Public Health in North Carolina

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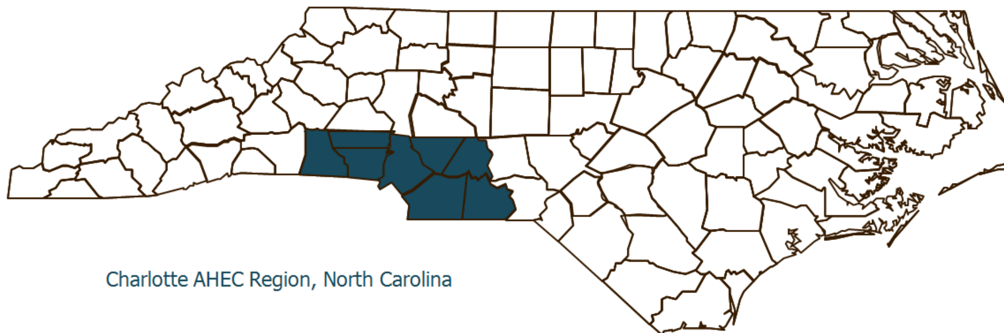
A REGIONAL REPORT ON THE PUBLIC HEALTH WORKFORCE IN THE CHARLOTTE AHEC REGION, 2013



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December 2013

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.

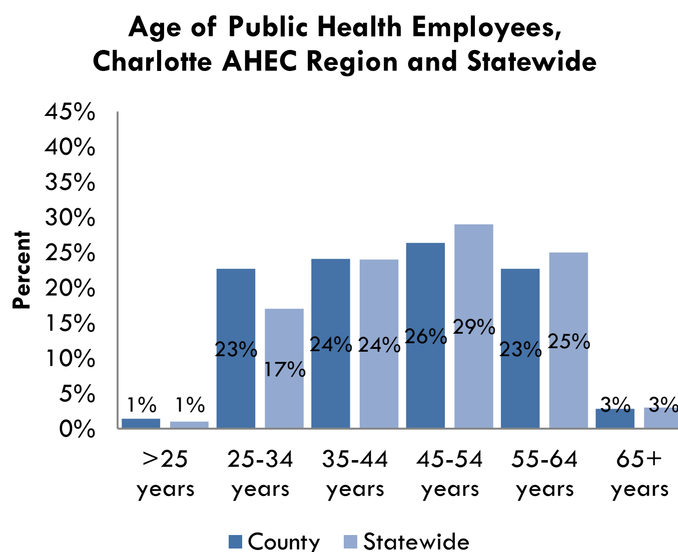
During spring 2013, all employees in local health departments (LHDs) throughout North Carolina were provided the opportunity to participate in the anonymous survey. Survey questions included a public health competency assessment as well as basic demographics and professional development.

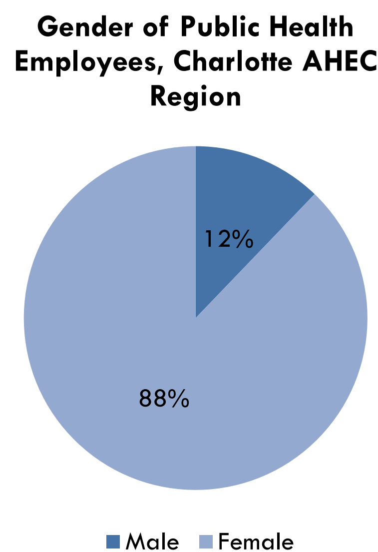
The Charlotte Area Health Education Center (AHEC) region includes the following counties: Anson, Cabarrus, Cleveland, Gaston, Lincoln, Mecklenburg, Stanly, and Union. This report is a summary of the Charlotte AHEC region counties that participated in this survey. Statewide comparison data includes both 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 353 local health department employees in the Charlotte AHEC region completed the survey (26%). Of those who completed the survey, 90 (26%) were at least 55 years old and 310 (88%) were female.

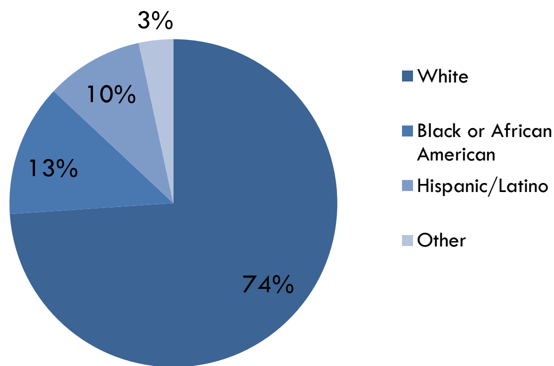


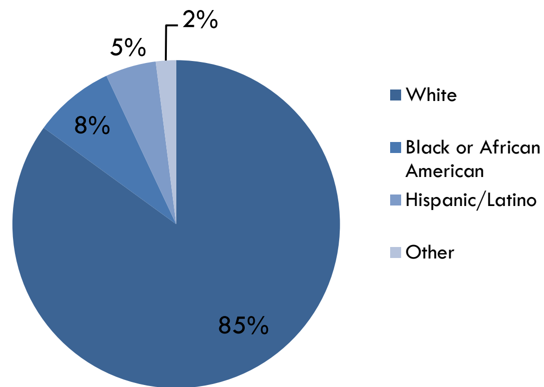


Note: Statewide data does not include local health departments who did not participate in the survey or local health departments who had <5 staff persons or <10% of the workforce participate.

Race/Ethnicity

A total of 261 (74%) local health department respondents in the Charlotte AHEC region were White, 46 (13%) Black, and 34 (10%) Hispanic.

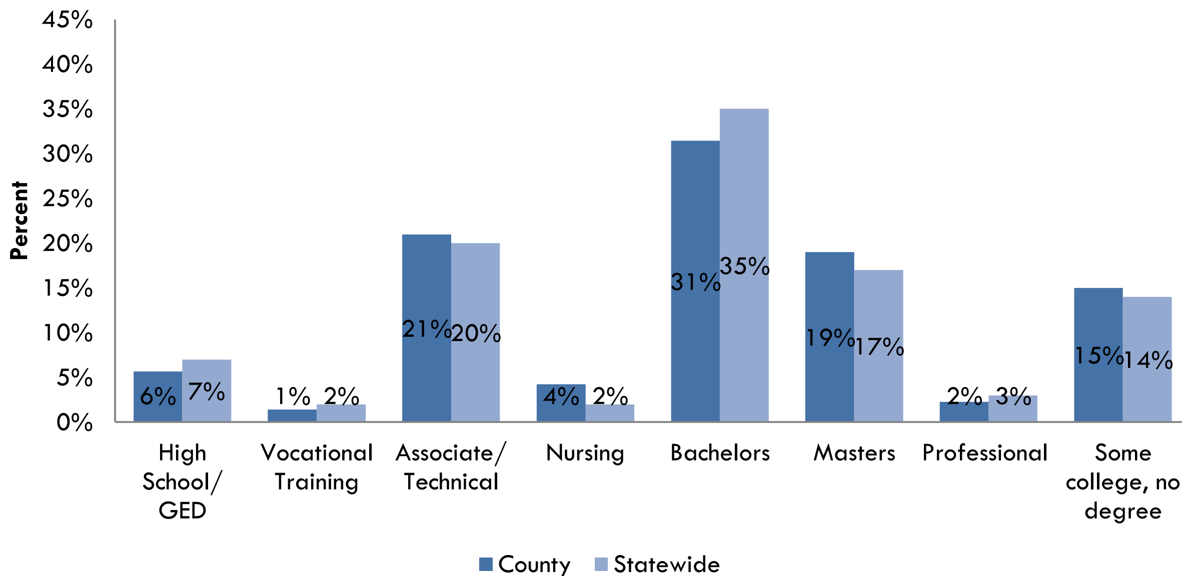




Note: The "Other" category includes Asians, Pacific Islanders, Native Hawaiians, Multi-racial respondents, and those who were unsure or did not know.

Highest Educational Attainment

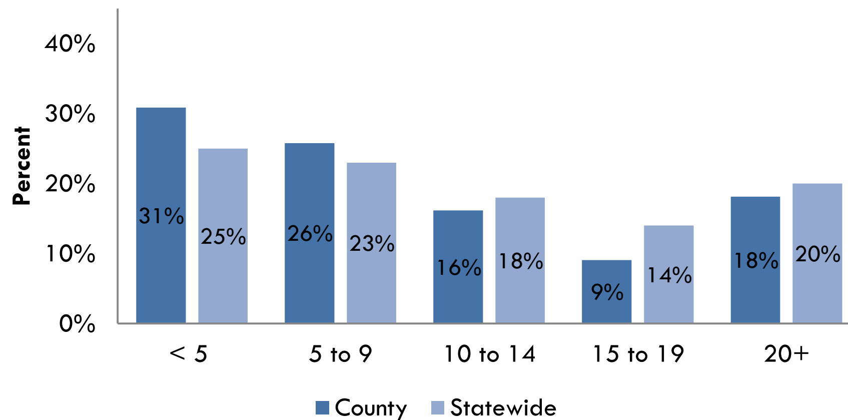
Bachelors (31%) was most frequently reported as the highest educational level attained for Charlotte AHEC region respondents.



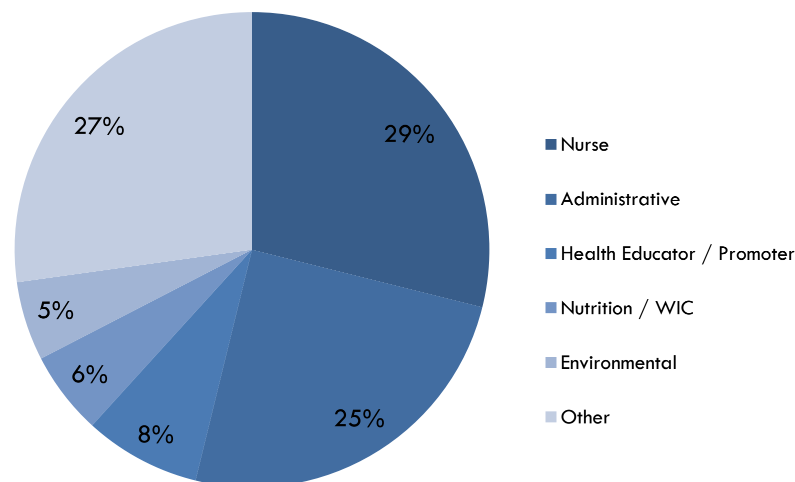
Note: Respondents were asked to select one response identifying their highest educational attainment. They may have had multiple degrees. Professional degree includes MD, DVM, JD, PhD and other doctoral degrees. Statewide data does not include local health departments who did not participate in the survey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

Years in Public Health Service and LHD Role

Approximately 26% of Charlotte AHEC region respondents have been in their current position for at least 10 years; 43% have been in public health for at least 10 years. One of the most commonly reported primary LHD roles was nurses (29%).



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.



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

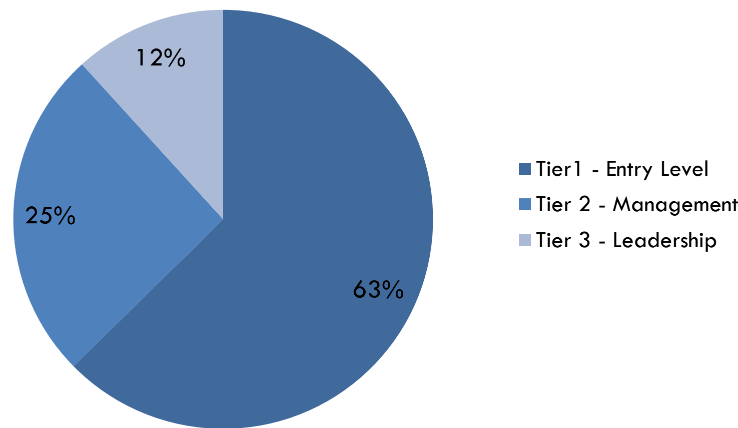
Relevance and Skills Gap by Competency Domain

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 Charlotte AHEC region, 176 (63%) of employees are classified as Tier 1 entry level.

Charlotte AHEC Region Employees by Tier



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 Leadership and Systems Thinking 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 Charlotte AHEC Region Respondents =353*	Tier 1: Entry Level (n=176)		Tier 2: Management (n=72)		Tier 3: Leadership (n=33)	
	N	%	N	%	N	%
1. Analytical/Assessment Skills	54	33.8	30	44.1	9	31
2. Policy Development/Program Planning Skills						
3. Communication Skills	40	27.4	39	58.2	14	53.8
4. Cultural Competency Skills	56	38.1	35	53	13	52
5. Community Dimensions of Practice Skills	49	33.8	29	43.3	10	38.5
6. Public Health Sciences Skills	52	38	28	44.4	8	30.8
7. Financial Planning and Management Skills	33	24.4	17	27.4	10	38.5
8. Leadership and Systems Thinking Skills*	50	39.1	36	59	13	56.5

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 Charlotte 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 Charlotte AHEC region are listed below.

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

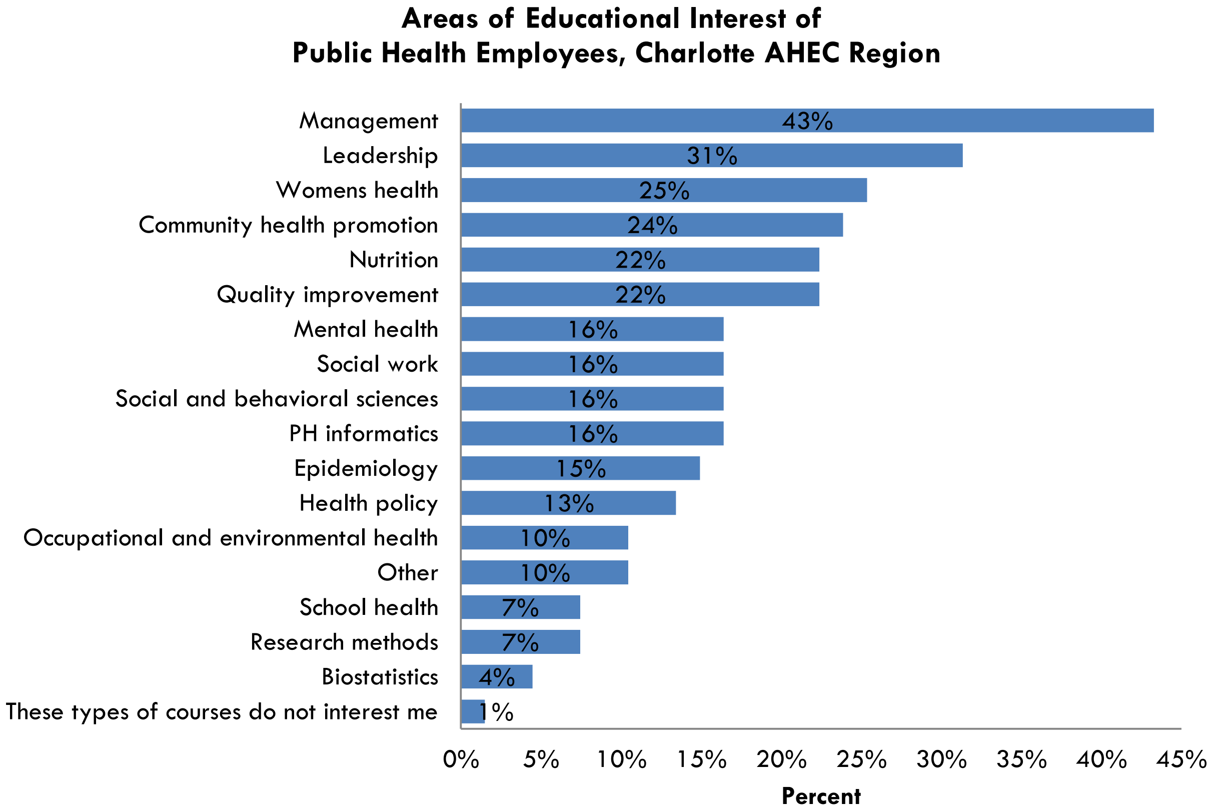
Tier	Competency	Domain
Tier 1 (entry level)	1. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	2. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	3. Recognizes the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services	Cultural Competency
	4. Describes the dynamic forces that contribute to cultural diversity	Cultural Competency
	5. Identifies the health status of populations and their related determinants of health and illness	Analytical/Assessment

	6. Describes the public health laws and regulations governing public health programs	Policy Development/ Program Planning
	7. Identifies the health literacy of populations served	Communication
	8. Conveys public health information using a variety of approaches	Communication
	9. Participates in the assessment of the cultural competence of the public health organization	Cultural Competency
	10. Identifies community assets and resources	Community Dimensions of Practice
Tier 2 (management)	1. Manages programs within current and forecasted budget constraints	Financial Planning and Management
	2. Develops strategies for continuous quality improvement	Policy Development/ Program Planning
	3. Assesses public health programs for their cultural competence	Cultural Competency
	4. Uses evaluation results to improve performance	Financial Planning and Management
	5. Incorporates ethical standards of practice as the basis of all interactions with organizations, communities, and individuals	Leadership and Systems Thinking
	6. Develops mechanisms to monitor and evaluate programs for their effectiveness and quality	Policy Development/ Program Planning
	7. Assesses the health literacy of populations served	Communication
	8. Explains the dynamic forces that contribute to cultural diversity	Cultural Competency
	9. Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts	Financial Planning and Management
	10. Responds to diverse needs that are the result of cultural differences	Cultural Competency
Tier 3 (leadership)	1. 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
	2. Oversees public health informatics practices and procedures	Policy Development/ Program Planning
	3. Ensures public health programs are consistent with public health laws and regulations	Policy Development/ Program Planning
	4. Synthesizes scientific evidence from a variety of text and electronic sources	Public Health Sciences
	5. Critiques the limitations of research findings	Public Health Sciences
	6. Incorporates data into the resolution of scientific, political, ethical, and social public health concerns	Analytical/Assessment
	7. Implements organizational and system-wide strategies for continuous quality improvement	Policy Development/ Program Planning
	8. Ensures a variety of approaches are considered and used to disseminate public health information	Communication
	9. Ensures the public health organization's cultural competence	Cultural Competency
	10. 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

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 Charlotte AHEC region were interested in furthering public health education through academic courses, the top areas of interest identified were management (43%), leadership (31%), and women's health (25%).



Note: Includes percent of the 182 respondents (52%) 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 Charlotte 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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