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The Public Health Workforce Taxonomy: Revisions and Recommendations for Implementation

Angela J. Beck, PhD, MPH,

Clinical Assistant Professor of Health Behavior and Health Education, Associate Director, Center of Excellence in Public Health Workforce Studies, University of Michigan School of Public Health, Ann Arbor, MI

Fátima Coronado, MD, MPH,

Deputy Associate Director for Science, Division of Scientific Education and Professional Development, Centers for Disease Control and Prevention, Atlanta, GA

Matthew L. Boulton, MD, MPH,

Professor of Epidemiology, Preventive Medicine, Global Health, and Health Management and Policy, Director, Center of Excellence in Public Health Workforce Studies, University of Michigan School of Public Health, Ann Arbor, MI

Jacqueline A. Merrill, PhD, MPH, RN, and

Professor of Nursing (in Biomedical Informatics), Columbia University Medical Center, New York, New York

the Public Health Enumeration Working Group

Abstract

Public health workforce size and composition have been difficult to accurately determine because of the wide variety of methods used to define job title terms, occupational categories, and worker characteristics. In 2014 a preliminary consensus-based public health workforce taxonomy was published to standardize the manner in which workforce data are collected and analyzed by outlining uniform categories and terms. We summarize development of the taxonomy's 2017 iteration and provide guidelines for its implementation in public health workforce development efforts.

To validate its utility, the 2014 taxonomy was pilot tested through quantitative and qualitative methods to determine if further refinements were necessary. Pilot test findings were synthesized, themed by axis, and presented for review to a 11-member working group drawn from the community of experts in public health workforce development who refined the taxonomy content and structure through a consensus process.

The 2017 public health workforce taxonomy consists of 287 specific classifications organized along 12 axes, intended for producing standardized descriptions of the public health workforce. The revised taxonomy provides enhanced clarity and inclusiveness for workforce characterization

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and will aid public health workforce researchers and workforce planning decision makers in gathering comparable, standardized data to accurately describe the public health workforce.

Keywords

public health; workforce; taxonomy

INTRODUCTION

Integration between public health and primary care is seen as a means to address multiple challenges to the U.S. healthcare system, from high costs to mitigating the growing burden of chronic disease to the implications of the recent, and unexpected, decrease in U.S. life expectancy.[1–4] The public health workforce, in the face of dramatic health care policy change associated with the Affordable Care Act, may have limited capacity to meet population health objectives that align with the national health quality strategy due to expected large-scale worker retirements coupled with decreasing resources for workforce development.[5–7] Accurate assessment of workforce supply and demand is necessary to ensure adequate public health human resources are in place to contribute to the vision of an integrated system.[5] However, planning is impeded because available workforce data are narrow, incomplete, and difficult to compare due to inconsistent measurement and analytic methods.

Until recently, the public health system was perceived as complementary rather than integral to the clinical care system. Public health workforce investments have not been commensurate with those afforded to other health professions, which are systematically characterized through national sample surveys[8] and data collected by the U.S. Bureau of Labor Statistics.[9] For example, although the federal government monitored the public health workforce regularly from 1940–1964, a national system for tracking has been unavailable since.[10,11] In addition, few public health occupations are listed in the Standard Occupation Classifications,[6] making the workforce largely indistinguishable among other health care occupations in federal employment statistics and national population health databases.[12,13] Public health professional organizations and researchers have collected data on workers in state and local governmental public health agencies at regular intervals since 2005,[14–16] but no formally established mechanism to collect national public health workforce data exists, particularly in settings outside of governmental public health, such as community-based organizations providing public health services.

The Health Resources and Services Administration, the federal agency responsible for tracking the health workforce supply, encourages the health professions to adopt a workforce minimum data set (MDS).[17] An MDS for any professional group is a standard set of data elements covering demographic, education, credentialing, and practice characteristics to promote consistency and comparability. Public health has lagged behind most professions, particularly medicine and nursing, in generating reliable data regarding workforce supply and demand, in part because of the legacy of limited resources, collective planning, and prioritization around this concern.[18] Extensive variation in how local organizations use and

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define job titles, occupational categories, and worker characteristics[19] add to the challenge of constructing an accurate and reliable national data set.[11] For example, government agencies often have standardized job titles that health departments must use, which may not reflect the current job responsibilities of the worker. The taxonomy was constructed to account for both the formal occupation as well as the tasks and programmatic responsibilities of the worker.

PUBLIC HEALTH WORKFORCE TAXONOMY REFINEMENT AND IMPLEMENTATION

In 2013, an enumeration working group (working group) of national experts in public health workforce research was convened by the Center of Excellence in Public Health Workforce Studies at the University of Michigan, with technical and funding support from the Centers for Disease Control and Prevention, to address methodological challenges in adapting health services workforce research methods for public health. In 2014, the working group published a public health workforce taxonomy (the taxonomy) modeled on the MDS concept. This first step toward standardizing how workforce data are collected is described in a prior publication.[20] The 2014 taxonomy was piloted in a national survey to evaluate its utility.[21,22] Concurrently, focus groups with public health workers produced feedback concerning taxonomy content and structure.[23] The working group reconvened regularly via conference call during 2016 to reach consensus on revisions suggested by the pilot study, focus group findings, and relevant events since 2013, including the emergence of public health agency accreditation, changes in professional credentials, and updates to the BLS Standard Occupational Code.[24]

The 2017 taxonomy presented here is a comprehensive set of 287 worker classifications organized hierarchically along the 12 axes originally identified in 2014 (Table). Taxonomy classifications are suited for both primary and secondary data collection. The classifications can serve as standardized response options for newly developed survey instruments or be cross-referenced with existing data sets. This study summarizes the current iteration and provides instructions for using taxonomy axes in workforce research. A summary of modifications made by the working group are detailed in the supplemental materials; specific changes are noted in bold text in the Table. A user manual provides definitions, cross-referencing resources, and recommended survey questions.[25]

Axis 1: Occupation

Axis 1 lists 73 occupational categories and subcategories, which can describe a primary job or multiple occupations (i.e. “check all that apply”). Worker titles/occupations not specifically listed in Axis 1 should be coded to the category that most accurately describes their occupation, rather than using general coding of “other,” “uncategorized,” or “unspecified”. In this context, the highest hierarchical category in each section of Axis 1 functions as the “other” category for coding purposes.

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Axis 2: Setting

Axis 2 can classify workers' primary employment location or identify multiple employment locations for those employed across multiple public health agencies or organizations (i.e., "check all that apply"). Nine categories are represented. A worker's setting can differ from the worker's employer; this axis captures the setting in which the worker provides public health services, regardless of the entity or agency providing employment compensation. Axis 2 includes "other" categories to provide unique descriptive information about the setting (e.g., Other Public Health Local Agency).

Axis 3: Employer

Axis 3 captures data about the worker's employer (i.e., entity providing compensation and benefits for services). Five categories are represented. Axis 3 is unchanged from the original taxonomy version, aside from two subcategories which were added to the Nongovernment employer category. This information may or may not differ from that reported in Axis 2. For example, a state employee assigned to a county health department would report "County Health Agency" for Axis 2, and "State Health Agency" for Axis 3.

Axis 4: Education

This axis includes 25 categories and subcategories of graduate, baccalaureate, and associate degrees most relevant public health workers, as well as other education categories. Axis 4 can capture all education (i.e., "check all that apply") or identify only the highest education level. Similar to Axis 1, "other" degrees should be coded according to the hierarchical category that describes them (e.g. a graduate degree that is not included as a category in this axis would be coded as 4.1 Graduate Degree).

Axis 5: Licensure

The Licensure axis includes 12 categories, including four new categories, intended to identify licenses held by public health workers; it is not necessarily reflective of the license(s) required for employment. This axis is not exhaustive but captures the majority of licensure credentials commonly required for delivery of public health services. In certain cases, it can be difficult to distinguish between licenses and certifications (Axis 6). Researchers should use their best judgment to determine if a credential not specified in Axes 5 or 6 is a license or a certification.

Axis 6: Certification

Axis 6 captures worker certifications and includes 28 categories and subcategories, including four new categories. This version of Axis 6 includes certifications of importance to public health service delivery, but, like Axis 5, is not exhaustive.

Axis 7: Job Tasks

This axis includes 46 common public health worker job tasks categorized within the Essential Public Health Services (EPHS), a widely accepted framework describing public health work.[26] It contains two cross-cutting categories that align with Public Health Accreditation Board domains. Data collected through Axis 7 are intended to capture daily

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job functions undertaken by public health workers. Axis 7 does not reflect all possible job tasks, but rather tasks common to most work settings using an EPHS framework. The categories can identify primary tasks, or all tasks (i.e., "check all that apply") associated with a worker's daily responsibilities. Although substantive changes were not made, multiple tasks were reworded or realigned within EPHS categories.

Axis 8: Program Area

This axis provides a list of 32 categories and subcategories, including three additions, associated with program areas reported by public health agencies and organizations. It can identify all program areas in which a public health worker spends time or to narrow down the functions of a public health worker into a primary program area.

Axis 9: Areas of Expertise

To improve clarity and context, Axis 9 was renamed from "Specialization Area or Expertise" to "Areas of Expertise". No changes were made to the 11 categories comprising this axis. The listing may be used to identify areas of expertise that reflect current job responsibilities as well as expertise not currently in use to comprehensively capture the worker's areas of practice or skills.

Axis 10: Funding Source

This axis includes 11 unmodified categories and subcategories designating funding source. Axis 10 can collect percentage effort funded by each source, or indicate primary funding source. Importantly, pilot testing revealed that the majority of employees are unable to accurately report their funding source(s); therefore, this information might be best collected at the organizational level.

Axis 11: Employment

Axis 11 captures employment characteristics through six main categories, including two additions, and subcategory options. Based on data needs, the Years Employed in Public Health category can be modified to capture years in current position. Unlike other taxonomy axes, categories used in Axes 11 and 12 are not hierarchically related. In survey use, each category would correspond to a stand-alone question.

Axis 12: Demographics

This axis comprises four categories describing worker demographics. Employment location and place of residence, which were added as part of the revision, can be identified through multiple mechanisms, depending on the research question. U.S. Census Bureau categories are recommended to capture race/ethnicity, and separate questions are recommended for sex and gender identity.

IMPLICATIONS FOR POLICY AND PRACTICE

- The public health workforce taxonomy is a hierarchy consisting of 12 axes and 287 items or terms. It represents a means to produce standardized descriptions of the workforce supply for use by researchers, workforce planners and decision-

makers when assessing adequacy of workforce capacity to deliver public health services.

- The revisions made through the working group's iterative consensus process enhance clarity, precision and inclusiveness for categorizing workforce characteristics.
- Professional organizations, government agencies, academic institutions, and others interested in public health systems can use the taxonomy to design data collection instruments that will produce compatible data with value beyond an individual study.
- Standardization will bring public health workforce data into a common format that allows reuse and aggregation. This supports larger scale analysis, using advanced computational techniques for modeling and forecasting, to supply relevant and valid information for workforce planning and policy decisions.[27]
- Ultimately, this taxonomy might support interoperable health workforce data exchange among national, regional or local health information systems.
- The future of public health is intertwined with the future of an evolving healthcare system newly focused on population health outcomes.[1,2,28,29] The taxonomy is a means for producing accurate data to plan for a sustainable public health workforce that can contribute to achieving our nation's vision of an integrated system that produces better health.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Carolyn Leep, MS, MPH, National Association of County and City Health Officials

Michael Meit, MPH, National Opinion Research Center (NORC) at the University of Chicago

Jean Moore, DrPH, MSN, University at Albany-SUNY

Katie Sellers, DrPH, CPH, Association of State and Territorial Health Officials (formerly)

George D. Stamas, MSc, U.S. Bureau of Labor Statistics (retired)

Hugh H. Tilson, MD, DrPH, University of North Carolina-Chapel Hill

Nadra Tyus, DrPH, MPH, Health Resources and Services Administration

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TABLE

Public Health Workforce Taxonomy, Version 2.0

Axis 1: Occupation		
1.1.	Management and Leadership	
	1.1.1.	Public Health Agency Director
	1.1.2.	Health Officer
	1.1.3.	Subagency-level Director: Bureau, Department, Division, or Branch
	1.1.4.	Deputy Director (agency or subagency level)
	1.1.5.	Program Director
	1.1.6.	Public Health Manager or Program Manager
1.2.	Professional and Scientific	
	1.2.1.	Behavioral Health Professional
		1.2.11. Behavioral Counselor
	1.2.2.	**Economist**
	1.2.3.	**Emergency Medical Technician/Emergency Medical Services Worker**
	1.2.4.	Emergency Preparedness/Management Worker
	1.2.5.	Environmental Health Worker
		1.2.5.1. Sanitarian or Inspector
		1.2.5.2. Engineer
		1.2.5.3. Technician
	1.2.6.	Epidemiologist
	1.2.7.	**Health Communicator**
		1.2.7.1. Public Information Specialist
	1.2.8.	Health Educator
	1.2.9.	**Implementation Specialist**
	1.2.10.	Information Systems Manager
		1.2.10.1. Public Health Informatics Specialist
		1.2.10.2. Information Technology Specialist
		1.2.10.3. **Data Manager**
	1.2.11.	Laboratory Worker
		1.2.11.1. Aide or Assistant

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- 1.2.11.2. Technician
- **1.2.11.3**. **Quality Control Worker**
- 1.2.11.4. Scientist or Medical Technologist
- **1.2.12**. **Licensure/Regulation/Enforcement Worker**
- 1.2.13. Medical Examiner
- 1.2.14. Nurse
  - 1.2.14.1. Registered Nurse
  - 1.2.14.1.1. Public Health or Community Health Nurse
  - 1.2.14.1.2. Clinical Services Registered Nurse
  - **1.2.14.1.3**. **Advanced Practice Nurse**
  - 1.2.14.2. Licensed Practical or Vocational Nurse
- 1.2.15. Nutritionist or Dietitian
- 1.2.16. Oral Health Professional
  - 1.2.16.1. Public Health Dentist
- 1.2.17. Physician
  - 1.2.17.1. Public Health or Preventive Medicine Physician
- 1.2.18. Physician Assistant
- **1.2.19**. **Policy Analyst**
- **1.2.20**. **Population Health Specialist**
- **1.2.21**. **Program Evaluator**
- 1.2.22. Social Worker/Social Services Professional
  - 1.2.22.1. Social Services Counselor
  - **1.2.22.2**. **Adult Protective Services/Community Worker**
- 1.2.23. Statistician
- 1.2.24. Student, Professional or Scientific
- 1.2.25. Veterinarian
  - 1.2.25.1. Public Health Veterinarian

1.3. Technical and Outreach
- 1.3.1. Animal Control Worker
- 1.3.2. Community Health Worker
- 1.3.3. **Disease Intervention Specialist**
- 1.3.4. **Health Navigator**

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- 1.3.5. Nursing and Home Health Aide
- 1.3.6. **Peer Counselor**

1.4. Support Services

- 1.4.1. Administrator
- 1.4.2. Business Support
  - 1.4.21. Accountant or Fiscal Worker
  - 1.4.2.2. Facilities or Operations Worker
    - 1.4.2.2.1. Custodian
  - 1.4.2.3. Grants or Contracts Specialist
  - 1.4.2.4. Human Resources Personnel
    - 1.4.2.4.1. **Training/Workforce Development Personnel**
  - 1.4.2.5. **Quality Improvement Worker**
- 1.4.3. Attorney or Legal Counsel
- 1.4.4. Clerical Personnel
  - 1.4.4.1. Administrative Assistant
  - 1.4.4.2. Secretary
- 1.4.5. Coordinator

Axis 2: Setting

2.1. Local Setting

- 2.1.1. County Health Agency
- 2.1.2. City or Town Health Agency
- 2.1.3. Multicity Health Agency
- 2.1.4. Multicounty Health Agency
- 2.1.5. Hospital
- 2.1.6. Primary Care Clinic **(e.g. Community Health Center, Migrant Health Center)**
- 2.1.7. Other Public Health Local Agency
- 2.1.8. Other Local Setting, Not Health

2.2. State Setting

- 2.2.1. State Health Agency — Central Office
- 2.2.2. State Health Agency — Local, District, or Regional Office
- **2.2.3. State Public Health Laboratory**
- 2.2.4. Inpatient or Outpatient Clinical Setting

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- 2.2.5. Other State Agency, not Health
- 2.3. Territorial Health Agency
- 2.4. Federal Health Agency
- 2.5. Educational Institution
  - **2.5.1. K–12 School**
  - **2.5.2. Higher Education**
- 2.6. Private Nonprofit Organization
- 2.7. Private Foundation
- 2.8. Personal Health Services Industry
- 2.9. Other Private Industry

Axis 3: Employer

- 3.1. Local Government
- 3.2. Tribal Government
- 3.3. State Government
- 3.4. Federal Government
- 3.5. Nongovernment
  - **3.5.1. For-profit**
  - **3.5.2. Not-for-profit**

Axis 4: Education

- 4.1. Graduate Degree
  - 4.1.1. Medical Doctor (MD) or Doctor of Osteopathy (DO) (or international equivalent)
  - 4.1.2. Doctor of Veterinary Medicine (DVM) or Veterinary Medical Doctor (VMD)
  - 4.1.3. Doctor of Dental Surgery (DDS) or Doctor of Dental Medicine (DMD)
  - 4.1.4. Doctor of Nursing Practice (DNP)
  - 4.1.5. Doctor of Public Health (DrPH), Doctor of Philosophy (PhD), Doctor of Science (ScD), or other public health doctorate
  - 4.1.6. PhD, ScD, or other nonpublic health doctorate
  - 4.1.7. Doctor of Pharmacy (PharmD)
  - 4.1.8. Juris Doctor or Doctor of Jurisprudence (JD)
  - 4.1.9. Master of Public Health (MPH)
  - 4.1.10. Master of Health Services Administration (MHSA)
  - 4.1.11. Master of Social Work (MSW)

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- 4.1.12. Master of Science in Nursing (MSN)
- 4.1.13. Master of Public Administration (MPA)
- 4.1.14. Master Arts (MA) or Master of Science (MS, SM)
- 4.1.15. Master of Business Administration (MBA)

4.2. Baccalaureate Degree

- 4.2.1. Bachelor of Science (BS) or Bachelor of Arts (BA)
- 4.2.2. Bachelor of Science in Nursing (BSN)
- **4.2.3. Bachelor of Public Health (BPH)**

4.3. Associate Degree

- 4.3.1. Associate Degree in Nursing (ADN)
- **4.3.2. Associate Degree in Public Health**

4.4. Other Education

- 4.4.1. High School or Equivalent Diploma

Axis 5: Licensure

5.1. MD or DO license

5.2. DDS or DMD license

5.3. DVM license

5.4. Registered Nurse (RN)

5.5. Advanced Practice Registered Nurse (APRN)

5.6. Licensed Practical Nurse (LPN) or Licensed Vocational Nurse (LVN)

5.7. Licensed Clinical Social Worker (LCSW) or Licensed Master Social Worker (LMS

5.8. Registered Sanitarian (RS) or Registered Environmental Health Specialist (REHS)

5.9. Registered Dietitian (RD)

5.10. Licensed Dental Hygienist (LDH)

5.11. Emergency Medical Technician/Paramedic License

5.12. Registered Pharmacist

5.13. Other license

5.14. Not currently licensed

Axis 6: Certification

6.1. Physician board certification

- 6.1.1. Preventive Medicine Physician board certification
  - 6.1.1.1. Public Health and General Preventive Medicine

6.1.1.2. Occupational Medicine

6.1.1.3. Aerospace Medicine

6.2. Nurse certification

6.2.1. Advanced Public Health Nurse (APHN-BC)

6.2.2. Public or Community Health Clinical Nurse Specialist (PHCNS-BC)

6.2.3. Nurse Executive (NE-BC)

6.2.4. Nurse Executive, Advanced (NEA-BC)

6.2.5. Nurse Practitioner (CNP)

6.2.6. Clinical Nurse Specialist (CNS)

6.3. Physician Assistant — Certified (PA-C)

6.4. Certified in Public Health (CPH)

6.5. Certified Health Education Specialist (CHES or Master CHES)

6.6. Laboratory certification

6.6.1. National Generalist Certification

6.6.2. National Specialist Certification

6.6.3. State certification to practice laboratory science

6.7. **Dental Public Health — Board Certification (DPH)**

6.8. **Breastfeeding/Lactation Certification (CLC, CLE, CLS, or IBCLC)**

6.9. **Diabetes Educator Certification (CDE)**

6.10. **Physical Activity in Public Health Specialist (PAPHS)**

6.11. Infection Control Certification (CIC)

6.12. Registered Dietitian (RD)

6.13. Other certification

6.14. Not formally certified

Axis 7: Job Tasks

7.1. Monitor health status to identify and solve community health problems

7.1.1. Conduct health needs assessments

7.1.2. Conduct formative evaluation of planned public health programs/interventions

7.1.3. Develop surveillance procedures

7.1.4. Report data to county, state, or federal entities

7.1.5. Data sharing to support decision making

7.2. Diagnose and investigate health problems and health hazards in the community

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- 7.2.1. Investigate health problems, including environmental health
- 7.2.2. Obtain information, specimens, or samples
- 7.2.3. Respond to emergencies

7.3. Inform, educate, and empower persons about health concerns

- 7.3.1. Provide education to the public
- 7.3.2. Interact with local or regional media
- 7.3.3. Communicate with the public through a variety of channels (phone, social media, web, print)
- 7.3.4. Process requests from the public (for services, information, or appointments)

7.4. Mobilize community partnerships and action to identify and solve health problems

- 7.4.1. Develop community partnerships
- 7.4.2. Represent the department at community meetings
- 7.4.3. Serve on committees, boards, or task forces

7.5. Develop policies and plans that support individual and community health efforts

- 7.5.1. Provide information to governing bodies to guide public policy
- 7.5.2. Develop public policy or regulations
- 7.5.3. Plan public health programs
- 7.5.4. Plan for emergencies

7.6. Enforce laws and regulations that protect health and ensure safety

- 7.6.1. Enforce regulations
- 7.6.2. Vector control
- 7.6.3. Schedule services and inspections
- 7.6.4. Conduct site visits, home visits, or inspections
- 7.6.5. Issue permits

7.7. Link clients to needed personal health services and ensure the provision of health care when otherwise unavailable

- 7.7.1. Register and enroll clients
- 7.7.2. Deliver direct health services to clients
- 7.7.3. Meet with clients for purposes other than delivering direct health services
- 7.7.4. Review medical records
- 7.7.5. Perform health or environmental screenings

7.8. Ensure competent public and personal health care workforce

- 7.8.1. Develop training materials and job-relevant content

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- 7.8.2. Disseminate training materials and job-relevant content
- 7.9. Evaluate efficiency, effectiveness, accessibility, and quality of personal and population-based health services
  - 7.9.1. Evaluate program performance
  - 7.9.2. Implement quality improvement or quality assurance activities
- 7.10. Research for new insights and innovative solutions to health problems
  - 7.10.1. Take part in public health research
- 7.11. Organizational Management and Administration
  - 7.11.1. Manage files, prepare reports, or correspondence
  - 7.11.2. Manage inventory
  - 7.11.3. Manage personnel (e.g., recruit, schedule, train, or evaluate staff)
  - 7.11.4. Manage public health programs
  - 7.11.5. Supervise, plan, or distribute work to others
  - 7.11.6. Process billing, fees, and payments
  - 7.11.7. Financial management (including manage budgets)
  - 7.11.8. Prepare applications for external funding
  - 7.11.9. Manage grants, contracts, or service agreements
  - 7.11.10 . Review facility operational plans
  - 7.11.11 . Establish fees for public health services
- 7.12. Maintain capacity to engage the public health governing entity(ies)
  - 7.12.1. Communicate with governing entity(ies) regarding responsibilities
  - 7.12.2. Monitor implementation of recommendations by governing entity(ies)

Axis 8: Program Area

- 8.1. Communicable Disease
  - 8.1.1. Human Immunodeficiency Virus (HIV)
  - 8.1.2. Sexually Transmitted Diseases (STD)
  - 8.1.3. Tuberculosis (TB)
- 8.2. Noncommunicable Disease
- **8.3**. **Injury/Violence Prevention**
- 8.4. Environmental Health
- 8.5. Maternal and Child Health
  - 8.5.1. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

- **8.5.2. Family Planning**
- 8.6. Clinical Services (excluding TB, STD, family planning)
- 8.7. Immunizations
- 8.8. Oral Health or Clinical Dental Services
- 8.9. Administration or Administrative Support
- 8.10. Mental Health
- 8.11. Substance Use (includes tobacco control programs)
- 8.12. Public Health Genetics
- 8.13. Vital Records
- 8.14. Medical Examiner
- 8.15. Animal Control
- 8.16. Cross-Cutting Areas
  - 8.16.1. Emergency Preparedness
  - 8.16.2. Epidemiology Surveillance
  - 8.16.3. Program Evaluation
  - 8.16.4. Health Education
  - 8.16.5. Health Promotion or Wellness
  - 8.16.6. Community Health Assessment or Planning
  - 8.16.7. Training or Workforce Development
  - 8.16.8. Global Health
  - **8.16.9. Informatics**
- 8.17. Other Program Area

Axis 9: Areas of Expertise

- 9.1. Generalist
- 9.2. Biostatistics
- 9.3. Environmental Health Sciences
- 9.4. Occupational Health
- 9.5. Epidemiology
- 9.6. Health Management and Policy
- 9.7. Health Behavior and Health Education
- 9.8. Maternal and Child Health
- 9.9. Emergency preparedness

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- 9.10. Informatics
- 9.11. Global Health
- 9.12. Other

Axis 10: Funding Source

- 10.1. Local Government
- 10.2. Tribal Government
- 10.3. State Government
- 10.4. Federal Government (not including Medicare or Medicaid)
- 10.5. Fee for Service
    - 10.5.1. Medicare or Medicaid Payments for Service
    - 10.5.2. Other Clinical Revenue (private insurers or fees from patients)
    - 10.5.3. Other Fee for Service or Fines
- 10.6. Private Foundation
- 10.7. Other sources
- 10.8. Unpaid or no funding source

Axis 11: Employment

- 11.1. Full-Time Equivalent Status
    - 11.1.1. Full-time
    - 11.1.2. Part-time
- 11.2. Category of Employment
    - 11.2.1. Regular Employee
    - 11.2.2. Contracted Worker
- 11.3. Exemption Status
    - 11.3.1. Exempt Employee
    - 11.3.2. Nonexempt Employee
- 11.4. Employment Status
    - 11.4.1. Permanent Employee
    - 11.4.2. Temporary Employee
- 11.5. Other Employment Considerations
    - 11.5.1. Bargaining Unit Employee
    - 11.5.2. Postdegree Fellow or Fellowship
    - 11.5.3. Student, Trainee, or Intern

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11.5.4. Volunteer

11.6. **Years Employed in Public Health**

11.7. **Intention to Retire or Leave Public Health**

Axis 12: Demographics

12.1. Age

12.2. Sex or Gender Identity

12.3. Race/Ethnicity

12.4. **Employment Location**

12.5. **Place of Residence**

Note: **Bold represents new categories added to the taxonomy**. The original taxonomy was published in 2014; this version represents taxonomy refinements approved in 2016.