successfully, but the ability to respond to more complex cases (including syphilis) was often cited for job positions that required previous DI professional experience and sometimes required the employee to supervise other DI professionals.

Job expectations followed a similar hierarchy across all states. For example, “Field Level” roles providing direct services to community members required abilities in areas such as contact tracing, testing, outreach, and basic risk reduction counseling. After reviewing all job descriptions, a mid-level role was observed: “Manager Level.” At this level, supervisory duties were mentioned, as well as the ability to handle complex cases and assist with leading program/policy development. At this level, DI professionals are expected to be more familiar with disease trends and the overall public health impact of disease intervention in their area. The “Executive Level” was categorized as regional/state oversight, strategic planning, reporting, and quality improvement duties. Executive Level DI professionals are leaders in their respective agencies who supervise entire programs and bureaus within public health departments.

Further analysis of the job tasks revealed required core skills in communication, confidentiality, informed practice, and collaboration; effective communication and documentation; confidentiality and trauma-informed practice; informed practice and the ability to work with populations; and collaboration with healthcare, community, and justice partners. Notably, familiarity with outbreak response and emergency preparedness were less frequently mentioned in the job descriptions than in the other existing CDI domains. In Table 3 (below), knowledge areas described in each of the six CDI domains were cross-referenced with all the job descriptions collected for the systematized review.

Table 3**Knowledge, Skill, and Ability Comparisons: CDI and Available Job Descriptions**

Domain	Specific KSA from CDI Domains	Findings from Systematized Review and Job Task Analysis
Knowledge of:	Communicable diseases targeted for disease intervention	Observed across all descriptions
	Specialized areas (e.g., congenital syphilis, HIV molecular clusters)	Inconsistently observed
	Risk reduction counseling	Observed across all descriptions
	Community resource navigation	Observed across all descriptions
	Comorbidities	Observed across all descriptions
	Analysis of information	Observed across all descriptions Note: Specific software or types of analyses vary
	Special populations (e.g., pregnant people, persons detained or under custody, persons who use drugs, people experiencing homelessness)	Observed across all descriptions
Skill in:	Reaching and working with people diagnosed with or possibly exposed to infectious disease	Observed across all descriptions
	Understanding implementation of new policies	Observed across all descriptions
	Reading, writing, and understanding reports	Observed across all descriptions Note: interpretation of epidemiologic reports more likely to be specified for higher-level positions
	Focusing on hard-to-locate individuals (e.g., people experiencing homelessness, people who are incarcerated or detained)	Inconsistently observed
	Outbreak management	Inconsistently observed
	Community engagement	Observed across all descriptions Note: inconsistent mention of outreach/community HIV/STI testing job duties
	Detailed surveillance activities	Observed across all descriptions
	Problem solving	Observed across all descriptions
Ability to:	Communicate effectively	Observed across all descriptions
	Organize health events/fairs	Inconsistently observed
	Deescalate and reengage with people diagnosed with or possibly exposed to infectious disease	Inconsistently observed
	Participate in outreach events and education seminars	Inconsistently observed
	Establish partnerships	Observed across all descriptions (terminology varies, e.g., “collaborate”)
	Work with populations (e.g., people with undocumented status, minors) with unique needs (e.g., language needs)	Observed across all descriptions
	Locate hard-to-find individuals (e.g., people experiencing homelessness, people who are incarcerated or detained)	Inconsistently observed

Listening Sessions

Listening sessions revealed job roles that were less rigid compared to the job descriptions reviewed in the job classification scan. Participants voiced more latitude in how they defined their own position, as many higher-level DI professionals in leadership positions classified themselves as Field Staff since they conducted work responsibilities—such as outreach events, assisting at those, and supervising field investigation—out the office. Due to governmental changes, participants also noted position changes due to staff restructuring and funding cuts, requiring them to take on responsibilities beyond their typical job role.

Comprising representation from all four regions of the US (northeast, south, midwest, west), as well as the US Caribbean region, a total of 39 DI professionals from eight US states and territories participated in one of eight listening sessions: South (n=15), West (n=14), US Caribbean (n=6), Midwest (n=<5), and Northeast (n=<5). Most participants (59%) worked at the field level, while the remaining 41% (n=16) held leadership positions.

Listening session data were coded based on alignment with the six CDI job domains, as well as on emerging themes identified from listening session data. New emerging themes included: Infection Knowledge, Ethics and Evidence-based Practice, and Positionality. Findings, along with select quotes from participants (set out below) start with the new emerging themes area and then move to the CDI job domains.

Infection Knowledge

The project team received detailed information regarding the level of knowledge (e.g., disease comprehension) a DI professional is expected to have for both STI-related conditions and non-STI-related conditions (e.g., vector borne and foodborne illnesses). DI knowledge of the signs and symptoms of STIs was a salient theme in the listening sessions, including treatment regimen variations:

“I would say basic, at least the basic of HIV and STDs, understanding the treatment. There’s long-term treatment and short-term treatment for HIV. Of course, long term for HIV. For gonorrhea and chlamydia, it’s a certain amount of pills for a certain amount of days, and then for syphilis, which is more complicated, I would think it needs to be explained. It all depends at what level or stage the person is because some people just think it’s going to an STD Clinic. They’re just gonna get treatment and it’s over with. And it’s not like that all the time.”
—Southern region participant

The complex nature of treating syphilis was described in most of the listening sessions, often in the context of interpreting medical results and being able to stage the condition based on client titers (the concentration of specific antibodies in the bloodstream).

“If there’s a lesion present, you know, that’s going to be... a 710, and then to follow the partners... through that way. So, it’s knowing the whole, especially with syphilis. It’s just knowing the whole stages of it, and how it works, and... compatible lesions and all of that.”
— Southern region participant

Some participants stated that syphilis cases were often assigned to more experienced DI professionals:

“[Syphilis is] usually something we save for our more advanced folks, because we want them to have a healthy knowledge, because syphilis, being the great pretender, it’s not as cut and dry as the other diseases.”
—Western region participant

In some areas, DI professionals are cross-trained to respond to any type of infection, due to lack of funding and/or lower STI morbidity in their jurisdiction. As did participants from other areas, several participants from the Western region mentioned DI outside of HIV/STI's and the need to rapidly glean information for specific non-STIs based on community needs. A DI professional in the West said, "As soon as rabies was added to our plate... it was a week or two, and we were kind of expected to know the details about it."

One participant described infection knowledge in the context of moving from a field role to a leadership position:

"[It] ebbs and flows on that, and so the idea is to have depth... to have people cross-trained so that they could... [be] responsive when a lab comes across, or when somebody's calling. Um, calling them... Being my own, like I said, one-person show and learning all this from... boots on the ground, to being, you know, supervisor/manager of a program."

—*Western region participant*

Ethics and Evidence-Based Practices

The ability to meet a client where they are mentally and physically, as well as seeing the whole person, not just their diagnosis, was often described as helpful in building rapport and for overall engagement in treatment and contact tracing.

"Are you able to have empathy? Are you able to communicate well? Like, are you able to gauge someone's comfort level with where the conversation is going? Like, those softer skills are really important."

—*Northeastern region participant*

Acknowledging the mental and physical factors that affected their clients, and how to address certain barriers via community referrals, was also discussed by participants:

"The other thing is... it's a kind of a personality thing? But somebody who cares. I 100% have seen if somebody doesn't care, they don't care about the people. They are terrible. Because in the same way, you know, the person needs shoes, or they have another problem. You're not willing to care about the person and help them as a whole person. Your work is going to be a lot less successful."

—*Western region participant*

"Meeting people where they are also comes with being able to... put aside your own personal beliefs at that moment. Because if not, you carry that with you, [you] may make a person feel like they're being attacked or they're being judged. And if we're trying to help them, then we don't want to pour our own personal things on them in the process. If that bleeds into it, you won't be able to make those connections to be able to continue the work."

—*Southern region participant*

Positionality

In all listening sessions, participants mentioned empathy and caring for their community as a key factor in success for DI professionals. Some listening session participants linked a professional's care for their community to their identity as a community member, such as:

“A successful DIS in a lot of communities reflects their communities, or is from the community, or can relate in some way and build that trust and relationship”
—*Western region participant*

One participant explained how their personal identity and culture helped bridge a language barrier with a client:

“It’s a really rural county... very limited resources, and she only spoke [language]... I am the only DIS in my team that can speak [language], as well as [another language], and be able to connect with her, and I was the only DIS that was, not only that, but also a healthcare professional that really took the time to talk with her, to educate her about her morbidity. Talk, get her resources that she never knew that she had, and the fact that I was able to... work with her, get her access to healthcare resources, find a provider with her to.... Be like, oh, that would work with her, get her a translator. That was huge for her. She never had someone in the US that was able to speak her own language to link with her and make sure that she had all the ancillary resources that she would need to live healthy.”
— *Western region participant*

When asked what attributes were present in the most successful DI professionals, listening session participants often cited passion for the job and an intrinsic motivation to do well and to care about clients:

“A good DIS is gonna excel because of their ability to, like, be present with someone, to be relational with someone, to listen to someone, and at the end of the day, to, like, really care. So, yeah, and it doesn’t have to be care about the person. It could be just care about their job very deeply, you know, or care about, like, doing their job well.”
—*Western region participant*

A recurring theme was that having a medical background does not guarantee success for a DI professional. One participant said, “Sometimes, just because they worked in a medical field before, or just because they were a doctor, and does not mean that they will work in this space.”—*Southern region participant*.

“So you wouldn’t get in if you didn’t have at least a high school education, and probably other type of little training, you know, like nurses aid, or something like that that’s not a medical assistant. That’s not a college degree, course, but at least it’s, you’ve got some baseline knowledge right even though it may be minimal. You have some type of baseline knowledge. So obviously, you have to be, you know, literate. Obviously. And willing to learn. And... the more education someone has you, it may be easier for them to be taught or mentored and pick up a lot of the information that they need to know. But I’ve had some DIS that only had high school education that were some of the best, where some that had master’s degrees and weren’t necessarily the best, and others with master’s degrees that were excellent, right... you can’t just eliminate all people just because they don’t have a certain level of education.”
—*Southern region participant*

Working as a DI professional requires growth and dedication. Several listening session participants highlighted the soft skills required of DI professionals, as well as the importance of aiming for progress instead of perfection when strengthening communication skills:

“And they [DI professionals] need to be kind to themselves, like, they think, like, if they don’t get it perfect every single time, that it’s a failure, and... Really, DIS work. It’s a people skill. There’s so much soft skills there that you have to go with progress over perfection.”

—*Western region participant*

“But I think emotional intelligence is obviously very, very important, and I think, being able to [have] someone who’s reflective, you know, kind of like going back kind of like what everyone is saying. Obviously, the work that we do can be very intense, emotionally taxing. You don’t always achieve the end goal that you’re trying or hoping for but being able to step back and reflect on what has occurred, and if there is a way to improve. So, I guess that kind of like, you know, the continuous process, improvement, or whatever it may be always kind of like keeping an eye out for that, and reflecting on what has occurred, and if there’s a way to improve it, I think can help too.”

—*Northeastern region participant*

Planning and Case Analysis

The professional ability to prioritize cases and clients and to manage time was mentioned by participants in all jurisdictions. One participant said:

“Prioritize. Like, you know, you have four patients. These are your four patients. This is what they have. Who would you pursue first as a case to intervene with, and you know, of course, in this day and age it would be the pregnant female who’s positive for an STI, because protecting the child—the unborn is the top priority. So? And then from there, you know, look at risk factors, you know, who’s at a higher risk. Somebody with HIV, that’s also positive for another disorder. Somebody who just has chlamydia or somebody who was a contact to, you know, gonorrhea. So I think that would also reflect their critical thinking skills and being able to prioritize the morbidities, or whatever.”

—*Southern region participant*

In addition to existing CDI sub-competencies for Planning and Case Analysis, several participants mentioned the ability to apply CDC case definitions to their assigned clients, as well as to decipher laboratory results and medical reports. This ability helps ensure that client assignments are appropriate for disease intervention. For example, one DI professional said:

“I think the most important thing is the ability to be able to decipher labs correctly and understand what you’re looking at, how to read the labs, how to read medical records also. Because you’re going through those and trying to pull out key bits of information to help make a diagnosis for a CDC case definition. So I think that’s probably the most important thing for DIS.”

—*Southern region participant*

Interviewing and Case Management Activities

Cross-cutting communication skills are necessary to succeed as a DI professional. In all listening sessions, participants described what they expected from those new to DI, as well as the expectation that communication and soft skills would continually develop and sharpen. A DI professional from the South stressed the importance of continuous professional growth to successful client interviewing and the ability to conduct interviews without forms and guides. She said, “At some point in time, I like to tell them I can do an interview on the back of a napkin if I have to.”

Building rapport and being able to explain the need to ask certain questions can promote partner elicitation. Participants expressed the importance of interpersonal communication skills and framing questions thoughtfully when gathering information from clients:

“How hard should I press, or how hard should I go at them? ...if there’s a way you can get the information from another source, like medical records, you know, and sometimes that’s the case, because they will, sometimes they say one thing to their provider, and then another thing to you. So if you can try and get the accurate information from a different source. But... I have called people back and said, ‘Hey, I think I might have heard you wrong. Could you talk to me?’... You know, like put the blame on me, like it was my fault, like I did something, I wrote it down wrong. I’m not one to like put, you know, ‘you’re lying to me.’ I mean, what’s the point in that?”
—Midwestern region participant

The ability to adapt complex information for delivery to people from various backgrounds and levels of understanding in an empathetic, nuanced tone is helpful. One DI professional said:

“You have to be able to have a conversation with a lot of different people on a whim, depending on what type of stage, if they’re finding out that they just got diagnosed with HIV, that’s a whole other... I’m not about to call you and say, ‘Hey, how are you today,’ you know, and whereas you might have to tell them, ‘Hey, you did. You did end up coming in contact with the infection called syphilis. This is what it is, let me educate you on it. Let me hold your hand while I do that.’ So, being a little bit empathetic, while giving your educational narrative, I think is really important as well.”
—Southern region participant

Field Services and Outreach Activities

Several DI professionals mentioned the benefits of learning from more experienced DI professionals in the field when starting the job:

“Don’t be afraid to ask for help. You don’t have to... know everything starting out. Actually, you won’t. And just, you know, lean on your colleagues and maybe more senior experienced workers, and ask. Ask questions, ask questions, ask questions.”
—US Caribbean region participant

The ability to assess personal safety during field services and outreach activities is important:

“If you feel safe, you feel okay, you could ask, ‘Hey, is such and such living here?’ But once you don’t feel safe, follow your gut instinct, I would say. Always follow your gut instinct. More than likely, you’re correct.”
—Southern region participant

Some listening session participants mentioned the ability to conduct venipuncture in the field or during outreach events. In some cases, DI professionals said they were accompanied by a nurse or other trained team member who conducted venipuncture during field visits and outreach events. For example, one said, “I appreciate [name redacted], because she did my field bloods for me, because I was a DS that didn’t draw blood. So, she did that for me”

—Southern region participant

The use of social media and text messaging varied significantly across states. For example, listening session participants in the South described being unable to search dating sites on their office computer or phone. But one DI professional described the guidelines for developing dating site profiles that represent the public health department in order to support contact tracing efforts and serve as a point for STI testing outreach:

“We are able to reach out to people via text message. And some of the social media sites. We do have text message is a regular part of our follow up, you know, call text message, mail letter, and then the field visit. But we can also send out an email. But obviously we have to remove, like any infectious disease or Division of STD Prevention and HIV Surveillance. And then Facebook, that’s restricted to primarily our HIV cluster cases or acute HIV cases.”

—Northeastern region participant

Surveillance and Data Collection

DI professionals must be able to collect pertinent information from their clients and document the information adequately. One listening session participant described concise yet comprehensive documentation in the context of internal collaboration: “If we have a particular client that’s a bit more challenging or needy, you know, we have to be able to work with each other and, you know, provide necessary and pertinent information”—US Caribbean region participant

Some participants highlighted the limited access to external systems and databases as a barrier to client care. One participant stated that they could depend on the community-based organization (CBO) to provide the client-level data they needed, but that there was a lag, which ultimately slowed down processes:

“Consistently, I get records, but it might take two weeks. I think we have 30 days to take care of everything, but if we have 30 days, that doesn’t mean I have 30 days. That means I get these records, and I take care of them the best of my ability. I send it to the next team. Let them do it. They might have to send it back to me because the patient, you interviewed the patient. The patient is now saying, ‘What are you talking about? I got treated for Chlamydia and for gonorrhea.’ And then I have to call the CBO. ‘Oh, yeah, they got treated for gonorrhea and chlamydia.’ But they’re not telling me they got treated with three shots. They’ve only given me one shot, so I better know that this person within a year didn’t have syphilis, this person did not have any signs and symptoms. Because of that, they are required to get three shots when there’s no history a year, no signs and symptoms. three shots. If this person is only giving me one, I have to then say, ‘Why? Did you guys give them three shots, or only one?’ And then I have to make sure that the three shots is within the timeframe. So they have up to 10 days between each shot. And if that doesn’t happen, I have to then say, ‘Hey, unfortunately, they’re not adequately treated. I need them to come back in and start the series over. I would like for you to call your patient back in, please, and get this done.’ And then that same record goes back to the team to do the same thing again. So it’s like a back and forth. So I better know what I’m talking about.”

—Southern region participant

Collaboration

Several listening session participants mentioned the importance of collaborating with medical providers in their community, often describing that confidence is needed as well as an existing working relationship or rapport such as, "... can you collaborate? ...can you, like, respectfully disagree with things and, like, advocate for a patient but still not break a relationship with a healthcare provider?"—Northeastern region participant

"I think having that confidence and saying, 'Well, this is what I know,' and having all of that information going into that conversation, because if you're saying, 'Well, let me check, let me double check, let me go check,' like, saying that while you're on the phone with them. You know, they're always saying they're running out of time, don't have a lot of time to talk. Just having that information so that they can go off of it. It's a lot better than just going into the conversation knowing, 'Well, I need to change my medications. Can you tell me?' and they're asking for dates and all of this. A lot of them can be really detailed and want all of that detailed information. And so just having everything beforehand that they could possibly ask, because they're only gonna pretty much talk to me that one time."

—Western region participant

Several listening session participants who had more than 10 years of experience described DI professionals as points of contact for doctors:

"I have very much people call me, or you know, say, 'Hey, how do I handle this? Or what do I need to report?' And you know, I had doctors all the time that you know were discussed this, and I remember, I worked at the hospital, too, and one of the infectious disease doctors. She would pull me aside and say, 'Okay, what do you, what's your thoughts,' and I have that with our clinicians right now. It's like, 'Come in here and look at this lesion. You've seen it before, you know. What do you think?'"

—Southern region participant

Participants also expressed the importance of internal collaboration with other team members for mentorship and developing solutions, as well as providing partner services that cater to team member strengths and traits for optimal client outcomes:

"Know your client, know your clientele if they are from an ethnicity or nationality that does not accept being of the LGBT community because of fear of death, or being shamed or shunned from their family, if they are not going to admit it, find a way to work around it. There are people who are in certain communities the men do not talk to women that are not their wives. Okay, 'Hey, [name redacted], do you mind calling my client for me? He doesn't talk to women.' We're still gonna get you right. We're still gonna get you treated. We're still gonna get you educated. We're still going to make sure we stop, we stop the spread."

—Southern region participant

Outbreak Response and Emergency Preparedness

Outbreak Response and Emergency Preparedness was the least frequently observed CDI domain across all listening sessions. DI professional involvement in the COVID-19 pandemic was often mentioned, including cross-cutting CDI domains in the context of the pandemic, such as the ability to collaborate with others, both within and outside the agency:

“It was something new. Nobody wanted to contract it, or be the first one to get it, so I’m sure that played on their hesitancy. However, you know, we were all in it together, and I guess eventually that understanding, ‘Hey, I’m not gonna just send you to go test. I’m going to be there supporting. I’m gonna be the person guiding the patients up to you. So you’re not in a house by yourself. I’m going to make sure you have all the PPE. You need all the specimens you just collect—five, 15 seconds, collect with the patient, get them out of the way. The rest is up to me. Five minutes of work, then you’re done.’ So eventually that sort of mended a lot of relationships. It eased a lot of bruised egos, so worked out in the end. But it definitely was challenging in the beginning. So, having that mindset and collaboration, being willing to speak up in difficult situations and having the well, I guess emotional intelligence. To know when to push, when to ease, when to pull back helps a lot as well.”

—US Caribbean region participant

The ability to act quickly when deciphering medical records and communicating with medical providers, as well as the ability to communicate health information without inducing or increasing fear, was also mentioned in the context of emergent cases or outbreak response:

“Also the ability to think quickly, especially in emergency situations, for diseases like botulism or meningitis, something where you have to be, able to access all of the information quickly, especially when you’re talking to providers and trying to relay treatment information over, or trying to get PEP [post-exposure prophylaxis] set up, and the ability to definitely, kind of work in a fast environment, especially when you have a large-scale exposure. And you’re trying to coordinate vaccine or immunizations or anything that’s required for whatever disease you’re working with. And then probably just people skills, because sometimes when you call people up and you tell them that [they] have a salmonella infection, and they don’t understand what that is, they kind of get scared, or they’re starting to, or trying to look for somebody to blame. So trying to talk them back down and telling them that, you know, it’s okay. We’re going to talk about it and kind of relaying what it is, and then how it’s treated, and, you know, letting them ask questions and being able to answer those.”

—Southern region participant

Core Competency Validation Consultations

Preliminary listening session findings and the results of the systematized review, job task analysis, and classification scan informed the draft of DI professional competencies used for the validation consultation, which occurred in late August 2025.

Twenty of the 39 listening session participants contributed to the competency validation consultation. Many respondents reported having more than 10 years of experience as a DI professional (n=9), followed by those with five-to-10 years (n=5) and one-to-three years of experience (n=<5). Most participants (n=13) had experience in supervising other DI professionals. The geographic distribution of respondents varied across the US. The largest proportion of respondents was based in the South (n=9), followed by the US Caribbean (n=5). The West, the Midwest, and the Northeast each accounted for less than 5 participant responses (Table 4).

Table 4*Characteristics of Core Competency Validation Consultation Participants*

	N
Years of experience as a disease intervention professional	
Less than one year	<5
One-to-three years	<5
More than three years but less than five years	<5
Five-to-10 years	5
More than 10 years	9
Supervision experience	
Yes	13
No	<5
Unsure / Prefer not to answer	<5
Region of employment	
US Caribbean	5
South	9
West	<5
Midwest	<5
Northeast	<5

Participants were asked to rate the Importance and Relevance of each of the nine proposed competency domains using a five-point scale ranging from one (not important/relevant) to five (essential/relevant). All nine competency domains were ranked as highly important and relevant for DI professionals. The mean and standard deviation of each domain is available in Table 5.

Table 5*Core Competency Validation Consultation Results for Importance and Relevance*

Competency Domain	Importance	Relevance
Infection Knowledge	5.00 (0.00)	4.90 (0.308)
Ethics and Evidence-Based Practices	4.75 (0.55)	4.70 (0.733)
Positionality	4.6 (0.754)	4.50 (0.761)
Planning and Case Analysis	4.90 (0.308)	4.85 (0.366)
Interviewing and Case Management Activities	4.95 (0.224)	4.90 (0.308)
Field Services and Outreach Activities	4.75 (0.550)	4.80 (0.410)
Surveillance and Data Collection	4.65 (0.587)	4.65 (0.587)
Collaboration	4.60 (0.598)	4.65 (0.587)
Outbreak Response and Emergency Preparedness	4.50 (0.761)	4.35 (0.813)

By comparing text-entry feedback with what we heard in the listening sessions and found in the systematized review, we then revised the definitions to reflect DI professional perspectives. Text-entry feedback from participants in the validation consultations was integrated only when the input was also observed in the listening sessions or documents from the systematized review. Participant feedback for each of the nine proposed competency definitions is detailed below.

***Validation consultation feedback that was also observed in listening sessions and/or systematized review documents*

Infection Knowledge

Proposed definition: The ability to acquire and apply evolving information on epidemiology, testing, prevention, transmission, clinical presentation, and treatment of HIV, sexually transmitted infections (STIs), tuberculosis (TB), COVID-19, and emerging or re-emerging infections to effectively guide public health interventions

Participants gave the following input in the text-entry portion of the consultation:

- Coinfections or having re-emerging infections simultaneously**
- Interpreting test results**
- Hepatitis C**
- Long COVID

The ability to interpret test results was a salient theme in the listening sessions, as well as systematized review of DI professional job descriptions and related reports. Hepatitis C virus (HCV) was also observed, as well as the ability to work with clients who have comorbidities and co-infections. Long COVID and the implications of the condition in disease intervention was not observed in listening sessions and systematized review documents.

Ethics and Evidence-Based Practices

Proposed definition: The ability to ethically and effectively plan, analyze, and manage cases using epidemiological principles and informed strategies, while maintaining confidentiality and professionalism (Topics discussed could include ethical and professional conduct, social and economic conditions contributing to health, etc.)

Participants gave the following input in the text-entry portion of the consultation:

- Cultural competence (which is different from cultural humility)**
- Community engagement and trust-building**
- Equity in data practices, such as identifying and correcting bias in collection, analysis, and reporting, and ensuring data are disaggregated to reveal disparities**
- Lack of emphasis on intersectionality and trauma-informed approaches, which help account for the ways overlapping identities and past trauma shape health outcomes**
- Legal and regulatory awareness (e.g., informed consent, public health law)** and reflexivity around power and privilege, which are central to ethical decision-making**
- Ethical, accessible, and culturally appropriate communication to support health literacy and reduce stigma**
- Innovative strategies to management and interventions such as AI models for bridging access

Innovative strategies to bridge access, particularly the use of artificial intelligence (AI), were not explicitly stated in the listening sessions or in the systematized review documents.

Positionality

Proposed definition: The practice of self-awareness, adaptability, and continuous growth in disease intervention work, encompassing a flexible response to public health emergencies, critical reflection on personal biases, development of a professional interviewing style, prioritization of mental well-being, and commitment to ongoing learning

Participants gave the following input in the text-entry portion of the consultation:

- The length of time as a DIS could/should be considered. A brand new DIS may not be as developed in those areas as an experienced or Lead Worker. Those skills tend to develop over time and with proper supervision and guidance.**
- It's important to develop a professional yet non-clinical interviewing style. We must speak to individuals at their level of understanding, not ours.**
- The professional interviewing style** is the most important aspect of this competency.

In the listening sessions, participants often described the evolution of skills that is experienced by a DI professional the longer they are in the field. We recognize that positionality, as well as the other eight identified competencies, are further developed and honed over time. Key features of positionality are expected of DI professionals during their professional duties so that they can communicate effectively and integrate their background and personal experiences into rapport-building opportunities with clients and others in DI.

Planning and Case Analysis

Proposed definition: The ability to collect client and epidemiological data, prioritize caseloads, apply disease-specific timeframes and CDC case definitions, leverage digital tools and community resources, and analyze case details to guide accurate, ethical, and effective intervention strategies

Participants gave the following input in the text-entry portion of the consultation:

- Basic analysis of collected data (especially in resource-limited settings where there are no dedicated data analysts/epis to support the DIS)**

The ability to analyze collected data, especially in resource-limited settings, was observed in the listening sessions. Specifically, DI professionals in the US Caribbean, and rural regions of the West and the South, voiced the need to be “cross-trained” or competent in several areas to meet the DI demands in their communities with limited resources and DI personnel.

Interviewing and Case Management Activities

Proposed definition: The ability to conduct confidential, comprehensive interviews to assess risk, elicit contact and exposure information, navigate barriers to care, develop and monitor action plans, and

communicate effectively across populations while applying public health principles and adapting to complex social and health contexts

Participants gave the following input in the text-entry portion of the consultation:

- Remember to be yourself and develop your own style of interviewing.**
- To communicate in a sex positive way. It helps alleviate feelings of embarrassment and shame.**

Individual interviewing style was described in the listening sessions as a skill that develops over time and as a DI professional gains more experience and confidence in interviewing. Sex-positive language was mentioned in some listening sessions; more often, nonjudgmental demeanor was described as necessary to building rapport and gathering information during client interviews.

Field Services and Outreach Activities

Proposed definition: The ability to plan and conduct safe, confidential, and responsive investigations, treatment delivery, and community engagement, while maintaining infection control, navigating challenging environments, and clearly communicating the role of disease intervention professionals

Participants gave the following input in the text-entry portion of the consultation:

- Provide outreach education and engage with providers and health centers who are testing** and providing walk-in/urgent care encounters.
- Remember, you can plan, but you can not plan the outcome. Don't take others' behavior personally. If you feel unsafe, leave asap.**

In some areas, DI professionals collaborate with healthcare providers and settings to deliver and host outreach events. This feature of outreach is contingent on jurisdiction and community setting, as outreach can occur in various places such as universities, clubs, and public events. When discussing field safety, DI professionals in the listening sessions often reflected on personal safety at an intuitive level; when they have felt unsafe, they removed themselves from the situation or environment.

Surveillance and Data Collection

Proposed definition: The ability to ethically verify, gather, and document accurate information from diverse sources and interviews to monitor infectious disease trends, identifying emerging concerns, and supporting timely and informed public health action

Participants gave the following input in the text-entry portion of the consultation:

- Monitoring disease trends requires some level of skill in data analysis**
- Being able to disseminate and articulate the data is crucial. Also, using the data to drive evidence-based prevention strategies**

As stated in Planning and Case Analysis, the degree to which a DI professional must be able to monitor and analyze disease trends is often based on community needs and workforce demands. Based on systematized review documents and listening session findings, DI professionals in leadership positions are more often

required to see “the bigger picture” of disease trends in an area and the broader public health implications of the data that are collected during DI.

Collaboration

Proposed definition: The ability to effectively engage with healthcare providers, laboratories, community organizations, and public health entities to ensure coordinated care, accurate reporting, informed outreach, and ethically grounded communication that supports responsive and efficient disease intervention efforts

Participants gave the following input in the text-entry portion of the consultation:

- Being able to explain reportable diseases and be transparent on how diseases/infections are reported. Being able to explain what disease investigation is to providers/nurses so they know that we are doing a public health investigation, and HIPAA doesn't apply in the same way they may think**
- Ensure all referrals are active.

Participants in the listening sessions often described the importance of being able to articulate to clients and to healthcare providers why they were asking certain questions or collecting specific information. Also, it emerged that community awareness of the DI profession was limited, requiring DI professionals to describe their role in the field, as well as to healthcare providers who might not be aware that, as a public health agent, they must access patient information outside of usual HIPPA guidelines.

Outbreak Response and Emergency Preparedness

Proposed definition: The ability to apply disease intervention techniques, support coordinated public health efforts, and contribute to post-response evaluations to ensure effective, ethical, and informed action during disease outbreaks and public health emergencies

Participants gave the following input in the text-entry portion of the consultation:

- Introduction to ICS [incident command system] structure for emergency declarations**
- “Would this and Infection knowledge not go hand and hand?”

Outbreak Response and Emergency Preparedness-related competencies were least frequently observed in the systematized review documents and listening sessions. We believe this is due to the nature of the domain; this competency does not include the knowledge, skills, or abilities that are required of DI professionals on a daily basis.

Finalized Competencies for DI Professionals

The finalized competencies for DI professionals integrate results from each component of our project and build on existing reports and information regarding the DI workforce.

For all sections of our project, we identified areas of alignment with the six existing CDI domains, as well as with additional areas of importance and relevance to DI professionals. Based on our systematized review, listening sessions, and core competency validation consultations, we propose the following competencies:

- 1. Infection Knowledge:** The ability to guide public health interventions based on evolving information on epidemiology, testing and interpreting results, prevention, transmission, clinical presentation, and treatment of HIV, sexually transmitted infections (STIs), tuberculosis (TB), COVID-19, Hepatitis, emerging or re-emerging infections, and the impact of comorbid conditions
- 2. Ethics and Evidence-Based Practices:** The ability to plan, analyze, and manage cases using epidemiological principles and informed strategies while maintaining confidentiality, professionalism, and legal awareness, recognizing the impact of overlapping identities and past trauma on health outcomes (intersectionality and trauma-informed approaches), recognizing social and economic conditions contributing to health and applying strategies that promote universally relevant public health interventions
- 3. Positionality:** The practice and pursuit of self-awareness, adaptability, and continuous growth in disease intervention work, encompassing a flexible response to public health emergencies, critical reflection on personal biases, development of a professional yet approachable interviewing style, prioritization of mental well-being, and commitment to ongoing learning
- 4. Planning and Case Analysis:** The ability to collect client and epidemiological data, prioritize caseloads, apply disease-specific timeframes and CDC case definitions, harness digital tools and community resources, and analyze case details to guide accurate, ethical, and effective intervention strategies
- 5. Interviewing and Case Management Activities:** The development of an individualized professional style for conducting confidential, comprehensive interviews that can assess risk, elicit contact and exposure information, navigate barriers to care, develop and monitor action plans, and communicate effectively across populations while applying public health principles and adapting to complex social and health contexts.
- 6. Field Services and Outreach Activities:** The ability to plan and conduct safe, confidential, and responsive investigations, treatment delivery, and community engagement, while maintaining infection control, navigating challenging environments, and clearly communicating the role of DI professionals
- 7. Surveillance and Data Collection:** The ability to ethically gather, document and verify the accuracy of information from diverse sources and interviews for the purposes of monitoring infectious disease trends, identifying emerging concerns, and supporting timely evidence-based and data-driven public health action
- 8. Collaboration:** The ability to engage with healthcare providers, laboratories, community organizations, and public health entities to ensure coordinated care, accurate reporting, informed outreach, and ethically grounded communication that supports informed and efficient DI efforts
- 9. Outbreak Response and Emergency Preparedness:** The ability to ensure effective, ethical, and informed action during disease outbreaks and public health emergencies by applying DI techniques, supporting coordinated public health efforts aligned with Incident Command Systems (ICS), and contributing to post-response evaluations

Challenges

Due to recent adjustments to federal government guidelines, many job titles related to DI work had been changed, complicating the document search process for this project. When information on job descriptions was not available, the project team could only estimate relevance based on tasks and KSAs. Additionally, listening session recruitment and planning was impacted by schedule and workload responsibilities of the engaged DI and public health professionals. Timeline constraints limited our ability to extend an invitation to listening session participants from Tribal Nations to participate in the validation consultations. Additionally, due to timeline constraints, we adapted the initial plan to conduct Delphi consultations, which involve two-to-three rounds of DI professional feedback to a single round of feedback, limiting the project component to validation consultations.

Next Steps

Based on our project outcomes, we recommend several strategic actions to strengthen the national capacity of the DI workforce. These recommendations will focus on four key areas:

- Establishing a unified national competency framework
- Addressing critical gaps in preparedness and quality improvement
- Developing standardized training and credentialing pathways
- Providing support for workforce sustainability

First, we recommend developing a national competency framework that provides a clear and consistent standard for DI professionals in the field. This should adopt the six CDI job domains as a foundation standard and incorporate emerging competencies defined by DI professionals. Additionally, field-validated skills should be integrated into the competency benchmarks, including critical thinking, self-awareness, and the ability to communicate effectively with leadership and community partners. Refining and validating sub-competencies for each of the competency definitions is needed. By further development, refinement, and validation of sub-competencies that align with each of the nine competency definitions in this report, DI professionals and public health leadership can more clearly, conceptually, and operationally structure DI response as an integral role in our nation's public health workforce.

Second, addressing gaps in preparedness and quality improvement is critical. Many current training programs available are outdated and do not prepare DI professionals adequately for the complex demands of their roles. To address this gap, we recommend requiring competencies in outbreak response, surge capacity, and emergency management across all levels of the workforce. Furthermore, expectations regarding quality improvement, data analysis, and reporting should be embedded in mid-level and executive roles to ensure performance improvement.

Third, the workforce would benefit from standardized training and credentialing pathways by developing tiered training modules mapped to field, manager, and executive roles that will create clear progression opportunities. Academic programs and workforce development pipelines will need to adopt the forthcoming competency framework and promote its use, ensuring the alignment between education and practice.

Fourthly, increased public awareness of the role of DI professionals in public health can promote community understanding of the positive impact of DI while supporting the onboarding and retention of DI professionals who will also benefit from clearer understanding of their job responsibilities.

Finally, workforce sustainability is a key focus. Consistent funding mechanisms are crucial for minimizing reliance on short-term or grant-funded positions. In addition, the integration of DI roles into broader public health structures, such as TB, STI/HIV, and outbreak teams, should be encouraged.

Operationalizing these recommendations will provide a clear pathway for building a stronger, more sustainable, and more capable workforce that is prepared to meet both current and emerging public health challenges.

References

- ASPPH & NBPHE. (2025). CDI exam content outline. Certified in Disease Intervention. National Board of Public Health Examiners. <https://www.nbphe.org/wp-content/uploads/2025/08/CDI-Exam-Content-Outline-2025.pdf>
- Beiderbeck, D., Frevel, N., von der Gracht, H. A., Schmidt, S. L., & Schweitzer, V. M. (2021). Preparing, conducting, and analyzing Delphi surveys: Cross-disciplinary practices, new directions, and advancements. *MethodsX*, 8, 101401. <https://doi.org/10.1016/j.mex.2021.101401>
- Cole, R. (2023). Inter-rater reliability methods in qualitative case study research. *Sociological Methods & Research*, 53(4), 1944–1975. <https://doi.org/10.1177/00491241231156971>
- Dalglish, S. L., Khalid, H., & McMahon, S. A. (2021). Document analysis in health policy research: The READ approach. *Health Policy and Planning*, 35(10), 1424–1431. <https://doi.org/10.1093/heapol/czaa064>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE Publications, Inc., <https://doi.org/10.4135/9781483384436>
- Leider, J. P., Castrucci, B. C., Robins, M., Hare Bork, R., Fraser, M. R., Savoia, E., Piltch-Loeb, R., & Koh, H. K. (2023a). The Exodus of State And Local Public Health Employees: Separations Started Before and Continued Throughout COVID-19. *Health Affairs*, 42(3), 338–348. <https://doi.org/10.1377/hlthaff.2022.01251>
- Leider, J. P., Yeager, V. A., Kirkland, C., Krasna, H., Hare Bork, R., & Resnick, B. (2023b). The State of the US Public Health Workforce: Ongoing Challenges and Future Directions. *Annual Review of Public Health*, 44, 323–341. <https://doi.org/10.1146/annurev-publhealth-071421-032830>
- Billock, R. M., Samoff, E., Lund, J. L., Pence, B. W., & Powers, K. A. (2021). HIV Viral Suppression and Pre-exposure Prophylaxis in HIV and Syphilis Contact Tracing Networks: An Analysis of Disease Surveillance and Prescription Claims Data. *JAIDS: Journal of Acquired Immune Deficiency Syndromes*, 88(2), 157–164. <https://doi.org/10.1097/QAI.0000000000002739>
- Centers for Disease Control and Prevention. (2024, April 24). *Disease intervention*. U.S. Department of Health & Human Services. <https://www.cdc.gov/sti/php/projects/disease-intervention.html>
- Cope, A. B., Mobley, V. L., Samoff, E., O'Connor, K., & Peterman, T. A. (2019). The Changing Role of Disease Intervention Specialists in Modern Public Health Programs. *Public Health Reports*, 134(1), 11–16. <https://doi.org/10.1177/0033354918813549>
- Cramer, R., & Ludovic, J. A. (2023). State Policies Relevant to Disease Intervention Specialists in the United States. *Sexually Transmitted Diseases*, 50(8S), S14–S17. <https://doi.org/10.1097/OLQ.0000000000001661>
- Heumann, C. L., Katz, D. A., Dombrowski, J. C., Bennett, A. B., Manhart, L. E., & Golden, M. R. (2017). Comparison of in-person versus telephone interviews for early syphilis and human immunodeficiency

virus partner services in King County, Washington (2010–2014). *Sexually Transmitted Diseases*, 44(4), 249–254. <https://doi.org/10.1097/OLQ.0000000000000583>

- Hood, J. E., Katz, D. A., Bennett, A. B., Buskin, S. E., Dombrowski, J. C., Hawes, S. E., & Golden, M. R. (2017). Integrating HIV Surveillance and Field Services: Data Quality and Care Continuum in King County, Washington, 2010–2015. *American Journal of Public Health*, 107(12), 1938–1943. <https://doi.org/10.2105/AJPH.2017.304069>
- Katz, D. A., Dombrowski, J. C., Kerani, R. P., Aubin, M. R., Kern, D. A., Heal, D. D., Bell, T. R., & Golden, M. R. (2016). Integrating HIV Testing as an Outcome of STD Partner Services for Men who Have Sex with Men. *AIDS Patient Care and STDs*, 30(5), 208–214. <https://doi.org/10.1089/apc.2016.0027>
- MacDonald, P. D., Nelson, A. L., Hightow-Weidman, L., & Leone, P. A. (2007). Disease Intervention Specialists as a Resource in a Public Health Emergency. *Biosecurity and Bioterrorism*, 5(3), 239–248. <https://doi.org/10.1089/bsp.2007.0019>
- Martin, E. G., Myderrizi, A., Kim, H., Schumacher, P., Jeong, S., Gift, T. L., ... & Chesson, H. W. (2025). Disease Intervention Specialist-Delivered Interventions and Other Partner Services for HIV and Sexually Transmitted Infections: A systematic review. *American Journal of Preventive Medicine*, 68(1), 182–203. <https://doi.org/10.1016/j.amepre.2024.08.004>
- Mase, W. A., Hansen, A. R., Smallwood, S. W., Shah, G., Peden, A. H., Mulherin, T., & Bender, K. (2018). Disease Intervention Specialist Education for the Future: An Analysis of Public Health Curricula. *Public Health Reports*, 133(6), 738–748. <https://doi.org/10.1177/0033354918792014>
- National Board of Public Health Examiners. (n.d.). *Certified in Disease Intervention*. <https://www.nbphe.org/certified-in-disease-intervention/>
- Public Health Accreditation Board. (2017, June). *Disease Intervention Specialist Certification Project: Final Report to the Centers for Disease Control and Prevention*. <https://phaboard.org/wp-content/uploads/PHAB-DIS-Full-Report.pdf>
- Taylor, C. (2023). *A Look at a Critical Player in Public Health, Disease Intervention Specialists*. Association of State and Territorial Health Officials. <https://www.astho.org/communications/blog/look-at-critical-player-in-ph-disease-intervention-specialists/>
- Taylor, M. M., Mickey, T., Winscott, M., James, H., Kenney, K., & England, B. (2010). Improving partner services by embedding disease intervention specialists in HIV-clinics. *Sexually Transmitted Diseases*, 37(12), 767–770. <https://doi.org/10.1097/OLQ.0b013e3181e65e8b>
- Tributino, A., Montgomery, M. C., Bertrand, T., Marak, T., Almonte, A., van den Berg, J., St John, K., Browning, C., Medina, M. M., Morse, A., & Chan, P. A. (2018). Partner notification outcomes after integration of an on-site disease intervention specialist at a sexually transmitted disease clinic. *PloS One*, 13(3), e0194041. <https://doi.org/10.1371/journal.pone.0194041>

- World Health Organization. (2017, May 9). *Infection prevention and control: Contact tracing*. <https://www.who.int/news-room/questions-and-answers/item/contact-tracing>
- VERBI Software. (2025). Consult. Sozialforschung GmbH. MAXQDA 2025 [Software]. Berlin, Germany. <https://www.maxqda.com/>.
- Zemmel, D. J., Kulik, P. K. G., Leider, J. P., & Power, L. E. (2022). Public Health Workforce Development During and Beyond the COVID-19 Pandemic: Findings From Qualitative Training Needs Assessment. *Journal of Public Health Management and Practice*, 28(5 Suppl 5), S263–S270. <https://doi.org/10.1097/PHH.0000000000001524>

Systematized Review Data Extraction

Document	State		16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48	
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA	
CORE FUNCTIONS	Disease Investigations	Conducting Confidential Disease Investigations by interviewing individuals diagnosed with communicable diseases and their contacts to identify sources and prevent further spread	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Education and Partner Services	Providing Education and Counseling and Partner Services on disease transmission, prevention strategies, and treatment options to clients, partners, and community groups	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Contact Tracing and Case Management	Performing Contact Tracing and Case Management to ensure exposed individuals receive appropriate testing, treatment, and referrals	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Collaborating	Collaborating with Healthcare Provider Prevention Initiatives, laboratories, and community organizations to coordinate care, provide technical assistance, and support public health initiatives	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Collecting and Analyzing Data	Collecting and Analyzing Data as well as maintaining detailed records and reports in surveillance systems	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Miscellaneous PH Intervention Tasks	Miscellaneous PH Intervention Tasks such as may involve phlebotomy, HIV/STD testing, conducting site visits, and participating in emergency preparedness efforts. See itemized tasks below:	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Phlebotomy	x	x	x	x	x	x	x	x							x		x	x	x	x	x		x	x	x	
		HIV/STD	x	x	x	x	x	x	x		x	x	x		x	x			x	x	x	x		x	x	x	x	
		Site Visits (Field Work)	x	x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	
			Emergency Preparedness / Outbreak Response	x		x	x	x	x	x	x	x							x	x		x	x					x
Public Health and Disease	Principles and Practices: Knowledge of public health principles sufficient to assist with epidemiological studies, analyze public health information, explain public health programs and issues, and present information. Knowledge of public health theory, principles, and practices is needed to advise and consult with health professionals. Understanding the concepts, principles, theories, methods, and tools associated with protecting and improving the health of people and their communities, such as promoting healthy lifestyles, researching disease/injury prevention, and detecting, preventing, and responding to infectious diseases. General knowledge of public health issues and concepts related to communicable and chronic diseases.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Communicable and Chronic Diseases: A strong knowledge of communicable diseases, including their etiology, manifestations, progression, diagnosis, and treatment, is essential. This includes detailed knowledge of sexually transmitted, chronic, foodborne, and general communicable diseases like tuberculosis, hepatitis, vaccine-preventable diseases, cardiovascular disease, diabetes, cancer, and others. DIS should know the causes, symptoms, and social and environmental factors affecting the transmission of these diseases, as well as their control methods and medical/epidemiological characteristics. Understanding the incidence of and exposure to specific diseases like HIV/AIDS, tuberculosis, and STDs is mentioned. Knowledge of harm reduction principles.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

Document		16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State		AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
		x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
	Current Information and Trends: It is important to keep current with local, national, and international disease trends and outbreaks. This involves obtaining current information pertaining to the symptoms, modes of transmission, control, treatment, and effects of assigned diseases. Maintaining knowledge of current STI treatment guidelines.																									
	Principles and Techniques: Knowledge of epidemiology to advise program participants on communicable diseases, assist in epidemiological studies, and edit research documents. Epidemiological disease investigation principles and techniques. Principles and practices of field investigation. Scientific investigation and research techniques to assist in epidemiological studies, suggest data collection methods, conduct needs assessments, record and analyze scientific data, monitor disease incidence, and identify disease outbreaks. Modern practices and principles of medical disease counseling and standardized protocols for investigation and intervention with positive results.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Data and Analysis: DIS should have knowledge of methods for compiling, organizing, and analyzing data. This includes data analysis techniques and basic statistical methods. Understanding STI/HIV/VH data use to direct prevention and care activities is noted.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Outbreaks: Knowledge of methods of disease investigations, clusters, and outbreaks is required. Identifying potential outbreaks and issues related to surveillance and control is part of the knowledge base.	x	x			x	x	x		x	x	x			x	x	x		x	x	x	x				x
	Program Laws and Regulations: Knowledge of public health program laws, rules, regulations, policies, and procedures is required, sufficient to analyze medical data and reports for compliance/impact. Considerable knowledge of federal and state laws pertaining to public health programs is necessary. This includes pertinent laws, regulations, administrative rules, and policies related to the reporting and control of communicable diseases. Knowledge of accepted techniques of communicable disease control and rules/regulations relative to it is noted. Understanding program requirements and applicable laws to provide direct care and education is necessary. Knowledge of HIPAA practices and safeguards, as well as federal and state laws/regulations regarding confidentiality. Law and Government principles, including legal codes, court procedures, precedents, regulations, executive orders, and agency rules.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Healthcare System Knowledge: DIS should have knowledge of public health systems. This includes working knowledge of available community resources and services and their appropriate application. Knowledge of community groups, organizations, and agencies providing health services is also important. Understanding healthcare delivery systems and the role, responsibility, and interrelationships of various health disciplines and agencies is noted.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Program Operations and Standards: Knowledge of standard operating procedures and program protocols and manufacturer guidelines for quality assurance is required. Understanding of the NC TB Control Manual and CDC treatment guidelines is also specified.		x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Terminology and Concepts: Medical terminology sufficient to interpret medical information and communicate effectively with health professionals is needed.. Understanding medical terms and principles of exposure infection, infectious period, potentially infectious interactions, symptoms, pre-symptomatic, and asymptomatic infection is required. Knowledge of human anatomy and physiology, including the common causes and symptoms of communicable and chronic diseases, is mentioned. Knowledge of medicine, including diagnostic techniques, treatment alternatives, drug properties/interactions, and preventive healthcare, is listed as a competency.	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Laboratory Information: Knowledge of laboratory testing procedures is necessary. This includes understanding how to interpret test results, lab report analysis for infectious diseases, and appropriate techniques to collect, preserve, and transport specimens. Knowledge of diagnostic tests for communicable diseases is also noted.	x	x	x	x	x	x		x	x		x					x	x		x	x		x	x	x	x
	Confidentiality: A strict understanding of patient confidentiality, including the ability to conduct interviews without violating it, is required. Knowledge of applicable provisions of confidentiality requirements is mentioned.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Document			16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
Knowledge	Behavioral and Social Factors	Interviewing and Counseling: Knowledge of interviewing and counseling techniques is necessary. This includes techniques for highly personal interviews, and understanding motivational interviewing techniques and principles. Knowledge of individual and group behavior is also noted.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Cultural and Socioeconomic Factors: Understanding varied social, economic, cultural, and lifestyle characteristics is important. Considerable knowledge of the impacts of communicable diseases on specific social, cultural, health, economic, and demographic characteristics of populations is required. Knowledge of cultural and sociological patterns as they affect health programs is also mentioned.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Behavioral Science: Behavioral aspects related to the etiology and prevention of specific diseases are part of the required knowledge. General knowledge of sociological and psychological principles is listed.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Data and Technology	Data Management Systems: Knowledge of computer software applications is needed. This includes routine software like word processing, spreadsheets, presentation software, and databases. Proficiency in Microsoft products is specifically mentioned, as is experience working with large database systems. Utilizing electronic disease surveillance systems is a key function, implying knowledge of these systems.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Other Systems: Knowledge of or the ability to learn a data reporting system such as the National Incident Command System (NIMS) (demonstrated by completing ICS 100, 200, 700, and/or 800) or some other state data reporting system used for emergency response and contact tracing roles.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Administration and Programs	Program Planning and Management: Knowledge of planning, coordinating, implementing, and evaluating communicable and/or chronic disease prevention programs and activities is required. Knowledge of the grant application process and grant writing is also noted. Knowledge of supervisory practices and procedures is essential for supervisory roles.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Standards and Protocols: Knowledge of established guidelines, policies, and procedures is necessary for various tasks like partner notification and case management. Standards of care for assigned program areas are also listed.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Safety and Security	Safety Techniques: Knowledge of personal safety techniques is required.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Public Safety: Knowledge of Public Safety and Security principles, including relevant equipment, policies, and procedures, is listed.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Research	Methodology: Knowledge of scientific research methods is needed to assist in epidemiological studies. Research principles and methodology, along with principles and methods of health-related research, are also mentioned, particularly at higher levels. Knowledge of evidence-based principles, strategies, methods, processes, and best practices for identifying health issues and conducting research/investigations/evaluations is listed under Health Research competency.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Communication and Interpersonal Skills		Verbal and Written Communication: Strong listening, verbal, and written communication skills are essential. DIS should be able to communicate effectively, both orally and in writing, and present ideas effectively verbally and in writing. This includes the ability to express ideas effectively verbally and in writing, speak clearly so others can understand, and prepare and present oral and written reports. Speaking effectively in public and presenting information verbally are also noted. Writing skills include drafting correspondence, documents, and reports, business writing, and technical writing. DIS should be able to write plans and reports proficiently with excellent grammar, punctuation, and syntax for the appropriate audience.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Interpersonal Interaction: The ability to establish and maintain effective working relationships with agency employees, community groups, media, the public, health care facilities staff, health professionals, vendors, grant recipients, other employees, and representatives of other agencies and organizations is crucial. DIS should be able to relate easily to people from diverse cultures and varying lifestyles and work with diverse populations. This includes interacting compassionately and tactfully with patients and family members and establishing rapport and effective communications with clients and stakeholders from diverse backgrounds. Interacting with the public calmly and effectively is also listed, as is the ability to apply concepts of cultural sensitivity. Working collaboratively with team members, other agencies, and partners.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Document	State		16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
	Data Management and Analysis	Counseling and Interviewing: Skills in interviewing techniques and counseling procedures are necessary. This includes the ability to conduct effective fact-gathering interviews of a highly personal nature and apply appropriate motivational techniques. Interviewing clients using motivational interviewing techniques is specifically mentioned.	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
		Data Handling: Skills in compiling, organizing, and analyzing data are required. Data management and analysis skills are noted generally, and skills in data collection methods are listed. DIS should be able to use database management systems for tracking and reporting. Proficiency in data entry and experience working with large database systems is mentioned. Analysis and Interpretation: DIS must be able to analyze and interpret data. This includes performing statistical analysis and epidemiologic analysis. Analyzing surveillance and program data is also listed. The ability to analyze highly confidential and technical medical records and reports is necessary. Skills in analyzing numerical information, analyzing information/data, analyzing medical-sexual situations, and analyzing policy issues are required.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Investigation and Case Management	Investigation: Skills in applying communicable disease intervention techniques such as interviewing, investigation, screening, and surveillance are required. This includes the ability to conduct health investigations and epidemiological investigations. Field investigation skills are also explicitly mentioned.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Case Management: Skills in case management of clients and contacts are necessary. This involves partner elicitation and contact tracing.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Training and Education	Training and Presentation: Skills in preparing and conducting training programs are needed. DIS should be able to develop, present, and/or participate in educational activities, including presenting health program information to educate individuals and groups. Presentation skills are listed generally, and the ability to speak to professional and community groups is noted.		x	x	x	x	x	x	x	x		x	x		x	x	x		x	x	x	x		x	x	x
		Education Techniques: Knowledge of techniques and methods of effective individual and community education is required. Skills in assessing training needs and evaluating courses/instructors are also mentioned.		x	x	x	x	x	x	x	x		x	x		x	x	x		x	x	x	x		x	x	x
	Administration and Organization	Planning and Organization: Skills in planning, organizing, and coordinating work activities are necessary. Organizing work efficiently is important. Organizing and directing selective or comprehensive disease investigations is also listed.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Management: For supervisory roles, knowledge of supervisory practices and procedures and the ability to plan, organize, and oversee the work of subordinates are essential. Skills in managing personnel resources are also required. This includes assessing staff training needs, scheduling training, planning/organizing/providing on-the-job training, and maintaining training records. Skill in team building is also mentioned.	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
		Coordination: Skills in coordination are listed. This involves coordinating program operations with other district programs and county health departments, coordinating training, and coordinating outreach and testing activities. The ability to effectively coordinate volunteers is noted.		x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Problem Solving and Critical Thinking	Analysis and Evaluation: DIS should have skills in analysis and evaluation, including the ability to analyze data and evaluate pertinent information and situations. Evaluating programs and plans is also noted. Skills in critical thinking, complex problem-solving, judgment and decision-making, and quality control analysis are required.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Problem Solving: Utilizing problem-solving strategies is a key skill. DIS should be able to multi-task and problem-solve effectively. The ability to identify problems, determine the accuracy and relevance of information, use sound judgment, generate/evaluate alternatives, and make recommendations is listed as a problem-solving competency.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Technology and Software	Computer Software Proficiency: Proficiency in computer software is a widely required skill, including using computers effectively, operating a personal computer, and being adept at using computer software/hardware and social media. Operations of various software applications programs, such as word processing, spreadsheets, presentation software, and electronic mail, are also listed. Using electronic reporting systems, databases, and software programs is necessary. Using database management systems for tracking and reporting is noted.		x	x	x	x	x	x		x	x	x			x	x	x	x	x	x	x	x	x	x	x	x

Document			16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
Skills	Clinical Support	Specimen Collection: Skills in collecting and/or transporting specimens are mentioned. This includes the ability to perform venipuncture and varied tests like blood and fluid samplings. Skills in learning phlebotomy in nontraditional settings are also noted .	x	x	x	x	x	x		x	x		x					x	x		x			x	x	x	x
		Testing and Treatment Support: DIS should have skills in performing diagnostic tests, conducting counseling sessions, developing treatment plans, and monitoring results. The ability to conduct HIV and STD screening, including phlebotomy, is listed.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Other Skills	Adaptability and Work Ethic: Skills in working with a high level of detail in a fast-paced environment, handling multiple projects simultaneously, and multitasking are noted. Reliability and predictability in attendance may be required.	x	x	x	x	x	x	x				x			x	x	x	x	x	x	x		x	x	x	x
		Customer Service: Providing customer service is a listed skill.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Field Work: Skills in conducting field investigations and providing integrated infectious disease outreach are important. Operating motor vehicles is also listed as a skill.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Safety: Skills in identifying and responding to safety concerns in the field are required.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Negotiation and Conflict Resolution: Multi-task, problem-solve, provide effective conflict resolution, and coordinate projects simultaneously. Respond effectively to conflict situations and people in conflict. Negotiation and Persuasion skills.	x	x	x		x	x	x	x	x	x	x					x	x		x	x	x	x	x		
		Technical Competence: The ability to use knowledge acquired through formal training or extensive on-the-job experience, work with/understand/evaluate technical information, and advise others on technical issues falls under Technical Competence.	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x				x	x	x			x
	Data and Information Handling	Investigation and Analysis: DIS should be able to investigate, organize, analyze, and interpret data to compile reports and recommend actions. This includes the ability to conduct fact-finding interviews and analyze data. Performing basic analysis of health-related data. DIS should be able to review and synthesize reports from data analysis.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Record Keeping and Documentation: The ability to document interviews and activities is necessary for monitoring cases. DIS should be able to record necessary changes on healthcare facilities and make clear, concise notes in patient records. Developing and maintaining detailed records of all activities and information obtained is required, as is preparing records and reports. The ability to complete timely, accurate, and thorough documentation and reports of field activities and cases is essential. DIS must be able to maintain and update electronic records and maintain epidemiologic records and reports. The ability to keep organized and accurate records is noted.				x	x	x	x	x	x		x	x		x	x	x	x	x	x	x	x	x		x	x
		Information Management: The ability to interpret and apply pertinent laws, regulations, rules, and policies is necessary. DIS should be able to interpret and explain disease characteristics, testing methods/results, treatment, and prevention strategies. The ability to understand information contained in medical records is required. DIS should be able to read and interpret complex written material and read and interpret rules, regulations, policies, and procedures. The ability to communicate effectively and sensitively communicate medical and epidemiological information and concepts is needed. DIS must be able to obtain information from patients about risk factors and possible means of exposure.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Effective Communication: Communicating effectively, both orally and in writing, is a fundamental ability. This includes the ability to effectively and sensitively communicate medical and epidemiological information and concepts, present comments clearly and concisely, and provide effective oral and written communication on complex medical issues to healthcare professionals and the general public . DIS should be able to communicate clearly and concisely verbally and in writing, speak clearly, and communicate information and ideas in writing so others understand . Providing informationand disseminating health educational materials. are also noted. The ability to communicate program guidelines to other agencies and the community is required. DIS should be able to communicate effectively by demonstrating professionalism, establishing rapport, listening effectively, providing information, and soliciting patient feedback.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Document			16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
	Communication and Interpersonal	Relationship Building: The ability to establish working relationships with agency employees, community groups, media, the public, health care facilities staff, health professionals, contract vendors, grant recipients, other employees, other agencies, county/city officials, and community members is crucial. DIS must be able to obtain information and cooperation from individuals, community organizations, health professionals, and the public. Gaining the confidence of persons and groups requiring services is important. Relating effectively to individuals from a variety of ethnic, cultural, and socioeconomic groups is noted.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Counseling and Education: DIS should be able to counsel clients before and after testing for infectious diseases, counsel patients and exposed persons, and provide disease-specific counseling and other appropriate patient education. Providing pre- and post-test counseling services is required. The ability to counsel patients about methods of prevention and avoidance of risk factors is listed. Counseling patients and others on sensitive issues related to communicable diseases is a key ability. DIS should be able to provide education to patients and communities, educate individuals on the risks of the disease and proper healthcare measures, and present health program information to educate individuals and groups. Developing and producing public information materials.		x	x	x	x	x	x	x	x		x	x		x	x	x		x	x	x	x			x	x
		Case Activities: The ability to identify, locate, notify, and refer individuals diagnosed with or at risk of injury, chronic, or communicable disease is fundamental. DIS should be able to conduct case investigations, including interpreting laboratory results and investigating reported, suspected, and potential cases. Determining the origins and potential spread of communicable disease is also required. The ability to ensure testing and treatment are completed by contacts is listed. DIS should be able to regularly review data on reportable communicable diseases and ensure appropriate treatment for infected patients and their contacts. Ensuring timely follow-up of reported cases and their contacts is essential. Conducting field investigations is a core ability. Conducting confidential, timely, accurate disease investigations is specified. Obtaining listings of all sexual partners and performing field investigations to locate listed persons is noted.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Referral and Linkage to Care: DIS must be able to refer affected individuals to health treatment sources, and provide referral services for clients. Referring individuals diagnosed with or at risk of communicable disease to medical evaluation, treatment, or health programs is necessary. The ability to refer persons and their partners to ongoing healthcare and provide referrals to other STI care and treatment is listed. Ensuring all patients who test HIV-positive are linked to medical treatment and referring patients and family members to psychological support services are also abilities. DIS should be able to facilitate access to services and refer affected individuals for appropriate treatment. The ability to make referrals to social service agencies is noted. Coordinating clinic referrals is also mentioned.				x	x	x	x	x	x		x	x		x	x	x	x	x	x	x	x			x	x
	Investigation and Intervention	Intervention Strategies: The ability to ensure implementation of timely disease intervention strategies is important. Providing direct disease and public health intervention activities is a key function. DIS should be able to apply communicable disease intervention techniques. The ability to implement measures and provide justification supporting policy development, planning, and resource allocation is noted at higher levels.		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x		x	x	x			
		Planning and Scheduling: DIS should be able to schedule health care facility surveys and organize and maintain a survey schedule. The ability to plan, organize, and coordinate work activities is necessary. DIS should be able to organize work efficiently and organize daily activities to meet programmatic priorities and deadlines. The ability to plan, coordinate, and implement health initiatives is noted.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Document			16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
Administration and Organization	Program Management and Oversight: The ability to plan, organize, oversee the work of subordinates, train and enhance the skill level of staff and exercise full supervisory authority, including recruiting, appointing, promoting, and transferring subordinates. Assess staff training needs, schedule formal training, plan/organize/provide on-the-job training, and maintain training records, impart knowledge to lower-level staff on rules, regulations, guidelines, policies, and procedures, apply epidemiological and program activity data, scientific information, and public health/disease knowledge to develop and recommend appropriate strategies, policies, and disease control measures. Provide expert consultation to medical/public health providers and others on diagnosis, tests, treatment, follow-up, and partner services. The ability to design and conduct assessment tools to evaluate the effectiveness of statewide communicable disease control efforts, manage human resources, and develop and implement protocols, standards, policies, and procedures is essential for supervisors.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Coordination: DIS should be able to coordinate program operations and training. Coordinating outreach and testing activities is also noted. The ability to effectively coordinate volunteers is listed.		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Reporting and Presenting: The ability to prepare records and reports is necessary. DIS should be able to draft correspondence, documents, and reports to convey complex and specific program information, study results, and compliance requirements. The ability to write plans and reports proficiently for the appropriate audience is required. DIS should be able to develop, review, and revise reports, charts, and graphs. The ability to generate reports and prepare and present oral and written reports is also necessary. Preparing written materials is noted. The ability to make oral presentations to diverse audiences. and prepare/deliver oral presentations is listed.					x	x	x	x	x			x	x		x	x	x	x	x	x	x	x			x	x
	Confidentiality: The ability to maintain strict confidentiality is essential. This includes maintaining confidentiality of patient information, records, and data . DIS must strictly adhere to the standard of patient and medical records confidentiality and professional conduct.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Judgment and Decision Making: The ability to exercise good judgment in appraising situations and making decisions is required. DIS should be able to exercise initiative and tact in tracing contacts. The ability to operate with appreciable latitude for independent action and decisions and use judgment and initiative to solve problems is necessary. Maintaining composure, using diplomacy and tact, and effectively de-escalating crisis and hostile situations is a key ability . Providing effective conflict resolution is also noted. DIS should be able to analyze available case information to determine case priority, disease staging, and/or additional steps for intervention.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Collaboration and Consultation: Ability to advise and consult with health care providers and the public on public health issues is needed. Ability to work collaboratively, providing technical assistance, guidance, and expert consultation to health department personnel and health care providers. Ability to establish liaison activities with State and county health departments and maintain liaison with health care providers and agencies to expedite follow-up and treatment. Ability to relate effectively to individuals from diverse backgrounds.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Specimen Collection and Handling: The ability to perform venipuncture is listed in several sources. You should be able to collect and/or transport specimens using appropriately selected methods and tools, including collecting GC/CT specimens and blood samples.		x	x	x	x	x	x		x	x		x					x	x		x	x		x	x	x	x
	Testing and Treatment: The ability to perform diagnostic tests, conduct counseling sessions, develop treatment plans, and monitor results is noted. You should be able to assist in laboratory examinations and perform tests at offsite locations. Conducting HIV and STD screening and performing phlebotomy, HIV Rapid Screening Tests, and STI rapid screening are also abilities. The ability to administer medications for the treatment of diseases like gonorrhea and Chlamydia is listed. You should be able to provide Directly Observed Therapy (DOT) to patients with tuberculosis		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Document			16, 22	34, 36, 39	26, 27	4, 5	37, 38, 47	9, 11, 18	6, 7, 8	49	45	44	10, 15, 23, 50	17	29	1, 2, 3	14	19, 20, 21, 24	33	28, 46	30, 31	12, 40	42	25, 32, 43	35, 41	13	48
State			AL	AK	AR	CA	CO	FL	GA	HI	IA	ID	IL	ME	MI	MN	MT	NC	NM	NV	NY	OH	OR	PA	TN	TX	WA
Abilities	Field Work and Travel	Field Operations: The ability to conduct field investigations is a core task. You should be able to operate motor vehicles, and be willing to travel frequently within the health district, assigned region, or for work-related purposes. Using a personal vehicle for travel may be required. The ability to work independently in non-handicapped accessible areas is noted. You should be able to perform duties independently without close supervision and work independently generally.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Outreach: The ability to design and participate in outreach activities in settings of epidemiological significance is required. You should be able to provide integrated infectious disease outreach to venues where high-risk populations can be reached.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Safety	Safety Response: The ability to identify and respond to safety concerns in the field is listed.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Technology	Software Proficiency: You should be able to effectively use computers and software, such as Windows and Microsoft Office. The ability to analyze and interpret statistical information using software is noted. You should be able to use a computer with proficiency, operate a personal computer, and use electronic reporting systems, databases, and software programs. The ability to use database management systems for tracking and reporting is listed. The ability to use and interpret CDPHE and CDC recommendations is mentioned.		x	x	x	x	x	x		x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Equity	Ethical and Equitable Practice: The ability to apply principles of ethics, diversity, equity, inclusion, and justice is a core competency. This includes promoting a confidential and comfortable environment for communications, applying principles of trauma-informed care, and applying principles of ethical and equitable treatment of culturally, able, age, and gender diverse populations. The ability to address ethical issues in community disease investigation and ensure ethical/equitable treatment across diverse boundaries is required.	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Qualifications	Education	High school diploma or GED with relevant experience.		x			x					x	x			x			x		x	x	x				x
		Some college coursework or an Associate's degree with relevant experience.				x	x		x			x	x						x		x	x	x				x
		Bachelor's degree in public health, health education, biological sciences, social sciences, nursing, or a related field.	x		x	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x	x	x	x	
		Graduate coursework may substitute for some experience.								x	x											x	x	x			
		Specific degrees (e.g., BSN with public health rotation for some DIS roles).									x							x									
	Experience	Paid experience in: communicable disease investigation, counseling, health		x	x	x	x		x		x	x	x		x	x		x	x	x	x	x	x	x	x	x	x
		Experience in a health-related field, public health program, or disease intervention.		x	x	x	x			x	x	x	x	x	x	x	x	x	x	x		x	x	x			
		Supervisory experience for senior level roles.	x	x	x	x		x	x	x					x	x		x	x	x	x			x	x		
		Specific experience (e.g., outreach to at-risk communities, working with incarcerated populations for Senior Communicable Disease Investigator).											x														
		Volunteer or internship experience may be qualifying with confirmation.			x	x																					
	Licenses and Certifications	Valid driver's license.			x	x	x			x			x	x		x	x	x	x	x	x	x	x	x	x	x	x
		Phlebotomy/ Venipuncture certification may be required or preferred.	x		x	x	x	x										x	x		x	x		x	x		x
		Specific training certifications (e.g., ISTD1, Passport to Partner Services, NIMS/ICS, DIS1 Training) may be required.	x				x							x		x		x	x	x				x	x		x
		RN license in some cases.		x				x		x								x									
		Disease Intervention Specialist national certification (within a timeframe after hire).		x				x							x				x	x				x	x		x

Listening Session Guide

University of South Florida: Certified in Disease Intervention (CDI): Core Competencies Listening Session Guide

Welcome

Good [afternoon/evening] and welcome. Thank you for agreeing to be part of this listening session. We appreciate your willingness to participate. If you are able, I kindly ask you to turn on your camera so we can see non-verbal cues and make it easier to respond.

Introductions

My name is _____ from the [University of South Florida] and I will be leading this listening session. The purpose of these listening sessions is to better understand the skills and training of disease intervention professionals. The aim is to define core competencies essential for Disease Intervention (DI) practice, which will inform the Certified in Disease Intervention (CDI) examination and support the recruitment, retention, and training of the DI workforce.

We want you to share your honest and open input with us. This listening session will be approximately 60 minutes in length. During the listening session, you will be asked questions about skills and training among the DI professional workforce. I may ask you to clarify or expand your answer. The listening session will be recorded, and notes will be taken.

The records of this listening session will be kept confidential. We will only use a number to identify you in the records. Data will be kept on password protected computers and written records will be kept in locked files in a secure location. In any sort of report, we would not include any information that makes it possible to identify a participant or agency. Access to data will be limited to project team members. The recording will be deleted after transcription and qualitative analysis.

Your participation is voluntary. If you choose not to participate, it will not impact your relations with ASPPH, the University of South Florida, your employer, or anyone else.

This project is supported by Cooperative Agreement CK20-2003 from the Centers for Disease Control and Prevention (CDC) through an award to the Association of Schools and Programs of Public Health (ASPPH). The contents of this <listening session> do not necessarily represent the official views of the CDC and ASPPH.

SUPERVISOR OR LEADERSHIP

1. Tell me about your involvement in the disease intervention (DI) workforce.

Probe: length of time involved, current position, worked as a DIS in the past, direct supervision of DI professionals or indirect

2. What are the minimal skills/competencies needed for a DI professional to competently do their job?

Probe: Provide examples. E.g. Case management, knowledge-based, levels of experience, communication

3. What additional skills/competencies do you see in the most successful DI professionals?

Probe: What do you think is the best way for DI professionals to achieve these skills?

4. What skills/competencies in current disease intervention training programs are not useful in the field?
5. Sometimes people start in other careers before they transition to a DI role. Are there skills/competencies from other careers that are useful in DI work?

Probe: Can you describe these skills/competencies and how they apply to DI professionals?

6. What are some things DI professionals can only learn in the field?

Probe: Can you describe an experience you felt ill-equipped to handle? What skills/competence were needed?

7. What else would you like to share with me that we did not discuss?

Disease Intervention (DI) Professional STAFF

1. Tell me about your involvement in the disease intervention (DI) workforce.

Probe: length of time involved, current position, worked as a DI professional in the past, direct supervision of DI professionals or indirect

2. What are the minimal skills/competencies needed for a DI professionals to do their job competently?

Probe: Case management, knowledge-based, levels of experience, communication

3. What additional skills/competencies do you see in the most successful DI professionals?

Probe: What do you think is the best way for DIS to achieve these skills?

4. What do you feel DI professionals can only learn in the field?

Probe: Can you describe an experience you felt ill-equipped to handle? What skills/competencies were needed?

5. Describe tasks that you do that people do not give you credit for.

6. What skills in current disease intervention training programs are not useful in the field? What do you wish you had more training on?

Probe: How would you have liked to be trained in that skill(s)?

7. Knowing what you know now, what would you tell a newly hired DI professional on their first day on the job?

8. What moment did you feel that you were acclimated to your job? If you are not, what is preventing you from reaching that point?

9. Please describe an experience that no amount of training could have prepared you for.

Probe: How did you react? What would have made it better?

10. What else would you like to share with me that we did not discuss?

IRB Approval Letter



EXEMPT DETERMINATION

May 20, 2025

Ismael Hoare
University of South Florida
13201 Bruce B Downs Blvd. MDC 56
Tampa, FL 33612

Dear Dr. Ismael Hoare:

On 5/19/2025, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY008461
Review Type:	Exempt 2
Title:	DIScovering Competencies for Disease Intervention Specialists
Funding:	Association of Schools of Public Health
Protocol:	• IRB Protocol for DIS Competencies;

The IRB determined that this protocol meets the criteria for exemption from IRB review.

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Institutional Review Boards / Research Integrity & Compliance

FWA No. 00001669

University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

Page 1 of 2



In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

Bhupinder Sran
IRB Research Compliance Administrator

Institutional Review Boards / Research Integrity & Compliance

FWA No. 00001669

University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

Page 2 of 2

CDI and Listening Session Alignment Table

Disc Listening Session Alignment with Certified in Disease Intervention (CDI) Domains

Table 1. Listening Session Alignment with CDI Domains

NP=not present in listening session, P=present in listening session, Salient=covered in all or most listening sessions

CDI Domain	CDI Sub-Domain Competency	NP	P	Salient	Notes
Infection Knowledge*	Discuss epidemiology, testing options, prevention strategies, transmission routes, signs and symptoms, and treatment of HIV.			X	
	Discuss epidemiology, testing options, titer interpretation, prevention strategies, stages, signs and symptoms, and treatment of syphilis.			X	
	Discuss epidemiology, prevention strategies, signs and symptoms, and treatment of gonorrhea, chlamydia, and other bacterial STIs.			X	
	Discuss epidemiology, prevention strategies, signs and symptoms, and treatment of all types of hepatitis.		X		
	Adapt to a changing environment to rapidly learn emerging disease specific information as it arises.			X	
	Participate with flexible availability and adaptability during outbreak response and disease intervention (DI) emergencies.		X		
Positionality*	Engage in critical self-reflection to identify and address personal biases that influence client and professional interactions.			X	
	Develop a personal style as to how to approach interviewing and field investigation while maintaining a team-oriented response and self-initiative to DI.		X		
	Prioritize self-care practices and positive coping strategies to manage any work-related stress and mental health status that might be created by professional and lived experiences.		X		
	Actively seek professional development and training opportunities.			X	
	Approach work tasks with an openness to learning and growing as a DI professional.			X	
	Respond to and interact with professional conduct that maintains strict confidentiality and meets the health literacy level of the client, community member, or care provider.			X	
Ethics and Evidence-Based Practices*	Adhere to the following public health principles during all professional activities: informed practice and responsiveness, understanding of social and economic conditions contributing to health.			X	

Planning and Case Analysis	Collect and verify relevant information that can inform planning and case analysis for people diagnosed with or possibly exposed to infectious disease.			X	
	Assess and prioritize case load to maximize the impact of intervention.			X	
	Use a range of digital technologies to identify and locate specific individuals.			X	Access to social media/dating sites and the ability to create agency profile varies by jurisdiction/state.
	Identify community resources that can connect people to care.			X	Excellent DI professionals provide resources for overall client needs (food, mental health support, etc.).
	Calculate DI timeframes (e.g., interview period, incubation period, window period) to determine disease investigation needs.			X	Particular emphasis is placed on syphilis; consider the inclusion of titers.
	Conduct ongoing case analysis to recognize gaps or discrepancies to inform additional steps for intervention.			X	
	Distinguish preventative strategies, signs and symptoms, and treatment of STIs, HIV, and other infections as needed to client information in planning and case analysis.			X	Knowledge of diseases is not in current CDI domains.
	Apply Centers for Disease Control and Prevention (CDC) case definitions to assigned clients to assess whether disease investigation is necessary.		X		Knowledge of CDC case definitions is not in current CDI domains.

Interviewing and Case Management Activities	Collect and verify relevant information that can help to determine investigation needs for people diagnosed with or possibly exposed to infectious disease.				X	
	Define confidentiality and confirm the ability to have a confidential conversation.				X	
	Discuss the purpose of the disease investigation (e.g., interview, test results, disease exposure, or environmental risk).				X	
	Motivate people diagnosed with or possibly exposed to infectious disease to participate in DI services (e.g., testing, treatment, isolation or quarantine, partner elicitation).				X	
	Conduct comprehensive interviews employing effective communication skills.				X	Expand on effective communication skills including: active listening, empathy, body language, and navigating language barriers.
	Obtain a detailed assessment of people diagnosed with or possibly exposed to infectious disease (e.g., risk history, sexual history, drug use, incarceration, demographics).				X	
	Collect demographic and location information from persons exposed to or at risk for disease (e.g., contacts, sexual partners, social network partners) for prevention and intervention.				X	
	Collect information on venues or social settings where persons may have been exposed to infectious disease to support prevention and mitigation.		X			
	Determine needs and barriers related to DI for people diagnosed with or possibly exposed to infectious disease.				X	
	Refer people diagnosed with or possibly exposed to infectious disease to appropriate support services (e.g., hospitals, clinics, shelters, mental health support).				X	
	Collaborate with people diagnosed with or possibly exposed to infectious disease to develop and implement an action plan (e.g., testing, treatment, support services, negotiating methods of partner/contact notification for timely intervention).				X	
	Verify whether people diagnosed with or possibly exposed to infectious disease have followed an action plan (e.g., testing, treatment, support services, and partner/contact notification).		X			
	Conduct a record search of information on persons exposed to or at risk for disease (e.g., contacts, sexual partners, social network partners, other people who may benefit from testing) to obtain and document any relevant locating, testing, and treatment information.		X			
	Follow up with persons exposed to or at risk for disease (e.g., contacts, sexual partners, social network partners, other people who may benefit from testing) to ensure testing, treatment, and/or other referrals takes place.				X	
	Apply knowledge of chronic conditions and other co-morbidities to case intervention to identify potential barriers or facilitators to prevention, testing, symptomology, and treatment.				X	Co-morbidities are only currently mentioned in the Outbreak response CDI domain.
	Inform the person/client/patient being interviewed of local, state, and federal policies pertaining to social environments and sexual health (e.g., sexual assault, clients who are minors, currently incarcerated, domestic and intimate partner violence, human trafficking, immigrants, clients with suicidal or homicidal ideation).		X			Specific sensitive situations are not explicitly mentioned in CDI domains.
	Communicate effectively via phone, including tone of voice and speed of the conversation. Additionally, determine times and circumstances that are most appropriate for a conversation by phone versus in person.				X	Phone etiquette is not mentioned in current CDI domains.
	Adapt complex information for delivery to the appropriate audience.				X	

Field Services and Outreach Activities	Plan field services (e.g., at home visit, outreach events, screening) to maintain confidentiality, security, and safety.			X	
	Maintain field supplies to be prepared for field services.		X		
	Conduct field investigations to residences or other community locations to inform people of possible disease exposure or positive test results.			X	
	Communicate in person with people diagnosed with or possibly exposed to infectious disease.			X	
	Maintain security and confidentiality of sensitive information and protected health information of people diagnosed with or possibly exposed to infectious disease.			X	
	When an individual cannot be reached, communicate with a third-party (e.g., mutual contacts, community support organizations, local businesses) to obtain additional information while maintaining confidentiality.			X	
	Practice universal precautions and infection control procedures.		X		
	Support field testing, treatment, and outreach activities for people experiencing disproportionately severe impacts of communicable disease.		X		
	Deliver and observe treatment (e.g., directly observed therapy (DOT), expedited partner therapy (EPT), field delivered therapy) in non-clinical settings to ensure adherence to treatment regimen as well as patient education.		X		No one mentioned EPT in the listening sessions.
	Identify and respond appropriately to unsafe situations (e.g., body language, threat of bodily harm, environmental cues, tone).			X	Rural/frontier regions were specifically mentioned, as were areas with increased medical/government mistrust
	Communicate the role of a DI professional to community members during outreach and public-facing health events.		X		Address lack of community awareness of the DI role.

Surveillance and Data Collection	Verify and collect data by navigating formal and informal sources (e.g., providers, information systems, internet searches).			X	
	During comprehensive interviews of people diagnosed with or possibly exposed to infectious disease, verify and collect surveillance information (e.g., risk information, socio-demographic information).			X	
	Update documentation as appropriate to ensure accurate and complete surveillance data.			X	
	Identify investigation trends and make notifications of emerging trends or concerns.	X			
Collaboration	Collaborate with healthcare and other service providers (e.g., correctional facilities, schools, health departments) to ensure adequate care is delivered.			X	
	Educate healthcare providers (e.g., clinicians, laboratorians) on jurisdiction requirements or reporting compliance.			X	
	Serve as a local resource to relay public health information and CDC recommendations to the community and service providers (e.g., correctional facilities, schools, health departments, medical personnel).			X	
	Participate in collaborative case review to identify and discuss opportunities for enhancing case management strategies and intervention.		X		
Outbreak Response and Emergency Preparedness	Participate in preparedness training (e.g., tabletop exercises, learning subject matter pertinent to emergency outbreaks, just-in-time training, emergency planning, awareness of an outbreak response plan, incident command structure (ICS) training).		X		
	Apply DI techniques (e.g., Program Operations Guidelines (POG), cross-train on knowledge of other morbidities) to participate in public health emergencies and outbreak response initiatives.			X	
	Assist government and public health officials in performing required tasks (e.g., data collection, contact collection, quarantine and isolation recommendations, rapid needs assessment, epidemiologists' consultation, community outreach, awareness promotion including Health Alert Network (HAN)).		X		
	Participate in after-action report (AAR) discussions to identify lessons learned and recommendations for improving future response activities.	X			Participants have discussed paperwork, but not AAR.

Finalized Validation Consultation Template

University of South Florida
Certified in Disease Intervention (CDI): Core Competencies
Delphi Consultation – Adapted Delphi approach

Round 1 – Validate existing competencies and gather feedback on proposed competencies

- List of competencies and competency definition. No differentiation is made between competency currently identified in CDI and those proposed based on University of South Florida (USF) research.
- Participants who have agreed to this will be asked to rate each competency based on importance, relevance, and clarity. We will include open-ended questions to identify what may be missing or what further refinements are needed to what is proposed.

Round 2 – Refinement and consensus building

- Revised list of competencies shared, based on analysis from Round 1. Share insights from participants.
- Share potential sub-competencies for each selected competency and provide an opportunity for participant to move items around thematically. The goal is to move toward the finalized list of competencies and the list of sub-competencies that may be included.

Round 3 – Finalize

- Share only the competency/sub-competency where there seemed to be some ambiguity. Ask participants to rank the importance of each of the competencies.

University of South Florida: Certified in Disease Intervention (CDI): Core Competencies (Adapted Delphi Consultation – Round 1)

Introduction

Thank you for your time and effort in participating in our listening session. We value your time and your willingness to share these insights to help improve the disease intervention (DI) profession. What you have shared in these listening sessions has been analyzed and along with other tasks. These have been used in the development of a draft list of core competencies shared in the review you see below. These draft core competencies include professional and technical skills. To make sure we have analyzed and summarized the information correctly, we need your input to refine our core list further.

We are working with DI professional organizational leaders and staff, like you, to help us refine and validate the core competencies from the list that we generated. In this task, we are asking you to review a draft list of core competencies and to share your opinion about the importance of each competency for the DI profession. This consultation involves DI professionals from seven states per round. The time commitment will be around 20 minutes to complete the first round of reviews. We anticipate that up to two additional **iterative** and **voluntary** rounds may follow, requiring around 20 minutes each, with the goal of building a consensus. In total, this may involve around 60 minutes of your time, over a period of up to six weeks.

The response from this review will be kept confidential. Response information will be kept on password protected computers. In any sort of report, we will not include any information that will make it possible to identify a participant or agency. Access to responses will be limited to project team members. Your participation is voluntary. If you choose not to participate, it will not impact your relations with ASPPH, the USF, your employer, or anyone else.

This project is supported by Cooperative Agreement CK20-2003 from the Centers for Disease Control and Prevention (CDC) through an award to the Association of Schools and Programs of Public Health (ASPPH). The contents of this Delphi consultation do not necessarily represent the official views of the CDC and ASPPH.

Disease Intervention (DI) Core Competencies
Adapted Delphi Consultation - Round 1

Introduction

Thank you for participating in this consultation to identify and prioritize core competencies for disease intervention (DI) professionals. Your expertise is invaluable in establishing consensus on the most important competencies for effective disease intervention. USF welcomes your comments, reflections or suggestions.

Instructions

Below is a list of potential core competencies for DI professionals. Please rate each competency on a scale from 1 to 5 based on its importance and relevance:

Importance: How critical is this competency for effective performance as a DI professional?

1. Not important
2. Slightly important
3. Moderately important
4. Very important
5. Essential

Relevance: How well does this competency reflect current and emerging responsibilities of DI professionals?

1. Not relevant
2. Minimally relevant
3. Somewhat relevant
4. Highly relevant
5. Directly relevant

Note: *The competencies are presented in random order to prevent any bias in ratings.*

Competency Rating

Please rate each competency (1-5) on importance and relevance:

Competency A - Ethics and Evidence-Based Practices - The ability to ethically and effectively plan, analyze, and manage cases using epidemiological principles and informed strategies, while maintaining confidentiality and professionalism. (Topics discussed could include: ethical and professional conduct, social and economic conditions contributing to health, etc.).

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Ethics and Evidence-Based Practices* competency that should be included?

Competency B - Infection Knowledge - The ability to acquire and apply evolving information on epidemiology, testing, prevention, transmission, clinical presentation, and treatment of HIV, sexually transmitted infections (STIs), tuberculosis (TB), COVID-19, and emerging or re-emerging infections to effectively guide public health interventions.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Infection Knowledge* competency that should be included?

Competency C - Positionality - The practice of self-awareness, adaptability, and continuous growth in disease intervention work, encompassing a flexible response to public health emergencies, critical reflection on personal biases, development of a professional interviewing style, prioritization of mental well-being, and commitment to ongoing learning.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Positionality* competency that should be included?

Competency D - Planning and Case Analysis - The ability to collect client and epidemiological data, prioritize caseloads, apply disease-specific timeframes and CDC case definitions, leverage digital tools and community resources, and analyze case details to guide accurate, ethical, and effective intervention strategies.

- Importance Rating: [] (1-5 (1-not important to 5-essential))

- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Planning and Case Analysis* competency that should be included?

Competency E - Interviewing and Case Management Activities – The ability to conduct confidential, comprehensive interviews to assess risk, elicit contact and exposure information, navigate barriers to care, develop and monitor action plans, and communicate effectively across populations while applying public health principles and adapting to complex social and health contexts.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Interviewing and Case Management Activities* competency that should be included?

Competency F - Field Services and Outreach Activities – The ability to plan and conduct safe, confidential, and responsive investigations, treatment delivery, and community engagement, while maintaining infection control, navigating challenging environments, and clearly communicating the role of disease intervention professionals.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Field Services and Outreach Activities* competency that should be included?

Competency G - Surveillance and Data Collection – The ability to ethically verify, gather, and document accurate information from diverse sources and interviews to monitor infectious disease trends, identifying emerging concerns, and supporting timely and informed public health action.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Surveillance and Data Collection* competency that should be included?

Competency H - Collaboration – The ability to effectively engage with healthcare providers, laboratories, community organizations, and public health entities to ensure coordinated care, accurate reporting, informed outreach, and ethically grounded communication that supports informed and efficient disease intervention efforts.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Collaboration* competency that should be included?

Competency I - Outbreak Response and Emergency Preparedness – The ability to apply disease intervention techniques, support coordinated public health efforts, and contribute to post-response evaluations to ensure effective, ethical, and informed action during disease outbreaks and public health emergencies.

- Importance Rating: [] (1-5 (1-not important to 5-essential))
- Relevance Rating: [] (1-5 (1-not relevant to 5-directly relevant))
- Additional input:
- Are there elements missing from the *Outbreak Response and Emergency Preparedness* competency that should be included?

Additional Input

Are there other competencies that should be considered? If so, please describe them below and indicate how important each one is to the role of DI professional:

Additional Competency 1: _____

Importance Rating: [] (1-5)

Additional Competency 2: _____

Importance Rating: [] (1-5)

Demographic Questions

How much experience do you have as a DI professional?

- Less than one year
- One-to-three years
- More than three years but less than five years
- Five-10 years
- More than 10 years

In which state or territory do you work?

As a DI professional, have you ever provided supervision?

- A. Yes
- B. No
- C. Unsure / Prefer not to answer

Thank You

Thank you for completing Round 1 of this Delphi consultation. Your ratings will be analyzed, and you will receive a summary of the results along with Round 2 materials in approximately two weeks' time. Contact information for questions: Dr. Mahmooda Pasha at mkpasha@usf.edu