



# DISEASE INTERVENTION SPECIALIST CERTIFICATION PROJECT

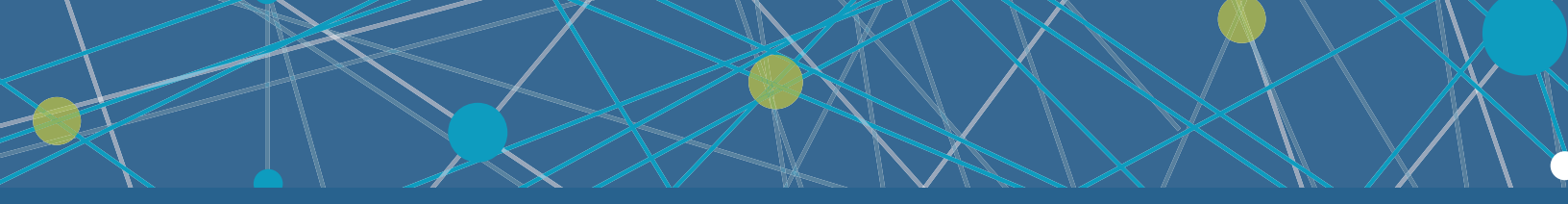
Final Report to the Centers for Disease Control and Prevention

*Executive Summary*

*Prepared by the Public Health Accreditation Board*

June 2017





PHAB acknowledges the contributions of the following organizations in the development of this report:

- American Nurses Credentialing Center (ANCC)
- Centers for Disease Control and Prevention, Division of STD Prevention (CDC)
- National Association of County and City Health Officials (NACCHO)
- National Coalition of STD Directors (NCSD)
- National TB Controllers Association (NTCA)
- PSI Services LLC (PSI)

## Introduction and Overview of the DIS Certification Project

Disease Intervention Specialists (DIS) have long been a critical part of public health, working directly with communities. Historically DIS have worked in sexually transmitted disease programs (STD), HIV programs, and tuberculosis control programs (TB), but now work in a variety of other disease areas, including other infectious disease outbreak and emergency response where their on-the-ground investigative skills and community engagement play a key role in public health improvement. Many health departments across the country have someone performing DIS job functions. Increasingly, DIS are also needed as patient navigators and networkers to ensure patients are linked to care through expanded relationships with health care providers. DIS are a critical part of the public health infrastructure and in building the link to health care into the future.

In 2013, International Credentialing Associates (ICA) was contracted by the National Association of County and City Health Officials (NACCHO) to conduct the DIS certification feasibility assessment. Purposes of this assessment were to describe the current and future directions of the DIS profession and determine how certification would impact DIS; determine the financial burden and proposed budget for creating and sustaining a certification program; assess the organizational capacity necessary to create and maintain a certification program; connect with key stakeholders in both the public health and certification industries to obtain guidance for best practices; and develop a business plan with recommendations for how to proceed post-feasibility assessment. Based on the feasibility assessment, ICA recommended that the Centers for Disease Control and Prevention (CDC) pursue the development of a DIS certification.

In September 2014, the CDC funded the second phase of the national DIS Certification Project, and the Public Health Accreditation Board (PHAB) became the coordinating organization. This phase of the DIS Certification Project, called the Assessment Phase, was designed to explore and determine the best model for DIS certification as well as those activities that are foundational for any national certification program. The goal of certification of the DIS workforce is to improve public health services provided to communities by DIS through a high-quality, standardized approach to the professional development of this workforce. Certification can standardize and validate the knowledge, skills, and abilities of DIS; drive the standardization and improvement of training; increase the quality and consistency of service delivery; and increase recognition of the skills and abilities of DIS.



During this phase, partners and consultants working on the DIS Certification Project have completed the following deliverables:

- DIS Job Task Analysis;
- Template DIS functional job description for health department use;
- Enumeration of the DIS workforce;
- DIS workforce registry;
- Description of three potential models for national certification;
  - » A test-based model, which describes certification of an individual as being able to competently complete a job or task based upon an examination and/or the completion of a program of study;

- » A portfolio review-based model which typically requires verification that an individual has met pre-determined and standardized criteria through the review of a collective body of work;
- » A unit-based model which typically requires verification that the individual has met criteria of nationally recognized, practice-focused, and evidenced-based standards by combining the performance of the individual with the performance of the unit, and documentation against standards is submitted together and reviewed together;
- Recommendations for continuing education and training; and,
- Complementary reports on the future education of the DIS workforce and the alignment between academic Bachelor of Science in Public Health (BSPH) and Master of Public Health (MPH) competencies with the DIS Job Task Analysis and the alignment with the related foundational program management expectations and the Public Health Accreditation Board (PHAB) health department accreditation standards and measures.

The project was designed to be a comprehensive, inclusive effort to develop recommendations to strengthen and formalize the role of DIS. It was informed by a PHAB National Advisory Committee composed of public health leaders, public health organizational representatives, DIS, DIS supervisors, and DIS training experts from multiple programs including STD, HIV, TB, and emergency preparedness and response. The findings and recommendations from this project are described in a final, comprehensive report and its related appendices. This executive summary provides a high-level overview of the project, observations, and final recommendations.

### **Definition of a Disease Intervention Specialist**

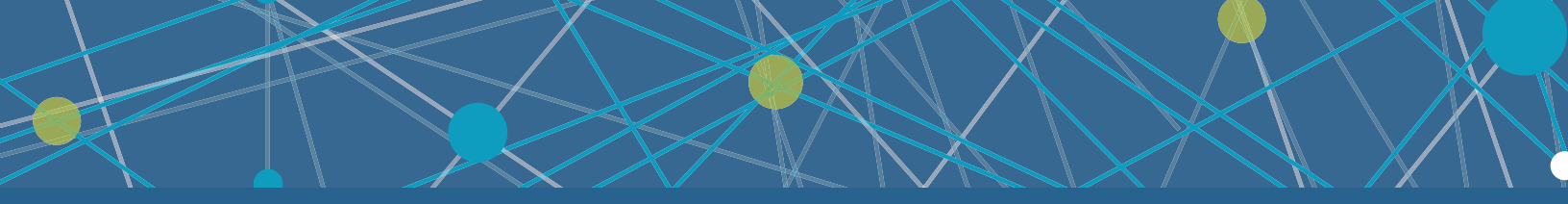
For purposes of this project, a DIS was defined as a non-licensed public health professional with applied expertise in client-centered interviews, collection of enhanced surveillance and community assessment data, partner services to include contact tracing, directly observed therapy, field specimen collection, field investigation in outbreaks and in emergency preparedness, community outreach, collaboration with medical providers, and navigation of health care systems to ensure patient evaluation and treatment. Relevant program areas include STD, HIV, TB, and other communicable disease, outbreak investigation, and emergency preparedness and response.

### **Definition of Certification**

For this project, certification was defined as a voluntary process by which a non-governmental agency grants a time-limited recognition to an individual after verifying that he or she has met predetermined and standardized criteria. An organization grants this recognition to an individual after verifying that he or she met eligibility criteria and passed an assessment. Certification is different than licensure, which is more typically awarded at the state level by a governmental or quasi-governmental regulatory body for the purposes of granting legal entry into practice (i.e. physicians, nurses, social workers, dentists, etc.).

### **Definition of Recertification**

Since certification is anticipated to be time-limited (3-5 years typically), recertification is a natural part of the process. A recertification program for professionals who have attained the DIS certification which uses a classic education and experience based professional development model is the most appropriate approach



to consider. In this example, credits are earned both for educational experiences (e.g., attending courses, attending conferences, independent study), giving back to the profession (e.g., teaching courses, writing articles on issues related to the DIS profession), and DIS experience (e.g., hours spent actively practicing as a DIS). The final recertification cycle, and its requirements, will be developed and published along with the initial certification requirements since the latter is an extension of the former.

### **Anticipated Benefits of DIS Certification**

DIS personnel, their supervisors, and CDC program leadership will want to understand the anticipated benefits of DIS certification since this concept is new to the field. The following anticipated benefits were identified during the 2013 feasibility assessment and confirmed during this assessment phase of the project:

- Increase visibility of the DIS profession;
- Increase the professional reputation and prestige of the DIS profession by setting minimum bounds for competence;
- Increase the recognition of individual performance and achievement;
- Provide a baseline for DIS competency nationwide by creating a certification with minimum experience and competency requirements;
- Decrease the variation in knowledge, skills, and abilities currently found within the DIS profession thereby standardizing the performance expectations;
- Increase the confidence level of clients and other members of the community in the work that DIS do;
- Increase dedication to the profession and decrease turnover, potentially creating a public health career path for DIS;
- Increase recognition and transference of skills between states/jurisdictions, thereby decreasing training and development time for DIS transferring between jurisdictions;
- Increase practice efficacy by standardizing the job duties, roles and responsibilities of the DIS which can then lead to the development of standardized approaches to evaluating the effects of their work, including patient outcomes;
- Increase the demand for continuing education, as training and education requirements are defined for certification, and certification becomes more accepted in the practice community;
- Motivate DIS to continuously learn and refine their skills as they prepare for recertification;
- Ensure that DIS are up-to-date on public health research trends related to their work; and,
- Support networking of DIS professionals, which in turn increases their sharing of best practices, other knowledge acquisition, and skill development.

## Selection of An Organization to Administer and Manage DIS National Certification

In order for the next two phases of this project (development and implementation) to occur, an organization should be selected to administer and manage the DIS certification program. One of the first decisions to make in setting up a national certification organization is whether to contract with an existing national certifying body or to establish a new national certifying body. Whichever is selected, it is critical that the organization be properly organized and governed to protect the integrity of the certification program, as well as the perception of the certification by applicants, employers, funders, and the public in general. Certification programs are typically registered under Internal Revenue Service (IRS) 501(c) (6).) Three key elements to consider in corporate organization and governance are: non-profit corporate status; an independent board of directors; and, complete autonomy of the certification program.

Because there are many factors in selecting an organization to manage and administer the DIS certification program, another deliverable of this project, a Request for Information (RFI) has been distributed by Seacrest Company to ascertain potential interest on the part of certifying organizations in managing the DIS national certification program. Analysis of information received in that process will be provided to CDC separately.

## Summary of Results from the DIS Certification Project

There are three categories of the project deliverables that provide information for the assessment phase of the DIS certification process: initial and supporting activities (job task analysis, enumeration of the DIS workforce, and establishment of the DIS registry); analysis of the three potential models or approaches to DIS certification; and, two related foundational support activities. Each of these categories will be summarized in this section. More specific details can be found in the full report, with its corresponding appendices.

### Initial and Supporting Activities

#### 1. Job Task Analysis

PSI Services LLC (PSI) conducted a Job Task Analysis to obtain information about the tasks performed in the DIS job role and the knowledge statements needed to support the performance of these tasks. Certification development organizations conduct job analysis studies to identify the critical practices of a profession. A job analysis study is also referred to as a role and function study, practice analysis, job task analysis, or role delineation study. Job analysis studies are a method of identifying information about a job role, which is then used to establish the necessary and important requirements to ensure that practitioners in the role have the requisite knowledge for competent practice. The JTA process for DIS certification was conducted in accordance with industry requirements to ensure the development of content-valid and legally-defensible examinations. A multi-phase approach identified the tasks and knowledge necessary for competent performance of DIS across various settings and professional disciplines:

- » Research of the role of the DIS using existing literature and draft task and knowledge areas based on that literature review;
- » Review, revise, and finalize task and knowledge statements through multiple, iterative reviews by subject matter experts;

- » Obtain importance and performance ratings for tasks and knowledge through a public survey of DIS; and,
- » Perform appropriate statistical calculations to determine the validity of job tasks and knowledge ratings.

The DIS JTA public survey (2016) yielded 495 responses, which is an outstanding response rate in the certification industry. The figure below provides a profile of the survey respondents.

Profile of the JTA Survey Respondents	
<b>Job Title</b>	<ul style="list-style-type: none"> <li>• Disease Intervention Specialist (51% of respondents)</li> </ul>
<b>Time Spent Providing Disease Intervention Services</b>	<ul style="list-style-type: none"> <li>• 91% - 100% (49%)</li> <li>• More than 60% (65%)</li> </ul>
<b>Primary Work/Practice Setting</b>	<ul style="list-style-type: none"> <li>• Local Agency (49%)</li> <li>• State Agency (40%)</li> </ul>
<b>People Conducting DIS Activities in Organization</b>	<ul style="list-style-type: none"> <li>• 2 to 3 (22%)</li> <li>• 6 to 9 (19%)</li> </ul>
<b>Years Performing DIS Work</b>	<ul style="list-style-type: none"> <li>• 6 to 10 (21%)</li> </ul>
<b>Which Disease Currently Working With</b>	<ul style="list-style-type: none"> <li>• Syphilis (22%)</li> <li>• HIV (21%)</li> </ul>
<b>Geographic Location</b>	<ul style="list-style-type: none"> <li>• Responses from 40 states and Puerto Rico, nine states, and District of Columbia not represented</li> </ul>
<b>Highest Academic Degree</b>	<ul style="list-style-type: none"> <li>• Bachelor's degree (55%)</li> </ul>
<b>Age</b>	<ul style="list-style-type: none"> <li>• 51-55 (16%)</li> <li>• 26-55 (76%)</li> </ul>
<b>Gender</b>	<ul style="list-style-type: none"> <li>• Female (70%)</li> </ul>
<b>Ethnicity</b>	<ul style="list-style-type: none"> <li>• White (Non-Hispanic) (42%)</li> </ul>

Respondents indicated that the final JTA tasks and knowledge statements sufficiently described the job tasks and duties of the DIS. A summary of the description of the job tasks, knowledge, skills, abilities, and work activities of a DIS based on the JTA process and content expert reviews is included in Attachment A. A related template functional job description for DIS based on the JTA results is included in Attachment B. Since the JTA forms the basis for certification test specifications, it is important to understand how DIS certification JTA survey respondents characterized the JTA results.

- » All survey respondents indicated that the tasks and knowledge statements sufficiently covered the necessary content for a test.
- » 56 of the 57 (98.25%) task statements drafted by the job analysis task force were rated as sufficiently important to retain in the final test specifications.
- » 102 of the 103 (99.01%) knowledge statements drafted by the task force were rated by a sample of 495 practitioners as sufficiently important to retain in the final test specifications.

It is anticipated that eligibility for DIS certification, regardless of the model chosen, would require the following:

**Minimum Eligibility**

- » High school diploma or General Education Development (GED) equivalent with at least two years of applicable community experiences in counseling or health outreach.

### **Preferred Eligibility**

- » Associate's degree or equivalent with up to one year of applicable community experience in counseling or health outreach.
- » Bachelor's degree or higher from an accredited college or university. No experience required.

Additional formalized training relative to the DIS role may also be required for eligibility to become nationally certified. The educational recommendations are designed to be a minimum standard that is inclusive of as much of the current workforce as possible, and is written in the context where there is currently no formal preparation curriculum within colleges and universities.

## **2. Enumeration of the DIS Workforce**

An important component of the project was the enumeration of the DIS workforce. This number, previously undocumented, was a critical piece of information needed for the development and assessment of the three certification models. Specifically, this information has implications for analysis and forecasting the costs, implementation, and sustainability of the certification program. Enumerating the number of DIS in the U.S. public health workforce was also instrumental in ensuring that the certification program meets the needs of DIS, health departments, and other partners and stakeholders. Enumeration was conducted via an online survey that was developed and administered by NACCHO, in partnership with NCSD, PHAB, and CDC. The survey was conducted in two phases from June to August 2016. The survey methodology was designed to be as accurate, comprehensive, and efficient as possible, and took into consideration differences across the country in how DIS positions are staffed, organized, and managed. The results of the enumeration revealed that there are 1,661 STD/HIV DIS positions (1,404 filled) and 402 STD/HIV DIS supervisor positions. Additional work to estimate the number of DIS who work only in the TB program was completed by the National TB Controllers Association (NTCA) and yielded a range of 540-575 positions.

## **3. DIS Registry**

A DIS registry has both short-term and long-term value as it relates to the development and implementation of a DIS national certification program. Initially, the registry can be used to inform DIS of the certification program and to ascertain potential interest in becoming certified. It can also be used to distribute information about the final eligibility requirements for the certification program, as well as education, training, and technical assistance opportunities that are available. In May 2015, the National Coalition of STD Directors (NCSD) asked STD directors of programs directly funded by the CDC Division of STD Prevention to provide contact information for all full and part-time DIS within their jurisdictions. Of the 65 states, cities, and territories funded by CDC, 62 provided information. As of December 2016, there are 2,226 people listed in the registry. NCSD will be conducting a review of this list during 2017 to ensure that the list is complete, and accurately reflects any turnover at the state and local levels.

## **Describing the Three Potential Models for DIS Certification**

A review of other national certification model options that could be considered for DIS certification revealed three potential approaches. The three potential models included a test-based model, which describes certification of an individual as being able to competently complete a job or task based upon an examination and/or the completion of a program of study; a portfolio review-based model which typically requires verification that an individual has met predetermined and standardized criteria through the review of a collective body of work; and, a unit-based model which typically requires verification that the individual has met criteria of nationally recognized, practice-focused, and evidence-based standards by combining the performance of the

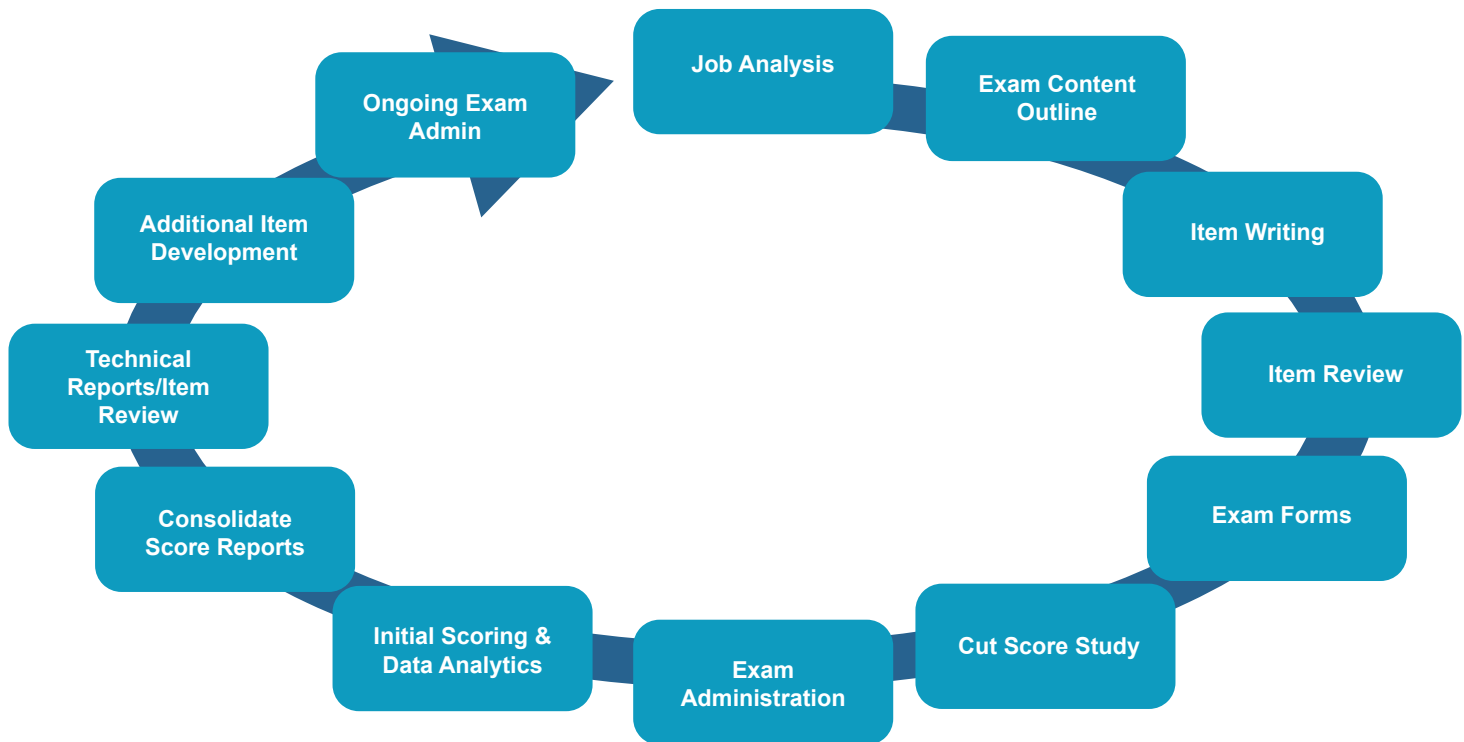


individual with the performance of the unit, and documentation against standards is submitted together and reviewed together. This section provides a summary of each of the models, with some comparison indices presented at the end of the section. More robust descriptions of each model are provided in the full report, with corresponding appendices that include technical aspects of each model as indicated.

### 1. Test-based Model

A test-based approach, or model, of national certification is the most common model in place in the certification industry today. The basic premise of a test-based model is that applicants who meet the eligibility criteria take a comprehensive exam that measures the knowledge, skills, and application of tasks identified in the JTA. Successful passing of the test leads to individual certification. Advantages of a test-based certification model include its general acceptance based on common understanding of taking a test to measure knowledge; a long-standing track record of credibility, validity, and reliability; a straightforward, individual path to certification that is transferable across work places, geographical boundaries, and billing requirements; and, measurement of a standardized, legally defensible body of knowledge.

There are several steps in the development of a test-based model for certification. The diagram below (Seacrest Company, May 2017) summarizes those steps. Detailed activities for each step can be found in the full report.



Disadvantages of a test-based certification model were identified as individual test-taking anxiety, especially for individuals who have not been a student for a period of time; tests can be complex and costly to administer and keep relevant (updating the foundational JTA is an ongoing part of keeping the test current with practice); some content might not apply to all DIS work situations, although this variability can be addressed with subject-specific modules attached to a test on the basic knowledge; the small number of DIS might make it difficult to find a vendor who is willing to administer and manage the test over

time; and this model can be subject to criticism that the applicant can prepare for and master the test, but still not be proficient in the skills required for the job. Additionally, individual costs to take the test can be a barrier for some DIS.

In terms of the anticipated costs for establishing a test-based model for DIS certification, PSI provided a financial analysis using the results of NACCHO’s enumeration study as a basis for the expected numbers of DIS to be certified. PSI developed the DIS certification financial analysis using industry best practices and variables such as market size, awareness, and purchase intent. The variables were used to develop an evolving financial model which accounts for the test-based and overall administrative expenses for the first five years of the certification program. The following tables are highlights of the financial analysis.

Table 1 displays the estimated cost of developing the DIS certification including the Exam Development, Marketing, and Publishing components. The total presented accounts for the cost and investment for the certification prior to launch and does not account for costs relating to the continued administration of the certification.

<b>Table 1. DIS Certification Program Development Projection for Test-based Model</b>					
<i>Total Development Cost = \$295,831</i>					
<b>Description</b>	<b>Development (approx. 8 months)</b>	<b>Testing (approx. 3 months)</b>	<b>Launch (approx. 3-6 months)</b>	<b>Line Subtotals</b>	<b>Assumptions (for comments)</b>
<b>Exam Development Services</b>	\$28,000		\$16,300	\$44,300	Includes item development, exam assembly/review in Development. Item analysis, Standard Setting, scaling and equating in Launch
<b>Exam Development Meetings</b>	\$42,142		\$12,630	\$54,772	Four in-person development meetings (Job Analysis Task Force, Item Writing, Item Review, and Standard Setting)
<b>Exam Development Meetings</b>				\$135,159	Assumes a 16-month development timeline
<b>Marketing</b>			\$20,000	\$20,000	Marketing for launch only
<b>Trademarking</b>		\$5,600		\$5,600	Assumes trademark registration in U.S.
<b>Exam Publishing</b>		\$3,000		\$ 3,000	
<b>Item Banking System</b>	\$ -			\$ -	Assumes included in exam delivery contract
<b>Certification Management System</b>	\$25,000			\$25,000	
<b>Scheme Committee</b>	\$8,000			\$8,000	
<b>Subtotal</b>	<b>\$103,142</b>	<b>\$8,600</b>	<b>\$8,930</b>	<b>\$295,831</b>	
<b>Phase Estimates</b>					
<b>Subtotals by Phases</b>	<b>\$103,142</b>	<b>\$8,600</b>	<b>\$48,930</b>	<b>\$295,831</b>	

Table 2 represents the operating costs of the DIS certification after the program has been launched. The associated costs include personnel for operating the program, additional marketing expenses, a management system, and scheme committee costs. Additionally, exam development and validation meetings are accounted for on a two-year cycle with year one being less robust than the following exam development cycles. Yearly marketing expenses are also included in the operating expenses, which may decrease if the CDC maintains the DIS certification as a federal standard.

<b>Table 2. Expected Post Launch Operating Expenses (Semi-variable and Fixed Costs)</b>					
<i>Expected annual fixed costs and semi-variable costs for the new service and/or product.</i>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Operations Role</b>	\$40,129	\$41,333	\$42,573	\$43,850	\$45,165
<b>Product Manager Role</b>	\$61,240	\$63,077	\$64,969	\$66,919	\$68,926
<b>Exam Development &amp; Validation Meetings</b>	\$18,000	\$ -	\$24,000	\$ -	\$24,000
<b>Marketing Expenses</b>	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<b>Certification Management System</b>	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<b>Scheme Committee</b>	\$ 8,000	\$8,000	\$8,000	\$8,000	\$8,000
<b>Total Operating Exp</b>	\$172,369	\$157,410	\$184,542	\$163,769	\$191,091

Table 3 reviews the yearly cost by volume of delivering the DIS certification itself. The cost assumes a per exam delivery cost of \$42 with additional costs of postage and certification packages. The yearly costs are associated with the number of certificants estimated per year, as well as the cost of a three-year recertification cycle.

<b>Table 3. Yearly Cost by Volume</b>					
<i>Expected variable costs of producing the new service and/or product</i>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Shipping/volume</b>					
<b>Total Cost/volume</b>	\$26,923	\$11,611	\$10,250	\$8,039	\$11,343
<b>Total Renewal Cost/volume</b>	\$ -	\$ -	\$2,383	\$1,123	\$991
<b>Total Variable Costs</b>	\$26,923	\$11,611	\$12,633	\$9,162	\$12,334

Table 4 displays the yearly cash flow required as well as the revenue produced from the DIS certification. The annual cash flow displays the cost of the DIS certification after it has been adjusted for the annual revenue, while the cumulative cash flow shows the cost of the program over the next five years. It is of note that the certification makes a positive gross profit but operating costs are greater than yearly profit.

Table 4. Expected Case Summary						
Expected Case	0	1	2	3	4	5
Annual Revenue	n/a	\$91,018.07	\$42,877.19	\$59,956.11	\$40,099.81	\$51,080.94
Total Variable Costs	n/a	\$26,923.14	\$11,611.14	\$12,633.10	\$9,161.70	\$12,334.33
Gross Profit	n/a	\$64,094.92	\$31,266.04	\$47,323.01	\$30,938.10	\$38,746.61
Gross Margin (%)	n/a	70%	73%	79%	77%	76%
Total Operating Expenses	n/a	\$172,368.75	\$157,409.81	\$184,542.11	\$163,768.37	\$191,091.42
Operating Profit	n/a	<b>\$(108,273.83)</b>	<b>\$(126,143.77)</b>	<b>\$(137,219.09)</b>	<b>\$(132,830.27)</b>	<b>\$(152,344.81)</b>
Operating Margin (%)	n/a	-119%	-294%	-229%	-331%	-298%
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Development Cost & Capital Investments	n/a	\$295,830.67				

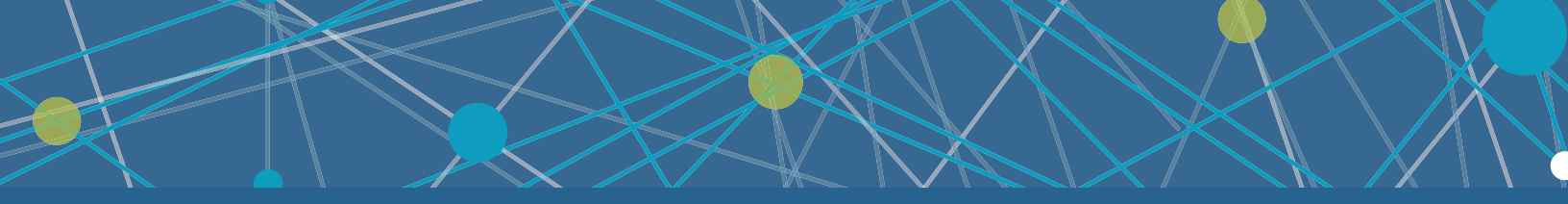
## 2. Portfolio Review Model

PHAB engaged the American Nurses Credentialing Center (ANCC) to develop a report with recommendations regarding the feasibility of using a portfolio review approach, or model, for DIS certification. The primary focus of certification through portfolio review process is based upon the collection and evaluation of documents that provide evidence of expertise in a specialty.

The ANCC Measurement and Certification Services departments reviewed elements of their existing nursing portfolio model for potential adaptation and implementation for DIS certification development. After thorough review and interpretation of the enumeration study and the JTA, it was determined that a portfolio approach would have potential for assessing DIS field workers. The ANCC nursing portfolio would require adaptation to support the non-nursing DIS certification program. The proposed certification portfolio involves the collection and evaluation of documents including a 1200-word written exemplar that provides evidence of knowledge, experience, and expertise in a medical or designated certification specialty.

Portfolio development typically occurs over a nine-month period and involves the following activities:

- » Recruitment of Content Expert Panel (CEP) and Portfolio Appraisers Panel (PAP);
- » Scoring Criteria Development;
- » Standard-Setting;
- » Training of Portfolio Appraisers; and,
- » Program Launch.



The primary responsibilities in DIS portfolio development are to identify eligibility criteria, adapt universal portfolio criteria to DIS, and to recruit a team of content experts who will oversee development of universal portfolio criteria and linkages to the content outline for the DIS assessment portfolio. In addition, an external validation panel (EVP) of DIS content experts must be designated to cross-validate the work of the CEP. The EVP provides additional independent validation of the portfolio criteria specifications and content outline. The typical size of the CEP is 10 members and for the EVP 15. An additional 10 content experts will be needed for the PAP. They will be responsible for scoring the candidates' portfolios. It should be noted that content experts are not allowed to serve on the CEP or EVP, while simultaneously serving as a portfolio appraiser. The DIS portfolio specifications areas that will need to be developed include:

- » Major content domains to be assessed;
- » Competencies associated with the major universal content criteria;
- » Competencies (knowledge, skills) specific to the specialty;
- » Scoring elements specific to the specialty; and,
- » Score “3” descriptors specific to DIS.

Advantages of a portfolio review certification model that were identified during this project include decreased test-taking anxiety on the part of the applicant; measurement of both the knowledge and its related skill application in current practice; the opportunity to measure the “softer” skills of the DIS; viewed and credible and transferable across work places, geographical boundaries and billing practices; development of a portfolio has benefit for the individual beyond certification; and, provides an opportunity to assist the DIS with review of their job in the context of national standards of portfolio review (individual feedback). Portfolio review or assessment is indicated as an alternative form of assessment for niche specialty areas where occupational populations are smaller and traditional testing methods are deemed less favorably due to smaller sample sizes. Portfolio assessment is an attractive approach for occupational areas where formal academic training is not widespread, recognized, or is in a developmental phase. Portfolio assessment allows consideration for life work, professional experience, and occupational recognition to be considered for certification.

Disadvantages of a portfolio review certification model were also identified. In comparison to traditional tests, portfolio assessment programs are costly and involve greater complexities for developing valid and reliable products. Major obstacles to successful implementation of a DIS portfolio program would be the cost to develop the product and train appraisers, and fees required of potential candidates to support the development and ongoing maintenance of the program. Some concerns were also raised about the written component of a portfolio review posing some unique challenges for applicants.

The smaller sample sizes typically encountered in alternate portfolio assessment programs pose unique challenges in meeting accreditation standards. For instance, common statistical measures reviewed in exam accreditation programs such as the Cronbach Alpha indicator of exam reliability are not applicable in portfolio assessment. Portfolio reliability and validity measures are dependent on consistency in scoring processes, score definitions, and rater uniformity.

ANCC provided forecasts for the costs associated with the development of the program, which includes the essential tasks of portfolio standards development; portfolio review process development; alpha and beta testing of standards and process; appraiser recruitment and appraiser training; and, publication of the portfolio requirements and applicability to DIS.

<b>Cost Estimates for DIS Certification Portfolio Development</b>				
<b>Meeting Type</b>	<b>Hypothetical Meeting Dates</b>	<b>Number of Days</b>	<b>Number of Attendees (Estimated)</b>	<b>Costs (Travel, Accommodations, fees)</b>
Portfolio Job Analysis Meeting 1	TBD	3	10	\$13,000*
Portfolio Job Analysis Meeting 2	TBD	3	10	\$13,000*
Standard Setting (Portfolio Score "3" Descriptors)	TBD	3	10	\$13,000*
Portfolio Appraiser Training	TBD	3	10	\$13,000*
Facilitator days (1500/day)		12		\$18,000*
Recruitment (Volunteers, CEP, EVP, PA, EVP)				\$15,000
Portfolio Configuration				\$15,000
Estimated Costs				\$100,000
			<b>Total Projected Costs</b>	<b>\$200,000</b>
Appraiser Stipend per Portfolio Scored			TBD in Full Business Analysis and Dependent on Number of Candidates	
Annual DIS Registry Maintenance (Portfolio Applications, Submissions, Assessment Results, and Credentialing History)			TBD in Full Business Analysis	

\*Unit Estimated Expenses Per Person Per Meeting: Airfare \$450; Transportation/Mileage \$125; Meals for 3 days \$225; Hotel for 2 nights \$500; Total \$1300

ANCC was not able to provide details of ongoing administrative and maintenance costs because they only provide those in a formal business analysis document. However, conservative estimates of \$100,000-200,000 per year for the first three to five years and then decreasing slightly thereafter were based on the following activities:

- » Initiating the portfolio review process and assessing the results;
- » Making changes to the program;
- » Annual training;
- » Development of recertification requirements; and,
- » Paying for the review process (appraiser costs, etc.).

Ongoing management of a portfolio review certification program will have some administrative/overhead costs that are unknown now because those will depend on the contract that is negotiated with the vendor

at the time. Also unknown is the individual fee for the portfolio review. Those fees are usually set based on the business plan for the certification program. For other portfolio reviews, individual fees can range from \$150-\$750 based on the specialty and the details of the portfolio requirements (i.e., whether an in-person interview is required as part of the review process).

### 3. *Unit-based Model*

For the purpose of this project, a unit-based model for DIS certification combines standards for health department performance in the program areas that DIS work in (STD, HIV, TB, etc.) with individual competencies and performance. This model assumes that individuals and the organizations in which they work are in alignment with the expectations of services to the clients and the public. This model is based in part on the ANCC Magnet recognition and certification of hospitals and nurses who work in them. A unit-based approach to certification has the potential to:

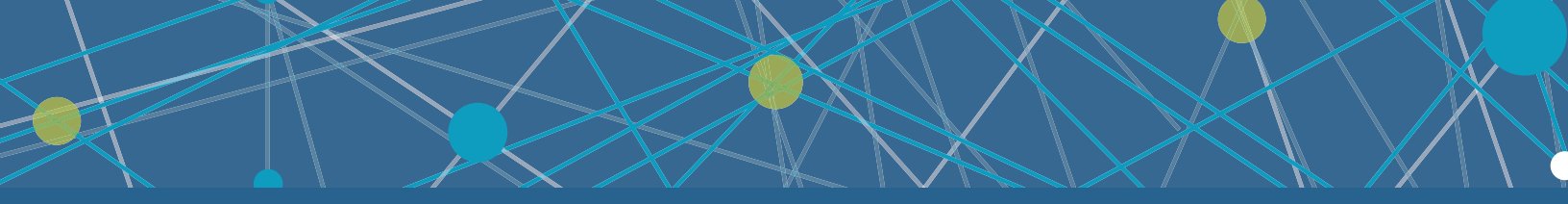
- » Identify strengths in a specific practice area;
- » Identify professional growth opportunities;
- » Link current skills and abilities to critical job skills and performance plans;
- » Assess learning needs prior to re-entering the workforce after a prolonged absence;
- » Assess learning needs prior to transitioning from one area of practice to another;
- » Form the framework for a professional development plan; and,
- » Hold the practice environment partially accountable for the performance of the individual.

Based on the application of this model in other areas than public health, it has the potential to create baseline standards for the field, both at the unit/program and individual levels; establish a method to differentiate between employee skills; create a uniform set of standards for employment and for program funding, performance management, and quality improvement; and, link the work place with the individual in a way that can promote employee retention. A unit-based model does not have the potential for anxiety over individual review.

PHAB held a think tank November 17-18, 2016 where representatives from the national partner organizations, selected DIS from various health departments, and selected program representatives from CDC came together to discuss the JTA components as well as health department program requirements. Since most health departments receive their guidance for program operations from federal Funding Opportunity Announcements (FOA), think tank participants reviewed those and other similar documents in considering this model. Elements that would be required should this model be chosen were identified by think tank participants as elements that are needed in the field anyway. Specifically, think tank participants recommended that performance standards for health departments to operate the programs in which DIS work be developed. Augmenting the FOA with specific, detailed performance standards would provide health departments with greater guidance in managing and administering the respective programs such as TB, STD, HIV, and general communicable disease.

A unit-based approach to DIS certification has the following potential barriers:

- » Isn't readily transferable when an employee leaves that work setting;
- » Doesn't give as much specific individual recognition;
- » Can be costly to maintain and update;
- » Attention to individual performance when reviewing the DIS and the unit together can be challenging; and,
- » Is very new, so it may not be as well understood as other models.



It is difficult to forecast the exact costs for development and implementation of a unit-based model for certification because there are not many examples from which to extract that information. The following costs are conservative estimates from PHAB, based on the best available information.

Development Costs (first one to two years) = \$200,000- \$300,000:

- » Identification of the evidence for practices, including best and promising practices;
- » Development of measurable performance standards for the health department (state, local, tribal, and territorial);
- » Discussions with experts in the program areas and in the field to reach consensus about the performance standards that would be most useful for DIS certification;
- » Development of the DIS certification individual standards for certification (similar to portfolio); and
- » Alpha and beta testing of the standards and the entire review process

Ongoing Maintenance/Administrative Costs:

The ongoing maintenance and administrative costs are unknown because it depends on how the individual component is blended into the unit-based review (whether that will look more like a test or a portfolio). It also will depend on whether the unit-based review would be absorbed into the existing accreditation program or would stand separately. These costs cannot be determined until more detail about the individual components of the model are determined.

## Comparison and Analysis of Three Models of DIS Certification

After having assessed the three potential models for DIS certification, the PHAB National Advisory Committee, national partners, and the PHAB Board members and staff recommend that CDC proceed with the development of a test-based approach to certification. This recommendation was developed based on the observations about the various attributes of each model, as well as the initial rationale for DIS certification. Those attributes included cost, transferability to other work settings, recognition by others (including potential payors), time to establish the certification program, understanding of the model by the DIS workforce, ability to measure the knowledge of the individual DIS, and ability to accurately measure the validity and reliability of the model. The recommendation was made after initial polling of the various stakeholders, with a follow-up poll approximately three weeks later to ensure confidence in the recommendation. Both polls indicated the test-based model was the most preferred; the unit-based model the second most preferred; and the portfolio review model the least preferred.

In further discussions about the secondary preferences for the unit-based model, the primary interest was in the relationship of the performance of the health department in managing the programs in which the DIS work. There was great interest in recommending that standards for health department performance be developed as a foundational support for DIS seeking certification. That recommendation, along with the planned approach for addressing this interest, is addressed under the Foundational Support section of this report.

The test-based model was determined to have the greatest proven potential to align with the DIS certification stated goals of: improving public health services provided to communities by DIS through a high-quality, standardized approach to the professional development of this workforce; validation of the knowledge, skills, and abilities of DIS; standardization and improvement of training; increasing the quality and consistency of service delivery; and, increasing recognition of the skills and abilities of the individual DIS. The other two models, portfolio review and unit-based had limited identified potential to achieve all of the stated goals due to their newness and to their more subjective approaches to review for certification.



A table summarizing the model comparisons by the eight identified attributes, is noted below.

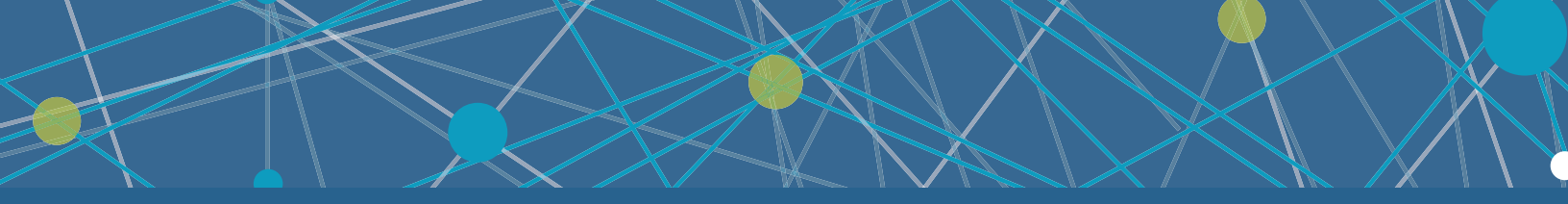
Model Selection			
Model Attributes	Test-based Model	Portfolio Review Model	Unit-based Model
Alignment with DIS Certification Goals	Yes	Limited	Limited
Start-up Costs	\$295,000	\$150,000-\$200,00	\$200,00-\$300,000
Transferable to Other Work Setting	Yes	Yes	No
Recognizable by Others	Yes	Limited	No
Time to Establish the Certification Program	1-1.5 years	1-1.5 years	1-2 years
Understanding of the Model by the DIS Workforce	High	Limited	No
Ability to Measure the Knowledge of the Individual DIS	High	High, but includes “soft skills” as well as knowledge	Limited
Ability to Measure the Validity and Reliability	High	Limited	Limited

## Foundational Support Areas and Observations

The PHAB National Advisory Committee, subject matter experts, national partners, and PHAB Board members and staff, identified two key foundational support areas that must be addressed if DIS certification is to be effective in accomplishing its intended goals. One of those areas is the availability of training for DIS who intend to participate in the national certification program. The second area relates to the setting of program standards specifically for assessing the performance of health departments who manage the programs in which DIS work. Both these areas will be summarized in this section, and more specific details can be found in the full report and in the complementary commissioned papers.

### Project Observations about Education and Training Related to the DIS Workforce

One of the goals of DIS certification is to assess, assure, and standardize qualifications to improve public health services. Unless and until there is a formalized educational pathway for DIS (such as through schools of public health at the undergraduate level) there is a need for standardized, high-quality training programs that provide the requisite knowledge. The DIS certification program must have a corresponding training and development element that is designed to fit. The correlation between this certification program and training is to make the DIS “fit for purpose”—and that the purpose continues to evolve. The DIS certification program will establish core competencies that DIS in the field will be expected to meet and maintain. The intent is to create a standard for the DIS job role and function, detailing specific tasks, knowledge, skills and abilities that are essential for all DIS. Comprehensive standardized training to support this role will be essential to ensure consistency in DIS performance nationwide. Obtaining certification will validate that a given DIS has demonstrated the established knowledge, skills, and abilities (KSAs). The process will be predicated on the assumption that a person has access to the necessary training and resources to achieve the KSAs to meet the



accredited certification program standards. CDC will play a critical role to ensure that DIS and supervisors of DIS have access to the necessary training and support to meet the certification standards.

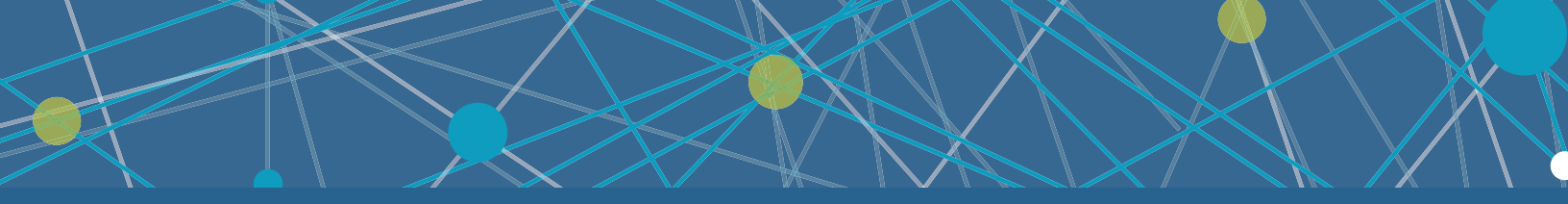
The DIS Certification Project allowed an opportunity to better assess DIS training needs and measure job tasks, knowledge, skills, and abilities. The JTA provides a template to conduct a crosswalk between required competencies and related training components. Important considerations are core curriculum enhancements to address the breadth of the core DIS competencies in areas such as cultural humility, incident command system, situational awareness and community safety. Current efforts underway at the CDC include utilizing results from a completed crosswalk with the current training, Passport to Partner Services, and the DIS Certification Project Job Task Analysis to determine gaps and pursue methods to address those gaps. Stakeholders from the National Advisory Committee recommended a similar crosswalk with the TB interview curriculum and HIV Capacity Building. While CDC has dedicated time and funding to enhance DIS training, information from the DIS Certification Project indicated that the existing training systems are inadequate to support emerging DIS training needs and the additional enhancements associated with DIS certification.

Stakeholders may likely have needs for additional training for emerging public health practice issues (i.e. technology-based client communications, etc.) and program priorities (i.e. Linkage to Care, PrEP, etc.). Thus, the recommendations of stakeholders throughout the DIS certification assessment process were to evaluate current training resources, take steps to address gaps and develop one training plan consistent across all program areas to address the core competencies. Thereafter the development of a plan for continuing education would include modules to support emerging issues would be in order. Evolution in responsibilities of DIS, disease content areas, and methods (approach and how the work gets done), as well as emerging public health practice issues and program priorities indicates additional training topics and enhancements that must also be considered. Some of these emerging areas include:

- Technology access and the use of data systems as well as new diagnostic tests and treatments;
- New and innovative prevention tools such as PrEP, Linkage to Care, etc.;
- Expanded responsibilities for TB, outbreaks, preparedness, additional data collection/assessment activities for surveillance; and,
- Assurance activities, detailing, and community engagement.

Given that current requests for CDC-sponsored training courses far outweigh the staffing resources at CDC and the Regional DIS Training Centers to provide the trainings, a plan should be developed with all relevant training stakeholders (STD, HIV, TB, Hepatitis, Emergency Preparedness) and local jurisdictions to develop capacity to provide established training curricula through Train the Trainer programs. Garnering ongoing input and buy in from internal and external stakeholders to inform training are significant. These stakeholders include other federal agencies, public health leaders at the state and local levels, training organizations, and HIV capacity building assistance providers. Representatives from programs such as Preparedness, Viral Hepatitis, Communicable Diseases that intersect or intermittently tap the expertise of DIS to augment their capacity, are likely to have valuable input to training to maintain the DIS' unique surge capacity for public health.

Baseline education and experience to determine eligibility for hire as a DIS was a point of robust discussion with subject matter experts. Current hiring practices of DIS across the country have varied educational requirements. Unlike other public health professions, potential DIS candidates are not hired with a formal academic degree and specific specialty such as epidemiology or nursing. State and local DIS job specifications include a variety of education requirements and preferences and many of the hiring processes place just as much emphasis on relevant job experience and knowledge/skills/abilities as on formal education. Recognizing the potential utility of a standardized curriculum, PHAB has partnered with the Association of Schools and Programs of Public Health to commission a paper that will describe how formal public health education might



address the educational needs of the DIS workforce in the future. This paper, which will be distributed as a complementary report to this project report, will consider the current curricula in both undergraduate and graduate public health education, and the DIS JTA results to address the alignment of these program curricula with the DIS JTA as well as potential options for DIS to access these programs across the nation. There are many benefits to this approach, but establishing formal relationships with schools of public health will take some time. Therefore, CDC should consider pursuing the formal educational curriculum in tandem with the establishment of the certification program and standardized national training.

### **Performance Standards for the Health Department in Which the DIS Work**

Throughout the project, the participants in the discussions identified the importance of the performance of the health department in administering, managing, and supporting the programs in which DIS work. The current standard operating procedure is that CDC provides guidance and best practice information to health departments through their Funding Opportunity Announcements (FOA) and other similar documents, but there are no standards of operation for these programs that measure the performance of health departments (other than their progress reports submitted to CDC). General communicable disease expectations as currently described in the PHAB accreditation standards and measures, and developed in partnership with various program divisions within the CDC include the following health department requirements:

- Protocols for timely investigations of public health problems, environmental, and/or occupational health hazards;
- Procedures for the conduct of investigations;
- Review of investigation reports against procedures (After Action Reports);
- Laboratory testing for notifiable/reportable diseases;
- Work with partners to conduct investigations and responses to outbreaks;
- Protocols for containment/mitigation of public health problems/environmental public health hazards; and
- Tracking logs for assessing the health department's performance on these areas against their protocols and procedures.

Health department accreditation standards and measures are organized in twelve domains, based on the Ten Essential Public Health Services, plus administration/management and relationship with the health department's governing entity (board of health, governor, mayor, county commissioners, etc.)

A commissioned paper on the alignment of the PHAB health department accreditation standards and measures with the DIS competencies in the JTA has been provided to CDC as a complementary report.

## Observations and Conclusions from the Assessment Phase of the DIS Certification Project

The PHAB National Advisory Committee, PHAB staff and board members, and partners, after having reviewed the information available to date, expressed the following observations and conclusions:

1. The JTA can be used as the basis for DIS certification. It appropriately reflects the duties, roles, and responsibilities of the DIS. A template functional job description has been created based on the JTA results and will be distributed for all health departments to use in their own job description format;
2. The NACCHO enumeration numbers (1661) seem to accurately reflect the number of front-line DIS in the country. Ensuring that TB-only DIS are included will strengthen the estimate. The National TB Controllers Association estimates the range of TB-only DIS positions to be 540-575;
3. The DIS registry, managed by NCSD, will be a valuable resource for contacting the DIS when certification is available; and,
4. An educational/outreach toolkit for DIS and their supervisors to use as they begin to prepare the workforce for the concepts of certification will be provided as a beginning tool for implementation of the certification program.

## Recommendations

### Short-term Recommendations

The PHAB National Advisory Committee, PHAB staff and board members, and partners, after having reviewed the information made available to them, provided the following short-term recommendations that should be addressed in the next twelve months:

1. After having assessed the three potential models for DIS certification, it is recommended that CDC proceed with the development of a test-based approach to certification. This recommendation was developed based on the observations about the various attributes of each model, as well as the initial rationale for DIS certification.
2. CDC should select an organization eligible for certification accreditation to administer and manage the DIS national certification program including the training on the certification process. PHAB has provided CDC with both an analysis of the potential organizations who can do this work and an implementation plan to assist in the rapid initiation of DIS certification.
3. CDC should plan to subsidize the development and implementation of the DIS national certification program for a period of at least five years.
4. CDC should designate a responsible party for ensuring that the subject matter content training that DIS need to become certified is available to all DIS in a timely manner. For accreditation purposes it is important that subject matter content training be provided independent of the certifying organization.
5. CDC should establish a cross-NCHHSTP CDC working group charged with developing short-term (i.e., training) and long-term (i.e., formal curricula) action plans that address the needs for education and training for DIS within the context of DIS certification.

6. CDC should consider commissioning a formal paper on the current state of DIS training and a training needs assessment, including the identified gaps, barriers, and access. This information would be useful in planning for the availability of training related to the DIS certification implementation as well as in developing one comprehensive DIS training plan, crossing all program areas of responsibility.
7. CDC should support the NCSA to update the DIS Registry so that accurate contact information can be used to inform all DIS about the certification program and its requirements.

### Long-term Recommendations

Several long-term recommendations also emerged from the discussions about DIS certification. While it is acknowledged that these recommendations will take longer than twelve months to address, initial work should begin concurrently with the development and implementation of the DIS national certification program since they are all considered foundational to the overall success of the program:

1. CDC should carefully consider the recommendations that emerged from the commissioned paper on the alignment between the DIS education needs and the competencies covered in formal public health education to plan for DIS formal academic education for the future.
2. CDC should strongly consider a partnership with PHAB to develop and publish clear standards of program operations and accountability for health departments to use in administering the programs in which DIS work. Recommendations from the certification/ health department accreditation alignment commissioned paper should be carefully considered.

## CONCLUSION

CDC has taken a bold step to study the feasibility and the assessment of models for DIS certification in the U.S. PHAB's consultant experts, experts for the commissioned papers, the PHAB National Advisory Committee, subject matter experts, national partners, and CDC support staff have systematically reviewed a variety of information and provided actionable recommendations aimed at achieving the DIS certification outcomes, as well as ensuring the development and implementation of a credible national DIS certification program. All components of these observations and recommendations are essential for the program to be a success.

# ATTACHMENTS



## Attachment A

### DIS Job Task Analysis Summary

#### Tasks

##### 1. Planning and Preparation for Case and Field Work

- » Gather, assess, and review client and community information using various investigation procedures including interviewing or data mining
- » Assess and prioritize intervention activities
- » Maintain field supplies and comply with field safety plans

##### 2. Investigation Activities

- » Conduct investigations using various investigation methodologies (e.g. including field investigations, investigations using electronic tools, and site assessments)
- » Document intervention activities in a timely manner per local protocol
- » Maintain confidentiality of sensitive client and protected health information

##### 3. Client Encounters and Interviewing

- » Verify the client's identity during client encounters or prior to disclosing confidential information
- » Notify and educate clients concerning test results, disease exposure, environmental risk, and other relevant health information
- » Conduct comprehensive interviews employing effective communication skills
- » Ensure and promote a confidential and comfortable environment for client communications
- » Inform clients of the importance of seeking care and refer them to the appropriate community or medical resources
- » Collaborate with clients to gather information on an environmental risk history, risk reduction plan, third parties at risk, or venues where the client or others may have been exposed to diseases
- » Identify client barriers to needed interventions to conduct partner/contact notification, and/or coordinate solutions to those barriers

##### 4. Surveillance Support Activities

- » Collect surveillance information from surveillance systems, management systems, and/or community surveillance information, and conduct data entry of client interviews and investigation activities to identify emerging issues with client population

##### 5. Health System Collaboration and Quality Improvement

- » Collaborate with service providers to ensure entry into care and continuity of care
- » Serve as a local resource for public health information or recommendations to the community and providers
- » Conduct and contribute to provider and laboratory education, health department improvement activities, and other means to improve the quality of care



## 6. Clinical Support Services

- » Verify that clients received testing, adequate treatment, and follow-up services as appropriate
- » Provide clinic testing and treatment follow-up services in accordance with local protocol and CDC recommendations

## 7. Testing and Field Services

- » Identify and respond appropriately to unsafe situations
- » Participate in event-based and targeted testing, screening, or outreach
- » Administer, and/or deliver testing, test results, and/or treatment to clients
- » Collect or transport specimens and serve public health orders per jurisdiction protocol

## 8. Case Analysis

- » Determine disease intervention time frames, procedures, and objectives
- » Recognize or address gaps in information elicited and conduct client interviews to collect necessary information
- » Review available case information and conduct case analysis to determine case priority level, disease staging classification, and/or additional steps for intervention

## 9. Outbreak Response and Emergency Preparedness

- » Participate in preparedness training
- » Support health emergencies and outbreak response initiatives by participating in interventions and active data collection
- » Coordinate with government agencies and health officials



## JTA Knowledge, Skills and Abilities

Knowledge	Skills
<ul style="list-style-type: none"> <li>Ethical and professional conduct</li> <li>Privacy practices and reporting procedures</li> <li>Counseling techniques</li> <li>Universal safety precautions and protocols</li> <li>Disease characteristics, treatments, and prevention strategies</li> <li>Community resources and stakeholders</li> <li>Health care program policies and procedures</li> <li>Clinic or laboratory policies and procedures</li> <li>Disease testing locations and protocol</li> <li>Cultural competency</li> </ul>	<ul style="list-style-type: none"> <li>Active listening</li> <li>Critical thinking</li> <li>Work efficiencies (e.g., multitasking, time management, prioritization, organization)</li> <li>Problem solving</li> <li>Interview techniques</li> <li>Investigation/ notification protocols</li> <li>Motivating clients</li> <li>Establish and maintain collaborative relationships</li> <li>Case management</li> <li>Data collection and entry</li> <li>Use of navigational tools</li> <li>Conflict management and resolution</li> <li>Applicable disease intervention assessments</li> <li>Communication techniques and procedures</li> <li>Test technologies and interpretation</li> <li>Specimen collection, handling, and processing</li> <li>Situational awareness</li> </ul>
Abilities	
<ul style="list-style-type: none"> <li>Adaptability to changing environment</li> <li>Non-verbal communication</li> </ul>	

## Work Activities- Work activities that are used to perform the tasks of a DIS

- Analyze data or information
- Obtain information
- Interpret the meaning of information for others
- Use technology and related tools
- Make decisions and solve problems
- Think creatively
- Document/record information
- Communicate with persons outside organization
- Organize, plan, and prioritize work
- Establish and maintain interpersonal relationships
- Estimate the quantifiable characteristics of products, events, or information
- Schedule work and activities
- Evaluate information to determine compliance with standards
- Perform administrative activities

## Tools & Technology- Technological tools and software that are used to perform the tasks of a Disease Intervention Specialist

Tools used by DIS	Technology used in DIS work	Important additional considerations
<ul style="list-style-type: none"> <li>Desktop computers</li> <li>Personal computers</li> <li>Mobile devices</li> </ul>	<ul style="list-style-type: none"> <li>Spreadsheet software</li> <li>Word processing software</li> <li>Internet browser software</li> <li>Data base user interface and query software</li> </ul>	<ul style="list-style-type: none"> <li>Valid driver's license if required to drive vehicle</li> <li>Access to personal car or applicable transportation</li> <li>Car insurance if required to drive vehicle</li> <li>Emergency response availability based on jurisdictional expectations</li> </ul>

## Attachment B

### Template Disease Intervention Specialist (DIS) Functional Job Description Instructions for Use in a Health Department Setting

#### General Instructions for Use

Health departments may use this template functional job description for DIS who work in their agency. This job description was developed based on the results of a national Job Task Analysis survey that was conducted by PSI, LLC in 2016 as part of the DIS Certification Project.

DIS have various titles depending on the human resources policies in place in any given health department. This job description was designed for the following definition of a DIS.

DIS are non-licensed public health professionals with applied expertise in client centered interviews; collection of enhanced surveillance and community assessment data; partner services, including contact tracing; field investigation and other field-based activities, including specimen collection, directly observed therapy, community outreach; collaboration with medical providers, and navigation of health care systems to ensure patient evaluation and treatment; and mobilization for outbreak investigation and emergency response.

#### First Section

Complete each section according to the human resources policies in place at the health department.

Job Title:	Disease Intervention Specialist or Similar Title
Department:	Specify Programs, Departments, or Division
Supervisor:	Specify name and Title of Supervisor Regular
Employment Status:	Full-Time (Change as Needed)
FLSA Status:	Exempt (Change as Needed)
Supervision:	None
Location:	Specify
Travel:	Specify Percentage

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### *Introduction*

Provide a paragraph about the health department as the work setting for the DIS position to which this job description applies.

### *Position Summary*

The standard position summary is intended to be used as written. However, a health department should specify the amount of travel and how the travel is to be accomplished (personal vehicle, public transportation, government provided vehicle, etc.).

Since this job description was developed based on the JTA for the DIS, it is not intended for use with other public health personnel who might also provide some of these services (such as RNs, CHWs, etc.).

### *Position Responsibilities*

These position responsibilities and examples were based on the results of the JTA. This section may be used in its entirety or it may be edited to accommodate a DIS specific job description. Health departments may cut and paste any component of this section as appropriate.

### *Knowledge, Skills and Abilities (KSAs)*

Health departments are strongly encouraged to use the KSA section as written, unless there is a KSA that isn't relevant to a specific DIS job function.

### *Important Additional Considerations and Preferred Educational and Experiential Background*

These are optional sections that may or may not be used by a health department depending on the job requirements for the DIS in their locale.

## Template Disease Intervention Specialist (DIS) Job Description Effective Date: June 1, 2017

Job Title: Disease Intervention Specialist

Department: Specify Programs, Departments, or Division

Supervisor: Specify name and Title of Supervisor Regular

Employment Status: Full-Time (Change as Needed)

FLSA Status: Exempt (Change as Needed)

Supervision: None

Location: Specify

Travel: Specify Percentage

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### Introduction

This is a placeholder for the health department to put a paragraph about the health department as the work setting for the DIS.

### Legal Basis for the Job Description Template

This functional job description was developed based on a formally conducted Job Task Analysis (JTA) under the national DIS Certification Project in 2016. The JTA was conducted to obtain information about the tasks performed in the DIS job role and the knowledge needed to support the performance of these tasks. The JTA process for DIS was conducted in accordance with industry requirements to ensure the development of content-valid and legally-defensible examinations. A three-phase approach identified the tasks and knowledge necessary for competent performance of DIS across various settings and professional disciplines.

- Research of the role of the DIS using existing literature and draft task and knowledge areas based on that literature review;
- Review, revision, and finalize task and knowledge statements through multiple, iterative reviews by subject matter experts; and,
- Obtain importance and performance ratings for tasks and knowledge through a public survey of DIS.

## Position Summary

A Disease Intervention Specialist (DIS) is a non-licensed public health professional with applied expertise in client centered interviews; collection of enhanced surveillance and community assessment data; partner services to include contact tracing; field investigation and other field-based activities, including specimen collection, directly observed therapy, community outreach; collaboration with medical providers, and navigation of health care systems to ensure patient evaluation and treatment. Relevant program areas can include TB, HIV, STD/STI, and other communicable disease, outbreak investigation and emergency preparedness and response.

The position requires some travel (specify percentage) and the use of a personal vehicle (or the use of a government supplied vehicle if applicable).

## Position Responsibilities

Position responsibilities may include, but are not limited to the following examples of work related tasks. The examples are expected to be conducted in accordance with state or local protocols, policies, and procedures and as outlined by the Centers for Disease Control and Prevention (CDC) in guideline documents specific to the disease.

### 1. *Planning and Preparation for Case and Field Work*

- Collect and review client and community information using various investigation procedures including interviewing of clients and contacts; review of data sources; and review of other relevant morbidity reports.
- Assess and prioritize intervention activities based on client needs and program priorities.
- Maintain field supplies needed to accomplish field work.
- Utilize situational awareness to ensure safety in the field.
- Comply with other field safety procedures.

### 2. *Investigation Activities*

- Conduct investigations using various investigation methodologies (e.g. field investigations, available record search and electronic tools, electronic health and medical records, site assessments).
- Document intervention activities in a timely and accurate manner.
- Maintain confidentiality of client and protected health information. Maintains compliance with HIPAA requirements.

### 3. *Client Encounters and Interviewing*

- Verify the client's identity during client encounters or prior to disclosing confidential information to other providers.

- Notify and educate clients concerning test results, disease exposure, environmental risk, and other relevant health information (e.g., treatment, isolation, etc.).
- Conduct comprehensive interviews and re-interviews employing effective communication skills to elicit contacts that may have been exposed to an infectious disease.
- Ensure and promote a confidential and comfortable environment for client communications.
- Inform clients of the importance of seeking care and refer them to the appropriate community, medical, or other resources.
- Gather information on an environmental risk history, risk reduction plan, third parties at risk, or venues where the client or others may have been exposed to diseases.
- Identify client barriers to needed interventions when conducting partner/contact notification, and/or coordinate solutions to those barriers.

#### 4. *Surveillance Support Activities*

- Support surveillance activities by reviewing information from surveillance systems, management systems, and/or community surveillance information.
- Conduct data entry of client interviews and investigation activities to identify emerging issues with client population.

#### 5. *Health System Collaboration and Quality Improvement*

- Collaborate with service providers to ensure entry into care and continuity of care based on individual client needs.
- Provide health education presentation on information pertinent to the programs and services in which DIS work.
- Serve as a local resource for public health information or recommendations to the community and providers.
- Conduct and contribute to provider and laboratory education, health department improvement activities, and other means to improve the quality of care.

#### 6. *Clinical Support Services*

- Verify that clients received testing, adequate treatment, and follow-up services as appropriate for their specific diagnosis.
- Provide clinic testing and treatment follow-up services based on recommendations for their specific diagnosis, based on state/local protocols and CDC recommendations or guidelines.
- Support public health efforts to assure patients maintain isolation and/or quarantine, including legal orders if required.

#### 7. *Testing and Field Services*

- Identify and respond appropriately to unsafe situations in the field.
- Participate in event based and targeted testing, screening, or outreach.
- Administer, and/or deliver testing, test results, and/or treatment to clients.

- Collect or transport patient specimens as appropriate.
- Serve public health legal orders when issued by a state or local health officer as appropriate for the jurisdiction.
- Provide or facilitate transportation to the clients' clinic appointments, as appropriate.

#### 8. *Case Analysis*

- Review available case information and conduct case analysis to determine case priority level, disease staging classification, additional steps for intervention, and/or to determine if expansion of the investigation is warranted.
- Determine disease intervention time frames, procedures, and objectives based on specific diagnosis.
- Recognize or address gaps in information elicited and conduct client interviews to collect necessary information.
- Utilize data as a resource when conducting investigations.

#### 9. *Outbreak Response and Emergency Preparedness*

- Participate in preparedness training.
- Support health emergencies and outbreak response initiatives by participating in interventions and active data collection.
- Coordinate with government agencies, community organizations, and health officials.

### Required Knowledge Of

- Ethical and professional conduct
- Privacy practices and reporting procedures
- Counseling techniques
- Universal safety precautions and protocols
- Modes of transmission, diagnosis, disease characteristics, treatments and prevention and control strategies
- Community resources and stakeholders
- Health care program policies and procedures
- Clinic or laboratory policies and procedures
- Applicable laboratory tests
- Disease testing locations and protocol
- Cultural competency
- Applicable public health laws
- Organization and functions of government and public health

## Required Skill In

- Active listening
- Critical thinking
- Work efficiencies (e.g., multitasking, time management, prioritization, organization)
- Problem solving
- De-escalation of selected situations
- Interviewing techniques
- Using investigation/notification protocols
- Motivating clients
- Establishing and maintaining collaborative professional relationships
- Case management
- Data collection and data entry
- Using navigational tools
- Conflict management and resolution
- Using applicable disease intervention assessments
- Using effective communication techniques and procedures
- Interpretation of specific test technologies
- Patient specimen collection, handling, and processing
- Application of situational awareness
- Using computers (desktop, laptop, iPad)
- Using of mobile devices (cell phones, apps)
- Using computer software (spreadsheet software, word processing software, internet browsing software, and data base user interface/query software)
- Use of social media (subject to local protocol) and available record searching modalities for investigative purposes

## Ability To

- Adapt to unfamiliar and changing environments
- Assess non-verbal communication
- Prepare and maintain confidential records and reports
- Conduct interviews of a highly personal nature
- Problem solve in the field and in-house settings
- Work with diverse populations

## Important Additional Considerations

- Valid driver's license if required to drive vehicle
- Access to personal car or applicable transportation
- Car insurance if required to drive vehicle
- Emergency response availability based on jurisdictional expectations
  - May require occasional evening hours





### Preferred Minimum Educational and Experiential Background

- High school diploma or General Education Development (GED) equivalent, at least two years of applicable community experiences in counseling or health outreach.
- Associate degree or equivalent with up to one year of applicable community experience in counseling or health outreach.
- Bachelor's degree or higher from an accredited college or university. No experience required.