West Virginia
Bureau for Public Health

2012 Workforce Assessment Survey

Final Report

Acknowledgement

This Workforce Project would not have been possible without the contribution from dedicated West Virginia Bureau for Public Health (WVBPH) employees as well as State and National organizations that work closely with WVBPH. Healthy People 2020 (source: http://healthypeople.gov/2020/default.aspx) provides science-based objectives for improving the health for all Americans. One of the objectives for Healthy People 2020 is to focus on building the Public Health Infrastructure by promoting a capable and qualified Workforce. Objective PHI-1 states “Increase the proportion of Federal, Tribal, State and local public health agencies that incorporate Core Competencies for Public Health Professionals into job descriptions and performance evaluations”

This Executive Summary serves as evidence to taking the necessary steps in supporting a Public Health Infrastructure that effectively provides essential public health services in West Virginia. Data from this assessment can be used to identify and address the current workforce needs of the West Virginia State Public Health System.

WVBPH would also like to thank the University of North Carolina’s Institute for Public Health, the Southeast Public Health Training Center and Purdue Healthcare Advisors for their work on data collection and analysis.

Table of Contents

I. Introduction 4

II. Background 5

III. Methods 6

A. Tool Development 6
B. Core Competencies for Public Health Professionals 6
C. Pilot Testing 7
D. Data Collection 7
E. Measures and Indicators 8
F. Statistical Analysis 8

IV. Results 9

A. WV Bureau for Public Health Demographic Profile 9
B. WV Bureau for Public Health Core Competency Assessment Data 10
1. Tier 1 10
2. Tier 2 13
3. Tier 3 15
C. Discussion 17

V. WVBPH Workforce Survey Vetting Session 19

VI. Recommendations 20

VII. Appendices 22

A. WVBPH Workforce Assessment Tables and Figures 23
B. WVBPH Workforce Survey Vetting Session Report 35

I. Introduction

In September 2010 the West Virginia Bureau for Public Health (WVBPH) was awarded grant funding through the Centers for Disease Control and Prevention's National Public Health Improvement Initiative (NPHII): Strengthening Public Health Infrastructure for Improved Health Outcomes. West Virginia chose Workforce Development as one key area of focus in an effort to further develop and sustain an adequately trained public health workforce at both state and local levels.

The Public Health Accreditation Board (PHAB) Standards and Measures guide includes Standard 8.2: Assess staff competencies and address gaps by enabling organizational and individual training and development opportunities. In order to assess the knowledge and skills of the current WV Public Health Workforce, a Workforce Development Committee was formed and plans were developed to launch a WVBPH and local health department workforce assessment.

The definition of the public health workforce by the U.S. Department of Health and Human Services includes all those who provide essential public health services, regardless of the nature of the employing agency. The public health workforce includes disciplines from the comprehensive health care workforce and is reliant upon those disciplines to maintain a diverse, sufficient, and competent workforce.

The Essential Services, developed by The Core Public Health Functions Steering Committee which included representatives from US Public Health Service agencies and other major public health organizations, provide a working definition of public health and a guiding framework for the responsibilities of local public health systems.

The Essential Public Health Services include:

- Monitoring the health status of populations to identify and solve community health problems.
- Investigating and diagnosing community health problems and health hazards.
- Informing and educating individuals about health issues.
- Mobilizing public and private sector collaborations and actions to identify and solve health problems.
- Developing policies, plans, and programs that support individual and community health efforts.
- Enforcing statutes and rules that protect health and ensure safety.
- Linking individuals to needed personal health services.
- Assuring a competent public health workforce.
- Evaluating effectiveness, accessibility, and quality of personal and population-based health services.
- Providing research to develop insights into and innovative solutions for health problems

In collaboration with the University of North Carolina's Institute for Public Health and the South Eastern Public Health Training Center, a Workforce Assessment Tool was developed using the Council on Linkages Core Competencies for Public Health

Professionals. The Competencies are a set of skills, knowledge, and attitudes necessary for the broad practice of public health. The competency set was adopted by the Council on Linkages between Academia and Public Health Practice in 2001. Between 2008 and 2010 the Council adopted a revised competency set to include specific competencies for Tier 1 (Front-Line Professionals), Tier 2 (Program Managers and Supervisors) and Tier 3 (Senior Management and Leaders). Each discipline that provides essential public health services has specific competencies to guide educational development and practice. Core competencies for public health guide formal public health education and continuing education curriculum development and public health practice.

The Core Competencies for Public Health Professionals are structured within eight domains consisting of specific competencies:

1) Analytic/Assessment Skills
2) Policy Development/Program Planning Skills
3) Communication Skills
4) Cultural Competency Skills
5) Community Dimensions of Practice Skills
6) Basic Public Health Sciences Skills
7) Financial Planning and Management Skills
8) Leadership and Systems Thinking Skills

In March 2012, West Virginia launched the WVBPH Workforce Assessment, assessing all WVBPH professional staff. This Workforce assessment was later launched for all local health department professional staff however this Executive Summary will describe the background, methods, results and recommendations for the Bureau level Workforce Development initiative. A local health department report will be produced separately.

II. Background

The National Public Health Performance Standards Program (NPHPSP) designed standards around the ten Essential Public Health Services. The NPHPSP includes three models; Local, State and Governance in terms of assessing the optimal performance within the ten Essential Public Health Services. In 2011 WVBPH created a Center for Performance Management and Systems Development as part of the NPHII grant. In early December 2012 the Center for Performance Management, in collaboration with Purdue Healthcare Advisors, organized and facilitated a State Public Health System Assessment using the NPHPSP State Public Health System Performance Assessment Instrument. Essential Public Health Service #8 is “Assure a Competent Public and Personal Health Care Workforce”. WVBPH has taken the initial steps to assuring a competent public health workforce by assessing the core competencies of all Bureau professionals.

During the planning phase of the Workforce Assessment the following objectives were considered as potential outcomes:

- identify training needs of Bureau employees
- integrate Core Competencies for public health professionals into public health practice
- inform higher education institutions of public health workforce training and educational gaps
- support an organizational culture that values workforce education and development
- develop strategies to position and support West Virginia Public Health agencies to meet PHAB standards related to Domain 8.

III. Methods

A. Tool Development

The WVBPH Workforce Assessment was developed by the North Carolina Institute for Public Health at the University of North Carolina in collaboration with WVBPH. The competency portion of the assessment was adapted from a Skills Assessment for Tier 1/2/3 Public Health Professionals developed by the South East Public Health Training Center. A non-competency section was also developed to collect data on demographics, occupation, and educational interests of WVBPH employees. Once the assessment was fully designed the questions were loaded using Qualtrics online survey software and delivered to individual email accounts previously identified in a target population. All of the data responses are confidentially stored in the Qualtrics system located on the North Carolina's Institute for Public Health server.

B. Core Competencies for Public Health Professionals

The WVBPH Workforce Assessment was adapted from the Skills Assessment for Tier 1/2/3 Public Health Professionals, which in turn was based on the *Council on Linkages Between Academia and Public Health Practice's Core Competencies for Public Health Professionals.* The Core Competencies were designed for public health professionals at three different levels: Tier 1 (entry level), Tier 2 (supervisors and managers), and Tier 3 (senior managers and executives). These competencies are the foundation on which discipline specific competencies are built and offer a starting point for public health professionals to identify state and local professional development needs and develop training plans. Use of these competencies is among the recommendations in Healthy People 2020. The Tiers are defined as follows:

- **Tier 1 – Entry Level**. Tier 1 competencies apply to public health professionals who carry out the day-to-day tasks of public health organizations and are not in management positions. Responsibilities of these professionals may include basic data collection and analysis, fieldwork, program planning, outreach activities, programmatic support, and other organizational tasks.

- **Tier 2 – Program Management/Supervisory Level.** Tier 2 competencies apply to public health professionals with program management or supervisory responsibilities. Specific responsibilities of these professionals may include program development, implementation, and evaluation; establishing and maintaining community relations; managing timelines and work plans; and presenting arguments and recommendations on policy issues.

- **Tier 3 – Senior Management/Executive Level.** Tier 3 competencies apply to public health professionals at a senior management level and to leaders of public health organizations. These professionals typically have staff that report to them and may be responsible for the major programs or functions of an organization, setting a strategy and vision for the organization, and building the organization's culture.

The WVBPH Workforce Assessment included two self-assessment measures: 1) skill level and 2) relevance to job. The two self-reported measures were collected across the eight *Council on Linkages Between Academia and Public Health Practice's Core Competencies for Public Health Professionals* areas: 1) analytical/assessment, 2) policy development/program planning, 3) communications, 4) cultural competency, 5) community outreach, 6) public health sciences, 7) financial planning and management, and 8) leadership and systems thinking. All respondents completed the demographic questions and then were asked to self-select the appropriate competency Tier based on the Tier definitions to begin the competency assessment questions.

C. Pilot Testing

The assessment was pilot tested, refined, and implemented between December 2011 and April 2012. From December 2011 to January 2012, the assessment was pilot tested with 40 West Virginia state and local public health employees. Thirty-two participants completed the assessment and 19 participants submitted feedback about the assessment. Based on the feedback, the assessment was further refined in consultation with WVBPH leadership. The main change consisted of adding a relevance question to each competency as noted above. The revised assessment underwent a final testing with three West Virginia public health personnel.

D. Data Collection

Following pilot testing and final revisions, the assessment was launched on March 12th, 2012 using Qualtrics online survey software. The participants received three reminders to complete the assessment and the assessment was closed on April 9th, 2012. The response rate was 81% (533 employees responded out of 658 who received the survey).

E. Measures and Indicators

The final version of the assessment contained 35 demographic/occupational/education questions and 74-87 competency questions depending on Tier. Estimated time to complete the assessment was approximately 20-30 minutes.

Basic Demographics
The assessment included questions asking for respondent age, gender and race.

Occupation and Educational Background
The assessment included questions about the respondent's WVBPH office and civil service classification, number of years working in their current position, and number of years working in public health. The assessment also included questions about the highest level of education attained, advanced degrees, and licenses and credentials. An additional four questions asked how long the respondents intended to stay in public health, reasons for staying, and ranked reasons for leaving.

Educational Training Preferences
Respondents were asked their level of interest in furthering their education through coursework at a school of public health, what courses interested them, their preferences for scheduling, and what barriers prevented them from coursework.

Core Competencies
The assessment asked respondents to choose their skill level for each competency question (Scale: I am unaware, or have very little knowledge of the skill; I have heard of it - limited knowledge and/or ability to apply the skill; I am comfortable with knowledge or ability to apply the skill; I am very comfortable, an expert, could teach this to others). Respondents were then asked to rate the importance level of the competency to their jobs (Scale: 1=Not relevant at all, 4=Highly relevant).

F. Statistical Analysis

Data was downloaded in raw format from UNC's Qualtrics online survey data collection site, and cleaned with input from WVBPH staff. Briefly, records were removed if they were duplicates; from survey pilot testing; contained little or no completed questions; or the participants indicated they were hired as CDC or other federal assignees or SAWAP (19 records). For all non-competency questions, this dataset (n = 514) was used for analysis. For the competency analysis, state employees were classified by civil service classification, with administrative employees identified by WVBPH (n=102) removed from the analysis. The competency analysis was conducted for 412 non-administrative state public health employees.

Competency data were analyzed using SAS 9.2 statistical software, and reports were generated for the entire group of non-administrative state employees as well as individual BPH offices. Competency reports were separated by Tier (I, II, III), each with

domain-specific frequencies and means, in addition to summary results including the mean skill and relevance rating for each competency, as identified by survey respondents. A "Need Score" was created to rate competencies based on their mean skill and relevance. The "Need Score" was calculated as the difference between mean skill rating and mean relevance rating for each competency (need score = mean skill - mean relevance).

Note: A negative need score indicates a need for competency skill development since the skill level rating is lower than the relevance rating.

This "Need Score" was also included with the mean skill and relevance ratings. The final summary result in the report for each tier was a grouping of competencies based on high and low mean skill and mean relevance ratings. The upper quartile (75th percentile) was used to define the high mean skill, and the lower quartile (25th percentile) was used to delineate low.

IV. Results

A. WV Bureau for Public Health Demographic Profile

The demographic profile includes information from 514 West Virginia Bureau for Public Health staff who completed the West Virginia Public Health Workforce Assessment. Demographic questions were not required for completion of the assessment; therefore, individual numbers of responses varied for some questions. Tables and figures illustrating the demographic profile are included in Appendix A.

Basic Demographics
The West Virginia Bureau for Public Health respondents were predominately female (70%) and white (91%). More than 60% of the respondents were 45 years of age or older, with the largest age group represented by 55-64 year olds (30%).

Occupation and Educational Background
The 514 employees who completed the assessment consisted of 493 full-time (96%) and 19 part-time (4%) staff. The majority (94%) classified themselves as standard Civil Service employees; the remaining 6% classified themselves as Temporary (2%), Contract Worker (2%), or Other (2%). Ninety percent of the WV BPH Workforce has educational training beyond a high school diploma or GED, with 35% holding a bachelor’s degree, 21% earning a master’s degree, and 5% have a doctoral or professional degree. Approximately 6% of respondents have a formal degree in public health (MPH, MSPH or DrPH). Nearly a third of respondents (32%) indicated they hold a license or credential of some kind. The top three licenses or credentials were Registered Nurse (7%), Professional Engineer (4%), and Registered Sanitarian (3%).

One quarter of respondents indicated that they intended to leave public health within the next five years. The top three reasons for leaving included salary (70%), change in personal/life situation (46%), and retirement (39%).

Educational Training Preferences
Nearly half of WVBPH respondents (48%) are interested in furthering their public health education through coursework at a school of public health. Respondents are most interested in a Master's degree (41%), followed by topic-specific courses (23%) and a Bachelor's degree (18%). Respondents who were interested in furthering their public health education indicated that their top choices for course topics included Health Policy, Management and Leadership (38%), Social and Behavioral Sciences (34%), Occupational and Environmental Health (32%) and Epidemiology and Community Health (30% each). Regarding method of public health course delivery, WVBPH respondents prefer the option of both online and on-campus classes (52%), with online only a close second (45%). The majority would prefer to attend evening classes (89%) and nearly half choosing weekend scheduling (49%). However, the majority of WVBPH respondents indicated significant barriers to enrolling in coursework, including financial support (83%), time (59%), employer approval/support (37%), and classes are not easily accessible (30%).

B. WV Bureau for Public Health Core Competency Assessment Data

For the purpose of this report it is necessary to look at aggregate data across the Bureau. Much clearer needs emerge when analyzing the data by BPH offices and by public health discipline. It should also be noted that the results indicate perceived skills and relevance. Especially in Tier 1 there is low perceived relevance in areas that should be very relevant, such as in a basic understanding of what public health is. This is why the assessment exercise also includes a process by which key stakeholders can vet the validity of the finding. Another important consideration when analyzing the data is that low and high scores are defined as those competencies below the 1st quartile value or above the 3rd quartile value for all BPH competencies. Generally speaking there is very little difference between the lowest high score and the highest low score. While some discussion of the data is possible in this section, the section of this report summarizing the key stakeholder data vetting process will shed more light on the meaning of the data.

1. Tier 1 (Entry Level)

Tier 1 Respondents include entry level public health practitioners. These are individuals who perform a public health function, but who are not in a management position. Two hundred and twenty respondents began the survey, 202 completed all questions (92 percent response rate). Nearly 20 percent hold a master's degree which is keeping with the national estimate that four out of five public health workers do not have formal public health training.

The data is presented as mean skills and mean (perceived) relevance. The data is outlined below. Mean skill ratings ranged from 1.73 to 2.86. Mode (the most frequent response) ranged from 1-3.

Tier 1 Mean Skill & Perceived Relevance Rating for each Domain in Tier 1

Domain	Mean Skill Rating	Mean Relevance Rating
1. Analytical/Assessment Skills	**2.38**	**2.19**
2. Policy Development/Program Planning Skills	**2.26**	**2.06**
3. Communication Skills	**2.34**	**2.08**
4. Cultural Competency Skills	**2.29**	**1.91**
5. Community Dimensions of Practice Skills	**2.21**	**1.91**
6. Public Health Sciences Skills	**2.08**	**1.84**
7. Financial Planning and Management Skills	**2.10**	**1.90**
8. Leadership and Systems Thinking Skills	**2.20**	**1.92**

NOTE: Negative need score indicates higher mean relevance to job than mean reported skill level

Tier 1: Skill and Relevance=High skill, High Perceived relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
7A3: Adheres to the organization’s policies and procedures	2.77	2.79	-0.02
1A11: Uses information technology to collect, store, and retrieve data	2.80	2.75	0.05
1A4: Uses methods and instruments for collecting valid and reliable quantitative and qualitative data	2.50	2.38	0.12
2A10: Applies strategies for continuous quality improvement	2.45	2.33	0.12
1A8: Adheres to ethical principles in the collection, maintenance, use, and dissemination of data and information	2.86	2.72	0.14
1A6: Recognizes the integrity and comparability of data	2.58	2.39	0.19
1A5: Identifies sources of public health data and information	2.42	2.22	0.20
3A2: Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	2.83	2.63	0.20
8A5: Uses individual, team and organizational learning opportunities for personal and professional development	2.47	2.24	0.23
8A1: Incorporates ethical standards of practice as the basis of all interactions with organizations, communities, and individuals	2.57	2.33	0.24

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
2A7: Incorporates policies and procedures into program plans and structures	2.33	2.07	0.26
7A10: Applies basic human relations skills to internal collaborations, motivation of colleagues, and resolution of conflicts	2.47	2.17	0.30
2A1: Gathers information relevant to specific public health policy issues	2.38	2.07	0.31
4A1: Incorporates strategies for interacting with persons from diverse backgrounds	2.50	2.16	0.34

Tier 1: Skill and Relevance=Low skill, Low perceived relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
6A3: Relates public health science skills to the Core Public Health Functions and Ten Essential Services of Public Health	1.73	1.66	0.07
7A6: Identifies strategies for determining budget priorities based on federal, state, and local financial contributions	1.85	1.70	0.15
7A4: Participates in the development of a programmatic budget	1.93	1.76	0.17
7A8: Translates evaluation report information into program performance improvement action steps	1.99	1.79	0.20
7A9: Contributes to the preparation of proposals for funding from external sources	1.95	1.75	0.20
8A3: Participates with stakeholders in identifying key public health values and a shared public health vision as guiding principles for community action	1.98	1.76	0.22
7A12: Participates in the development of contracts and other agreements for the provision of services	1.93	1.70	0.23
7A2: Describes the organizational structures, functions, and authorities of local, state, and federal public health agencies	2.05	1.81	0.24
7A13: Describes how cost-effectiveness, cost-benefit, and cost-utility analyses affect programmatic prioritization and decision making	1.90	1.66	0.24
7A11: Demonstrates public health informatics skills to improve program and business operations	2.06	1.81	0.25
7A1: Describes the local, state, and federal public health and health care systems	2.04	1.77	0.27
8A4: Identifies internal and external problems that may affect the delivery of Essential Public Health Services	2.03	1.75	0.28
6A2: Identifies prominent events in the history of the public health profession	1.92	1.64	0.28
8A8: Describes the impact of changes in the public health system, and larger social, political, economic environment on organizational practices	1.96	1.66	0.30
8A2: Describes how public health operates within a larger system	2.08	1.77	0.31

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
4A6: Participates in the assessment of the cultural competence of the public health organization	2.08	1.72	0.36

2. **Tier 2 (Management Level)**

Tier 2 professionals are those who manage programs and/or people. Mean Tier 2 scores range from 2.07 to 3.1 and mode skill ratings ranged from 1-4. One hundred and twenty three staff began the survey and 116 completed all questions (94 percent response rate).

Tier 2 Mean Skill & Relevance Rating for each Domain

Domain	Mean Skill Rating	Mean Relevance Rating
1. Analytical/Assessment Skills	**2.62**	**2.60**
2. Policy Development/Program Planning Skills	**2.65**	**2.63**
3. Communication Skills	**2.83**	**2.74**
4. Cultural Competency Skills	**2.52**	**2.28**
5. Community Dimensions of Practice Skills	**2.55**	**2.46**
6. Public Health Sciences Skills	**2.31**	**2.19**
7. Financial Planning and Management Skills	**2.53**	**2.54**
8. Leadership and Systems Thinking Skills	**2.63**	**2.65**

Tier 2: Skill and Relevance=High skill, High relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
1B11: Uses information technology to collect, store, and retrieve data	2.97	3.10	-0.13
8B5: Promotes individual, team and organizational learning opportunities	2.82	2.87	-0.05
5B5: Maintains partnerships with key stakeholders	2.83	2.88	-0.05
1B9: Interprets quantitative and qualitative data	2.78	2.82	-0.04
2B9: Develops mechanisms to monitor and evaluate programs for their effectiveness and quality	2.81	2.85	-0.04
7B9: Uses evaluation results to improve performance	2.78	2.82	-0.04
1B8: Employs ethical principles in the collection, maintenance, use, and dissemination of data and information	2.87	2.90	-0.03

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
5B3: Establishes linkages with key stakeholders	2.79	2.82	-0.03
8B1: Incorporates ethical standards of practice as the basis of all interactions with organizations, communities, and individuals	2.89	2.92	-0.03
2B6: Manages public health programs consistent with public health laws and regulations	2.87	2.89	-0.02
2B11: Develops strategies for continuous quality improvement	2.80	2.82	-0.02
7B11: Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts	2.89	2.91	-0.02
3B2: Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	3.10	3.11	-0.01
2B7: Develops plans to implement policies and programs	2.86	2.83	0.03
3B3: Solicits input from individuals and organizations	3.07	3.03	0.04
3B5: Presents demographic, statistical, programmatic, and scientific information for use by professional and lay audiences	2.93	2.78	0.15

Tier 2: Skill and Relevance=Low skill, Low relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
7B4: Implements the judicial and operational procedures of the governing body and/or administrative unit that oversees the operations of the public health organization	2.21	2.23	-0.02
7B14: Uses cost-effectiveness, cost-benefit, and cost-utility analyses in programmatic prioritization and decision making	2.35	2.28	0.07
3B1: Assesses the health literacy of populations served	2.31	2.22	0.09
6B5: Conducts a comprehensive review of the scientific evidence related to a public health issue, concern, or, intervention	2.33	2.24	0.09
6B3: Relates public health science skills to the Core Public Health Functions and Ten Essential Services of Public Health	2.07	1.97	0.10
6B7: Determines the limitations of research findings	2.35	2.25	0.10
7B13: Negotiates contracts and other agreements for the provision of services	2.35	2.24	0.11
6B9: Contributes to building the scientific base of public health	2.24	2.13	0.11
1B3: Generates variables that measure public health conditions	2.26	2.14	0.12
6B1: Discusses the scientific foundation of the field of public health	2.26	2.14	0.12
1B1: Assesses the health status of populations and their related determinants of health and illness	2.40	2.28	0.12
5B7: Distinguishes the role of governmental and non-governmental organizations in the delivery of community health services	2.40	2.28	0.12
5B2: Collaborates in community-based participatory research efforts	2.36	2.21	0.15

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
6B2: Distinguishes prominent events in the history of the public health profession	2.09	1.94	0.15
1B2: Describes the characteristics of a population-based health problem	2.35	2.19	0.16
5B8: Negotiates for the use of community assets and resources	2.34	2.17	0.17
5B1: Assesses community linkages and relationships among multiple factors (or determinants) affecting health	2.40	2.21	0.19
4B6: Assesses public health programs for their cultural competence	2.23	2.01	0.22

3. Tier 3 Leadership

Tier 3 respondents include senior managers. Fifty-two Tier 3 staff began the survey and 48 completed all questions (92 percent response rate). Tier 3 mean skills ratings ranged from 2.33 to 3.42. Mode skills ratings ranged from 2-4. Tier 3 skills and relevance are outlined below.

Tier 3: Mean Skill & Relevance Rating for each Domain

Domain	Mean Skill Rating	Mean Relevance Rating
1. Analytical/Assessment Skills	**2.83**	**2.88**
2. Policy Development/Program Planning Skills	**2.90**	**3.04**
3. Communication Skills	**2.98**	**3.18**
4. Cultural Competency Skills	**2.56**	**2.73**
5. Community Dimensions of Practice Skills	**2.79**	**2.82**
6. Public Health Sciences Skills	**2.53**	**2.66**
7. Financial Planning and Management Skills	**2.82**	**3.02**
8. Leadership and Systems Thinking Skills	**2.86**	**2.93**

Tier 3: Skill and Relevance=High skill, High relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
7C8: Determines budgetary priorities for the organization	2.94	3.24	-0.30

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
7C5: Defends a programmatic and organizational budget	2.94	3.22	-0.28
1C11: Uses information technology to collect, store, and retrieve data	3.00	3.26	-0.26
7C9: Evaluates program performance	2.98	3.20	-0.22
7C16: Incorporates data and information to improve organizational processes and performance	3.02	3.20	-0.18
3C2: Communicates in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	3.24	3.42	-0.18
2C8: Implements plans and programs consistent with policies	3.25	3.38	-0.13
2C9: Ensures the consistency of policy integration into organizational plans, procedures, structures, and programs	3.04	3.17	-0.13
2C2: Decides policy options for public health organization	3.00	3.12	-0.12
3C3: Ensures that the public health organization seeks input from other organizations and individuals	3.12	3.24	-0.12
5C3: Establishes linkages with key stakeholders	3.00	3.12	-0.12
3C7: Communicates the role of public health within the overall health system	3.20	3.25	-0.05
7C12: Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts	3.08	3.10	-0.02
5C4: Ensures the collaboration and partnerships of key stakeholders through the development of formal and informal agreements	3.10	3.10	0.00
5C5: Maintains partnerships with key stakeholders	3.14	3.14	0.00

Tier 3: Skill and Relevance=Low skill, Low relevance

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
7C13: Integrates public health informatics skills into program and business operations	2.35	2.65	-0.30
6C9: Contributes to building the scientific base of public health	2.45	2.71	-0.26
2C11: Oversees public health informatics practices and procedures	2.41	2.66	-0.25
4C6: Assesses the public health organization for its cultural competence	2.47	2.68	-0.21
6C10: Establishes partnerships with academic and other organizations to expand the public health science base and disseminate research findings	2.58	2.73	-0.15
1C7: Rectifies gaps in data sources	2.59	2.73	-0.14
5C2: Encourages community-based participatory research efforts within the public health organization	2.53	2.67	-0.14
6C3: Incorporates the Core Public Health Functions and Ten Essential Services of Public Health into the practice of the public health sciences	2.53	2.67	-0.14
6C7: Critiques the limitations of research findings	2.48	2.62	-0.14

Competency	Mean Skill Rating	Mean Relevance Rating	Need Score
4C4: Assesses the dynamic forces that contribute to cultural diversity	2.45	2.58	-0.13
6C6: Synthesizes scientific evidence from a variety of text and electronic sources	2.59	2.69	-0.10
4C3: Responds to diverse needs that are the result of cultural differences	2.59	2.68	-0.09
6C8: Advises on the laws, regulations, policies and procedures for the ethical conduct of research	2.54	2.61	-0.07
6C1: Critiques the scientific foundation of the field of public health	2.33	2.38	-0.05
5C1: Evaluates the community linkages and relationships among multiple factors (or determinants) affecting health	2.54	2.58	-0.04
7C4: Manages the implementation of the judicial and operational procedures of the governing body and/or administrative unit that oversees the operations of the public health organization	2.62	2.66	-0.04
6C2: Explains lessons to be learned from prominent events in the history in comparison to the current events of the public health profession	2.51	2.53	-0.02

C. Discussion

The highest priority training needs by tiers are seen as follows. This data shows that the competency domains with the highest need for training are: Management skills and Analytical/Assessments skills.

Highest Training Needs by Tier: West Virginia

Competency-Tier 1	Skill	Relevance	Need Score
7A3: Adheres to the organization’s policies and procedures	2.77	2.79	-0.02
1A11: Uses information technology to collect, store, and retrieve data	2.80	2.75	0.05
1A4: Uses methods and instruments for collecting valid and reliable quantitative and qualitative data	2.50	2.38	0.12
Competency-Tier 2			
1B11: Uses information technology to collect, store, and retrieve data	2.97	3.10	-0.13
8B5: Promotes individual, team and organizational learning opportunities	2.82	2.87	-0.05
5B5: Maintains partnerships with key stakeholders	2.83	2.88	-0.05
Competency-Tier 3			
7C8: Determines budgetary priorities for the organization	2.94	3.24	-0.30
7C5: Defends a programmatic and organizational budget	2.94	3.22	-0.28
1C11: Uses information technology to collect, store, and retrieve data	3.00	3.26	-0.26

Overall the data for Tier 1 indicate no significant findings with regard to training needs; however, this may be misleading. The majority of staff in Tier 1 has no formal public health training. While there is general low perceived relevance, there is also generally low competence. There is no skill rating above 2.5, but overall, the level of perceived skill is higher than relevance. This is problematic and indicates a lack of basic understanding of public health. There is low understanding of the broader public health system which is critical to the provision of the ten essential services. This would indicate the need for basic training in core public health systems and services. This in turn might help Tier 1 staff to recognize relevance. The results for the statewide system assessment will help to shed more light on training needs in this area.

The Tier 2 data provide slightly clearer training needs data. There are 13 skills with negative need scores, though only one, “Uses information technology to collect, store, and retrieve data” has a significant difference between skills and relevance. Public Health Informatics is national training need which is seen in the competency-based training needs data for many states. As with Tier 1, there is a general deficit in public health systems skills and management skills, the latter clearly very relevant to personnel in management positions.

Tier 3 data shows an overall higher level of skills and deeper understanding of relevance. There are many skills for which skill level is lower than perceived relevance. This is what you would expect with staff at this level.

Comparison to National data

In 2012 the Southeast Public Health Training Center at UNC conducted an assessment of training needs assessments across 40 states. Of those states, 61 percent used the three Council on Linkages competency tiers to assess the training needs of both state and local public health personnel. The Table below summarizes the top priority competency domains by tiers. This data clearly indicates that the national trend is the need for more training in management skills, leadership/systems thinking skills and public health science skills. Specific training needs include: quality improvement and performance management; public health informatics and overall management skills including budgeting skills. The BPH data is in line with the national data.

State training needs assessment by priority competency domains (N=25 states)

	Tier 1	Tier 2	Tier 3	Total
Analytical Assessment	1	4	2	7
Program Planning/Policy Development	1	2	1	4
Communication	2	2	1	5
Cultural Competency	4	2	1	7

Community Dimension of Practice	1	2	0	3
Public Health Skills	4	4	4	12
Financial planning and Management	**6**	**5**	**4**	**16**
Leadership/Systems Thinking	**4**	**6**	**8**	**18**

V. WVBPH Workforce Survey Vetting Session

In October 2012 the newly formed, WVBPH Center for Performance Management and Systems Development, collaborated with Purdue Healthcare Advisors to develop a strategic Workforce Survey Vetting Session using the data results from the Workforce Assessment. The Vetting Session was designed to translate data into information allowing participants to identify and understand strengths and weaknesses as well as external opportunities and challenges (SWOT). The data was sorted by Tier, with Tier 1 targeting Entry Level Staff, Tier 2 targeting Program Management Level Staff and Tier 3 targeting Senior Management/Executive Level Staff.

The Vetting Session participants included WVBPH Leadership, such as the WVBPH Commissioner's Office and WVBPH Office Directors. Participants were presented with data findings on staff competencies and demographics. Participants were grouped together randomly and a SWOT analysis was conducted and recorded. Priority areas were then documented based on the SWOT analysis results. A WVBPH Workforce Vetting Session Report (Appendix B) was produced in October 2012 and those priority areas are included below:

Tier 1 (Entry Level Staff) Priority Areas

- Develop a Public Health orientation for new WVBPH employees
- Improve professional development for entry level staff
- Establish knowledge, skills and abilities (KSA) for each position to tie back to Core Competencies for Public Health Professionals
- Provide training on competencies and provide mentoring
- Involve Tier 1 employees in systems thinking to give staff more understanding of job
- Education of current workforce regarding relevance of duties to public health

Tier 2 (Program Management/Supervisory Level Staff) Priority Areas

- Improve understanding of budgets and finance
- Improve data systems
- Develop retention and recruitment opportunities

Tier 3 Priority Areas (Senior Management/Executive Level Staff)

- Develop formal Succession Planning so that Institutional knowledge of Senior Leadership can be shared with employees by coaching/mentoring sessions.

VI. Recommendations

The first model standard under the state public health system (SPHS) within Essential Service #8, “Assure a Competent Public and Personal Health Care Workforce”, is Planning and Implementation. To accomplish this standard a workforce assessment is required followed by the development of a statewide workforce plan(s). The workforce plan(s) should establish strategies and actions needed to recruit, maintain and sustain a competent and diverse workforce. This standard also encourages the development of programs focused on enhancing the skills and competencies of the workforce through human resource development.

In November 2012, the Center for Performance Management and Systems Development organized five committees to oversee the implementation of the Bureau for Public Health Strategic Map. One of the five committees is charged with overseeing Track C, Developing and Supporting a Competent Empowered Workforce. The committee participants include Bureau senior management, supervisors and program staff. The following recommendations are being made based on the current workforce data, Bureau infrastructure, NPHPSP and PHAB Standards;

1. At the approval of the WVBPH Commissioner, assign oversight of the following tasks to the committee overseeing Track C of the BPH strategic map, Developing and Supporting a Competent Empowered Workforce:

A. Develop a Workforce Development Plan for the WVBPH utilizing the workforce data (core competencies), workforce vetting session data while using PHAB Standards Domain 8 and the NPHPSP State Model Standards for Essential Service #8 as guides. List of potential areas to include in the workforce plan may include:

   a. Address training needs and core competency development of Bureau staff. Develop a core curricula of training schedules
   b. Develop and track training initiatives for leadership and/or management staff
   c. Establish strategies and actions needed to recruit, maintain and sustain a competent and diverse workforce
   d. Identify actions to improve the quality of the workforce
   e. Establish relationships and collaborate with schools of public health or other academic programs that promote the development of future public health workers
   f. Track data related to staff attendance at state or national conferences

g. Track data related to staff attendance at training/educational sessions provided by other organizations related to their area of work.
h. Provide consultation and/or technical assistance to local health departments regarding evidence-based and/or promising practices in the development of workforce capacity, training and continuing education

Appendices

A. WV Bureau for Public Health Demographics 23

Figure 1 - Primary Center or Office of WVBPH Employees....................................23

Figure 2 – Age of WVBPH Respondents...25

Figure 3 – Gender of WVBPH Respondents 25

Figure 4 – Race of WVBPH Respondents...26

Figure 5 – Total Years Worked in Public Health..26

Figure 6 – Total Years Worked in Current Public Health Position 27

Figure 7 – Length of Time WVBPH Respondents Intend to Remain in the Public Health Workforce...27

Figure 8 – Reasons Would Leave Public Health Practice 28

Figure 9 – Reasons for Leaving Public Health, Ranked in Order of Importance 29

Figure 10 – Highest Educational Degree...30

Figure 11 – Degrees Earned from a School or Program 30

Figure 12 – Licenses and Credentials 31

Figure 13 – Level of Public Health Education of Interest...32

Figure 14 – Types of Academic Public Health Courses WVBPH Respondents Would Be Interested in Taking...32

Figure 15 – Preferred Method of Course Delivery 33

Figure 16 – Preferred Scheduling of On-Campus Classes......................................33

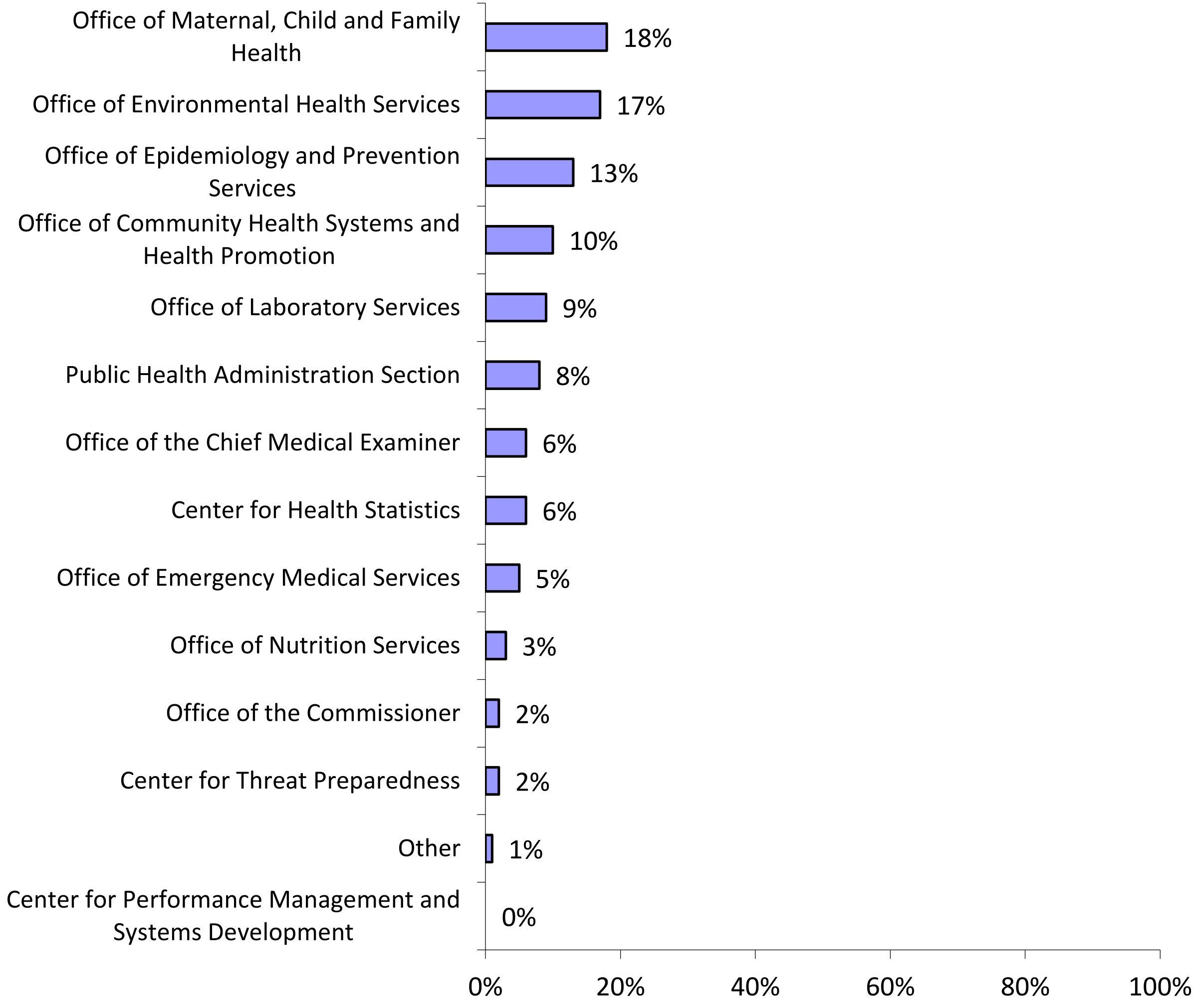
Figure 17 – Barriers to Enrolling in Public Health Coursework................................34

B. West Virginia Workforce Survey Vetting Session Report.................................35

VII. Appendices

Appendix A - West Virginia Bureau for Public Health Workforce Assessment Demographic Profile – Tables and Figures

Figure 1. Primary Center or Office of WVBPH Employees (n = 514)



#	Answer		Response	%
1	Center for Health Statistics		29	6%
2	Center for Performance Management and Systems Development		0	0%
3	Center for Threat Preparedness		10	2%
4	Office of the Chief Medical Examiner		30	6%
5	Office of the Commissioner		10	2%
6	Office of Community Health Systems and Health Promotion		50	10%
7	Office of Emergency Medical Services		26	5%
8	Office of Environmental Health Services		87	17%
9	Office of Epidemiology and Prevention Services		69	13%
10	Office of Laboratory Services		48	9%
11	Office of Maternal, Child and Family Health		95	18%
12	Office of Nutrition Services		17	3%
13	Public Health Administration Section		39	8%
14	Other: please specify		2	1%
	Total		514	100%

Figure 2. Age of WVBPH Respondents (n = 511)

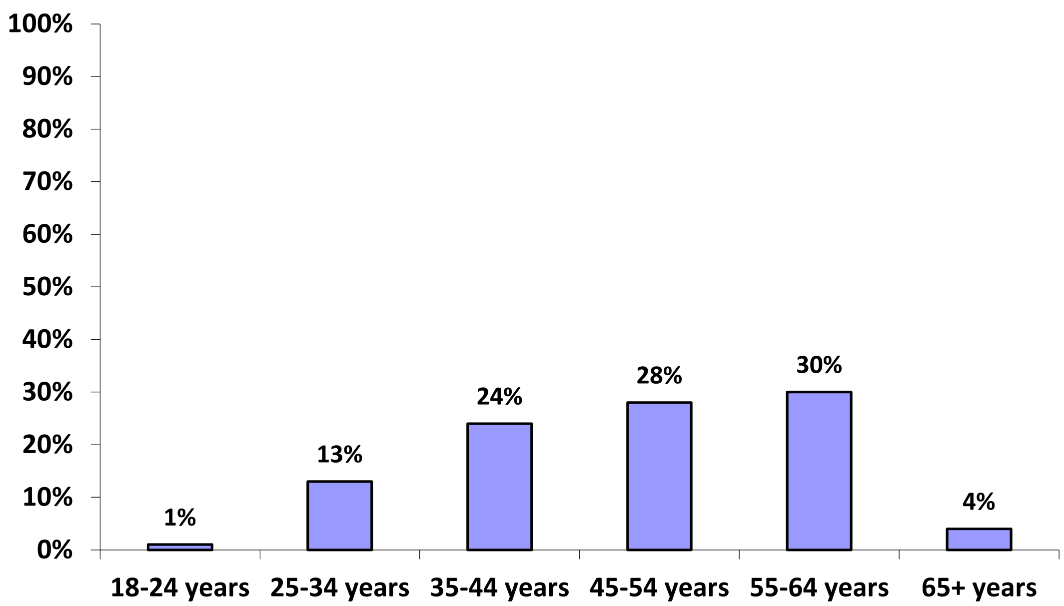


Figure 3. Gender of WVBPH respondents (n = 511)

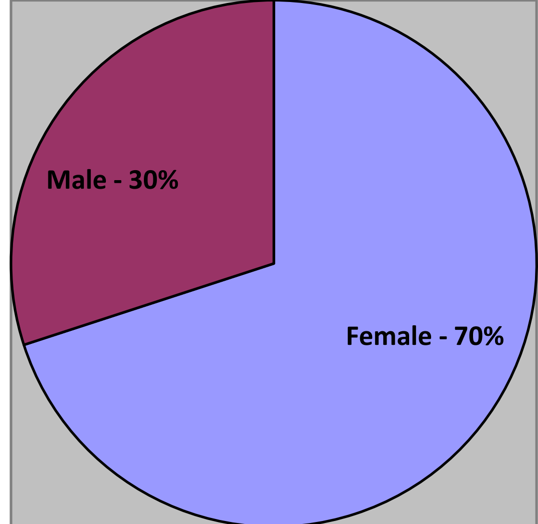


Figure 4. Race of WVBPH respondents (n = 511)

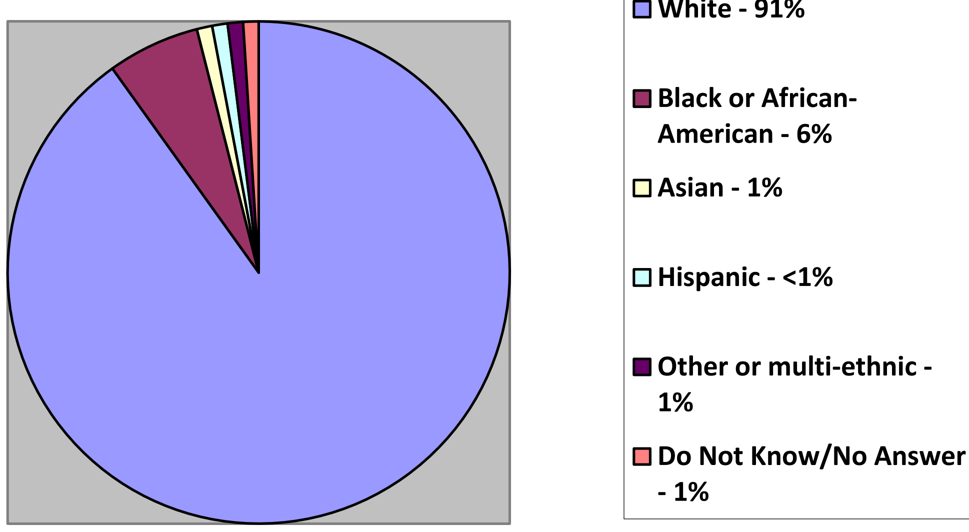


Figure 5. Total Years Worked in Public Health (n = 511)
(Average = 11 years)

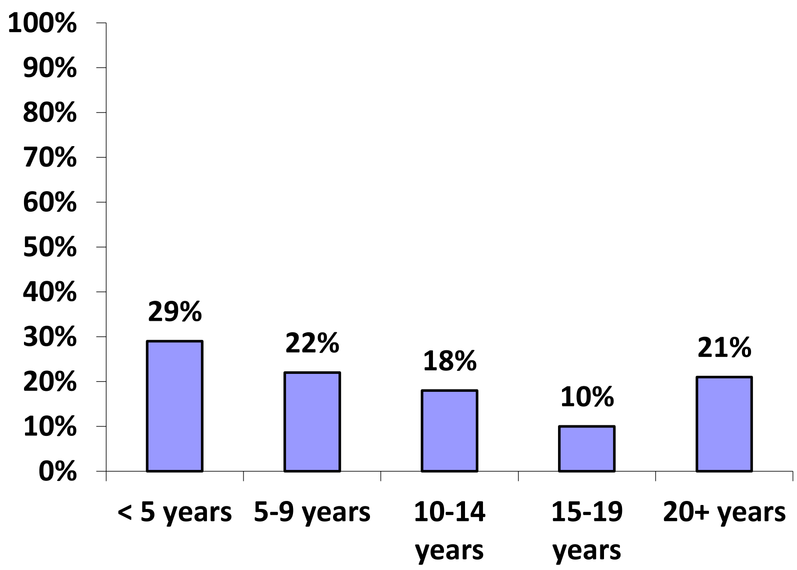


Figure 6. Total Years Worked in Current Public Health Position (n = 511)
(Average = 6 years)

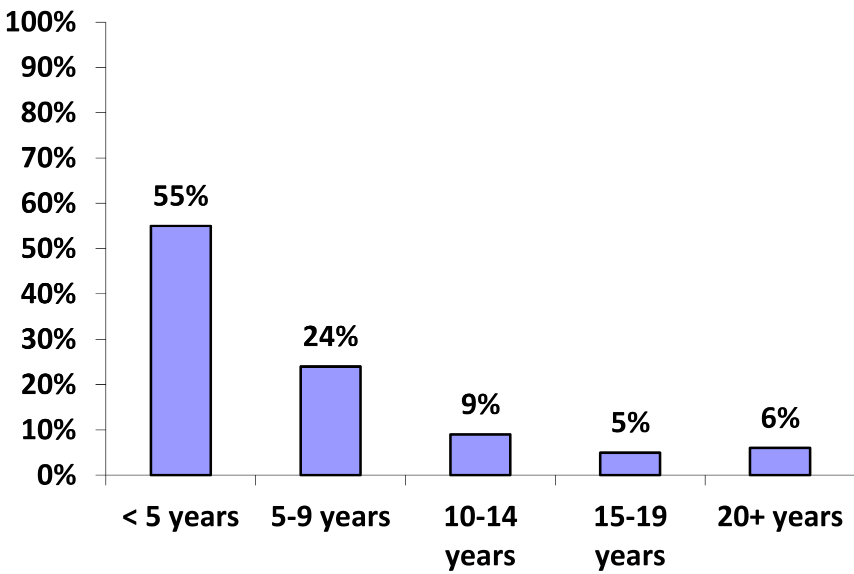


Figure 7. Length of Time WVBPH Respondents Intend to Remain in the Public Health Workforce (n = 510)

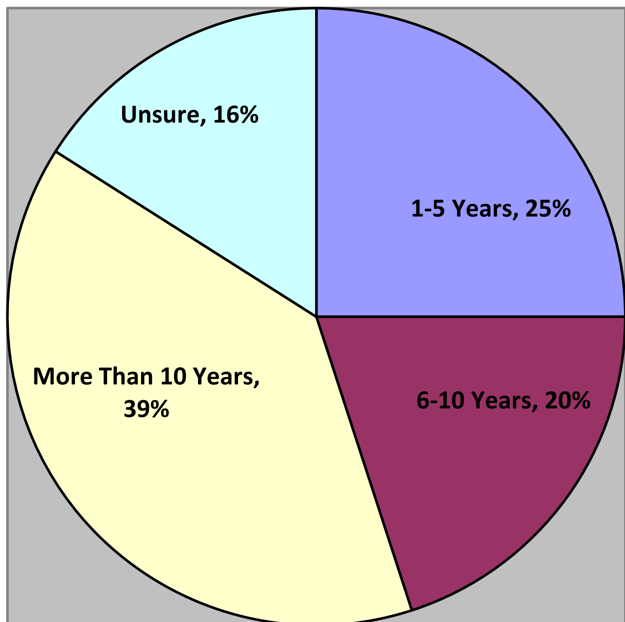
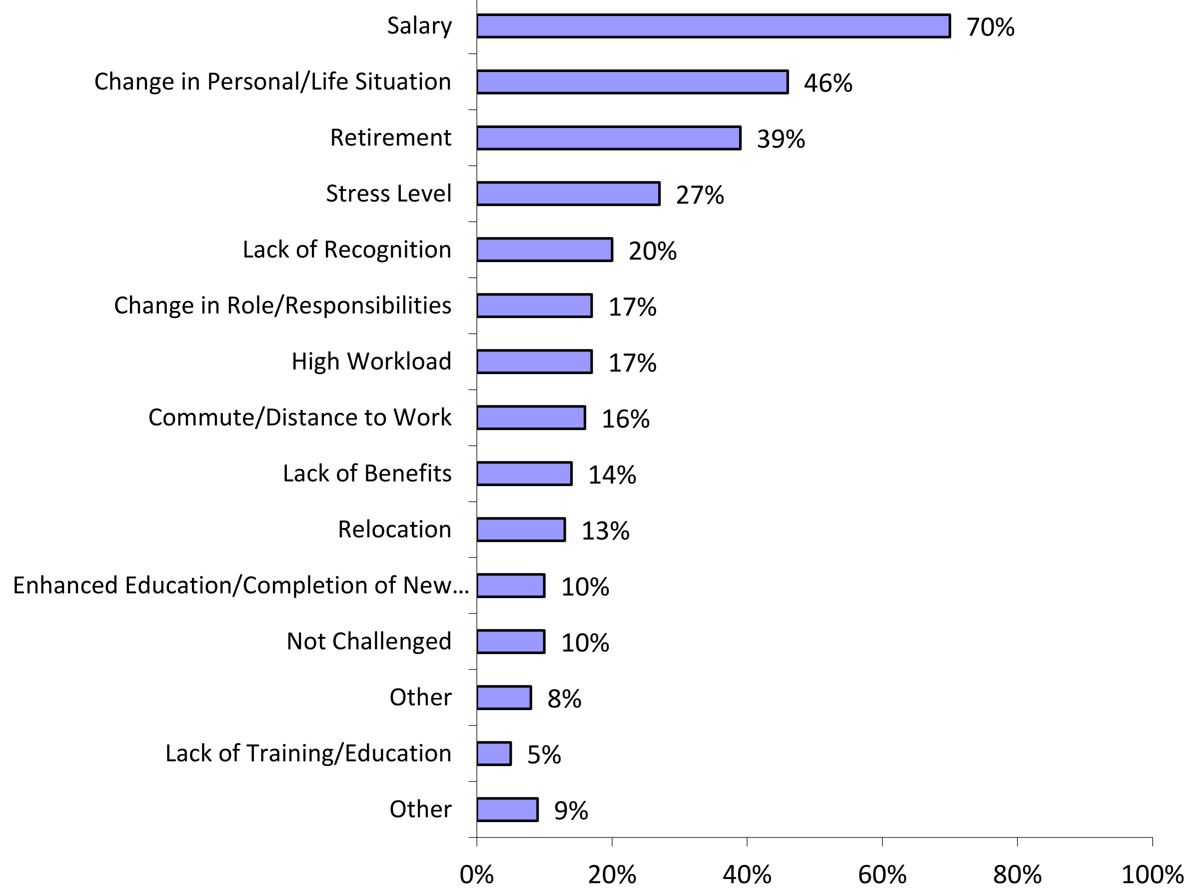


Figure 8. Reasons WVBPH Respondents Would Leave Public Health Practice (n = 503)



Other: *Included adverse work environment/ boss (5), bureaucracy(1), lack of career ladder, merit increases, and cost of living increases (1)*

Figure 9. Reasons for Leaving Public Health, Ranked in Order of Importance (n = 404)

Reason	1st choice	2nd choice	3rd choice	4th choice	5th choice
Salary	173 (43%)	59 (15%)	34	20 (9%)	12 (9%)
Retirement	55 (14%)	31	23	19	25 (19%)
Change in Personal/ Life Situation	41 (10%)	68 (18%)	53 (16%)	34 (15%)	9
Stress Level	27	26	35 (11%)	20 (9%)	11
Career Change	21	34 (9%)	36 (11%)	22 (10%)	7
Commute/ Distance Required to Travel to Work	18	18	13	12	5
Other	14	10	4	0	7
High Workload	11	29	19	16	4
Lack of Recognition	9	26	23	19	16 (12%)
Enhanced Education/ Completion of New Degree/ Training	8	14	15	10	2
Lack of Benefits	7	24	20	8	6
Not Challenged	4	13	7	13	6
Change in Role/ Responsibilities	4	15	22	17	11
Lack of Training/ Education	1	4	7	4	4
TOTALS	404	385	325	225	134

***Note**: Percentages are given for the top three answers in each category*
***Other:** Included adverse work environment/ boss (5), bureaucracy (1), lack of career ladder, merit increases, and cost of living increases (1)*

Figure 10. Highest Educational Degree Reported by WVBPH Respondents (n = 514)

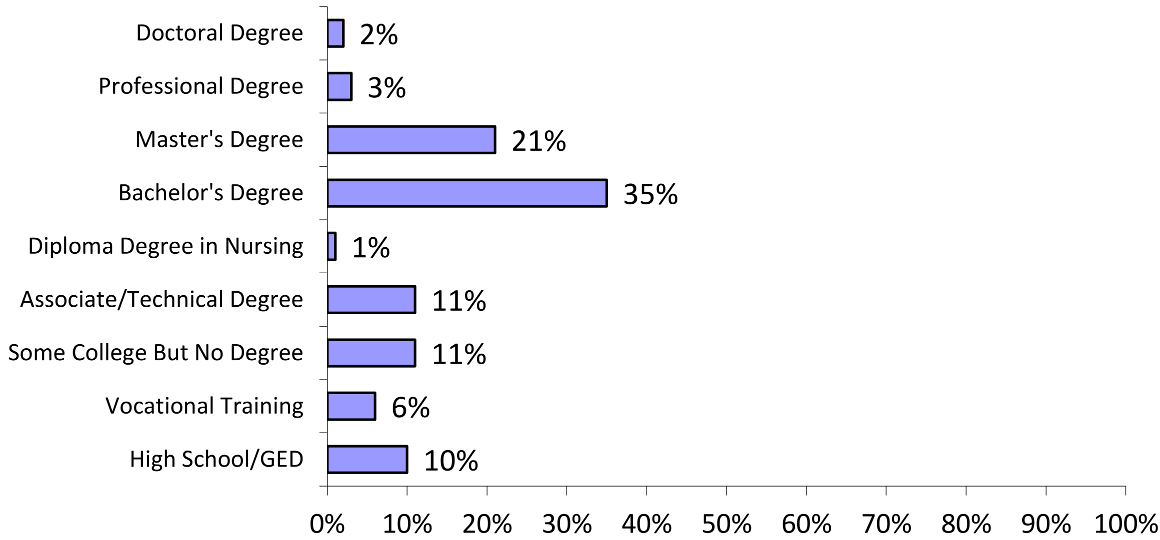


Figure 11. Degrees (Baccalaureate or higher) Earned by WVBPH Respondents From a School or Program (n = 299)

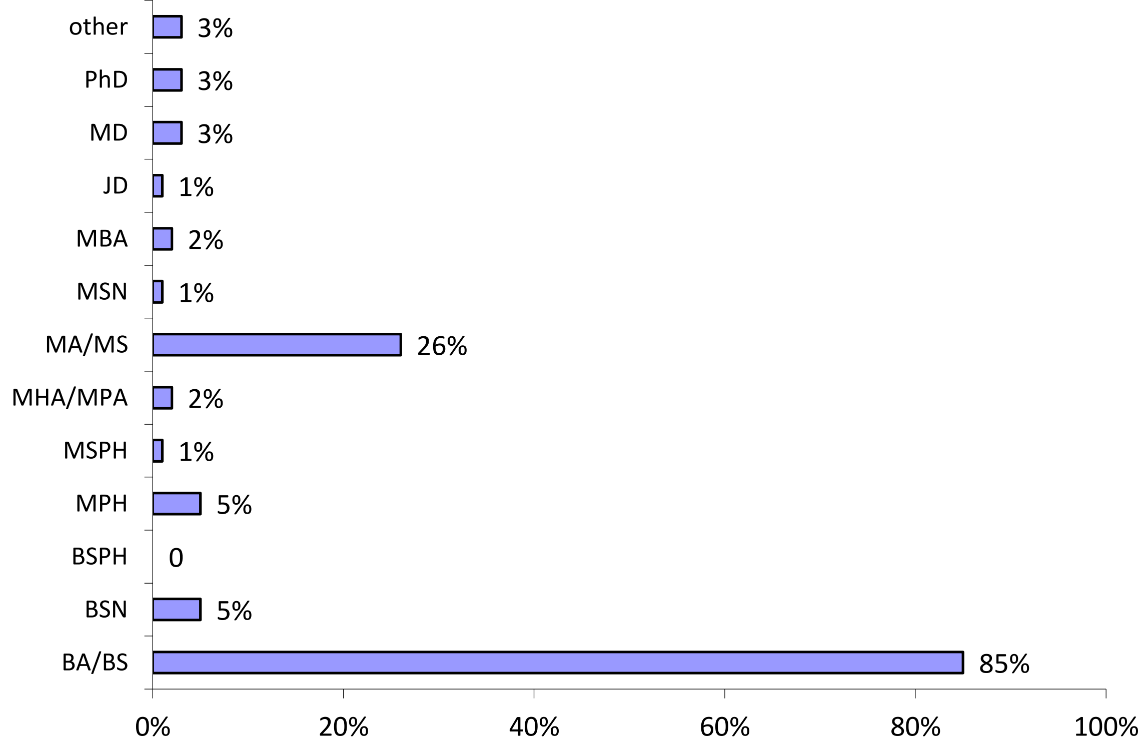


Figure 12. Licenses and Credentials Held By WVBPH Respondents (n = 165)

License/Credential	n	%
Registered Nurse	36	7%
Professional Engineer	18	4%
Registered Sanitarian	14	3%
Emergency Medical Technician	11	2%
Licensed Clinical Laboratory Technologist	10	2%
Licensed Social Worker	9	2%
Registered Dietitian	4	1%
Paramedic	4	1%
Engineer in Training	4	1%
Certified Tumor Registrar	4	1%
Licensed Physician	4	1%
Registered/Certified Pharmacy Technician	4	1%
Certified Health Education Specialist	3	1%
Certified Medical Assistant	3	1%
Licensed General Radiotelephone Operator	3	1%
Certified Parks and Recreation Specialist/Professional	3	1%
Licensed/Certified Medical Technologist	3	1%
Certified Medical Laboratory Technician	2	1%
Certified Public Accountant	2	1%
Licensed Nursing Home Administrator	2	1%
Certified Asbestos Inspector	2	1%
Certified Teacher	2	1%
Licensed Counselor	2	1%
Certified Nursing Assistant	2	1%
Registered Respiratory Therapist	2	1%
Licensed Dietitian	2	1%
Other	29	6%

Other (one each): Licensed Practical Nurse, Registered Health Information Technician, Certified Nuclear Medicine Technologist, Phlebotomist, FACHE Professional Certification, Certified Aging Services Professional, Certified Relocation and Transition Specialist, CPR Certification, Certified Cytotechnologist, Certified Executive Coach, Certified Chronic Disease Self-Management Program Trainer, Licensed Dentist, Certified Professional Credentials Specialist, Forensic Pathologist, Licensed Psychologist, EPA Lab Inspector Certification, Certified Wastewater Operator, Licensed Paralegal, Certified Clinical Competence in Audiology, Licensed Clinical Laboratory Scientist, Certified Medical Secretary, Certified Public Health Inspector, Licensed Surveyor, Licensed Veterinarian, Certified Toxicologist, Certified Cisco Network Associate, Certified Microsoft Professional, Certified Professional Soil Scientist, Licensed Embalmer, Certified Radiology Technician, Certified Professional Medical Coder

Figure 13. Level of Public Health Education of Interest to WVBPH Respondents (n = 247)

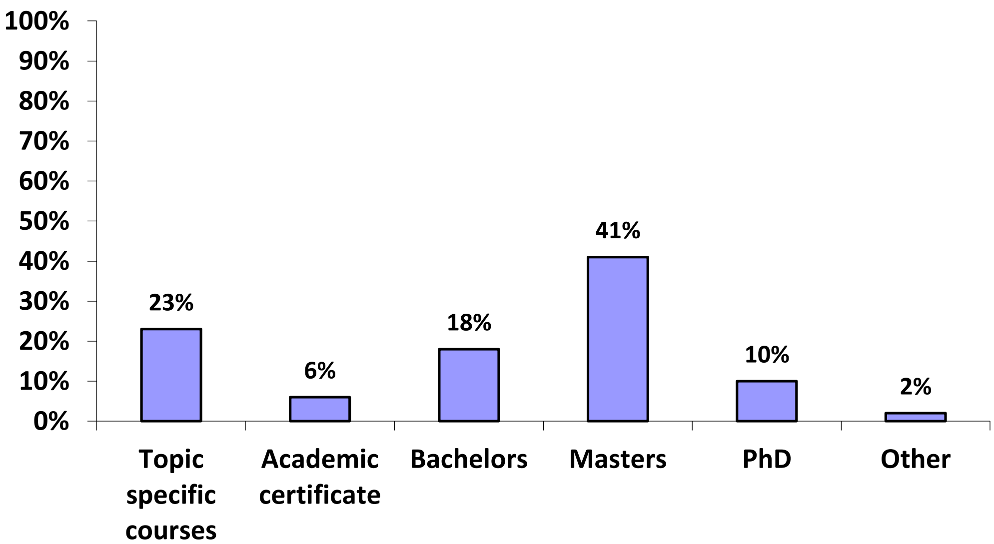
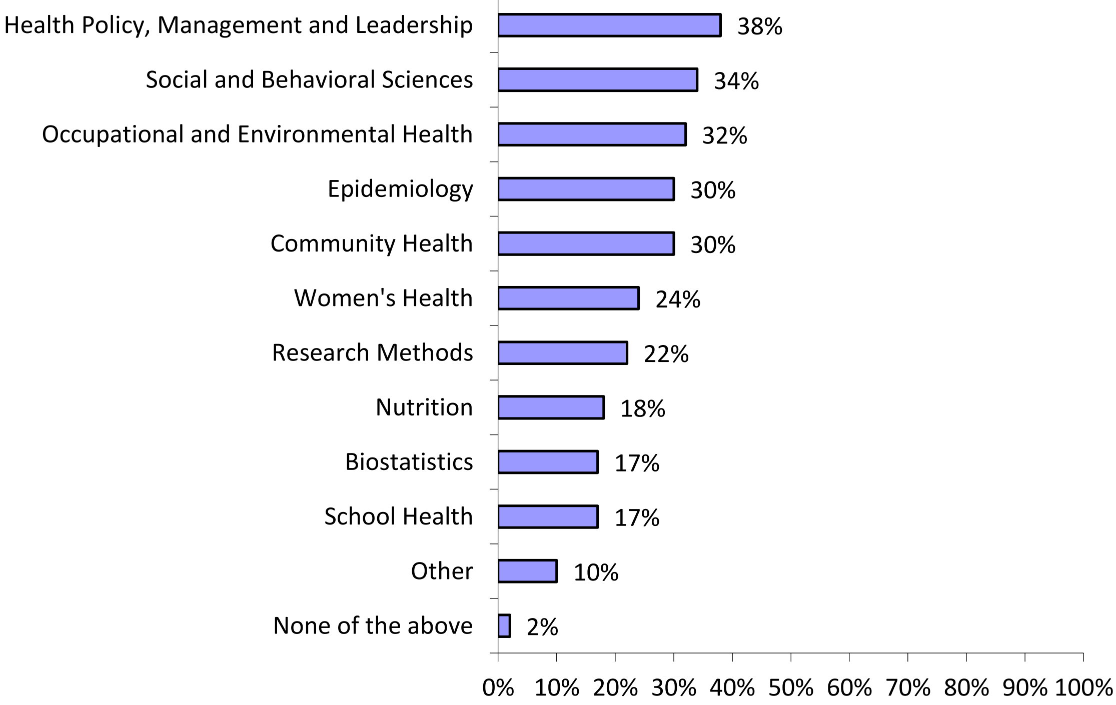


Figure 14. Types of Academic Public Health Courses WVBPH Respondents Would Be Interested in Taking (n = 246)



Other: *Includes law/ health law (4), emergency management/ disaster preparedness (4), accounting (2), computer/ information technology (2), care management, family nurse practitioner, public health GIS, quality control and lab testing, counseling, program evaluation, medical coding and billing, networking, prison health*

Figure 15. Preferred Method of Course Delivery (n = 247)

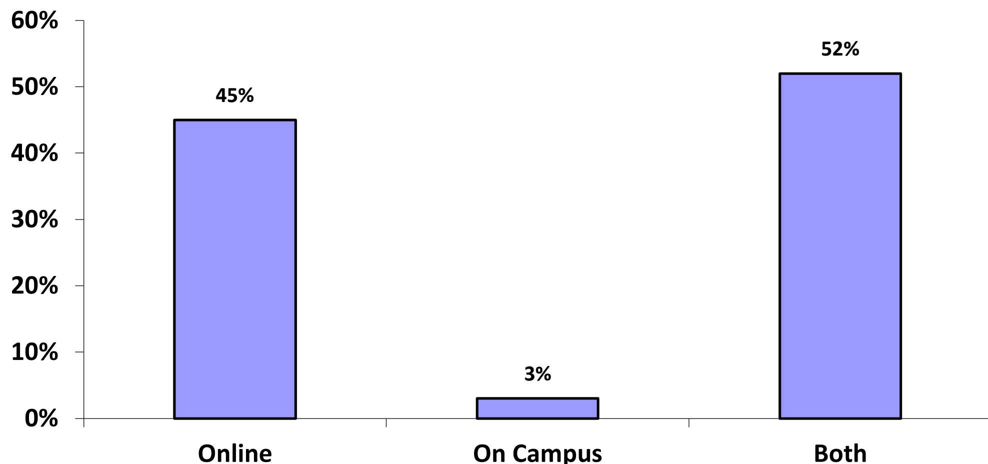


Figure 16. Preferred Scheduling of On-Campus Classes (n = 137)

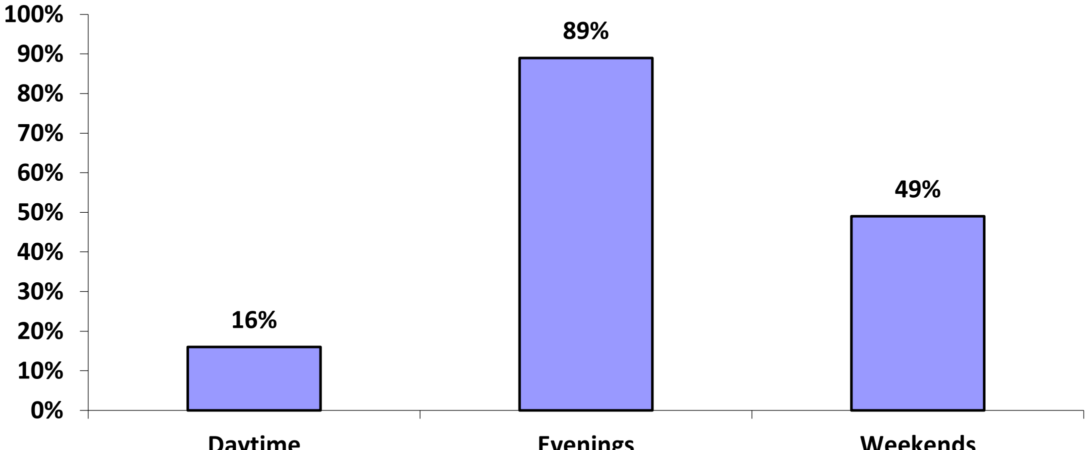
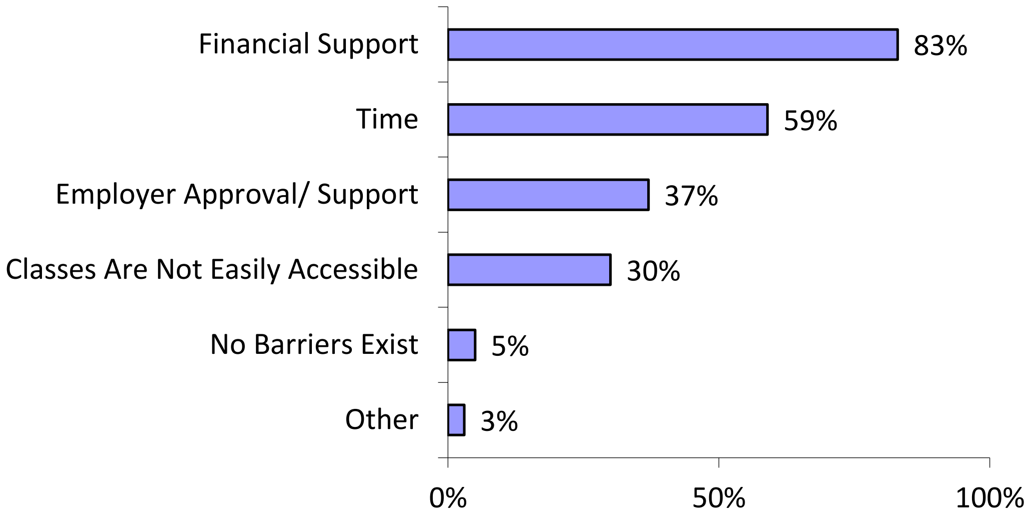


Figure 17. Barriers to Enrolling in Public Health Coursework (n = 247)



***Other**: Includes family or childcare (3), in school now (2), inertia*

Appendix B - West Virginia Bureau for Public Health Workforce Survey Vetting Session Report (Produced by Purdue Healthcare Advisors)

Workforce Survey Vetting Session Participants

Dr. Marian Swinker – Commissioner/State Health Officer
Amy Atkins – Director, Division of Local Health
Nancy Bazzle – Deputy Commissioner, Health Improvement
Kristen Childress – Associate Director, Division of Local Health
Daniel Christy – Director, Health Statistics Center
Chris Curtis – Director, Health Resource Development
Denise Ferris – Director, DHHR Nutrition Services
Ann Goldberg – Director, Public Health Regulations
Loretta Haddy – Director, Epidemiology and Prevention Service
Melissa Kinnaird – Associate Director, Center for Threat Preparedness
Andrea Labik – Director, Laboratory Services
Drema Mace – Administrative Services Manager, Office of the Chief Medical Examiner
Mike Morris – Manager, Privacy, Health Informatics & Continuity
Jerry Rhodes – Director, Center for Threat Preparedness
Janet Richards - Administration, Deputy Commissioner
Joyce Spiroff – Director, Human Resource
Barb Taylor – Director, Environmental Health Services
Chuck Thayer – Associate Director, OCHSHP
Tim Whitener – Chief Financial Officer
Mark Wigal – Director, Office of Emergency Medical Services
John Wilkinson – Deputy Commissioner, Health Regulation & Protection
Anne Williams – Director, Office of Maternal, Child and Family Health
Claire Winterholler – Assistant Attorney General
Amanda McCarty – Director, Performance Management

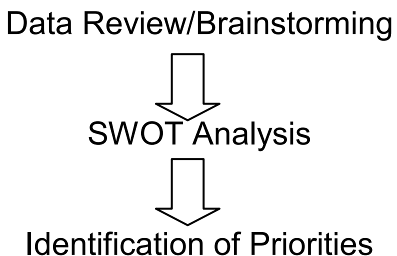
Table of Contents

Workforce Vetting Session Process and Strategic Intent ………………………………...37
Workforce Vetting Session Data ……………………………………………………..……38
Workforce Vetting Session Agenda………………………………………………………39
Tier 1 SWOT Analysis Findings………..…………………………………………………40
Tier 2 SWOT Analysis Findings…………………………………………………………..42
Tier 3 SWOT Analysis Findings…………………………………………………………..44
Tiers 2/3 Combined SWOT Analysis Findings…..………………………………………46
Tier 1 Initial Priorities……………………………………………………………………….48
Tier 2 Initial Priorities……………………………………………………………………….50
Tier 3 Initial Priorities……………………………………………………………………….51

Workforce Vetting Session Process and Strategic Intent

Strategic planning is a management tool used to determine where an organization is going over the next several years, how it's going to get there and how it will determine success. It is the process of defining direction and making decisions on the allocation of resources. This same process can be applied to the process of establishing an agency-wide Workforce Development Plan. As a step by step process, definite goals, objectives and strategies are produced, and can be used for implementation and evaluation to build specific competencies within the West Virginia Bureau for Public Health (BPH).

The West Virginia Bureau for Public Health (BPH) Workforce Development Plan begins with a focus on recently collected workforce survey data on staff competencies and demographics by data review and brainstorming of significant findings. Participants then completed a SWOT analysis to identify internal strengths and weaknesses, as well as external opportunities and challenges. Finally, participants identified some initial key priorities from the SWOT analysis. Use of this data-driven process enables identification of workforce priorities that are crucial to achieving the mission of the agency. The initial set of priorities identified from the workforce vetting session may be used to further guide development of formal goals and objectives in a written plan, in a manner that will articulate measureable results.



Some of the trends identified by the vetting process are potential opportunities, some are potential threats and others are both. To take control of the future in building a competent public health workforce to meet the challenges of 21st century in public health, the West Virginia BPH must examine the possibilities and formulate the strategies that will enable the agency to take advantage of opportunities and minimize threats. Below you will find the details that were revealed in this process. The action plan of the West Virginia BPH will be an extension of this document that is used by the Bureau to guide implementation, monitoring and evaluation as they build the workforce for the future of public health in West Virginia.

Workforce Vetting Session Data

The Workforce Development Plan produces health department decisions and actions that shape and guide what is focused on to support growth of the leadership, management and staff. This process helps the health department to do a better job in building a competent workforce, ensuring that staff has the public health knowledge and skills needed to effectively delivery public health services in an ever-changing environment.

As an initial step in the development of the Bureau Workforce Development Plan, and in preparation for the vetting session, data was gathered from an agency-wide web-based survey conducted from March 12, 2012 to April 9, 2012. Results were reviewed and an initial analysis conducted by Purdue Healthcare Advisors (PHA). This analysis was shared in a PowerPoint presentation, as well as in hard copy, during the vetting session.

Data obtained and used in the vetting session included:

- Demographic responses of participating staff, managers and leadership from the web-based survey.
- Responses from participating staff (Tier 1), managers (Tier 2) and leadership (Tier 3) using a web-based survey to generate data on skill ratings (competency) and relevance of eight Domain areas. NOTE: All participants self-selected a Tier based on a definition provided in the survey. .
- Additional analysis by PHA presented in a PowerPoint presentation for each of the three Tiers.

Vetting Session Agenda

Details related to the vetting session agenda for West Virginia Bureau for Public Health are contained below.

Time	Topic	Presenter
	Welcome	Dr. Swinker Amanda McCarty WV Bureau for Public Health
	Workforce Competency Survey Overview	Amy Atkins and Kristen Childress WV Bureau for Public Health
	Discussion of shared vision and outcomes	Facilitated session
	Assessment background, methodology and report format	Facilitated Session
	Break (Coffee and Snacks)	
Breakout Session 1	Tier 1 findings, implications, priorities and recommendations	Facilitated session
	Lunch	
Breakout Session 2	Tier 2 and 3 findings, implications, priorities and recommendations	Facilitated session
	Break	
	Recap and next steps Adjourn	Amanda McCarty WV Bureau for Public Health

Tier 1 Situational (SWOT) Analysis

To assess the current reality of the internal and external environments in which the Tier 1 workforce practices, brainstorming and a SWOT analysis process were conducted following review by the participants of the demographic data and survey competency and relevance findings. Below you will see the findings as identified by the participants for the BPH Tier 1 strengths, challenges, opportunities and threats.

<table>
<tr>
<th>Tier 1 Strengths
What do you do well?
What unique skills/resources can you draw on?
What does your workforce perceive as strengths?</th>
<th>Tier 1 Weaknesses/Challenges
What could you improve?
Where do you have fewer resources than others?
What does workforce perceive as weaknesses?</th>
</tr>
<tr>
<td>• Dedicated and capable staff
• Two highest competencies - technology and adherence to policies and ethics
• Have standardized practice policies
• Adhere to critical principles
• Strong portion that have a college education or higher open to promotion within
• Most completed the survey
• High skill with interacting with diverse backgrounds
• Ethics has high relevance and high assessment and analytical skills
• A lot plan to stay more than 10 years (40) 20 or more
• Over 50% have bachelor/masters
• Nearly 40% stay due to value-mission
• 52% have college degrees</td>
<td>• Workforce doesn’t understand relevance of duties to public health
• Workforce wellness
• With nearly half having professional degree, inadequate salary to keep them in place
• DOP rates/determines salary differs from comparison to domain classification. Prevents us from analyzing appropriately
• Flexibility within the hiring system
• Low leadership skills
• Low financial skills
• Communication can be improved
• Lack of understanding of policies and procedures
• Identification of 68 competencies as non-relevant
• No public health 101 orientation
• No formal mentoring/coaching
• Reason to leave listed as salary – little ability offer competitive salaries</td>
</tr>
</table>

Tier 1 Opportunities **What opportunities are open to you?** **What trends could you take advantage of?** **How can you turn your strengths into opportunities**?	**Tier 1 Threats** **What threats could harm you?** **What is your competition doing?** **What threats do your weaknesses expose you to?**
• Many identify the value and mission of public health as reason for staying • Also may planning to stay in public health • Education opportunity • Growth for those who have college education • Bureau-wide orientation for all new employees. Perhaps even offer one time for all current employees. Could provide via webcast through website for easy access • Individual evaluation during annual EAP to determine goals/growth for each employee. Management can use as opportunity to coach/assist in employee development throughout the year. • Can establish KSA's (knowledge/skills/abilities) for each Tier 1 position • Provide training on competencies that were rated low • Involve Tier 1 employees in more systems thinking • Mentoring • Mentoring could be used to enhance/build understanding of bigger picture • Educational reimbursement opportunities	• Salary (2) • Hiring regulations • Budget • Where is the need to focus on because scores are so close? • If those with degrees do not have opportunity through growth, they will leave • Without ownership may lose skilled staff • Keeping people involved • If employees don't understand the "why" – more likely to be enticed away to other opportunities 70% said they'd leave for money

Tier 2 Situational (SWOT) Analysis

To assess the current reality of the internal and external environments in which the Tier 2 workforce practices, brainstorming and a SWOT analysis process were conducted following review by the participants of the demographic data and survey competency and relevance findings. Below you will see the findings as identified by the participants for the BPH Tier 2 strengths, challenges, opportunities and threats.

Tier 2 Strengths **What do you do well?** **What unique skills/resources can you draw on?** **What does your workforce perceive as strengths?**	**Tier 2 Weaknesses/Challenges** **What could you improve?** **Where do you have fewer resources than others?** **What does workforce perceive as weaknesses?**
• Experienced staff • Over 75% have college degrees • 82% have a bachelors degree or higher • 41% plan to stay in public health workforce > 10 years • View mission of public health as top reason to stay in public health practice • Management identification of core competencies as relevant • Overall satisfied with duties • Commitment – will stay six or more years • Average tenure 13 years – good experience	• Salary accommodations • Stressful environments due to grant activities being funded by grants, meeting grant requirements • Years of experience but new to current job • No growth opportunity – ladder • The longer tier 3 stays the less opportunity for growth • No automatic for advanced education • Weak public health sciences – may translate to Tier 1 having no correlation to big picture

Tier 2 Opportunities **What opportunities are open to you?** **What trends could you take advantage of?** **How can you turn your strengths into opportunities?**	**Tier 2 Threats** **What threats could harm you?** **What is your competition doing?** **What threats do your weaknesses expose you to?**
• Degree of flexibility and commitment from staff • Recognize employee efforts • Training and skills development	• 37% retiring, loss of institutional knowledge • 72% may leave due to salary • Dependence of positions on Federal funds • Stress (34%) risk to health • 13% said would leave it not challenged

Tier 3 Situational (SWOT) Analysis

To assess the current reality of the internal and external environments in which the Tier 3 workforce practices, brainstorming and a SWOT analysis process were conducted following review by the participants of the demographic data and survey competency and relevance findings. Below you will see the findings as identified by the participants for the BPH Tier 3 strengths, challenges, opportunities and threats.

Tier 3 Strengths **What do you do well?** **What unique skills/resources can you draw on?** **What does your workforce perceive as strengths?**	Tier 3 Weaknesses/Challenges **What could you improve?** **Where do you have fewer resources than others?** **What does workforce perceive as weaknesses?**
• Average 17 years – good public health background • Good collaborators • Experience in public health • Focus on value and mission of public health • Willingness to do what it takes to get the job done • Dedication and teamwork	• Years of experience but new to current job • No growth opportunity • Salary

Tier 3 Opportunities **What opportunities are open to you?** **What trends could you take advantage of?** **How can you turn your strengths into opportunities**?	**Tier 3 Threats** **What threats could harm you?** **What is your competition doing?** **What threats do your weaknesses expose you to?**
• We have additional resources that could be used that are currently not being utilized. Perhaps for coaching, mentoring. • Break down silos among offices and programs. • Influencing the direction of the agency • Influence on Tier 2 • Influence on public health policy • Opportunity for training - relevance higher than skill	• Large portion retiring • 44% leaving in less than five • Stress (40% risk to health

Tier 2/3 Situational (SWOT) Analysis

Two breakout groups combined Tiers 2/3 in the SWOT analysis. Below you will see the findings as identified by the participants for the BPH combined Tier 2/3 strengths, challenges, opportunities and threats.

<table>
<tr><th>Tier 2/3 Strengths
What do you do well?
What unique skills/resources can you draw on?
What does your workforce perceive as strengths?</th><th>Tier 2/3 Weaknesses/Challenges
What could you improve?
Where do you have fewer resources than others?
What does workforce perceive as weaknesses?</th></tr>
<tr><td>• Communicate well
• Develop plans and improvement P&Ps
• Obtain input from others by presenting demo and statistical data
• As move up in tiers, include expectations of self and recognize needs
• Stakeholders – equal skill and relevance
• Value and mission are the #1 reason for staying. Benefits lower on list
• Executive Management (Tier 3) in all domains had higher relevancy than skill set (and competency)
• Six highest competencies for Tier 3 different than 1 and 2 – build on these and develop in lower tiers
• Our Tier 2 and Tier 3 skill domains are the same. Leadership and management are in sync with one another. High = communication, policy development, program planning and skills. Low = cultural competency, public health science skills</td><td>• Low information technology
• Low promoting team and individual approaches (seen in Tier 1 also)
• Tier 3 – understands want increase in efficiency of financial
• Integrating public health informatics skills and overseas same skills
• Tier 2 can develop plans but Tier 3 needs skills to implement
• Large number leaving within five years (Tier 3)
• Clear answers from different organizations (purchasing and HR)
• Cultural competencies (lack of diverse workforce)
• Weak public health sciences</td></tr>
</table>

Tier 2/3 Opportunities What opportunities are open to you? What trends could you take advantage of? How can you turn your strengths into opportunities?	Tier 2/3 Threats What threats could harm you? What is your competition doing? What threats do your weaknesses expose you to?
• Review cultural competence learning programs on-line • Create new program on cultural understandings • Learning opportunities – technology and finance • More office engagement w/Central Finance to understand and update budgets with Commissioner • Cultural competencies – work on diversifying • Tier 2 – 41% staying > 10+ years • Large range of skill 2.07 – 3.1 Tier 2 and 2.33 to 3.42 Tier 3 – development/training opportunities	• 44$ planning to retire from Tier 3 between 1-5 years • Even smaller "needs scores" range to identify specific areas to target •

TIER 1 PRIORITIES

ISSUE/TREND	CURRENT EVIDENCE-BASE AND/OR DATA	OUTCOME MEASURES	EVIDENCE-BASED QI STRATEGIES /ACTIVITIES	TIMELINE	RESOURCES REQUIRED	RESPONSIBLE PERSON(S)
Need orientation to Bureau!						BPH Workforce Director TBD
Need more professional development (e.g. quarterly update to give broad view/context						BPH Workforce position TBD
Do the 50% in Tier 1 work here to begin to climb the ladder? Yes or no					Verify their plans – if “yes”, is the ladder visible?	
Est. KSA for each position to tie back to competencies of public health	Written at high level of personnel department – need spec for each job					

Provide training on competencies rates low and provide mentoring (mentoring already being looked at high level) Involve Tier 1 employees in systems thinking to give staff more understanding of job imp. Education of current workforce regarding relevance of duties to public health – many ID low relevance of public health competencies in daily work	Many ID the value and mission of public health as reason for staying and report they want to remain in public health for 10 years	Post survey after education to measure change in relevance ratings	Highlight office actions and how they contribute to public health	Year 1 ideally, maybe year 2	Commitment from each office, time and contact person	Leadership team

TIER 2 PRIORITIES

ISSUE/TREND	CURRENT EVIDENCE-BASE AND/OR DATA	OUTCOME MEASURES	EVIDENCE-BASED QI STRATEGIES /ACTIVITIES	TIMELINE	RESOURCES REQUIRED	RESPONSIBLE PERSON(S)
Understanding of budgets and finance		More engagement with CFU and Commissioner's office for budget review (used to be mid-year review)				
Improve data systems – each office struggles		Purchase of new system				
Large no. of people potentially leaving						
Tier 2 willing to change jobs for better salary –focus on retention and skills + leadership enrichment programs						

TIER 3 PRIORITIES

ISSUE/TREND	CURRENT EVIDENCE-BASE AND/OR DATA	OUTCOME MEASURES	EVIDENCE-BASED QI STRATEGIES /ACTIVITIES	TIMELINE	RESOURCES REQUIRED	RESPONSIBLE PERSON(S)
High skill level could share (e.g. leadership training program mentors)						Workforce Director
Capitalizing ‘the time window’ between Tier 2 and 3 – Succession planning	41% of Tier 2 plan to stay > 10 yrs…..but 44% of Tier plan to leave in 1-5 yrs.	Develop viable public health employees as candidates for Tier 3 management	Structural mentoring program	Within 1-5 years, before we lose this institutional knowledge	Tier 3 – commitment to mentor, transfer knowledge	Tier 2 and Tier 3 groups