

Public Health in North Carolina

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**A STATEWIDE REPORT ON THE PUBLIC
HEALTH WORKFORCE IN LOCAL HEALTH
DEPARTMENTS IN NORTH CAROLINA, 2013**



Prepared by:
Southeast Public Health Training Center
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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)

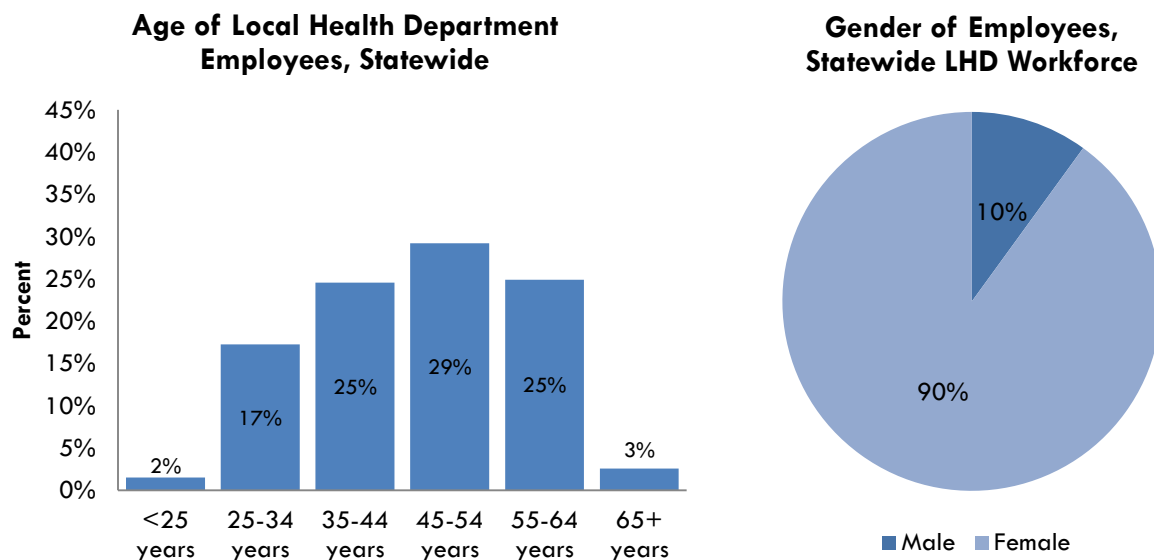
The competencies represent a set of skills desirable for the broad practice of public health, reflecting the characteristics that staff of public health organizations may want to possess as they work to protect and promote health in the community.

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. This report includes responses from participating LHDs across North Carolina and excludes data from local health departments with participation from less than 10% of their workforce or fewer than 5 total responses.

STATEWIDE PUBLIC HEALTH WORKFORCE CHARACTERISTICS

Age and Gender

A total of 4,649 local health department employees in North Carolina completed the survey (53%). Of those who completed the survey, 1,268 (28%) were at least 55 years old and 4,146 (90%) were female.

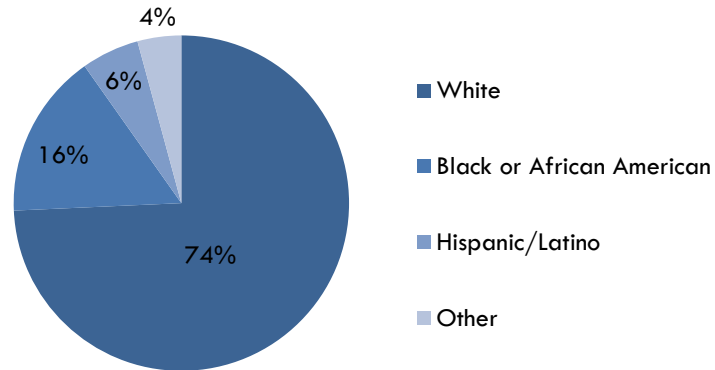


Note: A total of 30 surveys had missing age and 28 surveys had missing gender.

Race/Ethnicity

A total of 3,430 (74%) local health department respondents across the state were White, 735 (16%) Black, and 257 (6%) Hispanic.

**Race/Ethnicity of Employees,
Statewide LHD Workforce**

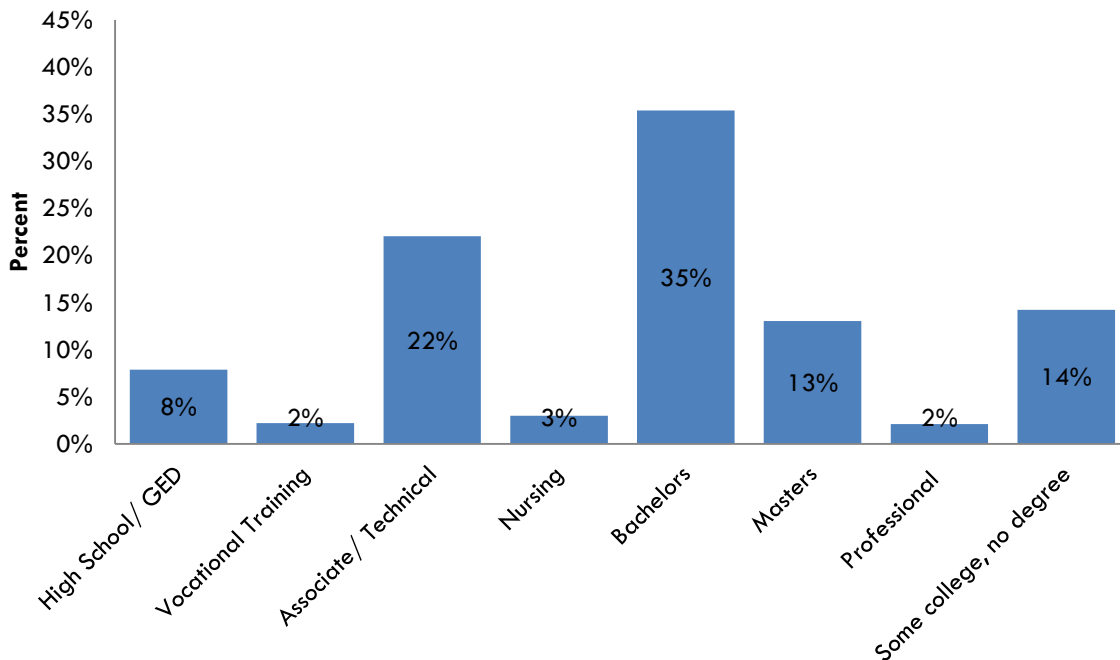


Note: The "Other" category includes Asians, Pacific Islanders, Native Hawaiians, Multi-racial respondents, and those who were unsure or did not know. A total of 32 surveys had missing race/ethnicity.

Highest Educational Attainment

Bachelors (35%) was most frequently reported as the highest educational level attained for local health department respondents.

**Highest Educational Attainment of Employees,
Statewide LHD Workforce**

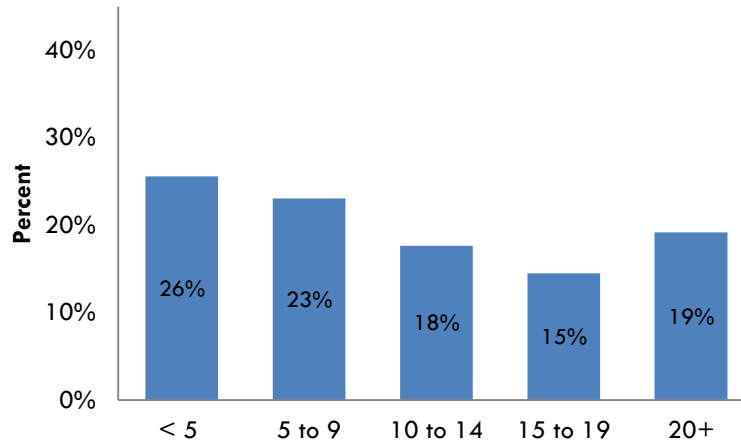


Note: Respondents were asked to select one response identifying their highest educational attainment. They may have had multiple degrees. Professional degree includes MD, DVM, JD, PhD and other doctoral degrees.

Years in Public Health Service and LHD Role

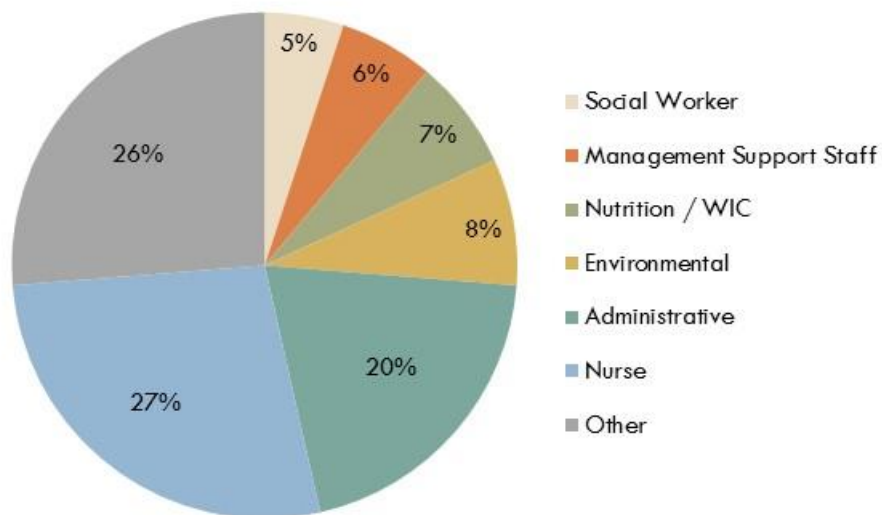
Approximately 33% of local health department respondents have been in their current position for at least 10 years; more than half (51)% have been in public health field for at least 10 years. One of the most commonly reported primary LHD roles was nurses (27%).

**Employee Years of Service in Public Health,
Statewide LHD Workforce**



Note: A total of 25 surveys had missing years of service.

Local Health Department Employees by Role, Statewide



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. A total of 49 surveys were missing LHD role.

LOCAL HEALTH DEPARTMENT TRAINING NEEDS

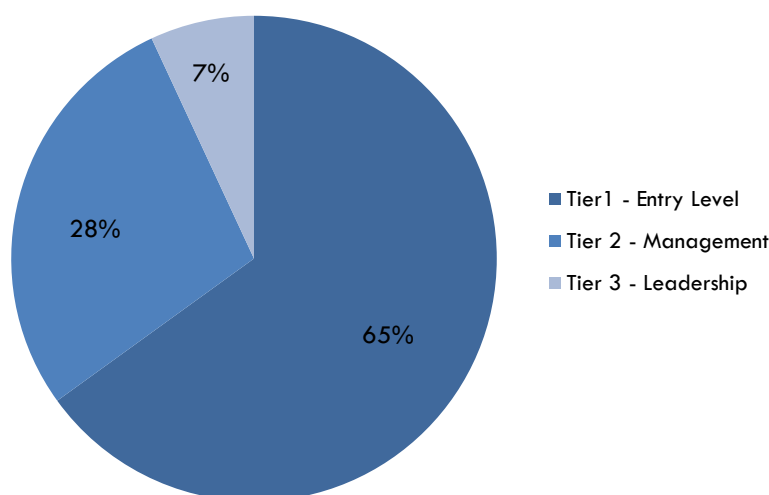
Relevance and Skills Gap by Competency Domain

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.

A total of 2,321 (65%) employees in local health departments statewide were classified as Tier 1 entry level.

Employees by Tier, Statewide LHD Workforce



Note: Respondents who identified as management support (918) and those with missing responses (152) were excluded.

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 of 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_Competerencies_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 Local Health Department Respondents, Statewide = 4,649*	Tier 1: Entry Level (n=2,321)		Tier 2: Management (n=1,008)		Tier 3: Leadership (n=250)	
	N	%	N	%	N	%
1. Analytical/Assessment Skills	775	36	393	43	113	53
2. Policy Development/Program Planning Skills	713	34	418	47	118	58
3. Communication Skills	727	35	398	45	109	53
4. Cultural Competency Skills	737	35	358	40	96	48
5. Community Dimensions of Practice Skills	781	38	364	42	108	54
6. Public Health Sciences Skills	890	29	305	35	103	51
7. Financial Planning and Management Skills	814	41	460	54	126	65
8. Leadership and Systems Thinking Skills*	672	35	359	43	90	46

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 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 local health department respondents in North Carolina are listed below.

Table 2. Top 10 skill gap/high relevance competencies by Tier (Statewide LHD Workforce)

Tier	Competency	Domain
Tier 1 (entry level)	1. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	2. Recognizes the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services	Cultural Competency
	3. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	4. Adheres to the organization’s policies and procedures	Financial Planning and Management
	5. Describes the dynamic forces that contribute to cultural diversity	Cultural Competency
	6. Identifies the health literacy of populations served	Communication

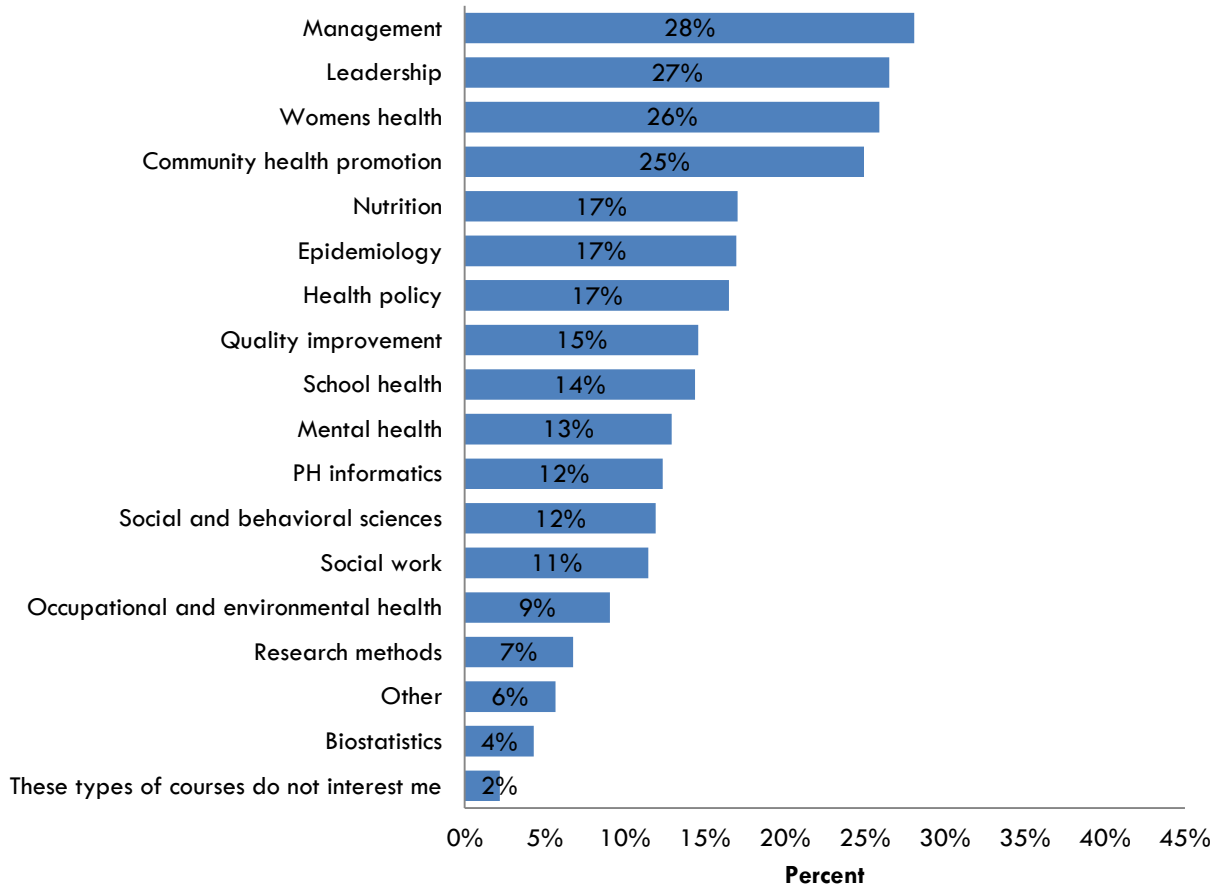
	7. Describes the public health laws and regulations governing public health programs	Policy Development/ Program Planning
	8. Informs the public about policies, programs, and resources	Community Dimensions of Practice
	9. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	10. Identifies community assets and resources	Community Dimensions of Practice
Tier 2 (management)	1. Develops a programmatic budget	Financial Planning and Management
	2. Manages programs within current and forecasted budget constraints	Financial Planning and Management
	3. Develops strategies for determining budget priorities based on federal, state, and local financial contributions	Financial Planning and Management
	4. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	5. Evaluates program performance	Financial Planning and Management
	6. Uses evaluation results to improve performance	Financial Planning and Management
	7. Assesses the health literacy of populations served	Communication
	8. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	9. Assesses public health programs for their cultural competence	Cultural Competency
	10. Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts	Financial Planning and Management
Tier 3 (leadership)	1. Includes the use of cost-effectiveness, cost-benefit, and cost-utility analyses in programmatic prioritization and decision making	Financial Planning and Management
	2. Integrates public health informatics skills into program and business operations	Financial Planning and Management
	3. Ensures the public health organization's cultural competence	Cultural Competency
	4. Establishes a performance management system	Financial Planning and Management
	5. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	6. Evaluates the community linkages and relationships among multiple factors (or determinants) affecting health	Community Dimensions of Practice
	7. Ensures that programs are managed within current and forecasted budget constraints	Financial Planning and Management
	8. 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
	9. Advises on the laws, regulations, policies and procedures for the ethical conduct of research	Public Health Sciences
	10. Assesses the dynamic forces that contribute to cultural diversity	Cultural Competency

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 were interested in furthering public health education through academic courses, the top areas of interest included management (28%), leadership (27%), women's health (26%), and community health promotion (25%).

Areas of Educational Interest of Employees, Statewide LHD Workforce



Note: Respondents (n=2,822) could select multiple responses.

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 reviewing 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 comes 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*.

Limitations

The results shown in this report reflect the counts and percentages from respondents in all participating county and regional Local Health Departments in North Carolina (respondents do not represent the state public health workforce, whose results are shared in a different report). It is important to note that LHD 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.

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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