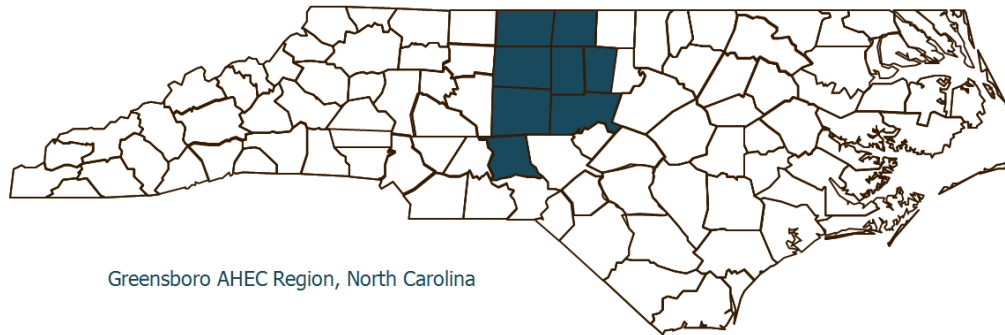# Public Health
in North Carolina
Everyday. Everywhere. Everybody.

A REGIONAL REPORT ON THE PUBLIC HEALTH WORKFORCE IN THE GREENSBORO AHEC REGION, 2013

Greensboro AHEC Region, North Carolina

THE NORTH CAROLINA
Institute *for* Public Health

INTRODUCTION

To target training needs for the governmental public health workforce in North Carolina, the Southeast Public Health Training Center of the North Carolina Institute for Public Health (NCIPH) at the UNC Gillings School of Global Public Health conducted a survey on workforce competencies. The survey is based on the national Core Competencies for Public Health Professionals developed by the Council on Linkages Between Academia and Public Health Practice. These competencies were designed for public health professionals at three different levels:

- Tier 1 (entry level)
- Tier 2 (supervisors and managers)
- Tier 3 (senior managers and CEOs)

The competencies represent a set of skills desirable for the broad practice of public health, reflecting the characteristics that staff of public health organizations may want to possess as they work to protect and promote health in the community.

During spring 2013, all employees in local health departments (LHDs) throughout North Carolina were provided the opportunity to participate in the anonymous survey. Survey questions included a public health competency assessment as well as basic demographics and professional development.

The Greensboro Area Health Education Center (AHEC) region includes the following counties: Alamance, Caswell, Chatham, Guilford, Montgomery, Orange, Randolph, and Rockingham. This report is a summary of the Greensboro AHEC region counties that participated in this survey. Statewide comparison data includes both local and state public health workforce respondents. This report is designed to serve as a starting point to assess workforce development efforts and training needs for public health agencies in this region.

REGIONAL PUBLIC HEALTH WORKFORCE CHARACTERISTICS

Age and Gender

A total of 627 local health department employees in the Greensboro AHEC region completed the survey (73%). Of those who completed the survey, 167 (27%) were at least 55 years old and 558 (90%) were female.

Age of Public Health Employees, Greensboro AHEC Region and Statewide
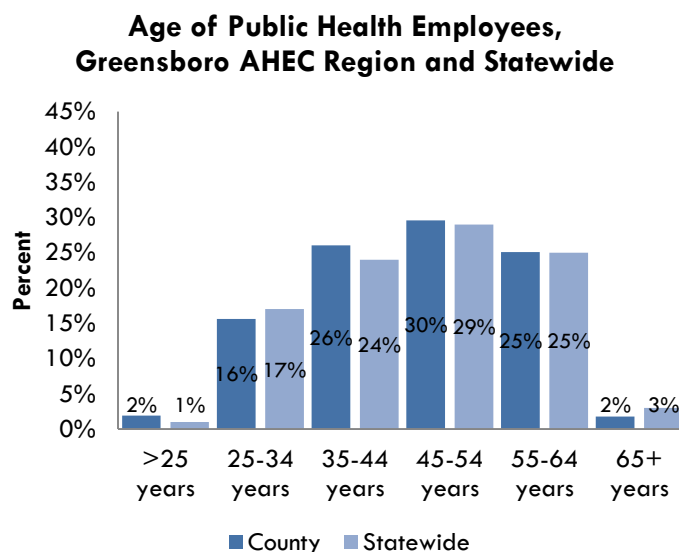
Gender of Public Health Employees, Greensboro AHEC Region
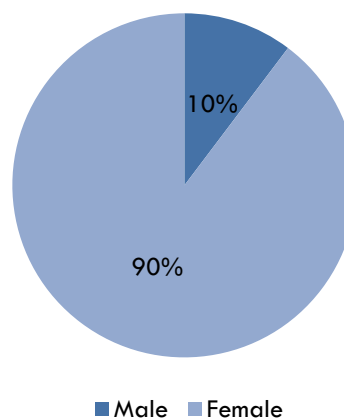
Note: Statewide data does not include local health departments who did not participate in the survey or local health departments who had <5 staff persons or <10% of the workforce participate.
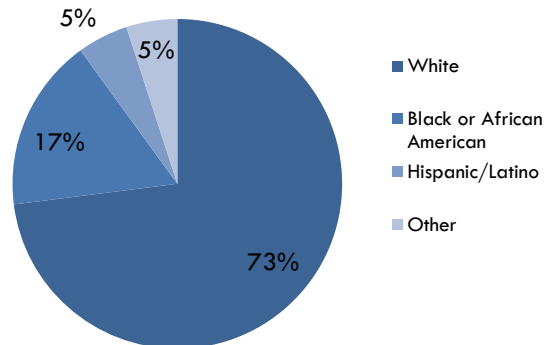
Race/Ethnicity

A total of 446 (72%) local health department respondents in the Greensboro AHEC region were White, 116 (19%) Black, and 34 (6%) Hispanic.

Race/Ethnicity of Public Health Employees, Greensboro AHEC Region

- White
- Black or African American
- Hispanic/Latino
- Other

72%
19%
5%
4%
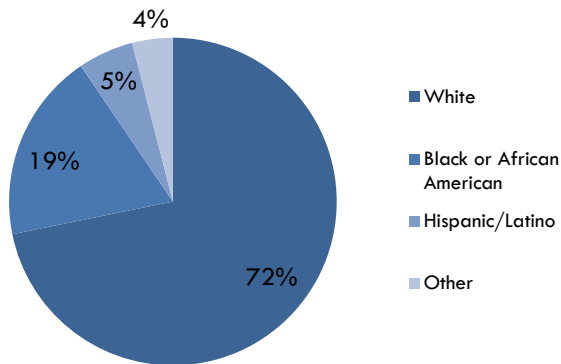
Race/Ethnicity of Public Health Employees, Statewide

- White
- Black or African American
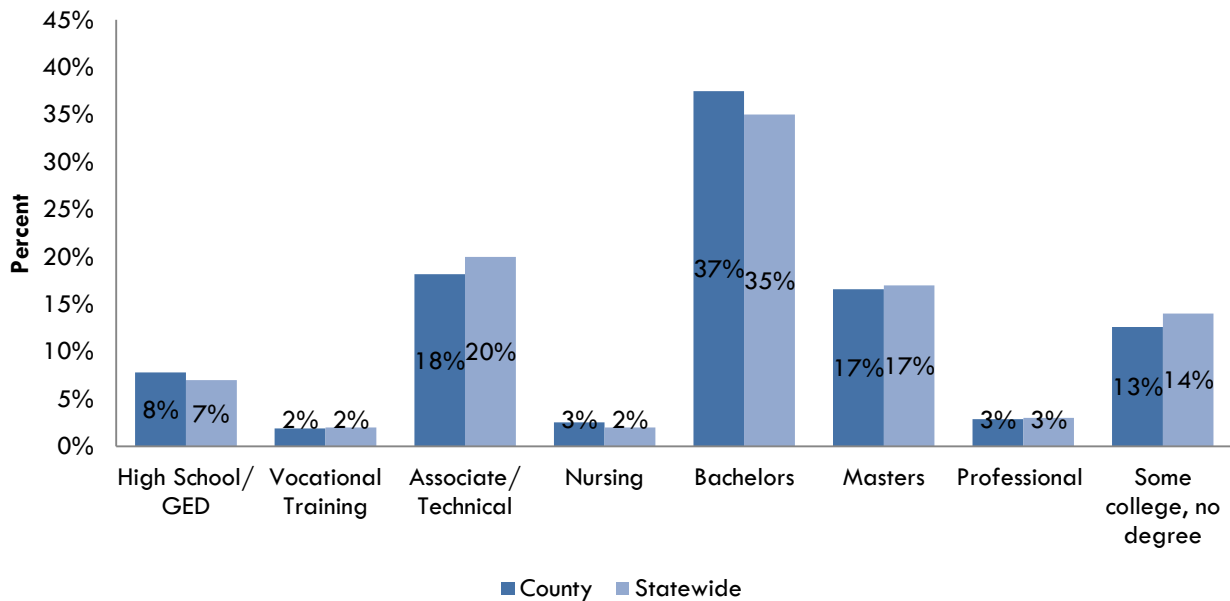- Hispanic/Latino
- Other

73%
17%
5%
5%

Note: The "Other" category includes Asians, Pacific Islanders, Native Hawaiians, Multi-racial respondents, and those who were unsure or did not know.

Highest Educational Attainment

Bachelors (37%) was most frequently reported as the highest educational level attained for Greensboro AHEC region respondents.

Highest Educational Attainment of Public Health Employees, Greensboro AHEC Region and Statewide

	High School/GED	Vocational Training	Associate/Technical	Nursing	Bachelors	Masters	Professional	Some college, no degree
County	8%	2%	18%	3%	37%	17%	3%	13%
Statewide	7%	2%	20%	2%	35%	17%	3%	14%

Note: Respondents were asked to select one response identifying their highest educational attainment. They may have had multiple degrees. Professional degree includes MD, DVM, JD, PhD and other doctoral degrees. Statewide data does not include local health departments who did not participate in the survey or local health departments who had <5 staff persons or <10% of the workforce participate.

Years in Public Health Service and LHD Role

Approximately 34% of Greensboro AHEC region respondents have been in their current position for at least 10 years; 54% have been in public health for at least 10 years. One of the most commonly reported primary LHD roles was nurses (30%).

Employee Years of Service in Public Health, Greensboro AHEC Region and Statewide
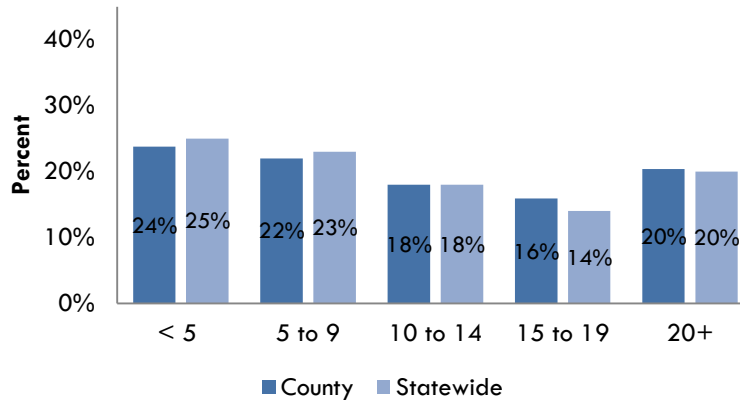
Note: Statewide data does not include local health departments who did not participate in the survey or local health departments who had <5 staff persons or <10% of the workforce participate.

LHD Employees by Role, Greensboro AHEC Region
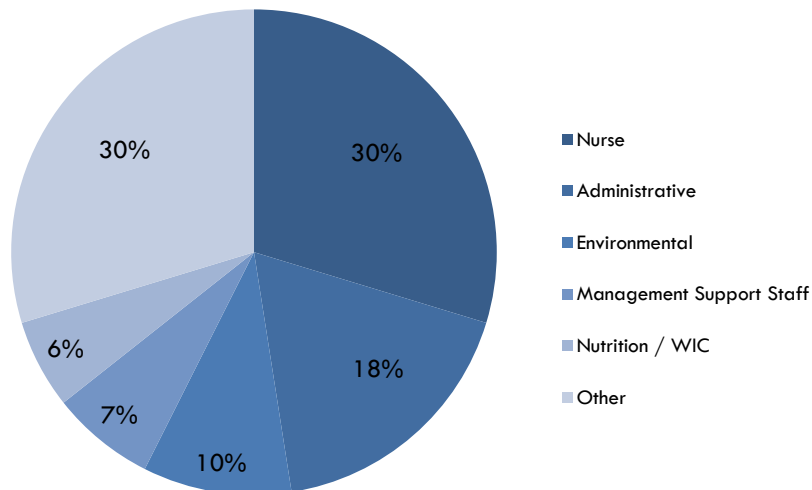
Note. Respondents were asked to select one LHD role. Because respondents may fill more than one role, some roles may be under-represented in this data. All write-in roles that could not otherwise be classified were collapsed into the "Other" category, including but not limited to the following: quality improvement, IT, housekeeping, research, phlebotomist, and community health assistants. "Other" also includes all roles that were reported by less than 5% of respondents.

REGIONAL TRAINING NEEDS

Relevance and Skills Gap by Competency Domain

Survey respondents were asked to classify themselves into one of three professional Tiers according to the following definitions:

- **Tier 1 (entry level):** Individuals who carry out the day-to-day tasks of public health organizations and are not in management positions.
- **Tier 2 (supervisors and managers):** Individuals with program management and/or supervisory responsibilities. In general, Tier 2 individuals have earned an MPH or related degree and have at least 5 years of work experience in public health or a related field or do not have an MPH or related degree, but have at least 10 years of experience working in the public health field.
- **Tier 3 (senior managers and CEOs):** Individuals at a senior/management level and leaders of public health organizations. Tier 3 public health professionals (e.g. health officers, executive directors, CEOs etc.) typically have staff that report to them.

In the Greensboro AHEC region, 339 (68%) of employees are classified as Tier 1 entry level.

Greensboro AHEC Region Employees by Tier

- Tier1 - Entry Level
- Tier 2 - Management
- Tier 3 - Leadership
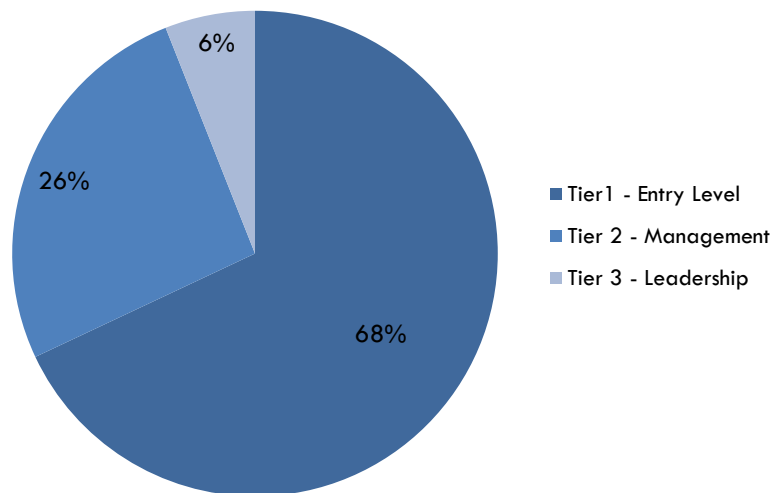
Note: Respondents who identified as management support were not placed in a tier.

Based on their self-identified Tier, respondents were asked to rate Tier-specific competencies within each of the eight domains of the Core Competencies for Public Health Professionals:

1. Analytical/assessment
2. Policy development/program planning
3. Communication
4. Cultural competency
5. Community outreach
6. Public health science
7. Financial planning and management
8. Leadership and systems thinking

Each domain has six to seventeen competencies for each Tier. These individual competencies describe desired skills for professionals at progressive stages of their careers.

A listing al all core competencies by Tier level are provided by
the Council on Linkages Between Academia and Public Health Practice:
http://www.phf.org/resourcestools/Documents/Core_Competencies_for_Public_Health_Professionals_2010May.pdf

For each competency, respondents assessed their own skill level (using a rating scale of 1 to 4 with 1 being lowest skill level and 4 being highest) and also how relevant the stated competency was to their job (again using a rating scale of 1 to 4 with 1 being lowest relevance and 4 being highest relevance). These measures were then combined to identify those competencies where respondents reported both a high relevance (relevance ≥ 3) and a skill gap (relevance > current skill level). Table 1 below shows the 8 core competency domains and the counts and percentages of respondents indicating high relevance and skills gaps on any competency within each domain.

The Financial Planning and Management Skills domain ranked highest in terms of relevance and skill gap for Tier 1 (entry level), Tier 2 (management), and Tier 3 (leadership) respondents.

Table 1. Respondents indicating high relevance and skills gap for any competencies listed in domain.

Core Competency Domains Total Greensboro AHEC Region Respondents =702*	Tier 1: Entry Level (n=383)		Tier 2: Management (n=139)		Tier 3: Leadership (n=32)	
	N	%	N	%	N	%
1. Analytical/Assessment Skills	117	37.1	56	51.9	17	58.6
2. Policy Development/Program Planning Skills	113	37.4	59	55.1	20	66.7
3. Communication Skills	117	38.7	58	54.2	20	66.7
4. Cultural Competency Skills	123	41.1	49	44.5	18	62.1
5. Community Dimensions of Practice Skills	117	39.8	49	45.8	19	65.5
6. Public Health Sciences Skills	96	34	42	40	20	66.7
7. Financial Planning and Management Skills	115	41.8	60	58.8	21	70
8. Leadership and Systems Thinking Skills*	99	36.7	55	54.5	18	60

Note: *Respondents who did not fall into one of the Tiers completed the demographic section only. High relevance = rating of 3 or higher. Skills gap=relevance rating > skill rating.

Top 10 Competencies with High Relevance and Skills Gap

The competencies most frequently reported across all domains as having a high relevance (≥3) and a skill gap (where relevance >current skill level) are reported in Table 2. The purpose is to identify areas where local health department employees in the Greensboro AHEC region have a skill gap in areas that are important (relevant) to performing their duties, highlighting "actionable" areas for improvement and targets for training.

The top 10 competencies identified by Tier 1, Tier 2, and Tier 3 respondents in the Greensboro AHEC region are listed below.

Table 2. Top 10 skill gap/high relevance competencies by Tier (Greensboro AHEC region)

Tier	Competency	Domain
Tier 1 (entry level)	1. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	2. Describes the dynamic forces that contribute to cultural diversity	Cultural Competency
	3. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	4. Recognizes the role of cultural, social, and behavioral factors	Cultural Competency

|		
	in the accessibility, availability, acceptability and delivery of public health services	
	5. Participates in the assessment of the cultural competence of the public health organization	Cultural Competency
	6. Identifies the health literacy of populations served	Communication
	7. Describes the public health laws and regulations governing public health programs	Policy Development/ Program Planning
	8. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	9. Describes the need for a diverse public health workforce	Cultural Competency
	10. Recognizes community linkages and relationships among multiple factors (or determinants) affecting health	Community Dimensions of Practice
Tier 2 (management)	1. Assesses the health literacy of populations served	Communication
	2. Assesses public health programs for their cultural competence	Cultural Competency
	3. Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	4. Incorporates public health informatics practices	Policy Development/ Program Planning
	5. Prepares proposals for funding from external sources	Financial Planning and Management
	6. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	7. Facilitates collaboration and partnerships to ensure participation of key stakeholders	Community Dimensions of Practice
	8. Negotiates for the use of community assets and resources	Community Dimensions of Practice
	9. Analyzes internal and external problems that may affect the delivery of Essential Public Health Services	Leadership and Systems Thinking
	10. Develops policies for organizational plans, structures, and programs	Policy Development/ Program Planning
Tier 3 (leadership)	1. Integrates public health informatics skills into program and business operations	Financial Planning and Management
	2. Ensures the measuring, reporting and continuous improvement of organizational performance	Leadership and Systems Thinking
	3. Applies the basic public health sciences (including, but not limited to biostatistics, epidemiology, environmental health sciences, health services administration, and social and behavioral health sciences) to public health policies and programs	Public Health Sciences
	4. Integrates a review of the scientific evidence related to a public health issue, concern, or, intervention into the practice of public health	Public Health Sciences
	5. Includes the use of cost-effectiveness, cost-benefit, and cost-utility analyses in programmatic prioritization and decision making	Financial Planning and Management

6.	Critiques strategies for determining budget priorities	Financial Planning and Management
7.	Interprets demographic, statistical, programmatic, and scientific information for use by professional and lay audiences	Communication
8.	Responds to diverse needs that are the result of cultural differences	Cultural Competency
9.	Ensures the public health organization's cultural competence	Cultural Competency
10.	Defends public health policies, programs, and resources	Community Dimensions of Practice

Note: *Respondents who did not fall into one of the Tiers completed the demographic section only. High relevance = rating of 3 or higher. Skills gap=relevance rating > skill rating. The Top 10 are in order with #1 being the most frequently reported. If there were ties for Top 10, more than 10 competencies may be identified as high relevance and a skill gap. Complete tables are available upon request.

Areas of Educational Interest

When asked if respondents in the Greensboro AHEC region were interested in furthering public health education through academic courses, the top areas of interest identified were women's health (38%), community health promotion (36%), leadership (35%), and management (35%).

**Areas of Educational Interest of
Public Health Employees, Greensboro AHEC Region**
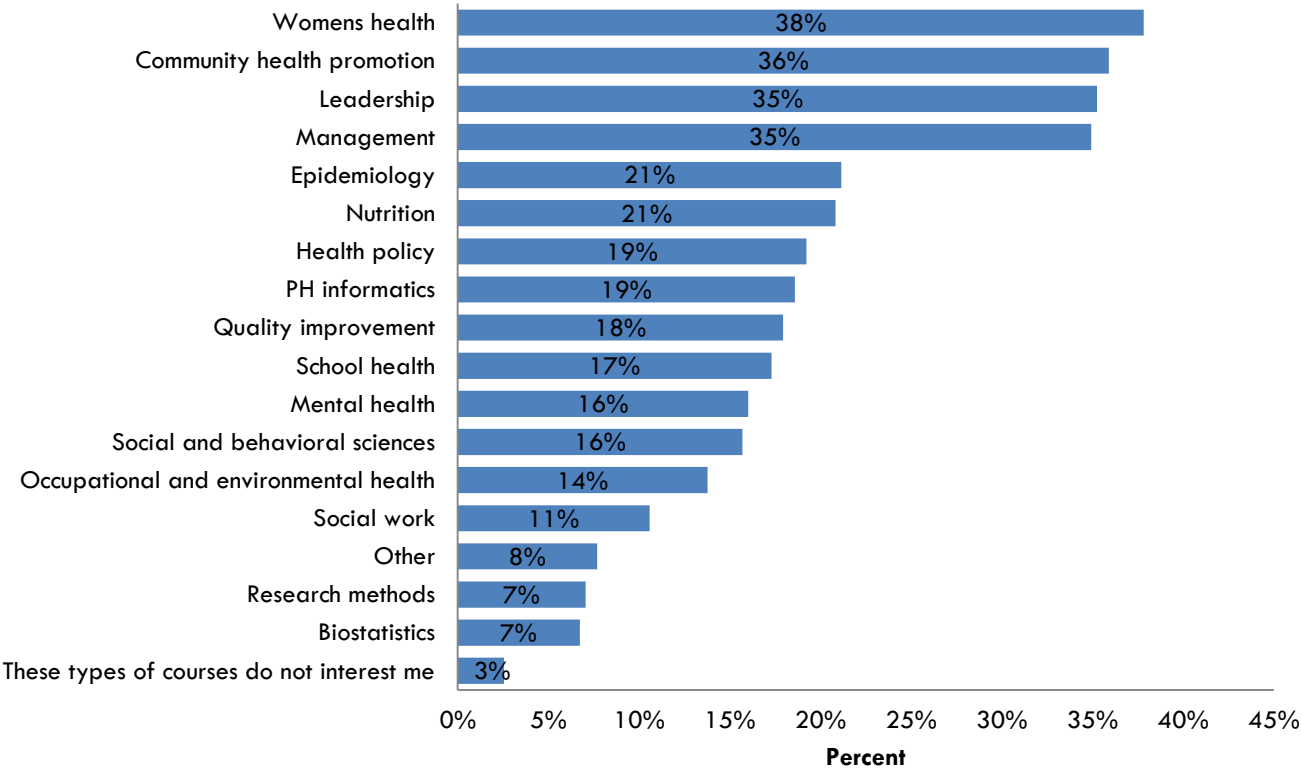
Note: Includes percent of the 317 respondents (51%) interested in additional education. Respondents could select as many responses as applied.

RESOURCES

The following resources offer core competency-based trainings and tools for public health professionals. If you cannot find a resource to meet your training needs, please contact us at nciph@unc.edu.

- **North Carolina Institute for Public Health (NCIPH):** http://nciph.sph.unc.edu/training
  NCIPH, part of the UNC Gillings School of Global Public Health, serves as a bridge between academia and partners in community organizations and government agencies. Resources include competency based face-to-face training, webinars, and online training website tailored to public health professionals in North Carolina.

- **North Carolina Area Health Education Centers (NC AHEC):** http://www.med.unc.edu/ahec/
  One of the ways NC AHEC pursues its mission is through the provision of quality continuing education (CE) programs. NC AHEC CE Programs are often taught by health science faculty from the state's four medical academic centers, bringing university expertise into NC communities.

- **TrainingFinder Real-time Affiliate Integrated Network (TRAIN):** http://www.train.org
  TRAIN, is the nation's premier learning resource for professionals who protect the public's health. A free service of the Public Health Foundation, TRAIN is comprised of the national www.train.org site and participating TRAIN affiliate sites.

- **Public Health Training Center Network:** http://bhpr.hrsa.gov/grants/publichealth/trainingcenters
  The Health Resources and Services Administration (HRSA)-funded Public Health Training Centers are partnerships between accredited schools of public health, related academic institutions, and public health agencies and organizations. The network catalog has hundreds of trainings, which cover topics such as leadership and management, epidemiology, and basic public health skills. There are also resources and publications with tools and information relevant to public health practitioners.

NEXT STEPS

NCIPH will be looking across all local health department workforce competencies to identify common training needs, highlight opportunities for improvement, and collaborate with state and local partners to develop new training opportunities.

ADDITIONAL REPORT INFORMATION

Methods

During spring 2013, all employees in local health departments (LHDs) throughout North Carolina were provided the opportunity to participate in the anonymous survey. Survey questions included a public health competency assessment as well as basic demographics and professional development. The number of full-time public health employees for County-level percentages come from the North Carolina Division of Public Health, State Center for Health Statistics report, *Local Health Department Staffing and Services Summary, Fiscal Year 2010-2011*. For regional reports, counties were classified in nine regions used in the North Carolina Area Health Education Centers (AHEC) program.

Limitations

The results shown in this report reflect the counts and percentages from respondents in the Greensboro AHEC region counties. It is important to note that respondents may not represent the entire workforce. In some questions (e.g., role in the health department), respondents may belong in more than one category but could only choose one. Some answers may be under-represented. The competency questions only applied to those who identified themselves in one of the Tiers; management support personnel only completed demographics questions. In addition, the survey was based on self-report and self-assessment. It is important for the health director and the management team to vet the results in order to determine the validity of the data in the current health department environment.

For more information about the methods and limitations of the report and access to regional and statewide workforce reports, visit the North Carolina Institute for Public Health website at:
http://nciph.sph.unc.edu/training/assessment.

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