West Virginia Local Public Health Workforce Report

A STATEWIDE REPORT ON THE PUBLIC HEALTH WORKFORCE IN LOCAL HEALTH DEPARTMENTS IN WEST VIRGINIA, 2012

Prepared by:
Southeast Public Health Training Center

THE NORTH CAROLINA
Institute *for* Public Health

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INTRODUCTION

The public health workforce relies on competencies and capabilities necessary to keep the population healthy. Over time, these competencies change, as do the needs of the population, newly emerging threats, increasing chronic disease, and other dynamics of population health in this global society. As a result, the public health workforce must keep pace with the dynamics of population health.

To target training needs for the local public health workforce in West Virginia, the West Virginia Bureau for Public Health (WVBPH) in collaboration with 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. Survey support was provided by the Southeast Public Health Training Center, a project of the Bureau of Health Professions in the Health Resources and Services Administration.

This 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.

From December 2011 to April 2012, 40 state and local public health employees in West Virginia were invited to participate in an online pilot workforce development survey including questions assessing public health competencies as well as basic demographics and professional development. Eight state employees and 24 local employees completed the pilot survey. Based on feedback from pilot participants, the survey was further refined in consultation with WVBPH leadership. From October 2012 to December 2012, the refined survey was sent to 527 employees in local health departments (LHDs) in West Virginia. Four email reminders were sent to invited participants and a total of 428 LHD staff completed the survey (81% response rate).

This statewide local report includes responses from participating LHD staff across West Virginia including non-duplicate demographic information from those who participated in the pilot survey (n=24). Detailed methods and limitations are included in the Additional Report Information section.

The purpose of this report is to serve as a starting point to assess workforce development efforts and training needs for local public health agencies in West Virginia.

LOCAL PUBLIC HEALTH WORKFORCE CHARACTERISTICS

Age and Gender

A total of 428 local health department employees in West Virginia responded to the survey (81%). Of those who completed the survey, 141 (35%) were at least 55 years old (Figure 1) and 315 (79%) were female (Figure 2).

Figure 1. Age of Local Health Department Employees, Statewide

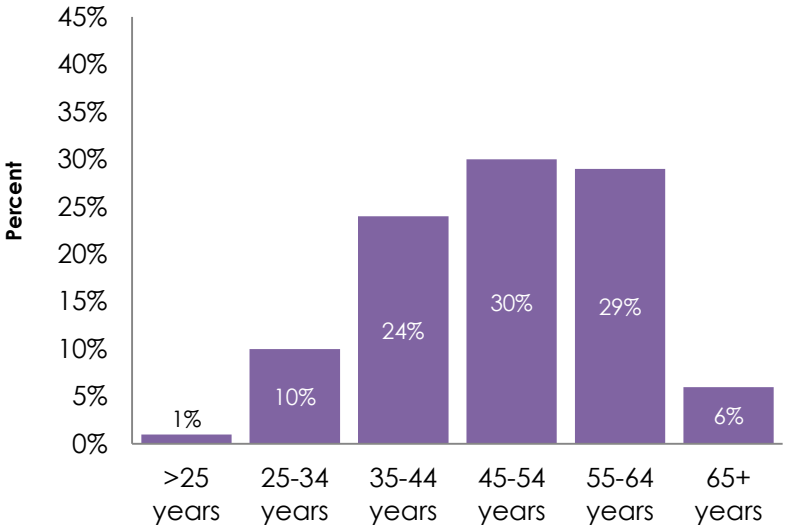
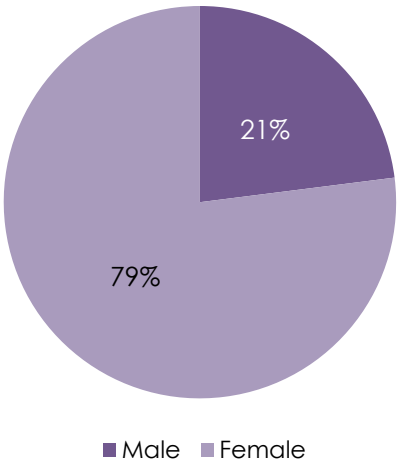


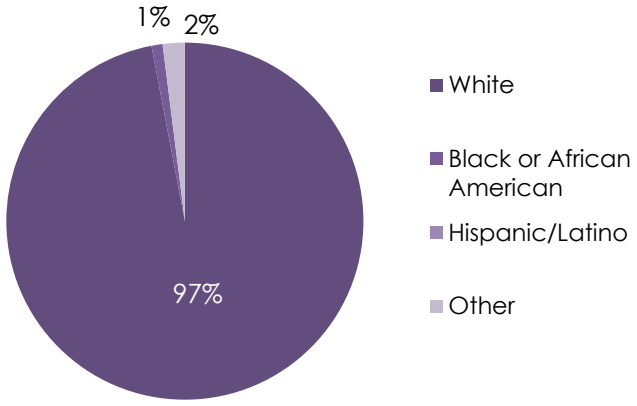
Figure 2. Gender of Employees, Statewide LHD Workforce



Race/Ethnicity

The majority of local health department respondents across the state were White (97%), followed by other races (2%) and African American (1%) (Figure 3).

Figure 3. Race/Ethnicity of Local Public Health Employees, Statewide

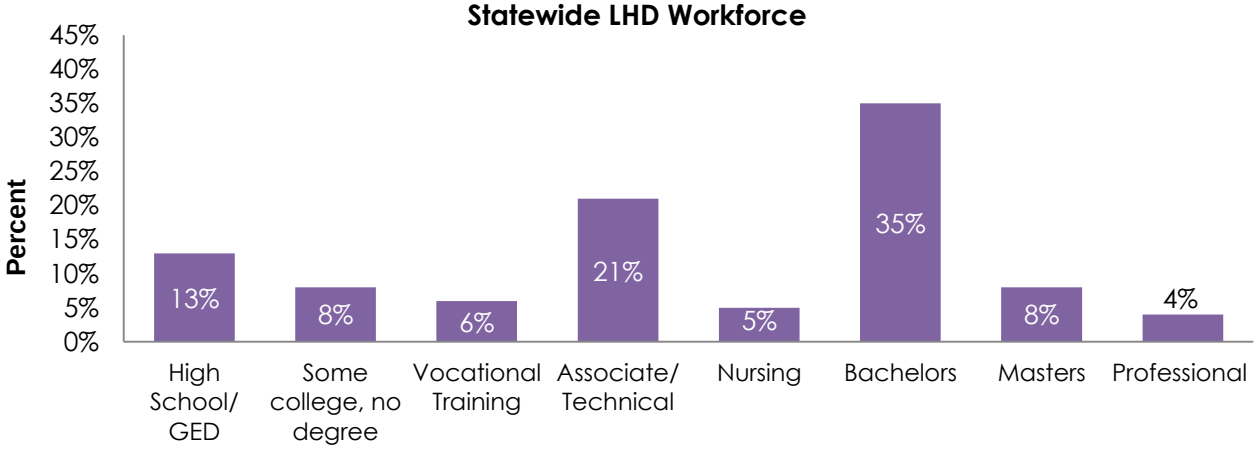


Note: The "Other" category includes Asians, Pacific Islanders, Native Hawaiians, multi-racial respondents, and those who were unsure or did not know.

Highest Educational Attainment

Bachelor's degree (35%) followed by Associate/Technical degree (21%) were most frequently reported as the highest educational level attained for local health department respondents (Figure 4).

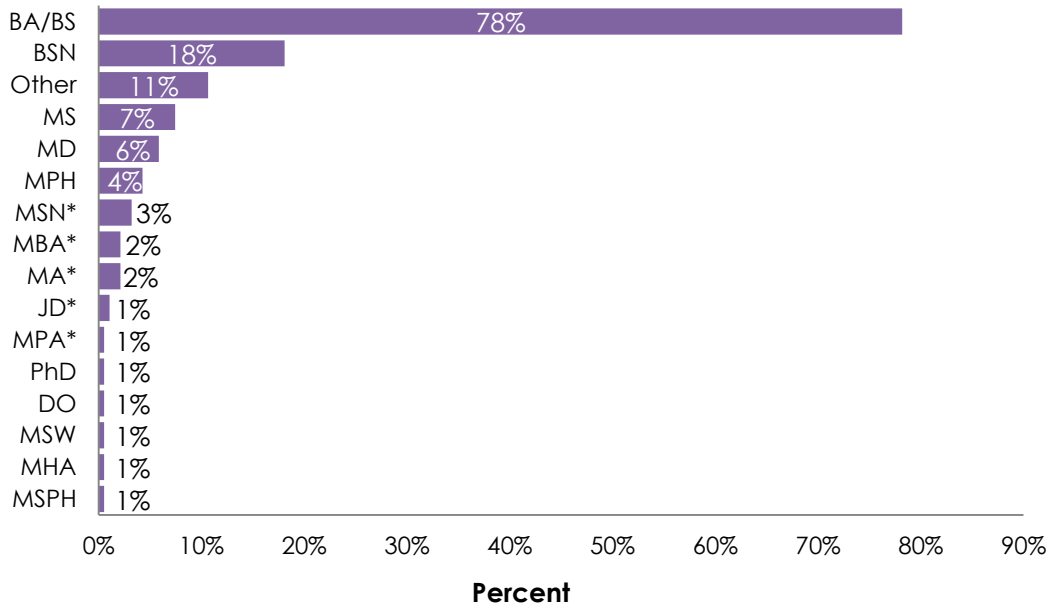
Figure 4. Highest Educational Attainment of Employees, Statewide LHD Workforce



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.

Of the 178 respondents who reported all degrees earned, Bachelors of Arts/Bachelors of Science (BA/BS) was the most frequently reported degree (78%) followed by Bachelors of Science in Nursing (BSN, 18%) (Figure 5).

Figure 5. Degrees of Public Health Employees, Statewide LHD Workforce

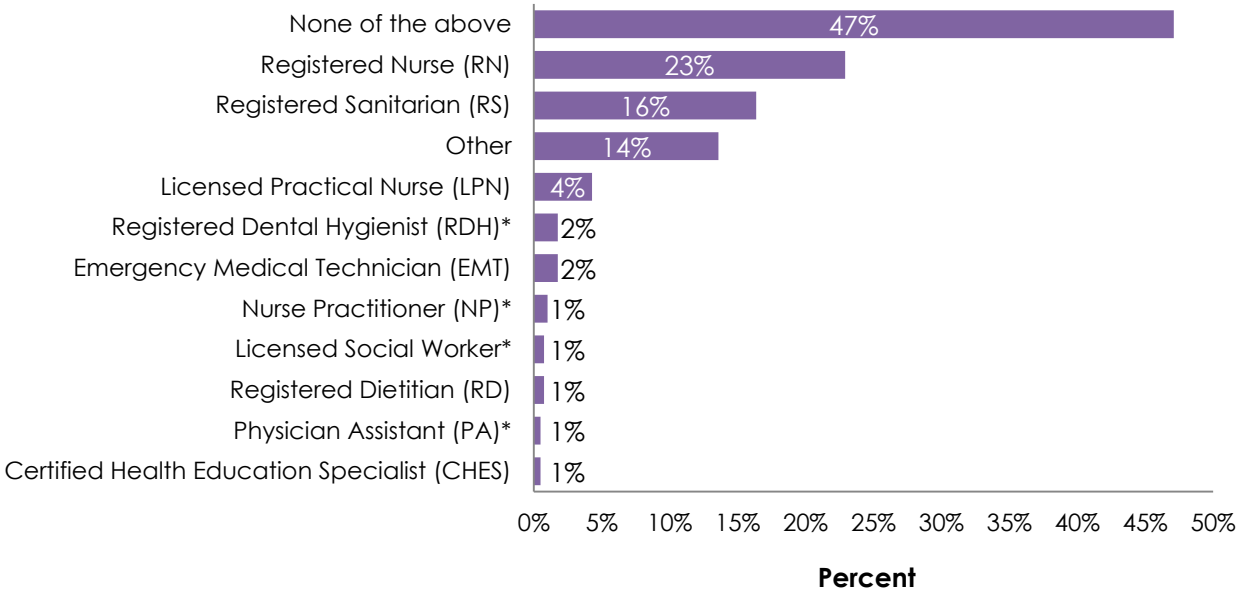


Note: *Indicated choices were added as a result of the pilot survey and were not available options for the pilot respondents (n=24). These percentages are among the 178 respondents who reported degrees earned; respondents could select more than one answer. "Other" degrees included: Regents Bachelors of Arts (RBA), Associate of Arts (AA), Associate of Science (AS), Associate Degree of Nursing (ADN), building construction, and career diploma.

Certifications

The top reported certifications for region respondents were Registered Nurse (23%) and Registered Sanitarian (16%) (Figure 6). A complete listing of "other" certifications is found in Appendix A.

Figure 6. Certifications of Public Health Employees, Statewide LHD Workforce



Note: *Indicated choices were added as a result of the pilot survey and were not available options for the pilot respondents (n=24). These percentages are among the 373 respondents who reported certifications; respondents could select more than one answer. "Other" certifications included: licensed dietitian, certified lactation specialist, certified nurse assistant, certified dental assistant, and certified medical assistant.

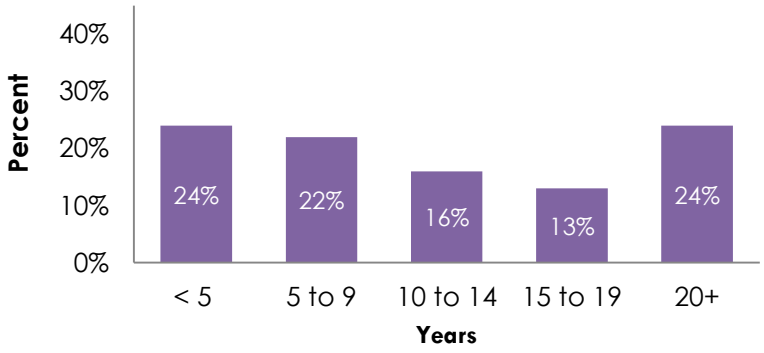
Type of Employee

The majority of local health department respondents (84%) reported being full-time employees and 16% part-time employees. Of those employees, 89% were civil service workers, 4% contract workers, 1% temporary workers, and 6% other. A complete listing of "other" type of employee is found in Appendix B.

Years in Public Health Service and Primary Role

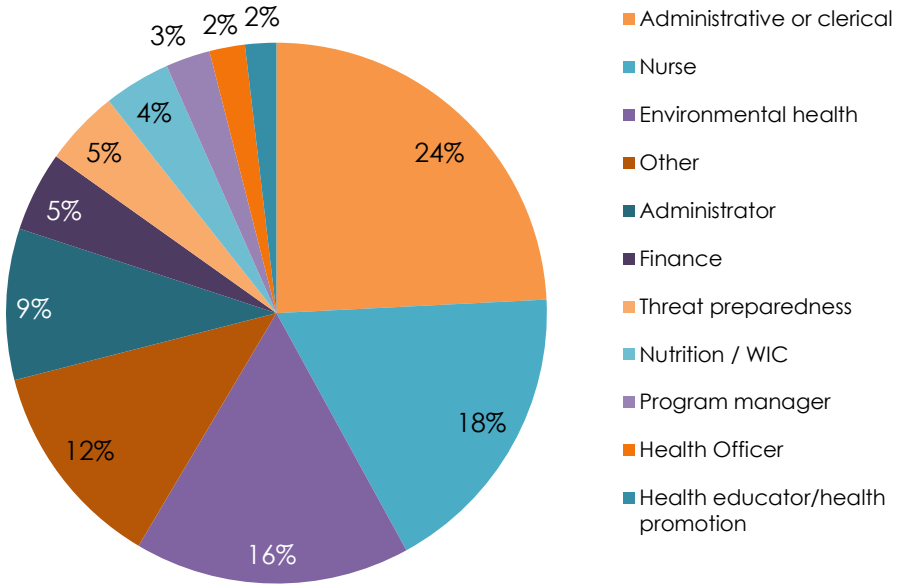
Approximately 41% of local health department respondents have been in their current position for at least 10 years; 54% have been in public health for at least 10 years (Figure 7).

Figure 7. Employee Years of Service in Public Health, Statewide LHD Workforce



The most commonly reported primary role among region respondents was administrative or clerical (24%) followed by nurse (18%) and environmental health worker/sanitarian (16%) (Figure 8). A complete listing of "other" primary roles is found in Appendix C.

Figure 8. LHD Employees by Primary Role, Statewide



Note: Respondents who participated in the pilot survey (n=24) did not have a question on primary role and are excluded. All write-in roles that could not otherwise be classified were collapsed into the "Other" category as well as categories that were reported by less than 5 respondents, including but not limited to the following: epidemiologist, home health, public health physician, nurse director, dental hygienist, office assistant, and behavioral health professional.

TRAINING NEEDS

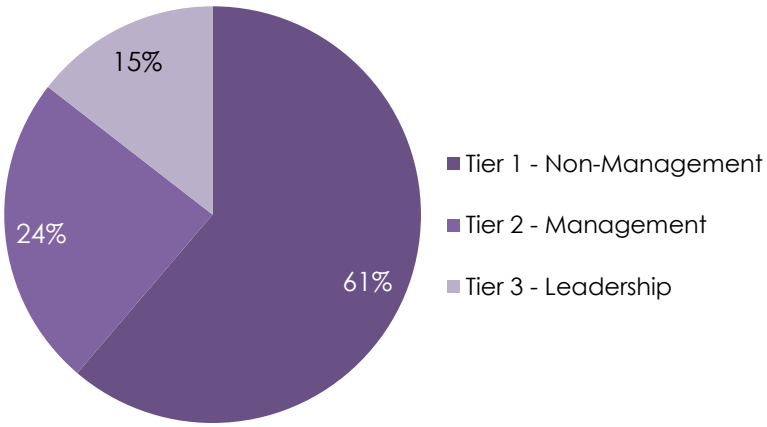
Relevance and Skills Gap by Competency Domain

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)**: An individual with program management and/or supervisory responsibilities as well as program development/implementation/evaluation, maintaining community relations, managing timelines and work plans, and recommending public health policies.
- **Tier 3 (senior managers and CEOs)**: An individual with a senior management or leadership position. This level includes responsibility for program functions, organizational strategy and vision, and establishing/maintaining the organization's professional culture.

A total of 230 (61%) of local health department employees were classified as Tier 1 entry level (Figure 9).

Figure 9. Employees by Tier, Statewide LHD Workforce



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 6 to 17 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). Together, these two criteria reflect both the importance of the competency to the respondents' job function and need for skills training relative to the importance of the job function.

Table 1 shows the 8 core competency domains and the counts and percentages of Tier 1, Tier 2, and Tier 3 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) respondents, followed by Policy Development/Program Planning Skills for Tier 2 (management) respondents. For Tier 3 (leadership) respondents, Financial Planning and Management Skills ranked highest (Table 1).

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

Core Competency Domains Total Local Health Department Respondents, Statewide = 376*	Tier 1: Entry Level (n=230)		Tier 2: Management (n=94)		Tier 3: Leadership (n=52)	
	N	%^	N	%^	N	%^
1. Analytical/Assessment Skills	81	38	47	53	26	57
2. Policy Development/Program Planning Skills	57	28	48	55	27	59
3. Communication Skills	68	33	42	48	22	49
4. Cultural Competency Skills	53	26	37	42	18	41
5. Community Outreach Skills	76	37	40	45	19	42
6. Public Health Science Skills	56	28	43	49	18	40
7. Financial Planning and Management Skills	81	40	46	54	28	62
8. Leadership and Systems Thinking Skills*	52	26	39	46	20	47

Note: *Total number of respondents who answered some questions in each domain. Respondents who did not fall into one of the Tiers completed the demographic section only. Respondents who only completed the pilot survey (n=24) are excluded. ^Percents may vary if respondents skipped any questions within each domain, resulting in varied denominators (and %). High relevance = rating of 3 or higher. Skills gap = relevance rating > skill rating.

Respondents indicating high relevance and skills gap for each core competency domain is also provided by West Virginia Public Health Preparedness Region in Appendix D.

Top 10 Competencies with High Relevance and Skills Gap

The competencies most frequently reported across all domains as having a high relevance (≥3 using a rating scale of 1 to 4) and a skill gap (where relevance >current skill level) are reported in Table 2. The purpose is to identify areas where 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 are listed below.

Table 2. Top 10 skill gap/high relevance competencies by Tier

Tier	Competency	Domain
Tier 1 (entry level)	1. Adheres to the organization's policies and procedures	Financial Planning and Management
	2. Collaborates with community partners to promote the health of the population	Community Outreach
	3. Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	4. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	5. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	6. Informs the public about policies, programs, and resources	Community Outreach
	7. Maintains partnerships with key stakeholders	Community Outreach
	8. Identifies community assets and resources	Community Outreach
	9. Describes the laws, regulations, policies and procedures for the ethical conduct of research	Public Health Science
	10. Describes the public health laws and regulations governing public health programs	Policy Development/ Program Planning

Tier 2 (management)	1.	Develops strategies for continuous quality improvement	Policy Development/ Program Planning
	2.	Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	3.	Develops mechanisms to monitor and evaluate programs for their effectiveness and quality	Policy Development/ Program Planning
	4.	Develops strategies for determining budget priorities based on federal, state, and local financial contributions	Financial Planning and Management
	5.	Manages public health programs consistent with public health laws and regulations	Policy Development/ Program Planning
	6.	Assesses the health literacy of populations served	Communication
	7.	Develops a programmatic budget	Financial Planning and Management
	8.	Uses a variety of approaches to disseminate public health information	Communication
	9.	Establishes linkages with key stakeholders	Community Outreach
	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 Science
Tier 3 (leadership)	1.	Integrates the findings from quantitative and qualitative data into organizational operations	Analytical/Assessment
	2.	Establishes a performance management system	Financial Planning and Management
	3.	Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	4.	Incorporates data into the resolution of scientific, political, ethical, and social public health concerns	Analytical/Assessment
	5.	Evaluates the integrity and comparability of data	Analytical/Assessment
	6.	Includes the use of cost-effectiveness, cost-benefit, and cost-utility analyses in programmatic prioritization and decision making	Financial Planning and Management
	7.	Rectifies gaps in data sources	Analytical/Assessment
	8.	Integrates emerging trends of the fiscal, social and political environment into public health strategic planning	Policy Development/ Program Planning
	9.	Assesses the dynamic forces that contribute to cultural diversity	Cultural Competency
	10.	Determines community specific trends from quantitative and qualitative data	Analytical/Assessment

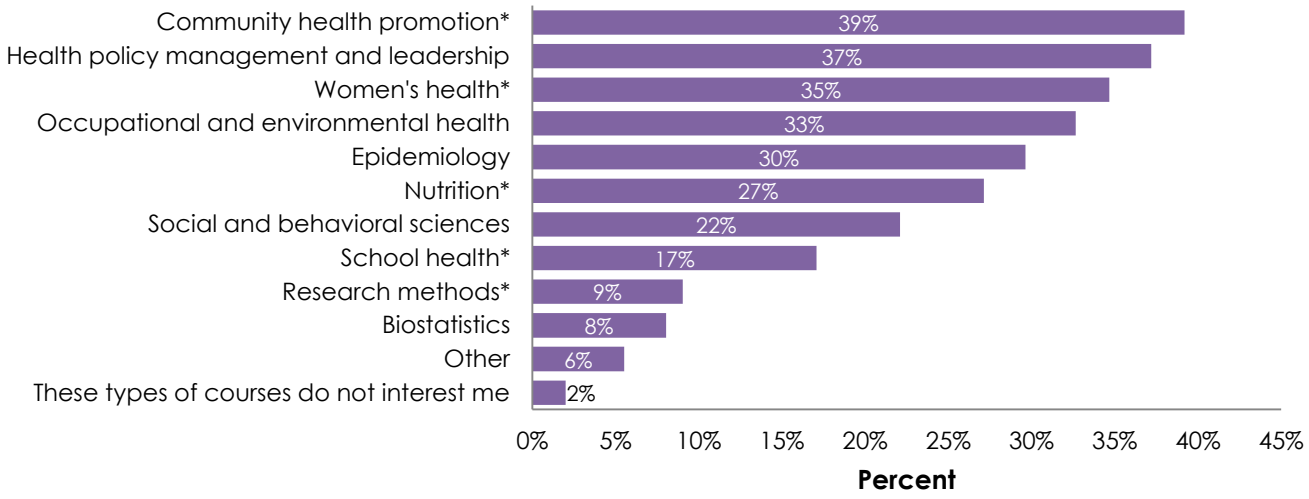
Note: Respondents who did not fall into one of the Tiers completed the demographic section only. Respondents who only completed the pilot survey (n=24) are excluded. High relevance = rating of 3 or higher. Skills gap=relevance rating > skill rating. The Top 10 are in order with #1 being the most frequently 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.

Top 10 competencies with high relevance and skills gap are also provided by West Virginia Public Health Preparedness Region in Appendix E.

Areas of Educational Interest

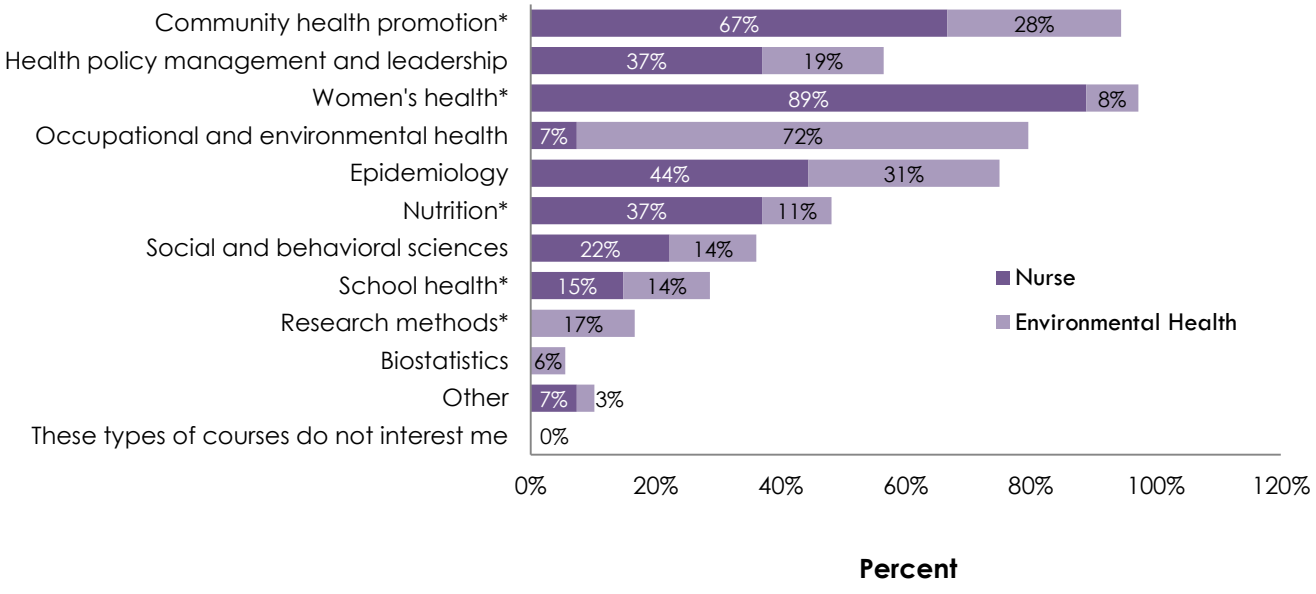
When asked if local health department respondents were interested in furthering public health education through academic courses, the top areas of interest identified were community health promotion (39%), health policy management and leadership (37%), and women's health (35%) (Figure 10). Top areas of educational interest for respondents who identified either "nurse" or "environmental health" as their primary LHD role are listed in Figure 11.

Figure 10. Areas of Educational Interest of Public Health Employees, Statewide



Note: Includes percent of the 201 respondents (43%) interested in additional education. Respondents could select multiple areas. *Indicated choices were added as a result of the pilot survey and were not available options for the pilot respondents (n=24).

Figure 11. Areas of Educational Interest by Nurse and Enviornmental Health LHD Primary Roles



Note: Includes percent of the 27 of the 67 nurse respondents (40%) and 36 of the 62 environmental health respondents (58%) interested in additional education. Respondents could select multiple areas. *Indicated choices were added as a result of the pilot survey and were not available options for the pilot respondents (n=24).

RESOURCES

The following resources offer core competency-based trainings and tools for public health professionals.

- **Partners in Information Access for the Public Health Workforce**
  http://phpartners.org/workforcedevelopment.html
  Partners in Information Access for the Public Health Workforce is a collaboration of U.S. government agencies, public health organizations, and health sciences libraries which provides timely, convenient access to selected public health resources on the Internet.

- **West Virginia TrainingFinder Real-time Affiliate Integrated Network (WVTRAIN)**
  https://wv.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.

- **Center for Performance Management and Systems Development**
  http://www.dhhr.wv.gov/publichealthquality/
  The Center for Performance Management and Systems Development is dedicated to supporting performance and quality improvement initiatives of the Bureau for Public Health, the state's local health departments and other public health system partners in West Virginia, to improve delivery of essential public health services and to improve health outcomes.

NEXT STEPS

These results will be used to inform plans for workforce training and competency development over the next several years.

ADDITIONAL REPORT INFORMATION

Methods

From December 2011 to April 2012, 40 state and local public health employees in West Virginia were invited to participate in a pilot workforce development assessment, including questions assessing public health competencies as well as basic demographics and professional development. Thirty-two participants completed the pilot assessment and 19 participants submitted feedback about the assessment. Based on the feedback, the assessment was further refined in consultation with WVBPH leadership. From October 2012 to December 2012, the refined survey was sent to 527 employees in local health departments (LHDs) in West Virginia. Survey questions included basic demographic information, service in the public health workforce, interest in professional development activities, and a public health competency assessment based on the *The Council on Linkages Between Academia and Public Health Practice's Core Competencies for Public Health Professionals*. Four email reminders were sent to invited participants and a total of 428 LHD staff completed the survey (81% response rate). The percentage of respondents was calculated using the total number of respondents divided by the total number of surveys sent.

The North Carolina Institute for Public Health at the University of North Carolina at Chapel Hill conducted the analyses using *SAS* version 9.2 and prepared regional and statewide data reports.

Public Health Workforce Characteristics

Demographic information including gender, age category, race, and education is reported for all survey respondents in a LHD. For age, respondents could select a category beginning with 18-24 years old and increasing by 10 year age categories until age 75, at which point the option was 75+. For the purposes of reporting, age categories were collapsed as follows to best reflect the distribution of respondents across LHDs: <25, 25-34, 35-44, 45-54, 55-65, and 65+ years.

Race categories in the survey were White, Black or African-American, Hispanic/Latino, American Indian or Alaskan Native, Asian, Pacific Islander or Native Hawaiian, Other (with write-in), or “do not know/unsure/no answer”. Race was collapsed to the following categories: White, Black or African-American, American Indian or Alaskan Native, Hispanic, or Other. The “Other” category included anyone who listed themselves as Asian, Pacific Islander or Native Hawaiian, Other, or wrote in a multi-racial background or other race that was not categorized.

Respondents were asked their highest educational attainment from the following options: High School/GED, Vocational Training, Some College/No Degree, Associate/Technical Degree, Nursing, Bachelors, Masters, Professional Degree (MD, DDS, JD, etc.), or Other Doctoral Degree. All categories were retained in the results except Professional Degree was collapsed with Other Doctoral Degree.

Respondents were also asked to select any degrees earned from any school or program from the following options: BA/BS, BSN, BSPH, MPH, MSPH, MHA, MPA, MS, MA, MSW, MSN, MBA, JD, MD, DO, DDS, PhD, DrPH, or an “Other” write-in option. No categories were collapsed, though only those with >0 responses are presented. Percentages were calculated using the number of respondents who marked any of the options as the denominator; respondents who skipped the question entirely were excluded from the denominator.

For licenses or credentials, respondents were asked to “select all that apply” from the following options: certified health education specialist, certified tumor registrar, emergency medical technician, engineer in training licensed practical nurse, licensed social worker, paramedic, professional engineer, registered dietician, registered nurse, registered pharmacist, registered sanitarian, registered dental hygienist, physician assistant, nurse practitioner, none of the above, or an “Other” write-in option. No categories were collapsed, though only those with >0 responses are presented. Percentages were calculated using the number of respondents who marked any of the options as the denominator; respondents who skipped the question entirely were excluded from the denominator.

For types of academic public health courses that would be of interest, respondents were asked to “select all that apply” from the following options: biostatistics, community health promotion, epidemiology, health policy, leadership, management, mental health, nutrition, occupational and environmental health, public health

informatics, quality improvement, research methods, school health, social and behavioral sciences, social work, women's health, these types of courses do not interest me, or an "Other" write-in option. No categories were collapsed, though only those with >0 responses are presented. Percentages were calculated using the number of respondents who marked any of the options as the denominator; respondents who skipped the question entirely were excluded from the denominator.

Respondents were asked to identify if they were full-time or part-time employees and if they were hired as civil service (standard employee, typically with benefits), temporary, contract worker (typically paid by the hour or project with no benefits), or an "Other" write-in option.

Respondents were asked about their years in the public health workforce based on the following categories: <5 years, 5 to 9 years, 10-14 years, 15-19 years, and 20+ years.

For primary health department role respondents had to select one of 17 options, including an "Other" write-in option. All categories were retained in the results.

Competency Assessment

Before completing the public health competency assessment, respondents were asked to select one of three options that identified them as non-management level (Tier 1), management level (Tier 2), or leadership level (Tier 3).

The specific definitions of employment levels are as follows:

- **Tier 1 (Non-Management Level)**: An individual in a public health position who carries out the day-to-day tasks of public health organizations and is not in a management position.
- **Tier 2 (Management Level)**: An individual with program management and/or supervisory responsibilities as well as program development/implementation/evaluation, maintaining community relations, managing timelines and work plans, and recommending public health policies.
- **Tier 3 (Leadership Level)**: This level includes responsibility for program functions, organizational strategy and vision, and establishing/maintaining the organization's professional culture.

For all Tiers, the competency assessment was structured by the eight domains of Core Competencies for Public Health Professionals:

1. Analytical/Assessment Skills
2. Policy Development/Program Planning Skills
3. Communication Skills
4. Cultural competency Skills
5. Community Outreach Skills
6. Public Health Science Skills
7. Financial Planning
8. Management Skills

Within each domain, the competency questions varied depending on the Tier.

Note: For a complete listing of competencies, please see:
http://www.phf.org/resourcestools/Documents/Core_Competencies_for_Public_Health_Professionals_2010May.pdf.

For each competency question (regardless of domain or Tier), respondents were asked to rate each competency in terms of their own current skill level and in terms of the relevance of that competency to their current job. To assess skills, respondents chose one of the following four options: 1) I am unaware, or have very little knowledge of the skill, 2) I have heard of it; limited knowledge or ability to apply the skill, 3) I am comfortable with knowledge or ability to apply the skill, or 4) I am very comfortable, an expert; could teach this to others. To assess skills, respondents chose one of the following four options: 1) Not relevant at all, 2) Somewhat relevant, 3) Relevant, or 4) Highly relevant.

To best identify areas in which training could have the greatest impact, competencies for which respondents reported "high relevance" and a "skill gap" were identified. Both skill and relevance were self-assessed on a 1 to 4 rating scale with 1 being lowest skill or relevance and 4 being highest skill or relevance. High relevance was defined as relevance rating ≥ 3. Skill gap was defined as a Skill rating < Relevance rating. Together, these two criteria reflect both importance of the competency to the respondents' job function and need for skills training relative to the importance of the job function.

Table 1 shows the number of respondents within a domain who had at least one competency in the domain that met both of the following criteria: 1) had a skill gap (relevance rating > skill rating) and 2) had a relevance rating ≥ 3. Denominators for the percent column are based on the number of respondents who answered both skill and relevance questions for each domain; percents may vary if respondents skipped any questions within each domain.

Table 2 shows the "Top 10 Competencies," regardless of domain, that were identified by the greatest number of respondents as meeting both of the following criteria: 1) had a skill gap (relevance rating > skill rating) and 2) had a relevance rating ≥ 3.

Limitations

Results reflect the counts and percentages from respondents working in local health departments in West Virginia. It is important to note that respondents may not represent the entire workforce and some answers may be under-represented.

Respondents who only participated in the pilot survey (n=24) did not complete the final statewide survey. The pilot survey did not include relevance questions in the competency section. The statewide report only includes demographic information for pilot participants. Variable modifications for the reports with pilot data include the following questions outlined in Table 3.

Table 3. Variable modifications for pilot responses

Question	Pilot Survey (n=24)	Statewide Local Survey (n=375)
Total years in public health	Write-in format	Category format
Total years in current public health position	Write-in format	Category format
Degrees		Added more degree choices
Licenses/credentials		Added more choices
Secondary role in LHD	[Not included in survey]	Added this question
Interest in types of public health courses		Added more choices
Barriers to enrolling in coursework		Added an additional choice
Interest in participating in types of educational programs		Added an additional choice
For each competency, degree able to effective perform each skill		Added relevance (how relevant is skill to current job)

The competency questions only applied to those who identified themselves in one of the Tiers. Because of the small number of respondents in each Tier by region, all Tiers were collapsed for regional reports (i.e. combined) for the purposes of reporting competency results. Because the competencies varied by Tier, collapsing them means that the results are more crude (less specific) than they would be if the Tiers could be reported separately.

Lastly, the survey was based on self-report and self-assessment. Interpretation of questions, as well as individual ability to assess, may vary by respondent. 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.

APPENDIX

Appendix A

"Other" certifications reported (14%)

- Associates in Applied Arts and Sciences
- BSN
- CDM
- Certified Pool Operator/ ServSafe Teacher & Procto
- Certified Childbirth Instructor, Safety Restraint
- Certified dental assistant
- Certified Diabetes Educator
- Certified Lactation Specialist
- Certified medical assistant
- CNA
- CompTIA A+
- CPH by NBPHE
- CPR Instructor
- D.O.
- HAZMAT
- IBCLC, RLC
- ICP
- Licensed Dietitian
- MCSE
- Medical Laboratory Scientist
- Nationally Certified Athletic Trainer
- Non Work Related
- Office assistant
- Ordained Spiritual Leader
- Paramedic
- Phlebotomist
- Physician
- Pool operator
- Public Health Practice Permit
- Quality Engineer
- Realtors License
- RMA
- Sanitarian (Not Registered)
- School Nurse
- SCUBA Certified
- Tobacco Treatment Specialist

Appendix B

"Other" type of employee reported (6%)

- Contract by County Commission
- County employee
- Exempt
- Full time salary
- Full time staff nurse
- Full time with benefits
- Licensed nurse
- MD
- Not applicable
- Not hired
- Part time
- Perm part time
- Permanent
- Salary no benefits
- Volunteer
- Work through a primary care center

Appendix C

"Other" LHD primary role reported (12%)

Note: Categories that were reported by less than 5 respondents were collapsed into the "Other" category, and are indicated by the asterisk (*) in the list below. Write-in responses from those specifying "Other" role that could not be readily classified into the categories are also shown in the list below.

- Epidemiologist*
- Home health*
- Behavioral health professional*
- Public health physician*
- 90 day exempt phone/office coverage
- Aide
- Children's oral health coordinator
- Clerk, regional program
- Clinic nurse
- Clinical Coordinator
- Counselor
- Dental Assistant
- Dental Hygienist
- Family Planning
- Family planning clinician
- HHS aide
- Information Technology Specialist
- NP for clinics
- Oral Health Coordinator
- Oral health educator
- Per diem clinic physician
- Physician Assistant
- Regional Care Coordinator Right From The Start
- Social Work with at risk pregnant women and infants
- Volunteer health officer

Appendix D

Percent of region* respondents indicating high relevance and skills gap for any competencies listed in domain (all Tiers).

Core Competency Domains	Region (all Tiers)						
	Bundle (n=43)	**EPHRT (n=61)**	**Mid Ohio Valley (n=54)**	**Northern (n=61)**	**PACT (n=59)**	**ROC (n=48)**	**SPHERE (n=63)**
1. Analytical/Assessment Skills	36%	52%	38%	36%	46%	49%	50%
2. Policy Development/Program Planning Skills	38%	61%	29%	36%	31%	38%	36%
3. Communication Skills	29%	51%	38%	34%	42%	37%	37%
4. Cultural Competency Skills	38%	47%	29%	22%	31%	21%	33%
5. Community Outreach Skills	31%	57%	40%	30%	40%	26%	46%
6. Public Health Science Skills	24%	57%	27%	30%	31%	36%	32%
7. Financial Planning and Management Skills	51%	44%	54%	43%	44%	50%	42%
8. Leadership and Systems Thinking Skills	25%	40%	40%	26%	40%	34%	30%

Note: *Regions were classified by West Virginia public health preparedness region. Because of the small number of respondents in each Tier by region, all Tiers were collapsed for the purposes of reporting competency results. Respondents who did not fall into one of the Tiers completed the demographic section only. Respondents who only completed the pilot survey (n=24) are excluded. Percents may vary if respondents skipped any questions within each domain. High relevance = rating of 3 or higher. Skills gap = relevance rating > skill rating.

Appendix E

Top 10 competencies with high relevance and skills gap by region* (all Tiers).

Region	Competency	Domain
Bundle (n=43)	1. Develops policies for organizational plans, structures, and programs	Policy Development/ Program Planning
	2. Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts	Financial Planning and Management
	3. Develops a programmatic budget	Financial Planning and Management
	4. Develops strategies for determining budget priorities based on federal, state, and local financial contributions	Financial Planning and Management
	5. Evaluates program performance	Financial Planning and Management
	6. Establishes a performance management system	Financial Planning and Management
	7. Ensures that programs are managed within current and forecasted budget constraints	Financial Planning and Management
	8. Determines budgetary priorities for the organization	Financial Planning and Management
	9. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	10. Manages public health programs consistent with public health laws and regulations	Policy Development/ Program Planning
EPHRT (n=61)	1. Describes the laws, regulations, policies and procedures for the ethical conduct of research	Public Health Sciences
	2. Demonstrates the use of public health informatics practices and procedures	Policy Development/Program Planning
	3. Identifies the health literacy of populations served	Communication
	4. Gathers information relevant to specific public health policy issues	Policy Development/Program Planning
	5. Recognizes the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services	Cultural Competency
	6. Describes how data are used to address scientific, political, ethical, and social public health issues	Analytical/Assessment
	7. Describes how policy options can influence public health programs	Policy Development/Program Planning
	8. Gathers information that will inform policy decisions	Policy Development/Program Planning
	9. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	10. Responds to diverse needs that are the result of cultural differences	Cultural Competency
Mid Ohio Valley (n=54)	1. Adheres to the organization's policies and procedures	Financial Planning and Management
	2. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	3. Uses individual, team and organizational learning opportunities for personal and professional development	Leadership and Systems Thinking
	4. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	5. Recognizes the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services	Cultural Competency
	6. Responds to diverse needs that are the result of cultural differences	Cultural Competency
	7. Collaborates with community partners to promote the health of the population	Community Dimensions of Practice
	8. Operates programs within current and forecasted budget constraints	Financial Planning and Management
	9. Solicits community-based input from individuals and organizations	Communication
	10. Conveys public health information using a variety of approaches	Communication
Northern (n=61)	1. Adheres to the organization's policies and procedures	Financial Planning and Management
	2. Describes the public health laws and regulations governing public health programs	Policy Development/Program Planning
	3. Informs the public about policies, programs, and resources	Community Dimensions of Practice
	4. Describes the role of governmental and non-governmental organizations in the delivery of community health services	Community Dimensions of Practice
	5. Participates in the development of a programmatic budget	Financial Planning and Management
	6. Demonstrates public health informatics skills to improve program and business operations	Financial Planning and Management

	7. Operates programs within current and forecasted budget constraints	Financial Planning and Management
	8. Reports program performance	Financial Planning and Management
	9. Applies strategies for continuous quality improvement	Policy Development/Program Planning
	10. Describes how policy options can influence public health programs	Policy Development/Program Planning
PACT (n=59)	1. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	2. Recognizes community linkages and relationships among multiple factors (or determinants) affecting health	Community Dimensions of Practice
	3. Collects quantitative and qualitative community data	Analytical/Assessment
	4. Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	5. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency
	6. Identifies stakeholders	Community Dimensions of Practice
	7. Maintains partnerships with key stakeholders	Community Dimensions of Practice
	8. Describes the role of governmental and non-governmental organizations in the delivery of community health services	Community Dimensions of Practice
	9. Identifies community assets and resources	Community Dimensions of Practice
	10. Describes the organizational structures, functions, and authorities of local, state, and federal public health agencies	Financial Planning and Management
ROC (n=48)	1. Adheres to the organization's policies and procedures	Financial Planning and Management
	2. Describes the laws, regulations, policies and procedures for the ethical conduct of research	Public Health Sciences
	3. Incorporates ethical standards of practice as the basis of all interactions with organizations, communities, and individuals	Leadership and Systems Thinking
	4. Describes the public health laws and regulations governing public health programs	Policy Development/Program Planning
	5. Demonstrates the use of public health informatics practices and procedures	Policy Development/Program Planning
	6. Identifies the health literacy of populations served	Communication
	7. Conveys public health information using a variety of approaches	Communication
	8. Collaborates with community partners to promote the health of the population	Community Dimensions of Practice
	9. Participates in the development of contracts and other agreements for the provision of services	Financial Planning and Management
	10. Operates programs within current and forecasted budget constraints	Financial Planning and Management
SPHERE (n=63)	1. Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	Communication
	2. Establishes linkages with key stakeholders	Community Dimensions of Practice
	3. Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	4. Describes the characteristics of a population-based health problem	Analytical/Assessment
	5. Determines the laws, regulations, policies and procedures for the ethical conduct of research	Public Health Sciences
	6. Maintains partnerships with key stakeholders	Community Dimensions of Practice
	7. Assesses the health status of populations and their related determinants of health and illness	Analytical/Assessment
	8. Uses information technology to collect, store, and retrieve data	Analytical/Assessment
	9. Develops strategies for continuous quality improvement	Policy Development/Program Planning
	10. Incorporates strategies for interacting with persons from diverse backgrounds	Cultural Competency

Note: *Regions were classified by West Virginia public health preparedness region. Because of the small number of respondents in each Tier by region, all Tiers were collapsed for the purposes of reporting competency results. Region respondents who only completed the pilot survey (Bundle, n=11 and Northern n=13) are excluded. High relevance = rating of 3 or higher. Skills gap=relevance rating > skill rating.

This project was supported through
the Southeast Public Health Training Center, a project of the Bureau of Health Professions in the Health Resources and Services Administration (Award No. 5 UB6HP20182-04-00).
Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HRSA or the U.S. Department of Health and Human Services.

THE NORTH CAROLINA
Institute *for* Public Health

Gillings School of Global Public Health | University of North Carolina at Chapel Hill | Campus Box 8165
Chapel Hill, NC 27599-8165 | nciph.sph.unc.edu | nciph@unc.edu