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National Center for
Health Workforce Information
and Analysis

The Public Health Work Force

Enumeration 2000



The Public Health Work Force

Enumeration 2000

Prepared by
Center for Health Policy, Columbia University School of Nursing
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Introduction

The public health workforce in this current best estimate is composed of 448,254 persons in salaried positions or one public health worker for every 635 persons, supplemented by at least 2,864,825 volunteers. This community is large and complex. Public health organizations form a network linked by common interest and in some cases, by law, in pursuit of improved health for all. The workers come from commonly identified health professions, from many technical backgrounds, or have been trained on the job. Entry to this workforce may require advanced education and board certification in a specialty requiring a dozen years of advanced education, or a high school diploma and a willingness to learn. The size and composition of this workforce should be identified, and should be tracked over time in order to develop appropriate plans for workforce development, recruitment and retention. Such analysis is possible for some components of the nation's health workforce such as physicians and nurses, some of whom work in public health. It has not been realistic for the public health workforce as a whole, because there has been no systemic accumulation of the necessary information. It may come as a surprise that the current estimated number of public health workers is less than the oft-cited half-million number developed in the 1970's. At the time that number was developed, it represented a public health worker to population ratio of one worker to each 457 persons, a ratio noticeably better than the current estimate. Given the new public health challenges of the intervening decades, the change represents substantial erosion in public health capacity.

Background

Discussions among leaders of the public health community during the 1993-4 national health reform debates focused on ways to improve communication within the public health community and between that community and policy-makers at all levels. A key product of those discussions was the statement *Public Health in America (PHA)* [See Appendix A]. This document developed the broad discussion of core functions of public health presented earlier by the Institute of Medicine into a more complete presentation of the mission, vision, responsibilities and essential services of public health. One of the essential services public health was charged with was to "assure a competent public health . . . workforce." The Public Health Functions Steering Committee, author of *PHA*, subsequently commissioned a group to develop specific plans for meeting this commitment to the public health workforce.

The work group on public health workforce was charged with providing a profile of the current public health workforce and making projections regarding the workforce of the 21st century. [See Appendix B for a summary of public health workforce enumeration efforts.] The subsequent report, *The Public Health Workforce: an Agenda for the 21st Century (PH Workforce)* made a number of important points regarding the workforce

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that influenced this project. For example, the report attempted to clarify who should be considered a part of the public health workforce:

For purposes of this discussion, the public health workforce includes all those responsible for providing the services identified in the *Public Health in America* statement regardless of the organization in which they work. As an example, all members of the U.S. Public Health Service Commissioned Corps, whether currently assigned to the Department of Health and Human Services (DHHS) or elsewhere are included. At the State level, many workers in environment, agriculture, or education departments have public health responsibilities and are included. This expansive definition does not include those who occasionally contribute to the effort in the course of fulfilling other responsibilities.

The report offered no profile of the workforce, however. It did include a discussion of enumeration that highlighted the following methodological concerns: occupational classifications in use have rarely reflected the duties and qualifications expected of the incumbents; boundaries between public health occupational categories have not been delineated; available categories are not mutually exclusive and overlap extensively with regard to knowledge base, skills, and tasks; existing classification systems lack consistency, with some occupations defined by what people do, and others defined by the populations they serve or by the required underlying skills; the many position descriptions/job titles used to employ public health professions lack uniformity across States and organizations; and there is no comprehensive public health professional licensure or certification requirement for public health workers. The report ended the discussion of workforce enumeration with this recommendation:

A standard taxonomy should be used to regularly identify the size and distribution of the public health workforce in official agencies (health, environmental health and protection, mental health, and substance abuse; local, State, and national) and private and voluntary organizations. [emphasis added]

The decision to develop this enumeration, a current best estimate of the size and composition of the public health workforce at the local, state and national level, is only a first step toward a comprehensive, accessible and current data source on the public health workforce.

As *PH Workforce* was being published, work was also underway on a new edition of *Healthy People 2010*, the national statement of health objectives that has driven much public health investment in recent decades. *Healthy People 2010* included a new chapter on public health infrastructure, demonstrating recognition that if the infrastructure was not in place, accomplishments of all other objectives were in jeopardy. The public health infrastructure chapter identified workforce as one of the three essential components of infrastructure, the other two being data/information and systems/relationships. Three objectives relate specifically to the public health workforce:

Objective 23-8. (Developmental) Increase the proportion of Federal, Tribal, State, and local agencies that incorporate specific competencies in the essential public health services into personnel systems.

Objective 23-9. (Developmental) Increase the proportion of schools for public health workers that integrate into their curricula specific content to develop competency in the essential public health services.

Objective 23-10. (Developmental) Increase the proportion of Federal, Tribal, State, and local public health agencies that provide continuing education to develop competency in essential public health services for their employees.

While none of these specifically require the enumeration of the public health workforce, knowledge of the size and composition of the workforce would enhance our understanding of the scope of work needed to accomplish each, and would facilitate monitoring success. It is also worth noting that each of these is developmental, that is, there are currently no data that would allow the objective to be quantified.

Interested Parties

The potential audiences for a good public health workforce database include:

- Leadership of public health agencies making budget and administrative decisions
- Evaluators of public health programs at all levels
- Schools of public health and other health professions schools contributing to the public health workforce
- Policy analysts in legislatures and executive branch policy offices at all levels of government
- Workforce researchers in general, including the Department of Labor

Interest in enumerating the public health workforce has come from multiple directions. Two major agencies of the US Department of Health and Human Services have an ongoing interest in public health workforce and regularly collaborate. The Health Resources and Services Administration (HRSA) has a public health unit within the Bureau of Health Professions (BHPr), which has supported a number of the previous efforts to understand the public health workforce. Other offices within the BHPr, such as the nursing unit, have a long-standing interest in the development of the public health portion of the profession. As an active participant in the Public Health Functions Project, HRSA was recognized as the likely leader in activities regarding public health workforce enumeration.

The Centers for Disease Control and Prevention (CDC) has also had a long-standing interest in the development of the public health workforce and has sponsored efforts to identify local public health workers. Since the publication of *HP2010*, CDC has begun

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developing a strategic plan for public health workforce development. This plan identifies the regular enumeration of the workforce as necessary if workforce development activities are to be effectively planned and evaluated.

States that have done public health improvement planning in recent years have identified the need to develop worker competencies in public health practice. Their focus, however, appears to have been more on professional staff than on the entire public health workforce. For instance, several states in the southeastern US have joined together to develop a common approach to workforce development. A survey conducted to identify training needs focused exclusively on staff at the professional level; no numbers regarding the technical or support level staff were developed. While professionals may be the most expensive public health workers to recruit, retain and keep current, and they have the most extensive pre-employment education, the entire public health workforce, at all levels, is critical to meeting community needs effectively and efficiently.

More complete knowledge about the educational preparation, career patterns, turnover rates, and mobility within states and across the country would facilitate planning for education, recruitment and retention. While job title-based information may be helpful, there are other considerations. For example, many members of important public health disciplines (physicians, nurses, environmental health specialists, health educators, laboratory scientists) are hired as administrators (health official, director), for some special skill (epidemiology, health education) or into positions with general public health titles (public health program specialist).

Beyond agencies interested in their own staff, or in the individuals they may wish to employ in the future, academic institutions have an interest in quantifying the workforce. The schools of public health could more effectively plan their educational programs if they knew, for example, the average annual rate of retirement of members of key disciplines. At least as important is the contribution workforce information would make to research and analysis of important public health issues. With epidemiology as its core science, public health thinking is often identified as thinking that always requires a denominator. That is, no item such as the number of newborns or cases of a disease, or admissions to a hospital, or licensed physicians is considered apart from some other figure that can put it in perspective, such as the size of the population within which the events occurred. There is no reason that health workforce studies should not follow the same rule. In fact, in extensively studied areas of the health workforce, such as distribution of primary care providers in rural and under served areas, ratios of physicians to population are regularly considered. Other areas of health services research may include, as one of the resource investments in various efforts, the staffing pattern associated with an intervention. But for public health, such descriptive or evaluative research is nearly impossible.

Practicalities

Preparing a current best estimate of the public health workforce was done with awareness of both technical issues to be clarified and some of the potential long-term policy issues. The burden of response being created for reporting entities became an important consideration. The questions considered included the following:

- What range of the governmental public health workforce should be included in a database? Only those in the single, official public health agency of a jurisdiction? Those in any agency with significant public health responsibilities? If the latter, how identified? The Public Health Functions Project routinely has considered general public health, environmental health, mental health and substance abuse agencies as the necessary components for study or analysis.
- What range of public health workers outside of governmental public health should be included, if any? At every presentation of the work in progress, questions have been asked about the inclusion of these numbers, even while the questioners have not been able to define exactly whom they mean, or how one would go about locating the information.
- What level of specificity should be sought? A database that uses every possible job title would be prohibitively expensive. The Bureau of Health Professions listing has been amended through this project to encompass 55 public health occupational titles. For repeated use, it needs validation. How should jurisdictions that report but cannot provide the desired level of detail be included?
- Are there some public health professions that are sufficiently important that they should be reported in detail, regardless of what job title they hold, or what public health service they deliver? If so, which?
- Who should be looked to as the data source by whatever entity gathers and manages the database? Any single entity, office or contact within each state may have only some of the relationships or information needed to report fully on the state. Some associations have profession-specific or program-specific information, but it may not be compatible with state-generated reports.
- What time period should be used to limit information? That is, if a jurisdiction has available reports, but they date from 5 years ago, or 10 years ago, should they be considered for inclusion?

In 1983, the American Public Health Association developed a comprehensive methodology for PH workforce enumeration but it was never put into use. Recently, researchers at the University of Texas, Houston applied this methodology in a state workforce study which includes community partners from many settings (see Figure 1). However, this single-state study was a result of 2 years of effort, and data gathering from nearly 400 different sources.

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For this current national enumeration project, only Wisconsin was able to furnish information on what are believed to be all workers with public health responsibilities in all agencies of the state. This was possible because in the recent past the health agency had completed a legislature-mandated (and thus funded) project on the range of public health law.

Because this project identified its goal as a 'current best estimate' it is also possible to describe the approach as one of sufficing. That is, to cite an old saying, the governing principle was that the perfect was not allowed to become the enemy of the good. Data were not discarded if they failed to match expectations perfectly; adjustments were made in the data system to accommodate the information.

From another perspective, this approach is qualitative research using quantitative data. One of the distinguishing features of qualitative research is the process of allowing data to speak for themselves, without the imposition of preconceived categories or hypotheses. Reading the history of the APHA and Kennedy et al. work described above, or the recent work funded by HRSA that attempted to use PHA as a data organizing framework, it was clear that the collective lack of experience with a national public health workforce data base, and thus the lack of agreement regarding data categories, made it impossible to determine in advance what level of detail or vocabulary would be used for the report. Therefore, material was accepted in any format or level of detail available. In cycles of review that lasted throughout the project, data were examined and reexamined to arrive at the final approach to presentation.

Methodology

As a first step an extensive review of literature on the public health workforce was conducted. An important product of this investigation is the bibliography that includes previously un-catalogued resources regarding workforce composition and training needs. It is included in this report on page 279.

Simultaneously, the chief health official of each of the 57 states and territories was contacted with a request for any existing report, survey or summary on the public health workforce in the jurisdiction. A staff member with workforce development or planning responsibility was generally identified as the contact for additional information or clarification. In addition to current enumeration reports, these contacts also identified historical reports or analytic publications that were entered into the project bibliography. Five months of intensive phone and email contact was required before the project had

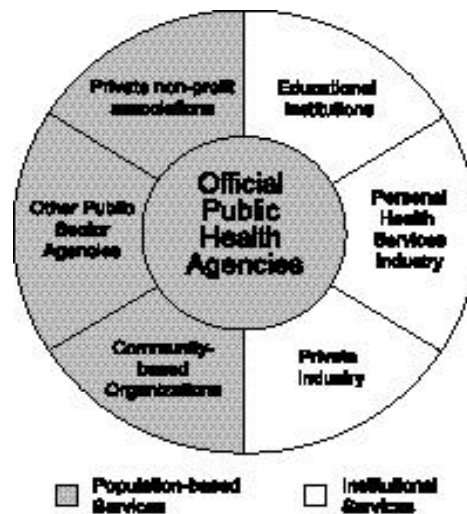


FIGURE 1
COMPONENTS OF THE PUBLIC HEALTH SYSTEM
Reprinted with permission from: Kennedy, et. al., Public health workforce information: A state-level study. *J Public Health Management Practice*, 5(3):12 © 1999, Aspen Publishers, Inc., www.aspenpublishers.com

usable information on 100% of the states and territories. Preliminary spreadsheets were made available for on-line review by submitting jurisdictions. Sixty percent responded with approval, corrections, or clarifications of the preliminary numbers.

The request for *existing* workforce data elicited varying types of information, from internal infrastructure reports to workforce planning surveys to Turning Point Initiative public health capacity summaries. States with centralized systems were able to provide information on public health workers at both the state and local level. States with decentralized systems frequently have an office of local public health able to provide local workforce numbers. In some cases (Pennsylvania, Kentucky, Tennessee and Virginia), project staff was referred directly to individual localities. In all states, other agencies beyond the identified official public health agency contribute to the delivery of essential public health services. These agencies include, but are not limited to, departments of environmental health, mental health, alcohol and substance abuse, agriculture, education, labor, health planning and insurance. In some cases, such as education and insurance, an independently elected official may direct the agency. Others such as mental health and substance abuse may be related units within the same umbrella agency as the state health department. None of these other agencies were contacted directly, but the state health agency was urged to provide whatever information was available about the wider circle of contributors to public health.

Data

Data differed from jurisdiction to jurisdiction in several ways. The time period reported was not consistent; some were a current fiscal or calendar year but others were up to 10 years old. Some reported individual workers, and others described full-time equivalents. Some included every individual job title within the jurisdiction and others grouped workers by categories that were unique to that location. The most generalized response was a single number reported to encompass all state and local public health workers within a state, with no detail as to job title, occupation or setting; the most specific was a person-by-person listing of every position within every local agency within the state.

Federal civilian public health workers are included in federal civilian workforce statistics compiled by the US Office of Personnel Management (OPM) and available on the Web. The OPM classifies the federal civilian white-collar workforce in 446 occupations and 26 agencies. Decision rules on which of these workers to include were developed by the Center for Health Policy through a criteria based consensus process, based on the agency's mission in relation to the essential public health services and considered the likelihood that offices or divisions within an agency would provide one or more of the essential services of public health. From 26 Federal agencies on which the OPM provides workforce data, only agencies clearly *without* a public health mission were eliminated from consideration. Appropriate offices within the Department of Defense provided data on the military public health workforce.

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While interest in the public health workers found in non-governmental and community partner agencies is high, states reported almost nothing about this component of the workforce. Limited detail on numbers of volunteers and salaried staff were obtained by contact with the national headquarters of major voluntary agencies, including the American Cancer Society, American Lung Association, American Red Cross, and the March of Dimes. The range of partner organizations involved in essential public health services is clearly much greater than this, so that both staff and volunteers are undercounted.

Data Classification

The project goal was to describe as much of the workforce as possible using the latest listing of public health professions used by the Bureau of Health Professions, HRSA, and the Bureau of Labor Statistics. Absence of standardization in existing workforce documentation required the design of an adequately structured system to organize the data in a sensible and comprehensible manner, while at the same time incorporating flexibility to accommodate the varying specificity and detail that emerged as each additional report was received and analyzed. To accomplish this, the project developed the classification scheme illustrated in Figure 2.

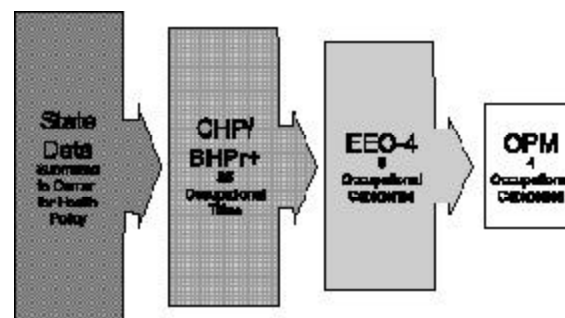


FIGURE 2
ENUMERATION 2000 CLASSIFICATION SCHEME

The US Office of Personnel Management utilizes standard categories to classify occupational titles as administrative, professional, technical, or clerical support. Each category is defined regarding education and level of responsibility, and includes examples of the type of work performed in the category. These were the least detailed occupational categories used by the project. The US Equal Employment Opportunity Commission uses an eight level worker classification scheme for its bi-annual reports mandated by Title VII of the Civil Rights Act of 1964. These reports, known as EEO-4 Reports, are required from public agencies employing more than 100 persons. As with the OPM system, each EEO-4 occupational category is described and defined. The eight EEO-4 categories correspond to and can be mapped into the OPM categories. These occupational classification systems provided a valid and reliable core for classifying existing public health workforce information.

The core scheme provided by combining the OPM and EEO-4 categories was made specific to public health workforce by using the taxonomy of public health occupational titles developed by the Bureau of Health Professions, HRSA (BHP) as part of efforts to add public health occupations to the Bureau of Labor Statistics Standard Occupational Codes (SOC). The BHP taxonomy had the advantage of previous use by other public health workforce researchers. The Center for Health Policy added eight additional titles and included nine new 1998 SOC public health titles. The complete list is provided in Table 1. The enhanced BHP taxonomy of titles was smoothly mapped into OPM and EEO-4 occupational categories and provided the final level of a collapsible three-tier classification scheme that accommodated most data.

TABLE 1
CHP/BHPr+ CLASSIFICATION SCHEME

Administrative	Health Administrator
Professional	Administrative/Business Professional Attorney/Hearing Officer Biostatistician Clinical, Counseling, and School Psychologist Environmental Engineer Environmental Scientist & Specialist Epidemiologist Health Economist Health Planner/Researcher/Analyst Infection Control/Disease Investigator Licensure/Inspection/Regulatory Specialist Marriage and Family Therapist Medical & Public Health Social Worker Mental Health/Substance Abuse Social Worker Mental Health Counselor Occupation Safety & Health Specialist PH Dental Worker PH Educator PH Laboratory Professional PH Nurse PH Nutritionist PH Optometrist PH Pharmacist PH Physical Therapist PH Physician PH Program Specialist PH Student PH Veterinarian/Animal Control Specialist Psychiatric Nurse Psychiatrist Psychologist Public Relations/Media Specialist Substance Abuse & Behavioral Disorders Counselor Other Public Health Professional
Technical	Computer Specialist Environmental Engineering Technician Environmental Science and Protection Technician Health Information Systems/Data Analyst Occupational Health and Safety Technician PH Laboratory Specialist Other Public Health Technician
	Investigations Specialist Other Protective Service Worker
	Community Outreach/Field Worker Other Paraprofessional
Clerical/Support	Administrative Business Staff Administrative Support Staff
	Skilled Craft Worker
	Food Services/Housekeeping Patient Services Other Service/Maintenance
Volunteers	Volunteer Health Administrator Volunteer PH Educator Volunteer Other Paraprofessional
Programs	
Unidentifiable	

KEY

Office of Personnel Management categories (OPM)

Bureau of Health Professions occupations (CHP/BHPr+)

Introduction

States and territories that did not provide reports by job title or category typically provided the number of workers by program. Therefore “Programs” became an additional category for workforce numbers unspecified by occupational title or category. States were asked to separate program staff numbers into at least the four OPM categories whenever possible. A category was also created for the volunteers reported by national voluntary agencies.

As a final level of categorization, workforce data from each jurisdiction were identified as describing state workers, local workers or other workers, others being those employed by voluntary organizations, schools of public health faculty or students, and volunteers. Workers that could not be associated with any specific level are reported as ‘agency unspecified’. These include workers attributed to the state by national association reports (i.e. Association of Public Health Laboratories, Association of State and Territorial Public Health Nutrition Directors) that could not be identified in other information the project received from the state.

Once a categorization scheme was in place decision rules were developed to guide the mapping of job titles into the scheme. The occupational category definitions provided by EEO and OPM and the Bureau of Labor Statistics standard occupational structure provided guidance. A numeric coding system was created with OPM classifications as the highest level and CHP/BHPr+ occupations as the most discrete. The decision on classifying a specific job title was based on a combination of known occupational qualifications (e.g., RN or MD licensure), the level of responsibility indicated by the job title (e.g. data systems administrator, data entry supervisor, data entry clerk), and finally by the research team's knowledge of the tasks generally performed by those with a given job title. Appendix C includes the complete list of job titles and decision rules for their application.

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Data Quality: Cautions

The number of public health workers reported here is far from exact, given that it is constructed out of reports that cover different time periods, use different categories and definitions, and do not cover all components of the public health practice community. The first and most obvious issue is the inclusion of volunteers, inflating the number by a factor of nearly 6.5. While many have expressed an interest in describing the contribution made to public health by volunteers, the number is so large as to obscure information about the paid workforce of 448,254. Because of this, no volunteers are included in calculations of public health worker to population ratios.

Even this smaller number includes some over counting. For example, including every employee of the DHHS means individuals working solely on aspects of welfare policy unrelated to health issues are included, even though they are not performing an essential public health service. Individuals concerned with health services financing might be described as 'linking people to needed personal health services' and 'assuring the provision of care when otherwise unavailable', both essential public health services. Or they might be simply defined as running an insurance program, not eligible to be included in the public health workforce. However, the mission of the DHHS, to protect health and provide essential human services, is consistent with the mission of public health, so all DHHS workers were included. In this agency all clerical and support workers were included in the count and it is expected that their number as part of the federal public health workforce is overestimated.

From a comprehensive perspective, the greater issue is that there are major areas of undercounting. Federal job titles were chosen for inclusion only if the title clearly suggested public health functions (such as public health educator). No general clerical or administrative titles were selected, so it is expected that their number, as part of the public health workforce in federal agencies other than DHHS, is underestimated. For example, omitted are all of the generalists working on public health programs in labor, agriculture, environmental protection and others.

At the state and local level, the organization of services related to environmental health, mental health, addictions and substance abuse into separate agencies has meant that many of the received state reports do not include these workers. For example, there are at least 41 state environmental agencies responsible for environmental health and protection programs, as reported in the most comprehensive examination of this subject, a number that far exceeds the number of environmental agencies included in data received for this report.

Because there is no nationally agreed upon set of definitions for the public health workforce, this project created them, as described above. Reported job titles, or categories of jobs, were then fit into the definitions established by the project staff. Until a national data dictionary is validated, or until every agency employing public health workers agrees to use a standard set of job titles, it is quite possible that a number of workers are reported in the wrong category. Given the commonality of titles, and the experience

of the team making the assignments, it is unlikely that this has resulted in misclassification of large numbers of individuals. But the available classes do present some difficulties. The category 'dental worker', for example, includes workers who are professionals, but also a range of technicians and paraprofessionals. In other apparently similar areas such as occupational health, there are separate categories for professional and technical staff. The job titles used in occupational health, however, do not always make the distinction clear, and some individuals may have been erroneously classified.

Faculty reported by schools of public health are included, and classified to an occupational title when possible. For example, faculty of a department of biostatistics are all classified as biostatistician. Members of departments with extremely general names such as maternal and child health, however, are included as other public health professionals. There is a specific category for public health students. The numbers included here represent an undercount of those who teach about and study public health practice, however. They do not include preventive medicine residents not currently enrolled in a master of public health program or graduate students in environment, health education, mental health or nursing studying in other than a school of public health.

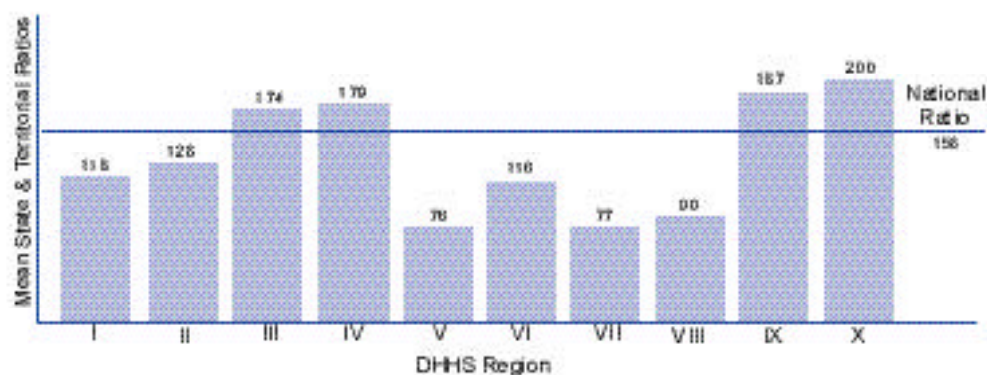
A particular warning is in order about comparison across jurisdictions. The information about the public health workforce is presented not only as reported totals, but also as ratios to population, both on a national level, and state-by-state. However, the ratio of worker to population in any one state is clearly related to at least two factors: the decisions made in that state about what is to be funded and organized as public health programs, and the availability of documents to be used in constructing this report. A state that has made comprehensive home health services a part of the public health endeavor will have a larger public health workforce than a state in which all or most home health care is delivered by non-public agencies. A state in which the local health authority carries out general public health, mental health, and environmental health programs will report a larger workforce than a state in which independent local agencies have no common tie to the state level. A state that can provide only aggregate numbers for state and local health agencies is likely to undercount, lacking information on public health workers in other agencies. On the other hand, a state in which public health is included within an umbrella agency and the workforce report was obtained for the agency as a whole, may lead to an over count and the appearance of a stronger public health workforce. The narrative and notes provided with each set of numbers attempt to make clear what cautions should be exercised in interpretation. **Users of this report wishing to make comparisons across jurisdictional lines are encouraged to read the full report and all notes carefully before selecting entities for comparison, and to exercise great caution in drawing any conclusions.**

National Perspective on the PH Workforce

The estimated national public health workforce, including Federal employees and the salaried staff of a limited number of voluntary agencies, is 448,254 employed workers, a ratio of 158 per 100,000 population. Of this workforce, 3.6 % are identified as holding official/administrative positions, 44.6 % in professional positions, 13.9 % in technical positions and 12.9 % in clerical/support positions. The remaining 25% could not be assigned to a specific category.

Considered from another perspective, the public health workforce is 34% local, 33 % state, and 19% federal. 14% of the workforce is located in other settings, such as schools of public health. Caution should be exercised in interpreting this information about governmental level. In a number of states it is not possible to distinguish between state and local workers, either because all public health workers are state employees even when assigned to local communities, or because available information did not allow the distinction.

A major limitation of this report is that approximately one quarter of the identified workers cannot be assigned to any worker category. This is either because the available data are organized by programmatic area (e.g., HIV program) without specifying worker category, or because only an aggregate number is available for an entire jurisdiction or agency. This latter point is the case, for example, in states for which no local health department data was available from the state and a local workforce estimate was based on the aggregate number recently reported to the National Association of County and City Health Officials (NACCHO).



ESTIMATED RATIOS OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION

National: 50 states, 6 territories, District of Columbia, federal civilians and military, and select voluntary agency staff.

National Perspective on the PH Workforce

As discussed in the introduction, the estimated national figure includes both over counting and undercounting. Over counting occurs when an entire agency has been included in the enumeration, even though some part of it performs work other than essential public health services. This is definitely the case for the U.S. Department of Health and Human Services (DHHS), though the public health portion of the agency is larger than its other units. Undercounting is probably more pervasive for the workforce as a whole. Groups undercounted include:

- Leaders and administrators of public health functions in other than the main public health agency
- Business, clerical and other staff supporting public health functions in other than the main public health agency
- Environmental health, mental health, substance abuse, behavioral health or occupational health workers in other than the main public health agency
- Workers of all levels delivering essential public health services in community partner organizations, including voluntary organizations and health provider organizations
- Volunteers serving on boards and commissions with public health authority

Despite these problems, this report is a current best estimate of the size and composition of the public health workforce. Key observations about this workforce estimate include:

- Public health physicians are a relatively small part of the workforce, 1.3 %. This is similar to the proportion reported as occupational health specialists (some of whom are physicians) or nutritionists. There are, at least 54 physicians identified working in positions with administrative titles among the 9,393 administrators.
- Epidemiologists, those working specifically in what is described as the core science of public health, comprise far less than 1% of the total workforce. Taken together, epidemiologists, biostatisticians and infection control/disease investigators are just over one-half of one percent of the workforce. Given the centrality of the activities encompassed by these occupations, the small proportion of identified workers supports the common observation that at the local level much of public health work is performed by generalists rather than by full-time specialists.

National Perspective on the PH Workforce

- Public health nurses (many of whom are registered nurses not identified as public health nurses) are the largest identified professional group at 49,232 or 10.9%. The nursing workforce is particularly large in states with a record of strong commitment to primary care and home care, suggesting that many of these nurses are working in personal care as well as, or instead of, population-focused services. The number of local jurisdictions for which only aggregate numbers are available means that the number and proportion of nurses would increase with more specific enumeration methods.
- Only 19,431 environmental health professionals (and 915 environmental technicians) could be identified. This is likely due to the fact that many environmental health activities are organizationally separated from other parts of public health, and their numbers were not included in submitted information. It is also likely that local environmental health numbers would increase with more specific enumeration methods.
- The numbers of laboratory professionals (14,088 or 3.1% of the workforce) and nutritionists (6,680 or 1.5% of the workforce) may be the most accurate of numbers in the professional category, because of special enumeration efforts undertaken by their professional associations. This made it possible to extricate numbers of these professionals from some state and local aggregate reports. Similar work has been contemplated by public health social workers, and any such efforts would help in understanding specific occupational areas.
- Two of the largest clusters of workers are in the Technical (62,358 or 13.9%) and Administrative Support (49,431 or 11%) categories. While not a majority of the workforce, the professional and leadership activities of public health are strongly influenced by the availability and quality of technical and administrative support in the laboratory, the records management process and elsewhere.

Comparison of any one jurisdiction or agency to these aggregate national figures should be attempted with caution. Significant gaps in data combined with wide variation in organizational structure across states could lead to misleading conclusions. Any comparative discussion should be accompanied by a review of the context for the agency or worker category being considered.

ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NATIONAL SUMMARY

Category	Federal Agencies	Voluntary Agencies	State and Territorial Agencies	Total
Officials and Administrators	1152	-	14768	15920
Professionals	58897	8012	133116	200025
Technicians	11695	-	29815	41510
Protective Service	429	-	841	1270
Paraprofessionals	1236	-	18342	19578
Administrative Support	11841	-	40071	51912
Skilled Craft	17	-	1166	1183
Service/Maintenance	44	-	4676	4720
Category Unreported	443	7373	104320	112136
Volunteers	-	2864825	5	2864830
Total w/ Volunteers	85,754	2,880,210	347,120	3,313,084
Total w/o Volunteers	85,754	15,385	347,115	448,254

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NATIONAL SUMMARY

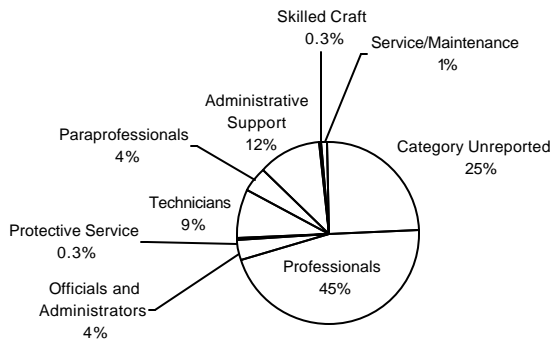
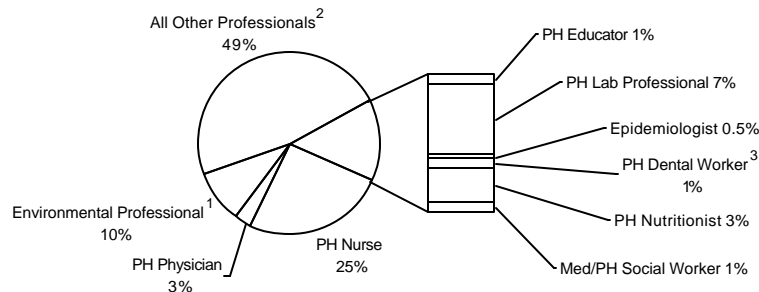


Chart does not include volunteers.
 * Indicates public health workers not identified by occupational category or title
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NATIONAL SUMMARY



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKFORCE: NATIONAL SUMMARY

Occupation	Federal Agencies	Voluntary Agencies	State and Territorial Agencies	Total
Administrators				
Health Administrator	1152	-	14768	15,920
Professionals				
Administrative/Business Professional	3133	-	1592	4,725
Attorney/Hearing Officer	351	-	250	601
Biostatistician	684	-	480	1,164
Clinical, Counseling, and School Psychologist	1	-	1	2
Environmental Engineer	3092	-	1457	4,549
Environmental Scientist & Specialist	3951	-	10931	14,882
Epidemiologist	5	-	922	927
Health Economist	86	-	19	105
Health Planner/Researcher/Analyst	2074	-	1499	3,573
Infection Control/Disease Investigator	2	-	781	783
Licensure/Inspection/Regulatory Specialist	9625	-	4155	13,780
Marriage and Family Therapist	-	-	-	-
Medical & Public Health Social Worker	170	-	2006	2,176
Mental Health/Substance Abuse Social Worker	-	-	-	-
Mental Health Counselor	113	-	673	786
Occupation Safety & Health Specialist	3619	-	1974	5,593
PH Dental Worker	1240	-	792	2,032
PH Educator	126	-	2104	2,230
PH Laboratory Professional	9603	-	4485	14,088
PH Nurse	4311	8000	36921	49,232
PH Nutritionist	269	-	6411	6,680
PH Optometrist	5	-	4	9
PH Pharmacist	1180	-	316	1,496
PH Physical Therapist	12	-	60	72
PH Physician	4055	-	1953	6,008
PH Program Specialist	3836	-	3984	7,820
PH Student	37	-	14996	15,033
PH Veterinarian/Animal Control Specialist	1929	-	108	2,037
Psychiatric Nurse	-	-	4	4
Psychiatrist	-	-	1	1
Psychologist	688	-	67	755
Public Relations/Media Specialist	448	12	115	575
Substance Abuse & Behavioral Disorders Counselor	2	-	36	38
Other Public Health Professional	4250	-	9788	14,038
PH Professional, Title Unspecified	-	-	24231	24,231
Technicians				
Computer Specialist	2565	-	1761	4,326
Environmental Engineering Technician	294	-	120	414
Environmental Science and Protection Technician	228	-	273	501
Health Information Systems/Data Analyst	172	-	433	605
Occupational Health and Safety Technician	93	-	2	95
PH Laboratory Specialist	4262	-	1438	5,700
Other Public Health Technician	4081	-	22872	26,953
Technician, Title Unspecified	-	-	2916	2,916
Protective Service				
Investigations Specialist	326	-	50	376
Other or Unspecified Protective Service Worker	103	-	791	894
Paraprofessionals				
Community Outreach/Field Worker	102	-	574	676
Other or Unspecified Paraprofessional	1134	-	17768	18,902
Administrative Support				
Administrative Business Staff	2498	-	1285	3,783
Administrative Support Staff	9343	-	28462	37,805
Unspecified Clerical/Support	-	-	10324	10,324
Skilled Craft Workers				
Skilled Craft Worker	17	-	1166	1,183
Service/Maintenance				
Food Services/Housekeeping	12	-	313	325
Patient Services	-	-	-	-
Other or Unspecified Service/Maintenance	32	-	4363	4,395
Category Unreported				
Programs	-	7202	7052	14,254
Unidentifiable	443	171	97268	97,882
Volunteers	-	2864825	5	2864830
Total w/ Volunteers	85,754	2,880,210	347,120	3,313,084
Total w/o Volunteers	85,754	15,385	347,115	448,254

The PH Workforce in the States and Territories



The State and Territorial Public Health Workforce

The following pages provide information about the public health workforce in each of the 50 states, 6 territories and the District of Columbia. The information presented is the compilation of material from every source identified as relevant to the jurisdictions, and is displayed at the most detailed level possible. It is important to remember that with no common national conventions regarding enumeration of the public health workforce, the reported data differ a great deal across jurisdictional lines.

Each presentation is introduced by a discussion of the organization of public health within the jurisdiction, based primarily on Centers for Disease Control and Prevention documents. This is essential context for any interpretation of the available information, as decisions made at the state level about the scope, organization and size of a public health authority will have a great impact on the size and composition of the workforce. It is especially important to note that with few exceptions, the information is from an official state health agency that is not responsible for all aspects of environmental health, mental health or substance abuse services, generally considered to be necessary for a state to fulfill comprehensive public health responsibilities. The states also vary widely with regard to the relationship between state and local public health responsibilities, which affects the distribution of staff.

No cross-state comparison should be undertaken without considering the impact contextual issues (such as the role of public health in primary care) have on the reported workforce. However, the ratio of reported workers to population has been calculated for each jurisdiction, and is presented together with the range and median ratios for all jurisdictions and for other jurisdictions in that region. This facilitates some perspective on available public health resource. July 1999 US Census Bureau estimates were used to calculate all ratios.

The data are displayed based on occupational categories defined by the US Office of Personnel Management (OPM) Occupational Categories [see Appendix C, Part 1], the US Equal Employment Opportunity Commission Occupational Categories (EEO-4) [see Appendix C, Part 2], and the Center for Health Policy adapted Bureau of Health Professions taxonomy of occupational titles (CHP/BHPr+) [see Appendix C, Part 3]. A complete description of the classification system and methods used to classify the data can be found in the Introduction on page 18. Additional information can be found in the Technical Notes on page 275.

For each jurisdiction, a combination of charts and tables is used to display the distribution of the workforce across the categories, and across state, local and other organizations. Because of the importance of the professional staff to the mission of public health, the information on these workers is presented when available. Dental health workers, environmental health professionals, health educators, laboratory professionals, nurses, nutritionists, physicians and social workers are specifically identified, if possible. The figures do not include the Federal workforce or national level staff of voluntary agencies, which are presented separately, and included in the comprehensive national discussion. They do include faculty and students of schools of public health.

Connecticut

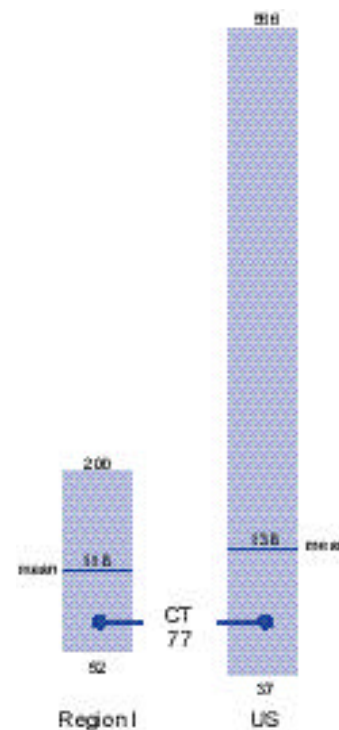
The Connecticut Department of Health Services, the state health agency, is a freestanding, independent agency. The interaction between state and local public health departments in Connecticut may be characterized as decentralized organizational control. Under this arrangement local governments directly operate health departments with or without local boards of health (CDC, 1991).

Connecticut has 106 local health departments, consisting of 29 full municipal health departments, 18 full-time health districts, and 59 part-time municipal health departments. The districts consist of towns, cities, and boroughs, which have voted to combine their health services into a district health department. The designation of full- or part-time depends on the presence or absence of a full-time health officer. There are 70 other jurisdictions in Connecticut, which have health services but do not have at least one full-time position. In addition, there are 2 full-time tribal health departments: Mashantucket Pequot and Mohegan (ibid).

About one third of the reported workers are at the state level.

Connecticut is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

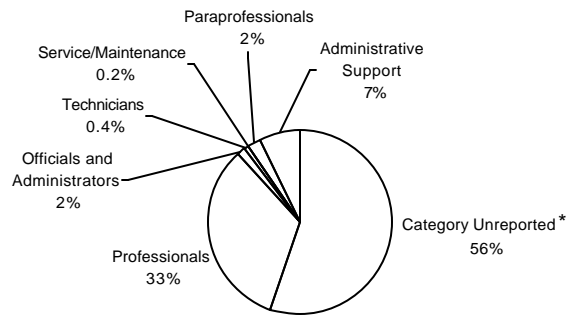
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: CONNECTICUT

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	40	-	-	-	40
Professionals	493	-	324	26	843
Technicians	11	-	-	-	11
Protective Service Workers	-	-	-	-	-
Paraprofessionals	57	-	-	3	60
Administrative Support	180	-	-	-	180
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	6	-	-	-	6
Category Unreported	24	1364	2	-	1390
Total	811	1,364	326	29	2,530

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: CONNECTICUT

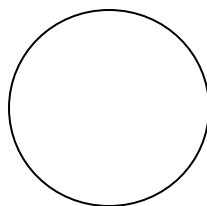
The data available for Connecticut leave over half of workers uncategorized, limiting the utility of more detailed observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: CONNECTICUT

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: CONNECTICUT

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	40	-	-	-	40
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	6	-	6
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	3	-	3
Epidemiologist	-	-	8	-	8
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	100	-	8	-	108
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	26	26
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	288	-	288
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	9	-	9
PH Professional, Title Unspecified	393	-	2	-	395
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	8	-	-	-	8
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	3	-	-	-	3
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	57	-	-	3	60
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	180	-	-	-	180
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	6	-	-	-	6
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	24	1364	-	-	1388
Total	811	1,364	326	29	2,530

Connecticut

NOTES ON DATA:

State agency data reported in EEO categories.

State laboratory workers were identified from APHL survey.

Local data available only as aggregate count in NACCHO survey.

Nutritionists identified from the ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Connecticut Department of Public Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

March of Dimes, National Office.

Maine

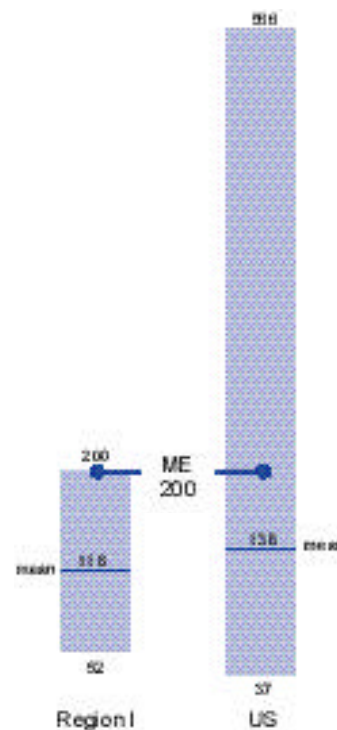
The Bureau of Health, the state health agency, is a component of a superagency called the Department of Human Services. The interaction between state and local public health departments in Maine may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

The eight local health departments in Maine consist of three city health departments (located in the cities of Bangor, Lewiston, and Portland) and five Department of Human Service regions (one county and four multi-county units). The city health departments are autonomous units, and the public health nursing services are elements of the state health agency that provide public health services to local areas (ibid).

Almost all reported public health workers in Maine are employed at the state level.

Maine is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

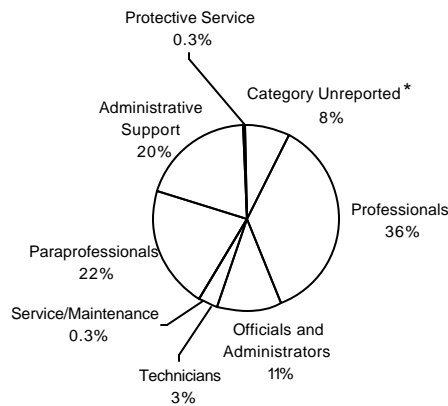
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MAINE

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	281	-	-	-	281
Professionals	857	-	-	33	890
Technicians	78	-	-	-	78
Protective Service Workers	8	-	-	-	8
Paraprofessionals	508	-	-	24	532
Administrative Support	511	-	-	-	511
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	7	-	-	-	7
Category Unreported	127	72	2	-	201
Total	2,377	72	2	57	2,508

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MAINE

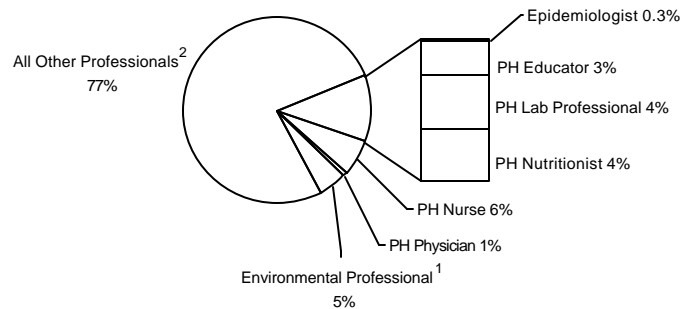
The data allowed categorization of almost all workers. The proportion of workers in the professional category is comparatively low, but data do not include environmental health, mental health or substance abuse staff.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MAINE

The proportion of professional workers not categorized is due to high use of public health specialist titles that may include individuals who would be recategorized if their duties or professions were known.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MAINE

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	281	-	-	-	281
Professionals					
Administrative/Business Professional	18	-	-	-	18
Attorney/Hearing Officer	34	-	-	-	34
Biostatistician	1	-	-	-	1
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	5	-	-	-	5
Environmental Scientist & Specialist	36	-	-	-	36
Epidemiologist	3	-	-	-	3
Health Economist	8	-	-	-	8
Health Planner/Researcher/Analyst	38	-	-	-	38
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	127	-	-	-	127
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	23	-	-	-	23
PH Laboratory Professional	36	-	-	-	36
PH Nurse	57	-	-	-	57
PH Nutritionist	3	-	-	33	36
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	6	-	-	-	6
PH Program Specialist	404	-	-	-	404
PH Student	14	-	-	-	14
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	2	-	-	-	2
Other Public Health Professional	42	-	-	-	42
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	55	-	-	-	55
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	1	-	-	-	1
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	15	-	-	-	15
Other Public Health Technician	7	-	-	-	7
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	8	-	-	-	8
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	508	-	-	24	532
Administrative Support					
Administrative Business Staff	66	-	-	-	66
Administrative Support Staff	445	-	-	-	445
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	7	-	-	-	7
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	127	72	-	-	199
Total	2,377	72	2	57	2,508

Maine

NOTES ON DATA:

State data provided as EEO summary.

Local data available only as aggregate count from NACCHO survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Maine Department of Human Services.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Massachusetts

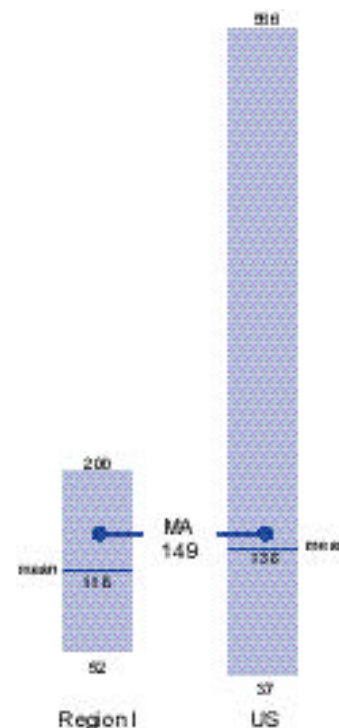
The Massachusetts Department of Public Health, the state health agency, is a component of a superagency known as the Executive Office of Human Services. MDPH is one of 11 departments within the Secretariat of Human Services. Interaction between state and local public health departments in Massachusetts may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

Massachusetts has 351 cities and towns, each with its own local board of health. Although the commonwealth has no direct authority over these health units, it does have authority by regulation and mandate to determine their functions and activities. The local units range from offices staffed only with volunteer, part-time board members or part-time staff, to full-fledged health departments. While information on the specifics of local staffing is limited, estimates are that Massachusetts has approximately 183 local units, which have at least one full-time employee and thereby meet the definition of a local health department. Seven of these represent multi-town jurisdictions (inter-municipal health districts), which enable member towns to share staff and other resources. Massachusetts has one county health department (Barnstable) (ibid).

Slightly more workers are reported at the local level than at the state level. The state total includes a large number of public health students, some of whom may also be working in a public health setting and thus counted twice.

Massachusetts is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

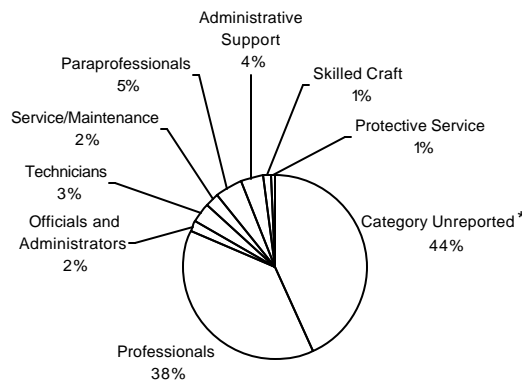
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MASSACHUSETTS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	183	-	-	-	183
Professionals	1492	-	1856	179	3527
Technicians	316	-	-	-	316
Protective Service Workers	52	-	-	-	52
Paraprofessionals	427	-	-	1	428
Administrative Support	400	-	-	-	400
Skilled Craft Workers	121	-	-	-	121
Service/Maintenance	200	-	-	-	200
Category Unreported	-	3941	4	-	3945
Total	3,191	3,941	1,860	180	9,172

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MASSACHUSETTS

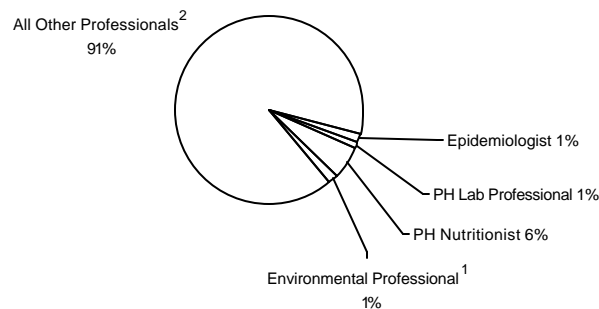
The high proportion of workers in the unreported category is due to the lack of detail available regarding local health department workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MASSACHUSETTS

The information regarding laboratory and nutrition professionals is from national reports. Data regarding the specific occupational categories are not available for professionals at the state level.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MASSACHUSETTS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	183	-	-	-	183
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	40	-	40
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	51	-	51
Epidemiologist	-	-	49	-	49
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	22	-	20	-	42
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	18	179	197
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	16	-	16
PH Student	-	-	1530	-	1530
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	50	-	50
PH Professional, Title Unspecified	1470	-	82	-	1552
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	316	-	-	-	316
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	52	-	-	-	52
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	427	-	-	1	428
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	400	-	-	-	400
Skilled Craft					
Skilled Craft Worker	121	-	-	-	121
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	200	-	-	-	200
Category Unreported					
Programs	-	-	4	-	4
Unidentifiable	-	3941	-	-	3941
Total	3,191	3,941	1,860	180	9,172

Massachusetts

NOTES ON DATA:

State data provided as EEO summary.

State laboratory workers were identified from APHL survey.

Local data available only as aggregate count from NACCHO report.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Massachusetts Department of Public Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

New Hampshire

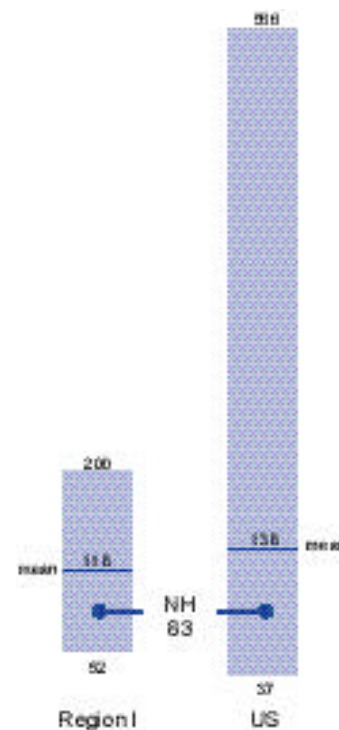
The Office of Community and Public Health is one of five divisions in the New Hampshire Department of Health and Human Services (NHDHHS) and is therefore a component of a superagency. The state health agency has no relationship with the counties and they, except for the operation of county nursing homes, have no public health functions. The interaction between state and local public health departments in New Hampshire may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

New Hampshire has 13 local health departments, all of which are city health departments. Only two of the health departments provide a wide range of services, but neither one fulfills the complete roles usually ascribed to such entities. The state, for public health purposes, has no oversight or regulatory responsibilities (ibid).

Almost all identified public health workers are at the state level, with the occupational category identifiable for about three fourths of these workers.

New Hampshire is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

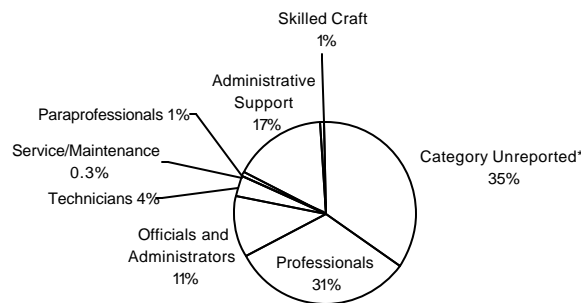
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NEW HAMPSHIRE

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	112	-	-	-	112
Professionals	272	-	-	40	312
Technicians	35	-	-	-	35
Protective Service Workers	-	-	-	-	-
Paraprofessionals	10	-	-	-	10
Administrative Support	168	-	-	-	168
Skilled Craft Workers	5	-	-	-	5
Service/Maintenance	3	-	-	-	3
Category Unreported	249	98	2	-	349
Total	854	98	2	40	994

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NEW HAMPSHIRE

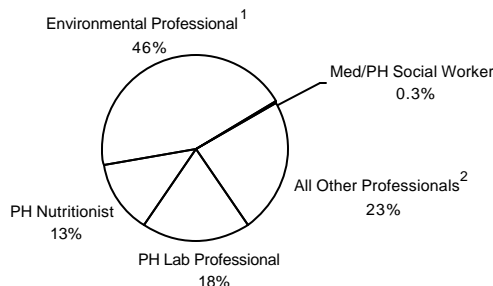
The data available for New Hampshire leave 35% of workers uncategorized, limiting the utility of more detailed observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEW HAMPSHIRE

No physicians and no nurses are identified in this workforce; they are likely either in occupational titles in the administrative category, or among the large number of professionals with unidentifiable titles.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEW HAMPSHIRE

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	112	-	-	-	112
Professionals					
Administrative/Business Professional	1	-	-	-	1
Attorney/Hearing Officer	3	-	-	-	3
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	19	-	-	-	19
Environmental Scientist & Specialist	124	-	-	-	124
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	14	-	-	-	14
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	16	-	-	-	16
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	1	-	-	-	1
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	56	-	-	-	56
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	40	40
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	10	-	-	-	10
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	1	-	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	27	-	-	-	27
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	16	-	-	-	16
Environmental Engineering Technician	5	-	-	-	5
Environmental Science and Protection Technician	5	-	-	-	5
Health Information Systems/Data Analyst	1	-	-	-	1
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	8	-	-	-	8
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	10	-	-	-	10
Administrative Support					
Administrative Business Staff	16	-	-	-	16
Administrative Support Staff	49	-	-	-	49
Unspecified Clerical/Support	103	-	-	-	103
Skilled Craft					
Skilled Craft Worker	5	-	-	-	5
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	3	-	-	-	3
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	249	98	-	-	347
Total	854	98	2	40	994

New Hampshire

NOTES ON DATA:

State data provided by occupation.

Local data available only as aggregate count in NACCHO survey.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

New Hampshire Department of Health and Human Services.

New Hampshire Department of Environmental Services.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Rhode Island

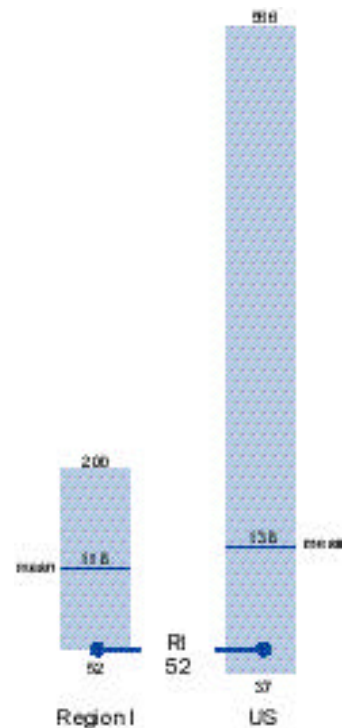
The Rhode Island Department of Health is a free-standing independent agency that serves as the state health agency. Since there are no local health departments in Rhode Island, there is no state-local liaison (CDC, 1991).

All public health services are provided by the State Department of Health (ibid).

Data regarding the workforce is only available at a summary level, limiting observations that can be made.

Rhode Island is in the lower third of states in ratio of public health workers to population, with almost all workers at the state level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

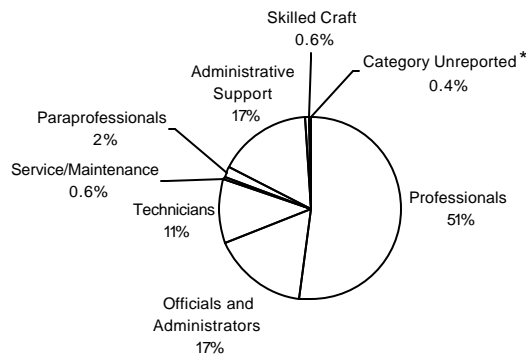
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: RHODE ISLAND

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	88	-	-	-	88
Professionals	210	-	-	54	264
Technicians	59	-	-	-	59
Protective Service Workers	-	-	-	-	-
Paraprofessionals	9	-	-	-	9
Administrative Support	89	-	-	-	89
Skilled Craft Workers	3	-	-	-	3
Service/Maintenance	3	-	-	-	3
Category Unreported	-	-	2	-	2
Total	461	-	2	54	517

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: RHODE ISLAND

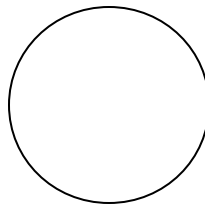
The distribution of workers by occupational category is a typical one.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: RHODE ISLAND

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: RHODE ISLAND

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	88	-	-	-	88
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	63	-	-	-	63
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	54	54
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	147	-	-	-	147
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	59	-	-	-	59
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	9	-	-	-	9
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	89	-	-	-	89
Skilled Craft					
Skilled Craft Worker	3	-	-	-	3
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	3	-	-	-	3
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	461	-	2	54	517

Rhode Island

NOTES ON DATA:

State data received as EEO summary.

State laboratory workers were identified from APHL survey.

Nutritionists identified from ASTPHND survey that were not identified in other data were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

Rhode Island Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Vermont

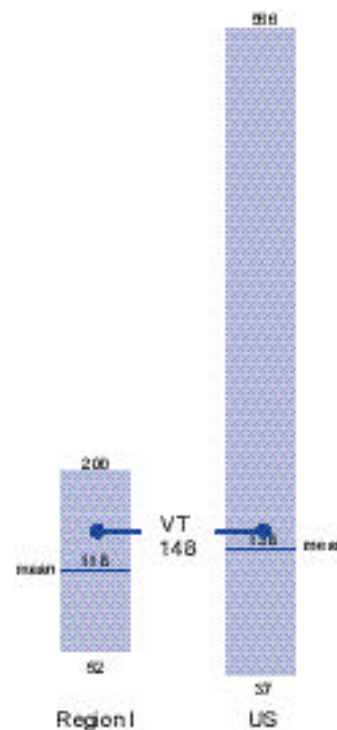
The state health agency is the Vermont Department of Health, which is a component of a superagency called the Agency of Human Services. Interaction between state and local health departments in Vermont may be characterized as centralized organizational control. Under this arrangement local health departments function directly under the state's authority and are operated by the state health agency (CDC, 1991).

Vermont has no autonomous local health departments. The local units are part of the state health agency. The 12 district offices provide services to local areas and perform many of the same basic functions as local health departments in other states. The districts are composed of several towns (multi-town areas) units and have no relationship to county governments (ibid).

The workforce is nearly evenly divided between the state and local level, though information on environmental health, mental health and substance abuse workers appears limited.

Vermont is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region I: CT, ME, MA, NH, RI, and VT
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

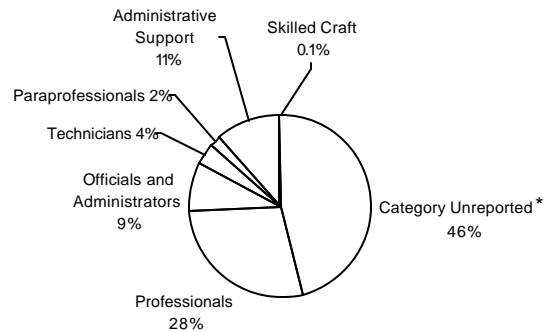
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: VERMONT

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	80	-	-	-	80
Professionals	235	-	-	12	247
Technicians	32	-	-	-	32
Protective Service Workers	-	-	-	-	-
Paraprofessionals	18	-	-	2	20
Administrative Support	98	-	-	-	98
Skilled Craft Workers	1	-	-	-	1
Service/Maintenance	-	-	-	-	-
Category Unreported	-	398	2	-	400
Total	464	398	2	14	878

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: VERMONT

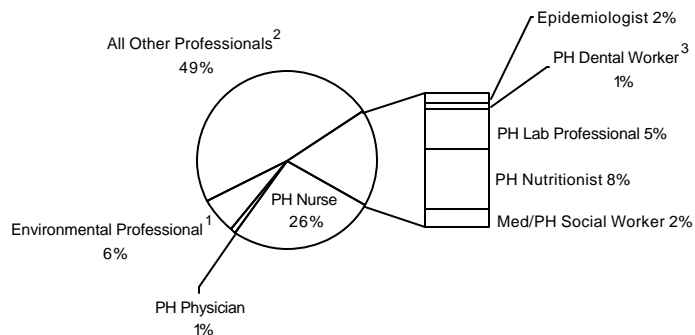
The data available for Vermont leave nearly half of workers uncategorized, limiting the utility of more detailed observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: STATE VERMONT

The small proportion of environmental professionals is likely due to lack of information regarding other components of state government. Available data leave a substantial proportion of professionals uncategorized, limiting the utility of further observations.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: VERMONT

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	80	-	-	-	80
Professionals					
Administrative/Business Professional	6	-	-	-	6
Attorney/Hearing Officer	1	-	-	-	1
Biostatistician	7	-	-	-	7
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	4	-	-	-	4
Environmental Scientist & Specialist	12	-	-	-	12
Epidemiologist	4	-	-	-	4
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	3	-	-	-	3
Infection Control/Disease Investigator	1	-	-	-	1
Licensure/Inspection/Regulatory Specialist	1	-	-	-	1
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	6	-	-	-	6
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	7	-	-	-	7
PH Dental Worker	2	-	-	-	2
PH Educator	-	-	-	-	-
PH Laboratory Professional	12	-	-	-	12
PH Nurse	63	-	-	-	63
PH Nutritionist	7	-	-	12	19
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	3	-	-	-	3
PH Program Specialist	13	-	-	-	13
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	1	-	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	1	-	-	-	1
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	21	-	-	-	21
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	60	-	-	-	60
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	1	-	-	-	1
Health Information Systems/Data Analyst	14	-	-	-	14
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	6	-	-	-	6
Other Public Health Technician	3	-	-	-	3
Technician, Title Unspecified	8	-	-	-	8
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	18	-	-	-	18
Other or Unspecified Paraprofessional	-	-	-	2	2
Administrative Support					
Administrative Business Staff	5	-	-	-	5
Administrative Support Staff	81	-	-	-	81
Unspecified Clerical/Support	12	-	-	-	12
Skilled Craft					
Skilled Craft Worker	1	-	-	-	1
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	398	-	-	398
Total	464	398	2	14	878

Vermont

NOTES ON DATA:

State data provided as EEO summary and occupational listing.

Local data available only as aggregate summary from NACCHO survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Vermont Department of Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

New Jersey

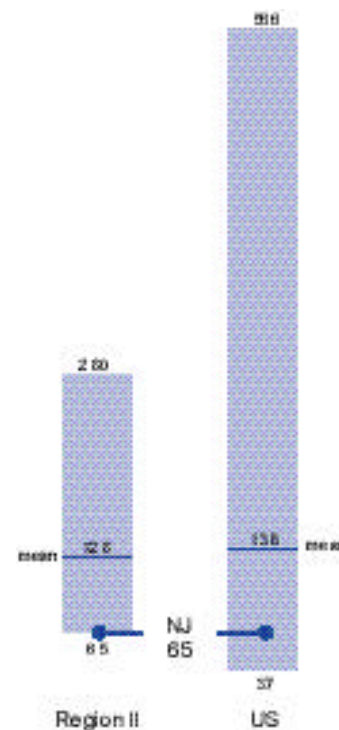
The state health agency is the New Jersey Department of Health and Senior Services. It is a freestanding, independent agency. In New Jersey, interaction between state and local public health departments may be characterized as decentralized organizational control. Under this arrangement, local government directly operates health departments with a local board of health (CDC, 1991).

New Jersey has 115 operating local health jurisdictions. These jurisdictions include 14 county health departments, 19 city health departments, and 82 town/township health departments (6 of the township units represent multiple townships that have formed associations called Regional Health Commissions to provide public health services). Under state statutes, local boards of health may use following options of delivering services to meet minimum standards: local health department; county health department; inter-local contract; or regional health commission (ibid).

Slightly more workers are reported at the state level than at the local level. Local data include environmental health, but neither level appears to include mental health or substance abuse workers.

New Jersey is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region II: NJ, NY, PR, and VI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

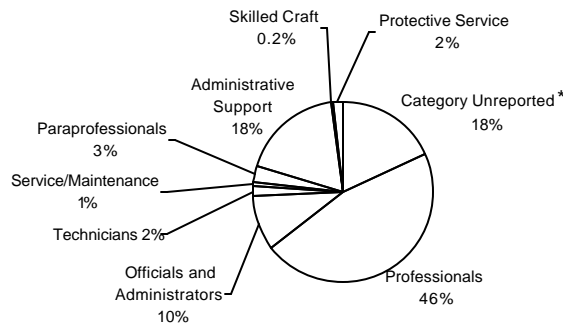
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NEW JERSEY

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	185	346	-	-	531
Professionals	1178	1145	-	120	2443
Technicians	69	30	-	-	99
Protective Service Workers	-	110	-	-	110
Paraprofessionals	59	79	-	14	152
Administrative Support	516	450	-	-	966
Skilled Craft Workers	11	-	-	-	11
Service/Maintenance	33	-	-	-	33
Category Unreported	900	84	2	-	986
Total	2,951	2,244	2	134	5,331

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NEW JERSEY

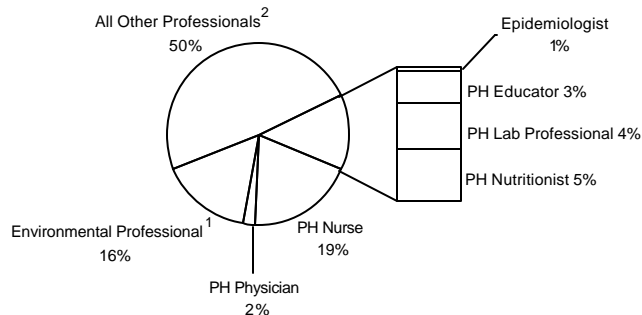
The proportion of workers who could be categorized as professionals is typical of the expertise needed to deliver public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEW JERSEY

The comparatively large number of physicians is reported at the local level and likely reflects large number of local agencies in NJ. Information on laboratory and nutrition professionals is from national reports; no data were available to categorize professional workers at state level. The approximately equal proportion of environmental professionals and nurses is consistent with anecdotal descriptions of local agency staff.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEW JERSEY

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	185	346	-	-	531
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	399	-	-	399
Epidemiologist	-	15	-	-	15
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	9	-	-	9
Infection Control/Disease Investigator	-	77	-	-	77
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	62	-	-	62
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	71	-	-	71
PH Laboratory Professional	109	-	-	-	109
PH Nurse	-	457	-	-	457
PH Nutritionist	-	-	-	120	120
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	55	-	-	55
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	1069	-	-	-	1069
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	30	-	-	30
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	69	-	-	-	69
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	110	-	-	110
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	59	79	-	14	152
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	450	-	-	450
Unspecified Clerical/Support	516	-	-	-	516
Skilled Craft					
Skilled Craft Worker	11	-	-	-	11
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	33	-	-	-	33
Category Unreported					
Programs	900	-	2	-	902
Unidentifiable	-	84	-	-	84
Total	2,951	2,244	2	134	5,331

New Jersey

NOTES ON DATA:

Data on state agencies was provided variously as aggregate count per agency or as EEO summary.

State laboratory workers were identified from APHL survey.

Local data provided by occupation.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

New Jersey State Department of Health and Senior Services.

New Jersey Department of Health and Senior Services, Office of Local Health.

New Jersey Department of Personnel, 1999 State Government Workforce Profile with Selected Local Data.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

New York

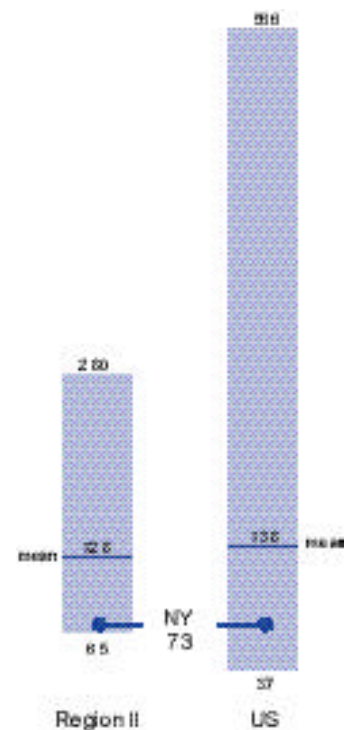
The state health agency, the New York Department of Health, is a freestanding, independent agency. Interaction between state and local public health departments in New York may be characterized as mixed centralized and decentralized control. Under this arrangement, local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

New York has 59 local public health units including 58 county health departments and 1 city health department. Thirty-six of the 59 units provide some level of “full public health services.” The remaining 23 units offer public health nursing services augmented by environmental services from the district offices. Local units are elements of local government (ibid).

About two-thirds of the reported public health workers are at the local level; these include some environmental, mental health and substance abuse workers.

New York is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region II: NJ, NY, PR, and VI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

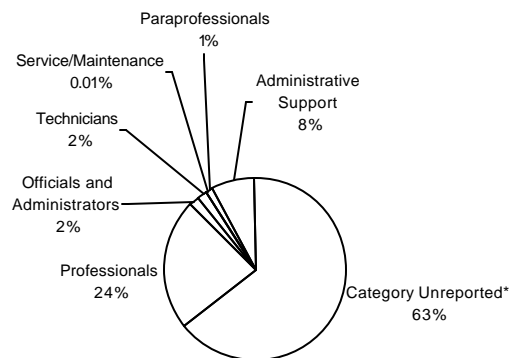
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NEW YORK

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	-	220	150	-	370
Professionals	-	2673	1473	316	4462
Technicians	-	142	140	-	282
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	160	-	44	204
Administrative Support	-	1267	200	-	1467
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	2	-	-	2
Category Unreported	3817	8097	61	-	11975
Total	3,817	12,561	2,024	360	18,762

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NEW YORK

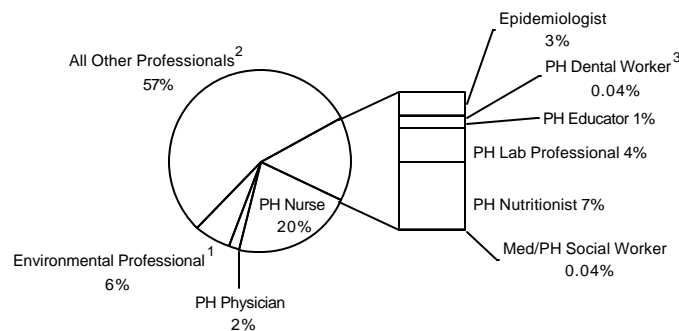
The high proportion of workers in the unreported category is due to the lack of detail available regarding state health department workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEW YORK

Much of the information on laboratory and nutrition professionals is from national reports. Lack of detail about the state professional workforce limits interpretation of this information.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEW YORK

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	220	150	-	370
Professionals					
Administrative/Business Professional	-	5	-	-	5
Attorney/Hearing Officer	-	53	-	-	53
Biostatistician	-	1	25	-	26
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	219	58	-	277
Epidemiologist	-	79	40	-	119
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	284	-	-	284
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	2	-	-	2
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	27	-	-	27
PH Dental Worker	-	2	-	-	2
PH Educator	-	59	-	-	59
PH Laboratory Professional	-	164	-	-	164
PH Nurse	-	913	-	-	913
PH Nutritionist	-	1	-	316	317
PH Optometrist	-	1	-	-	1
PH Pharmacist	-	3	-	-	3
PH Physical Therapist	-	-	-	-	-
PH Physician	-	94	-	-	94
H Program Specialist	-	734	21	-	755
PH Student	-	22	832	-	854
PH Veterinarian/Animal Control Specialist	-	5	-	-	5
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	1	-	-	1
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	1	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	3	61	-	64
PH Professional, Title Unspecified	-	-	436	-	436
Technicians					
Computer Specialist	-	66	-	-	66
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	5	-	-	5
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	70	-	-	70
Other Public Health Technician	-	1	-	-	1
Technician, Title Unspecified	-	-	140	-	140
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	160	-	44	204
Administrative Support					
Administrative Business Staff	-	49	-	-	49
Administrative Support Staff	-	1218	-	-	1218
Unspecified Clerical/Support	-	-	200	-	200
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	2	-	-	2
Category Unreported					
Programs	3817	-	61	-	3878
Unidentifiable	-	8097	-	-	8097
Total	3,817	12,561	2,024	360	18,762

New York

NOTES ON DATA:

State data provided about workers by organizational division only.

Local data provided by occupation for New York City and aggregate counts for all other local (county) agencies.

Additional nutritionists within the state identified from ASTPHND survey.

NY total does not include state laboratory.

Other data includes quasi-governmental grant administration agency (Health Research, Inc), March of Dimes staff, and students and faculty of schools of public health.

DATA SOURCES:

New York State Department of Health.

New York City Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

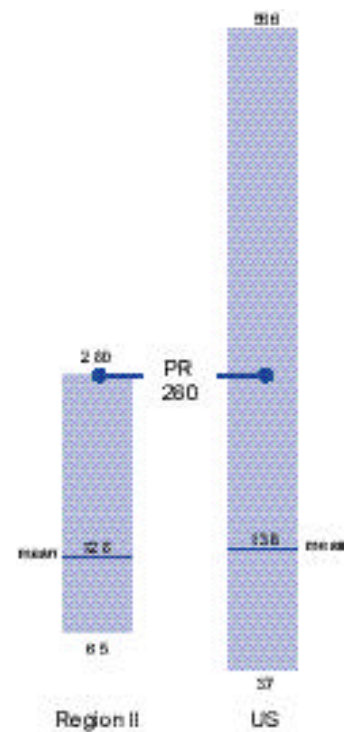
Puerto Rico

The Puerto Rico Departamento de Salud is a freestanding agency reporting to the Governor. There are regional offices providing services throughout the Commonwealth.

The distribution of workers by occupational category is typical, though the reported data include very little information regarding environmental health, mental health or substance abuse.

Puerto Rico is similar to the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region II: NJ, NY, PR, and VI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

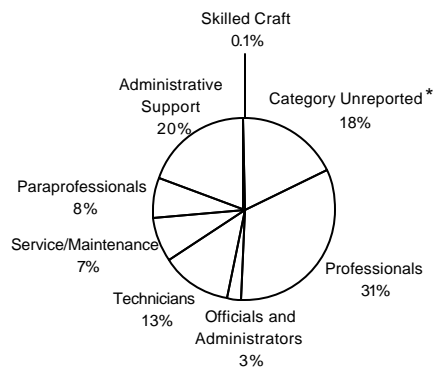
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: PUERTO RICO

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	272	-	-	-	272
Professionals	2635	-	638	146	3419
Technicians	1371	-	-	-	1371
Protective Service Workers	-	-	-	-	-
Paraprofessionals	802	-	-	19	821
Administrative Support	2123	-	-	-	2123
Skilled Craft Workers	10	-	-	-	10
Service/Maintenance	803	-	-	-	803
Category Unreported	1978	-	-	-	1978
Total	9,994	-	638	165	10,797

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: PUERTO RICO

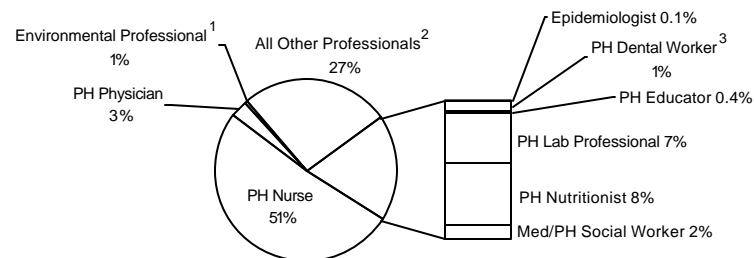
Comparatively low proportion of workers in the administrative category may reflect individuals employed in professional job titles who fill administrative functions as well.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: PUERTO RICO

Above average proportion of physicians and comparatively high proportion of nurses may reflect an unusual level of personal health services to ensure access. Other professions category includes nearly 600 public health students, who may also hold other positions while attending school.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: PUERTO RICO

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	272	-	-	-	272
Professionals					
Administrative/Business Professional	30	-	-	-	30
Attorney/Hearing Officer	5	-	-	-	5
Biostatistician	42	-	2	-	44
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	6	-	-	-	6
Environmental Scientist & Specialist	2	-	12	-	14
Epidemiologist	-	-	5	-	5
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	1	-	-	-	1
Infection Control/Disease Investigator	36	-	-	-	36
Licensure/Inspection/Regulatory Specialist	138	-	-	-	138
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	63	-	-	-	63
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	48	-	-	-	48
PH Educator	12	-	-	-	12
PH Laboratory Professional	225	-	-	-	225
PH Nurse	1745	-	-	-	1745
PH Nutritionist	124	-	3	146	273
PH Optometrist	1	-	-	-	1
PH Pharmacist	19	-	-	-	19
PH Physical Therapist	15	-	-	-	15
PH Physician	107	-	-	-	107
PH Program Specialist	-	-	5	-	5
PH Student	-	-	585	-	585
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	4	-	-	-	4
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	12	-	8	-	20
PH Professional, Title Unspecified	-	-	18	-	18
Technicians					
Computer Specialist	53	-	-	-	53
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	12	-	-	-	12
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	53	-	-	-	53
Other Public Health Technician	1253	-	-	-	1253
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	97	-	-	-	97
Other or Unspecified Paraprofessional	705	-	-	19	724
Administrative Support					
Administrative Business Staff	95	-	-	-	95
Administrative Support Staff	2028	-	-	-	2028
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	10	-	-	-	10
Service/Maintenance					
Food Services/Housekeeping	102	-	-	-	102
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	701	-	-	-	701
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	1978	-	-	-	1978
Total	9,994	-	638	165	10,797

Puerto Rico

NOTES ON DATA:

State (territorial) data provided by occupation.

Additional nutritionists within the territory identified from ASTPHND survey.

Other data consists of students and faculty of schools of public health.

DATA SOURCES:

Puerto Rico Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

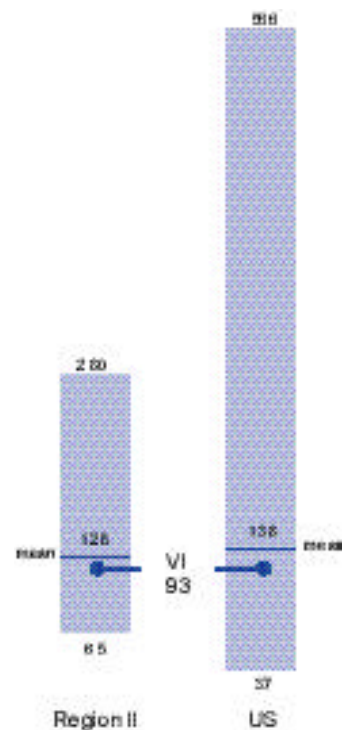
Virgin Islands

The Department of Health has direct responsibility for conducting programs of preventive medicine including special programs in maternal and child health, family planning, environmental sanitation, mental health, and drug and substance abuse prevention.

The reported staff do not include any from environmental, mental health or substance abuse services.

The Virgin Islands are similar to the middle third of states in ratio of public health workers to population, with all staff reported at the centralized level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region II: NJ, NY, PR, and VI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

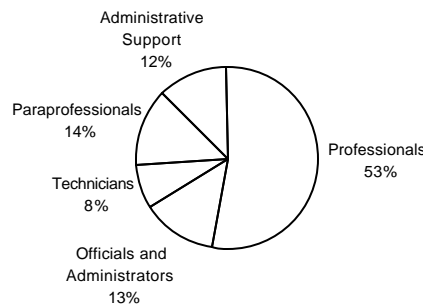
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: VIRGIN ISLANDS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	15	-	-	-	15
Professionals	50	-	-	9	59
Technicians	9	-	-	-	9
Protective Service Workers	-	-	-	-	-
Paraprofessionals	16	-	-	-	16
Administrative Support	14	-	-	-	14
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	-	-	-
Total	104	-	-	9	113

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: VIRGIN ISLANDS

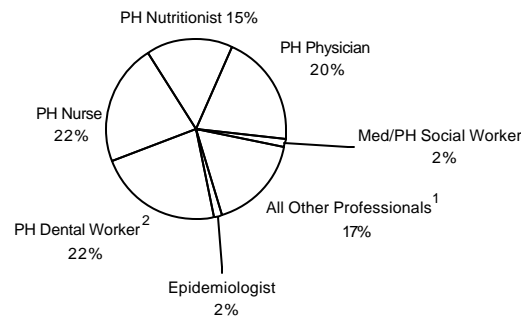
The distribution of workers by occupational category is typical of the range needed to provide public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: VIRGIN ISLANDS

The proportion of physicians is comparatively high and nearly the same as the proportion of nurses, apparently reflecting atypical policy or organizational decisions in this jurisdiction.



¹ Includes professionals in other titles and professionals unidentified by title
² Includes Dentists, Dental Hygienists and other dental workers
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: VIRGIN ISLANDS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	15	-	-	-	15
Professionals					
Administrative/Business Professional	1	-	-	-	1
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	1	-	-	-	1
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	1	-	-	-	1
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	1	-	-	-	1
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	13	-	-	-	13
PH Educator	-	-	-	-	-
PH Laboratory Professional	-	-	-	-	-
PH Nurse	13	-	-	-	13
PH Nutritionist	-	-	-	9	9
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	12	-	-	-	12
PH Program Specialist	2	-	-	-	2
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	1	-	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	5	-	-	-	5
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	3	-	-	-	3
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	6	-	-	-	6
Technician, Title Unspecified	-	-	-	-	-
Protective Service	-	-	-	-	-
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	16	-	-	-	16
Administrative Support					
Administrative Business Staff	2	-	-	-	2
Administrative Support Staff	12	-	-	-	12
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	-	-	-	-	-
Total	104	-	-	9	113

Virgin Islands

NOTES ON DATA:

State (territorial) data provided by occupation.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

DATA SOURCES:

U.S. Virgin Islands Department of Health, Community Health Services.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Delaware

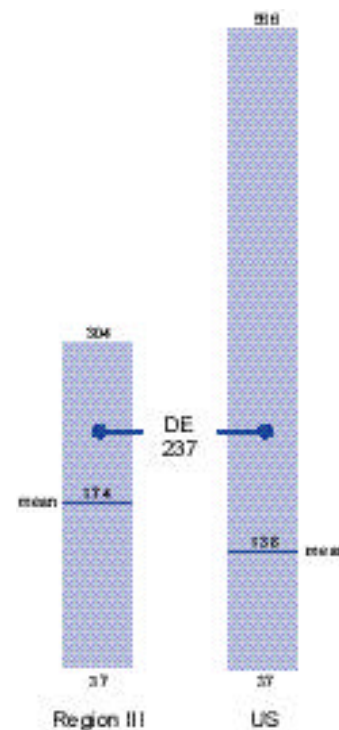
The Delaware Division of Public Health, the state health agency, is a component of a superagency called the Department of Health and Social Services. The interaction between state and local public health departments in Delaware may be characterized as centralized organizational control. Under this arrangement local health departments function directly under the state's authority and are operated by the state health agency or State Board of Health (CDC, 1991).

Delaware does not consider the three service units to be local health departments. The state health agency, however, has a branch office located in each county to provide public health services in that jurisdiction. These units are part of the state health agency and receive no local funding or input, but they are providing public health services in local jurisdictions (ibid).

About 80% of reported workers are at the state level; no details were reported about the small number of local workers.

Delaware is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

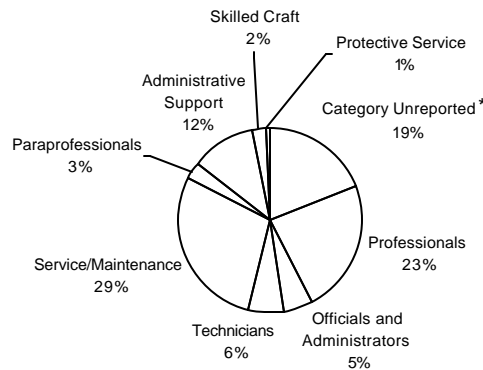
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: DELAWARE

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	87	-	-	-	87
Professionals	414	-	-	-	414
Technicians	108	-	-	-	108
Protective Service Workers	13	-	-	-	13
Paraprofessionals	52	-	-	-	52
Administrative Support	206	-	-	-	206
Skilled Craft Workers	41	-	-	-	41
Service/Maintenance	519	-	-	-	519
Category Unreported	-	343	2	-	345
Total	1,440	343	2	-	1,785

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: DELAWARE

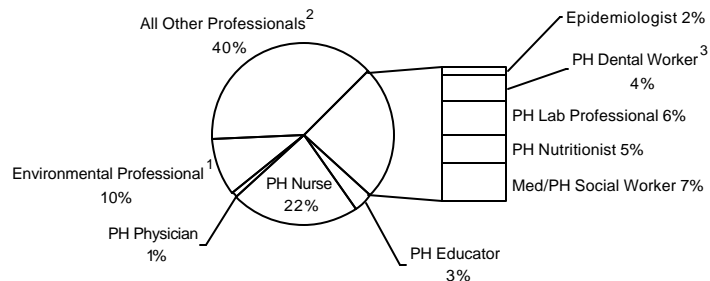
The high proportion of service/maintenance workers is due to the unusual responsibility the state public health agency has for state long-term care institutions.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: DELAWARE

The proportion of environmental professionals is comparatively low and may reflect the lack of data about all state agencies with public health functions. The proportion of workers in 'all other professions' makes specific observations difficult.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: DELAWARE

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	87	-	-	-	87
Professionals					
Administrative/Business Professional	17	-	-	-	17
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	3	-	-	-	3
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	1	-	-	-	1
Environmental Scientist & Specialist	40	-	-	-	40
Epidemiologist	7	-	-	-	7
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	1	-	-	-	1
Infection Control/Disease Investigator	1	-	-	-	1
Licensure/Inspection/Regulatory Specialist	17	-	-	-	17
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	27	-	-	-	27
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	1	-	-	-	1
PH Dental Worker	18	-	-	-	18
PH Educator	14	-	-	-	14
PH Laboratory Professional	25	-	-	-	25
PH Nurse	93	-	-	-	93
PH Nutritionist	20	-	-	-	20
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	5	-	-	-	5
PH Program Specialist	38	-	-	-	38
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	2	-	-	-	2
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	20	-	-	-	20
PH Professional, Title Unspecified	61	-	-	-	61
Technicians					
Computer Specialist	22	-	-	-	22
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	4	-	-	-	4
Health Information Systems/Data Analyst	3	-	-	-	3
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	18	-	-	-	18
Other Public Health Technician	52	-	-	-	52
Technician, Title Unspecified	9	-	-	-	9
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	13	-	-	-	13
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	52	-	-	-	52
Administrative Support					
Administrative Business Staff	8	-	-	-	8
Administrative Support Staff	95	-	-	-	95
Unspecified Clerical/Support	103	-	-	-	103
Skilled Craft					
Skilled Craft Worker	41	-	-	-	41
Service/Maintenance					
Food Services/Housekeeping	2	-	-	-	2
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	517	-	-	-	517
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	343	-	-	343
Total	1,440	343	2	-	1,785

Delaware

NOTES ON DATA:

State data provided by occupation and EEO category.

State laboratory workers were identified from APHL survey.

Local data identified as aggregate count from NACCHO survey.

Other data consists of March of Dimes survey.

DATA SOURCES:

Delaware Department of Health and Social Services, Division of Public Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

Association of Schools of Public Health, 1998 Annual Data Report.

March of Dimes, National Office.

Maryland

The Maryland Department of Health and Mental Hygiene (MDHMH), the state health agency, is a freestanding, independent agency. Interaction between state and local public health departments in Maryland may be characterized as shared organizational control. Under this arrangement local health departments are under the authority of the MDHMH, as well as the local government and board of health (CDC, 1991).

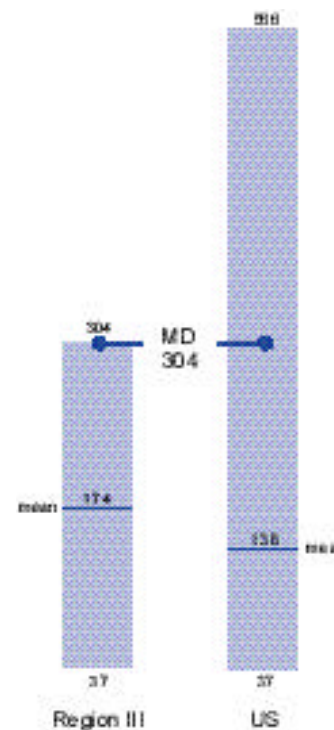
There are 24 local health jurisdictions in Maryland. Twenty-three of these are county health departments, and one is a city health department (Baltimore City) (ibid).

The majority of reported workers are at the state level and may reflect the wide scope of responsibility of the state health agency.

The large number of professionals at other than state and local levels reflects a large number of public health faculty and students. Some of these individuals may also be employed within the public health agencies.

Maryland is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

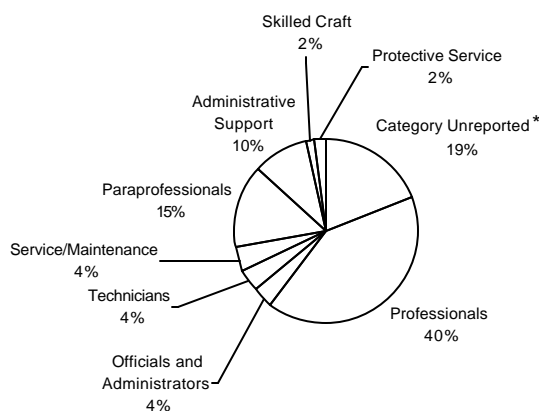
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MARYLAND

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	585	1	-	-	586
Professionals	4259	180	1969	34	6442
Technicians	585	28	-	-	613
Protective Service Workers	302	-	-	-	302
Paraprofessionals	2137	192	-	-	2329
Administrative Support	1526	9	-	-	1535
Skilled Craft Workers	259	-	-	-	259
Service/Maintenance	637	-	-	-	637
Category Unreported	545	2448	2	-	2995
Total	10,835	2,858	1,971	34	15,698

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MARYLAND

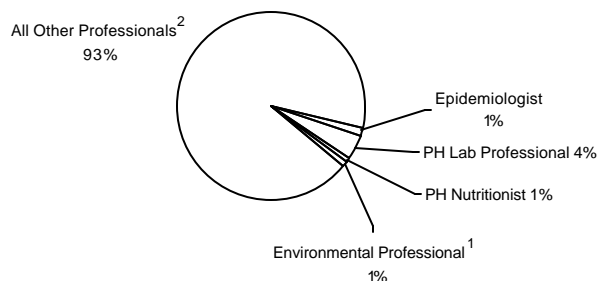
The distribution of workers across categories is typical. The professional category may be distorted by the large number of public health students reported, some of whom may also work in other positions.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MARYLAND

The information regarding laboratory and nutrition professionals is from national reports; no other details are available about the job titles of professionals in this state.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists

² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MARYLAND

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	585	1	-	-	586
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	20	-	20
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	84	-	84
Epidemiologist	-	-	87	-	87
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	232	-	52	-	284
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	34	34
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	31	-	31
PH Student	-	-	1188	-	1188
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	206	-	206
PH Professional, Title Unspecified	4027	180	301	-	4508
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	13	-	-	-	13
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	572	28	-	-	600
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	302	-	-	-	302
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	2137	192	-	-	2329
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	1526	9	-	-	1535
Skilled Craft					
Skilled Craft Worker	259	-	-	-	259
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	637	-	-	-	637
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	545	2448	-	-	2993
Total	10,835	2,858	1,971	34	15,698

Maryland

NOTES ON DATA:

State data provided as a summary by EEO category.

State laboratory workers were identified from APHL survey.

Local agencies' data provided as aggregate count and summary by EEO categories.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data includes March of Dimes staff and students and faculty of school of public health, listed by specialization.

DATA SOURCES:

Maryland Department of Health and Mental Hygiene.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

March of Dimes, National Office.

Pennsylvania

The state health agency is an independent, freestanding agency known as the Pennsylvania Department of Health. Interaction between state and local public health departments in Pennsylvania may be characterized as mixed centralized and decentralized organizational control. Public health services in Pennsylvania may be provided by the state health agency in some jurisdictions and by local government units, boards of health, or health departments in other jurisdictions (CDC, 1991).

There are 70 local public health agencies in Pennsylvania, that provide a wide range of services. Local health departments are semi-autonomous from the state and serve counties, cities, and city/county jurisdictions. There are eight of these units, one city-county, three city, and four county health departments.

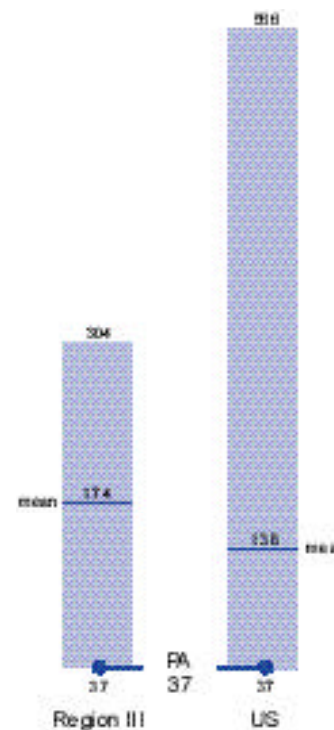
A unit of the State Health Center System serves each county in the state that is not served by a local health department. There are 62 service units in the State Health Center System, staffed and administered by state employees and divided into six administrative districts.

There are 240 boards of health and health officers from boroughs, townships and cities that are generally autonomous from the PDH in their operation and services and have a limited number of staff and services (ibid).

Nearly two-thirds of reported workers are at the local level.

Pennsylvania has the lowest ratio of public health workers to population, 37/100,000. This is in part due to the limited number of environmental, mental health or substance abuse workers reported for this study, but may also reflect policy priority decisions made at the state or local level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

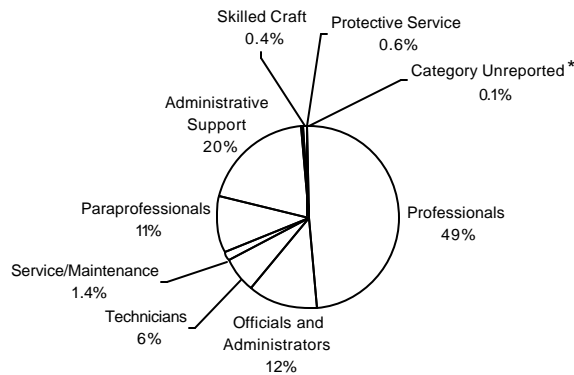
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: PENNSYLVANIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	196	352	-	-	548
Professionals	572	843	470	257	2142
Technicians	68	208	-	-	276
Protective Service Workers	-	25	-	-	25
Paraprofessionals	8	153	-	313	474
Administrative Support	363	550	-	-	913
Skilled Craft Workers	-	20	-	-	20
Service/Maintenance	2	62	-	-	64
Category Unreported	-	1	2	-	3
Total	1,209	2,214	472	570	4,465

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: PENNSYLVANIA

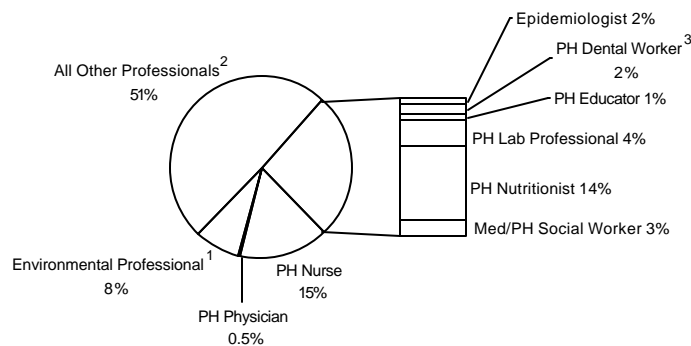
The proportion of workers not identifiable by category is comparatively low; the distribution of workers across categories is typical.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: PENNSYLVANIA

A large proportion of nutritionists identified from a national report could not be located in state or local agencies. The other professions category is large in part due to local professionals not specified by job title, or identified as public health program specialist without further detail.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: PENNSYLVANIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	196	352	-	-	548
Professionals					
Administrative/Business Professional	18	27	-	-	45
Attorney/Hearing Officer	11	9	-	-	20
Biostatistician	9	2	11	-	22
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	38	-	-	38
Environmental Scientist & Specialist	9	101	17	-	127
Epidemiologist	8	1	25	-	34
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	24	20	-	-	44
Infection Control/Disease Investigator	-	30	-	-	30
Licensure/Inspection/Regulatory Specialist	202	39	-	-	241
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	63	-	-	63
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	13	-	-	13
Occupation Safety & Health Specialist	14	1	-	-	15
PH Dental Worker	-	34	-	-	34
PH Educator	7	23	-	-	30
PH Laboratory Professional	41	30	25	-	96
PH Nurse	177	151	-	-	328
PH Nutritionist	4	29	-	257	290
PH Optometrist	-	-	-	-	-
PH Pharmacist	1	12	-	-	13
PH Physical Therapist	-	-	-	-	-
PH Physician	5	5	-	-	10
PH Program Specialist	31	111	5	-	147
PH Student	-	-	373	-	373
PH Veterinarian/Animal Control Specialist	-	1	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	1	-	-	1
Public Relations/Media Specialist	3	3	-	-	6
Substance Abuse & Behavioral Disorders Counselor	6	3	-	-	9
Other Public Health Professional	2	13	13	-	28
PH Professional, Title Unspecified	-	83	1	-	84
Technicians					
Computer Specialist	37	13	-	-	50
Environmental Engineering Technician	-	4	-	-	4
Environmental Science and Protection Technician	-	13	-	-	13
Health Information Systems/Data Analyst	13	14	-	-	27
Occupational Health and Safety Technician	-	2	-	-	2
PH Laboratory Specialist	2	3	-	-	5
Other Public Health Technician	16	107	-	-	123
Technician, Title Unspecified	-	52	-	-	52
Protective Service					
Investigations Specialist	-	24	-	-	24
Other or Unspecified Protective Service Worker	-	1	-	-	1
Paraprofessionals					
Community Outreach/Field Worker	-	31	-	-	31
Other or Unspecified Paraprofessional	8	122	-	313	443
Administrative Support					
Administrative Business Staff	4	61	-	-	65
Administrative Support Staff	359	431	-	-	790
Unspecified Clerical/Support	-	58	-	-	58
Skilled Craft					
Skilled Craft Worker	-	20	-	-	20
Service/Maintenance					
Food Services/Housekeeping	-	28	-	-	28
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	34	-	-	36
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1	-	-	1
Total	1,209	2,214	472	570	4,465

Pennsylvania

NOTES ON DATA:

State data provided by occupation.

Local data provided by occupation and summarized by OPM category.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Pennsylvania Department of Health.

Philadelphia Department of Health.

Allegheny County Health Department.

City of Allentown Bureau of Health.

York City Bureau of Health.

Bucks County Department of Health.

Erie County Health Department.

Chester County Health Department.

City of Bethlehem Health Bureau.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND)
1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on
Faculty, Fall 1997.

March of Dimes, National Office.

Virginia

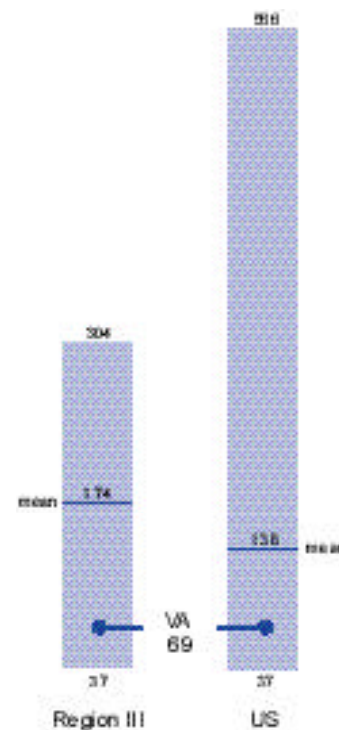
The state health agency is the Virginia Department of Health (VDH), a freestanding, independent agency. State and local public health agency interaction in Virginia may be characterized as centralized organizational control. Under this system, local health departments function directly under the state's authority and are operated by VDH or the State Board of Health (CDC, 1991).

Virginia has 119 local health departments, consisting of 13 city/county departments, 24 city health departments, and 82 county health departments. Within these local health departments are 56 satellite clinic offices, for a total of 175 clinic sites (ibid).

About three-fourths of the reported workers are state workers and one fourth local.

Virginia is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

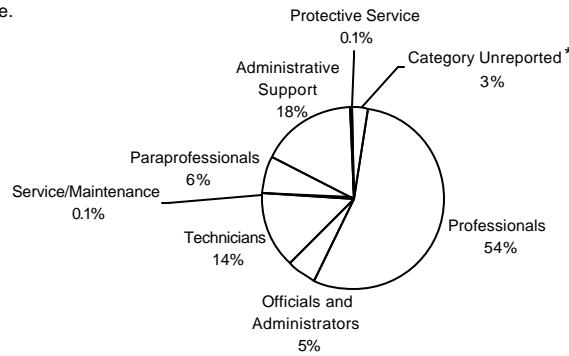
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: VIRGINIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	212	23	-	-	235
Professionals	1957	424	-	191	2572
Technicians	650	28	-	-	678
Protective Service Workers	-	7	-	-	7
Paraprofessionals	-	285	-	19	304
Administrative Support	699	139	-	-	838
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	6	-	-	6
Category Unreported	-	133	2	-	135
Total	3,518	1,045	2	210	4,775

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: VIRGINIA

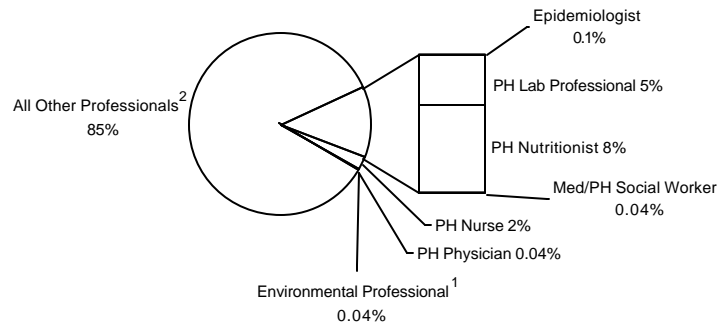
The proportion of administrative workers (both administrators and administrative support) is comparatively low in this state.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: VIRGINIA

The information regarding laboratory and nutrition professionals is from national reports. The comparatively low proportion of nurses, physicians and environmental professionals is likely due to the lack of detail available about the state workforce.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: VIRGINIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	212	23	-	-	235
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	1	-	-	1
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	1	-	-	1
Epidemiologist	-	3	-	-	3
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	13	-	-	13
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	1	-	-	1
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	116	-	-	-	116
PH Nurse	-	61	-	-	61
PH Nutritionist	-	6	-	191	197
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	1	-	-	1
PH Program Specialist	-	2	-	-	2
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	20	-	-	20
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	1841	315	-	-	2156
Technicians					
Computer Specialist	-	4	-	-	4
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	650	24	-	-	674
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	7	-	-	7
Paraprofessionals					
Community Outreach/Field Worker	-	5	-	-	5
Other or Unspecified Paraprofessional	-	280	-	19	299
Administrative Support					
Administrative Business Staff	-	5	-	-	5
Administrative Support Staff	-	18	-	-	18
Unspecified Clerical/Support	699	116	-	-	815
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	6	-	-	6
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	133	-	-	133
Total	3,518	1,045	2	210	4,775

Virginia

NOTES ON DATA:

State data provided by OPM category.

Local data provided by occupation, EEO category, and aggregate count per agency.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes personnel.

DATA SOURCES:

Virginia Department of Health.

Fairfax County Health Department.

Arlington Health District.

Richmond City Department of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

West Virginia

The Bureau of Public Health, the state health agency, is a component of the superagency known as the Department of Health and Human Resources. The interaction between state and local public health departments in West Virginia may be characterized as shared organizational control. Under this arrangement local health departments are under the authority of the state health agency as well as the local government and board of health (CDC, 1991).

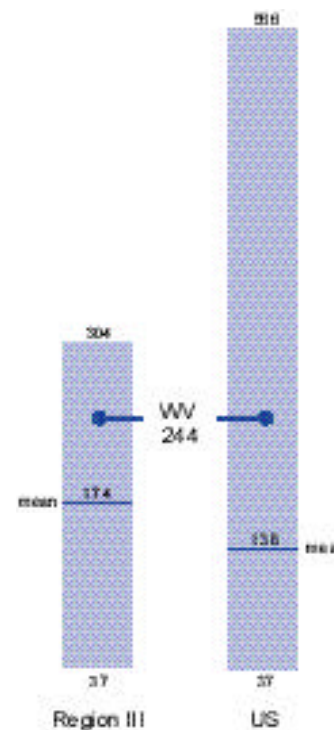
West Virginia Local Boards of Health are appointed by County Commissions and are responsible for directing, supervising and carrying out matters relating to the public health of their respective counties or municipalities. Each board of health must submit an annual plan of operation to the Commissioner of the Bureau for Public Health, under the West Virginia Department of Health and Human Resources (DHHR). Distribution of state funds is contingent upon the Commissioner's approval of this Plan. The Commissioner is the state health officer and is appointed by the secretary of DHHR (ibid).

West Virginia has 54 local health department sites serving 55 counties. There are 49 administrative local boards of health. In one instance, six counties have combined to form one board of health with sites in each of the six counties for service delivery; in another instance, 2 counties have combined to form one board of health with one delivery site. Thus, the 49 administrative sites with 54 delivery sites.

Approximately one third of the workforce is local and the remainder primarily state.

West Virginia is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

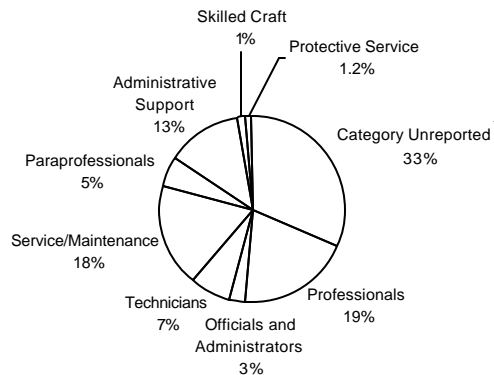
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: WEST VIRGINIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	129	-	-	-	129
Professionals	753	-	-	71	824
Technicians	304	-	-	-	304
Protective Service Workers	51	-	-	-	51
Paraprofessionals	208	-	-	28	236
Administrative Support	586	-	-	-	586
Skilled Craft Workers	64	-	-	-	64
Service/Maintenance	807	-	-	-	807
Category Unreported	-	1408	2	-	1410
Total	2,902	1,408	2	99	4,411

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: WEST VIRGINIA

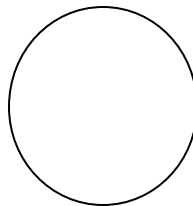
No local health department workers could be identified by category, making observations about this workforce difficult.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: WEST VIRGINIA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: WEST VIRGINIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	129	-	-	-	129
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	30	-	-	-	30
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	71	71
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	723	-	-	-	723
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	4	-	-	-	4
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	300	-	-	-	300
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	51	-	-	-	51
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	208	-	-	28	236
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	586	-	-	-	586
Skilled Craft					
Skilled Craft Worker	64	-	-	-	64
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	807	-	-	-	807
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1408	-	-	1408
Total	2,902	1,408	2	99	4,411

West Virginia

NOTES ON DATA:

State data provided by EEO categories.

State laboratory workers were identified from APHL survey.

Local data available only as aggregate count in NACCHO survey.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

West Virginia Department of Health and Human Resources, Bureau for Public Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

March of Dimes, National Office.

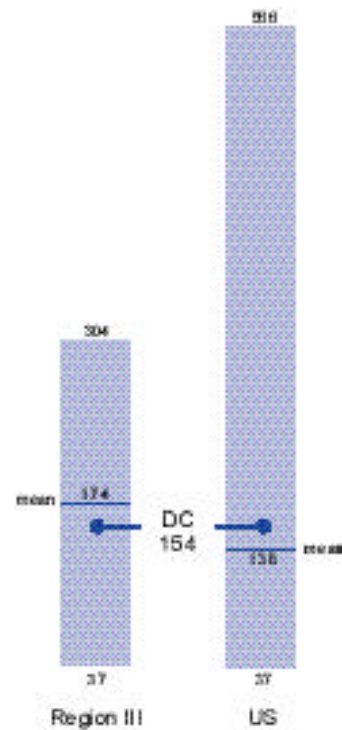
District of Columbia

The District of Columbia Department of Health monitors public and private health care services in the District, sets policy and standards that contribute to the delivery of quality health care services, regulates and licenses health professionals and care affiliates, and administers Medicaid in addition to the usual range of public health and environment programs.

The proportion of workers in occupational categories is typical. Lack of detail makes it impossible to determine the degree to which environmental, mental health and substance abuse staff are included.

The District of Columbia is similar to the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region III: DE, MD, PA, VA, WV, and DC
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

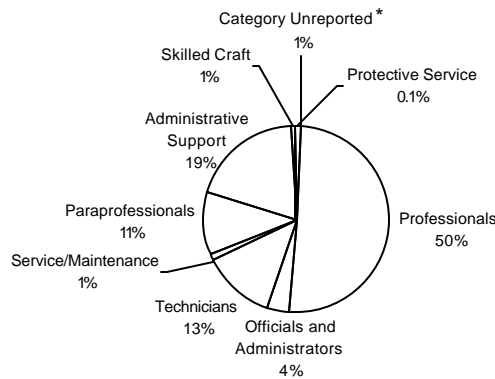
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: DISTRICT OF COLUMBIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	-	32	-	-	32
Professionals	-	352	-	42	394
Technicians	-	101	-	-	101
Protective Service Workers	-	1	-	-	1
Paraprofessionals	-	91	-	1	92
Administrative Support	-	155	-	-	155
Skilled Craft Workers	-	6	-	-	6
Service/Maintenance	-	8	-	-	8
Category Unreported	-	-	12	-	12
Total	-	746	12	43	801

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: DISTRICT OF COLUMBIA

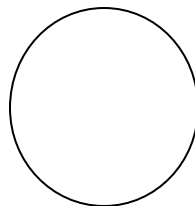
The proportion of workers in unreported categories is comparatively low; the distribution across categories is typical.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: DISTRICT OF COLUMBIA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: DISTRICT OF COLUMBIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	32	-	-	32
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	-	-	-	-	-
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	42	42
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	352	-	-	352
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	101	-	-	101
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	1	-	-	1
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	91	-	1	92
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	155	-	-	155
Skilled Craft					
Skilled Craft Worker	-	6	-	-	6
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	8	-	-	8
Category Unreported					
Programs	-	-	12	-	12
Unidentifiable	-	-	-	-	-
Total	-	746	12	43	801

District of Columbia

NOTES ON DATA:

DC data provided as an EEO summary and classified as local level.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

District of Columbia Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Alabama

The Alabama Department of Public Health, the state health agency, is a free-standing, independent agency. The interaction between state and local public health departments in Alabama may be characterized as shared organizational control. Under this arrangement local health departments are under the authority of the state as well as the local government and board of health (CDC, 1991).

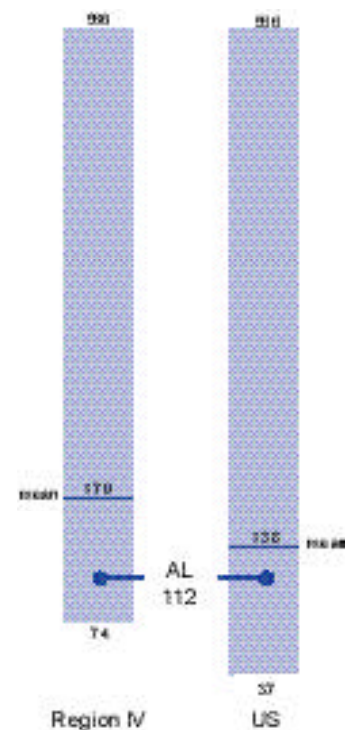
The 67 county health departments in Alabama function as the local public health agencies in the state. They are staffed by state merit system employees, with exception of Mobile and Jefferson Counties, which have local merit systems (ibid).

All local public health workers are state employees and reported at the state level.

The large number of professionals reported as “other” include the faculty and students in school of public health, some of whom may also be workers in the public health agency.

Alabama is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

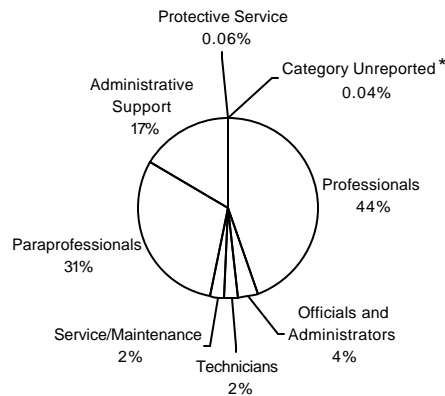
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: ALABAMA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	189	-	-	-	189
Professionals	1633	-	482	57	2172
Technicians	113	-	-	-	113
Protective Service Workers	3	-	-	-	3
Paraprofessionals	1493	-	-	-	1493
Administrative Support	808	-	-	-	808
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	100	-	-	-	100
Category Unreported	-	-	2	-	2
Total	4,339	-	484	57	4,880

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: ALABAMA

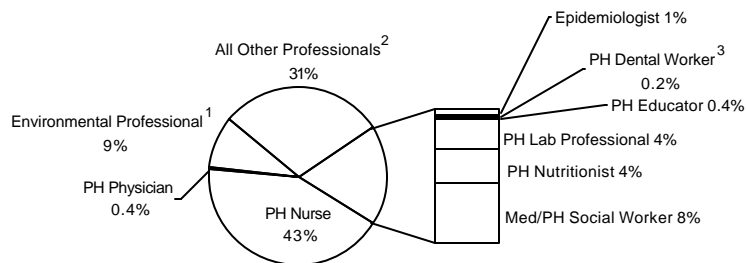
This state reports a higher proportion of paraprofessionals than many others, reflecting decisions about the structure and staffing of public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: ALABAMA

The large proportion of nurses may represent a higher than typical level of delivery of personal health services. The other professionals includes a large number of public health students.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: ALABAMA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	189	-	-	-	189
Professionals					
Administrative/Business Professional	23	-	-	-	23
Attorney/Hearing Officer	4	-	-	-	4
Biostatistician	1	-	8	-	9
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	4	-	-	-	4
Environmental Scientist & Specialist	193	-	7	-	200
Epidemiologist	10	-	13	-	23
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	13	-	-	-	13
Infection Control/Disease Investigator	38	-	-	-	38
Licensure/Inspection/Regulatory Specialist	69	-	-	-	69
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	170	-	-	-	170
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	4	-	-	-	4
PH Educator	9	-	-	-	9
PH Laboratory Professional	86	-	-	-	86
PH Nurse	918	-	-	-	918
PH Nutritionist	39	-	-	57	96
PH Optometrist	-	-	-	-	-
PH Pharmacist	3	-	-	-	3
PH Physical Therapist	10	-	-	-	10
PH Physician	8	-	-	-	8
PH Program Specialist	11	-	7	-	18
PH Student	6	-	417	-	423
PH Veterinarian/Animal Control Specialist	1	-	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	6	-	-	-	6
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	7	-	10	-	17
PH Professional, Title Unspecified	-	-	20	-	20
Technicians					
Computer Specialist	44	-	-	-	44
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	22	-	-	-	22
Other Public Health Technician	47	-	-	-	47
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	3	-	-	-	3
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	1493	-	-	-	1493
Administrative Support					
Administrative Business Staff	44	-	-	-	44
Administrative Support Staff	764	-	-	-	764
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	30	-	-	-	30
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	70	-	-	-	70
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	4,339	-	484	57	4,880

Alabama

NOTES ON DATA:

State data provided by occupation.

No data available on local workers outside the official agency.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Alabama Department of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Florida

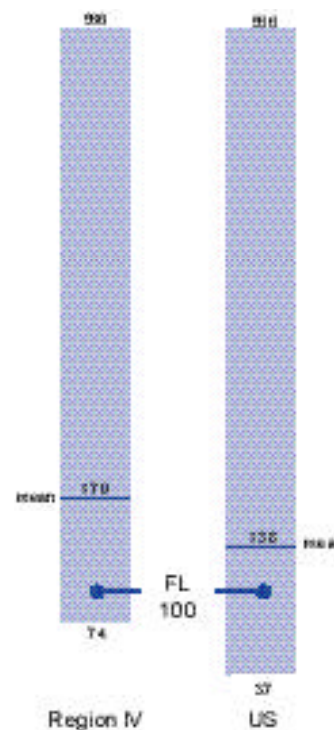
The Department of Health (DOH) in Florida is responsible for providing state-supported public health services. The interaction between state-local public health departments in Florida may be characterized as joint organizational control. Under this arrangement, local health departments function directly under the state's authority and are operated jointly by the county governments and the DOH. The DOH provides policy direction, while the county health departments adjust services to meet local needs. Personnel are state employees; facilities and equipment are county-owned (CDC, 1991).

There are 67 county health departments in Florida (ibid).

Almost all reported public health workers in Florida are employed at the state level.

Florida is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

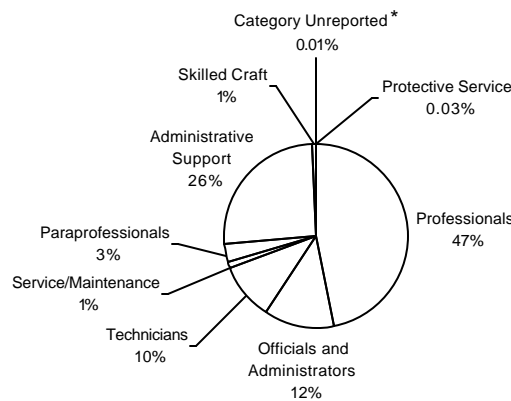
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: FLORIDA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	1819	-	-	-	1819
Professionals	6130	-	690	257	7077
Technicians	1469	-	-	-	1469
Protective Service Workers	5	-	-	-	5
Paraprofessionals	437	-	-	76	513
Administrative Support	3911	-	-	-	3911
Skilled Craft Workers	89	-	-	-	89
Service/Maintenance	176	-	-	-	176
Category Unreported	-	-	2	-	2
Total	14,036	-	692	333	15,061

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: FLORIDA

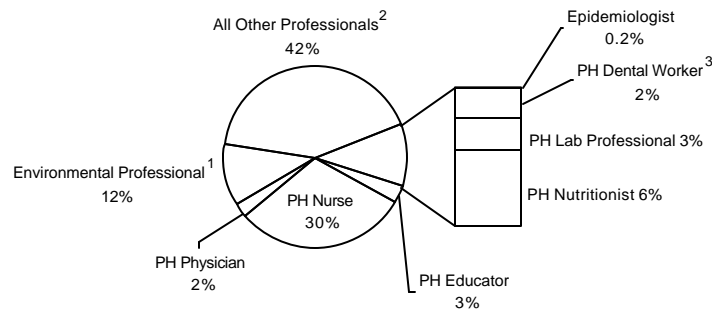
The data allowed categorization of almost all workers. The proportion of workers in the professional category is typical, though data do not include many mental health or substance abuse staff.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: FLORIDA

Over half of the nutritionists reported in Florida could not be assigned to any agency. The proportion of nurses reported is high, probably reflecting policy commitments on access to personal care services. This state makes extensive use of the job title 'public health program specialist', thus other health professional categories are probably undercounted.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: FLORIDA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	1819	-	-	-	1819
Professionals					
Administrative/Business Professional	713	-	-	-	713
Attorney/Hearing Officer	27	-	-	-	27
Biostatistician	8	-	-	-	8
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	69	-	-	-	69
Environmental Scientist & Specialist	731	-	14	-	745
Epidemiologist	2	-	11	-	13
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	102	-	-	-	102
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	160	-	-	-	160
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	4	-	-	-	4
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	161	-	-	-	161
PH Educator	220	-	-	-	220
PH Laboratory Professional	180	-	-	-	180
PH Nurse	2104	-	-	-	2104
PH Nutritionist	171	-	-	257	428
PH Optometrist	-	-	-	-	-
PH Pharmacist	32	-	-	-	32
PH Physical Therapist	1	-	-	-	1
PH Physician	170	-	-	-	170
PH Program Specialist	684	-	8	-	692
PH Student	-	-	635	-	635
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	3	-	-	-	3
Public Relations/Media Specialist	12	-	-	-	12
Substance Abuse & Behavioral Disorders Counselor	2	-	-	-	2
Other Public Health Professional	574	-	10	-	584
PH Professional, Title Unspecified	-	-	12	-	12
Technicians					
Computer Specialist	447	-	-	-	447
Environmental Engineering Technician	14	-	-	-	14
Environmental Science and Protection Technician	4	-	-	-	4
Health Information Systems/Data Analyst	56	-	-	-	56
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	159	-	-	-	159
Other Public Health Technician	789	-	-	-	789
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	5	-	-	-	5
Paraprofessionals					
Community Outreach/Field Worker	174	-	-	-	174
Other or Unspecified Paraprofessional	263	-	-	76	339
Administrative Support					
Administrative Business Staff	343	-	-	-	343
Administrative Support Staff	3568	-	-	-	3568
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	89	-	-	-	89
Service/Maintenance					
Food Services/Housekeeping	86	-	-	-	86
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	90	-	-	-	90
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	14,036	-	692	333	15,061

Florida

NOTES ON DATA:

State data provided by occupation.

No data available on local workers outside the official agency.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Florida Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Georgia

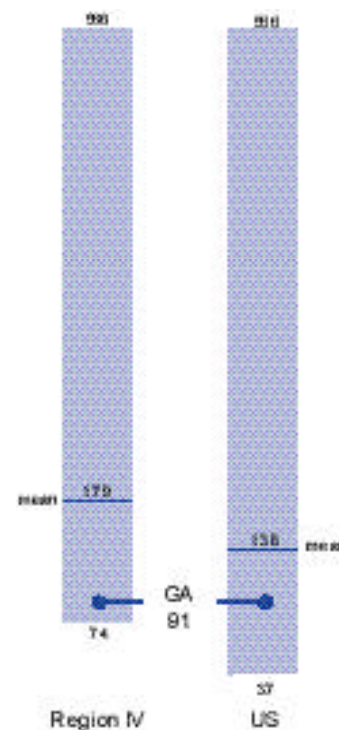
The state health agency in Georgia is called the Division of Public Health (DPH), which is a component of a superagency called the Georgia Department of Human Resources. Interaction between DPH and local health departments in Georgia may be characterized as shared organizational control. Under this arrangement, local health departments are under the authority of the board of health and certain indirect authority from the state (CDC, 1991).

Each of the 159 counties in Georgia has a county health department which functions as the local public health agency. The health departments are organized around 19 health districts (ibid).

The majority of workers are reported at the local level than at the state level, though they are state employees. The state total includes a large number of public health students, some of who may also be working in a public health setting and thus counted twice.

Georgia is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

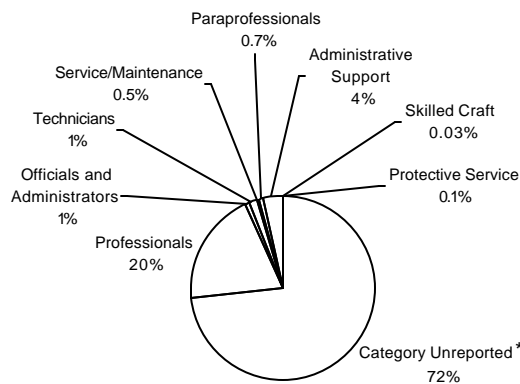
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: GEORGIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	51	-	-	-	51
Professionals	643	-	673	121	1437
Technicians	88	-	-	-	88
Protective Service Workers	4	-	-	-	4
Paraprofessionals	47	-	-	-	47
Administrative Support	251	-	-	-	251
Skilled Craft Workers	2	-	-	-	2
Service/Maintenance	38	-	-	-	38
Category Unreported	-	5182	4	-	5186
Total	1,124	5,182	677	121	7,104

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: GEORGIA

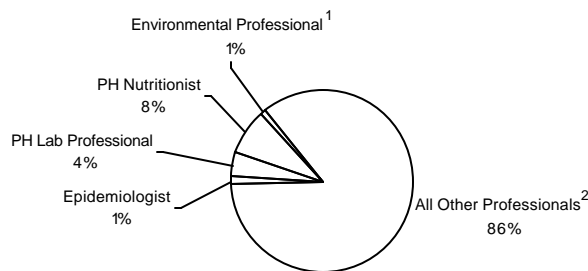
The high proportion of workers in the unreported category is due to the lack of detail available regarding local health department workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: GEORGIA

The information regarding laboratory and nutrition professionals is from national reports. The data available leave over 80% of professionals uncategorized, limiting the utility of more detailed observations. This state has a large number of public health students who may also hold jobs and thus be included as workers.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: GEORGIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	51	-	-	-	51
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	13	-	13
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	12	-	12
Epidemiologist	-	-	18	-	18
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	62	-	-	-	62
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	121	121
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	1	-	1
PH Student	-	-	580	-	580
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	13	-	13
PH Professional, Title Unspecified	581	-	36	-	617
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	88	-	-	-	88
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	4	-	-	-	4
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	47	-	-	-	47
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	251	-	-	-	251
Skilled Craft					
Skilled Craft Worker	2	-	-	-	2
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	38	-	-	-	38
Category Unreported					
Programs	-	-	4	-	4
Unidentifiable	-	5182	-	-	5182
Total	1,124	5,182	677	121	7,104

Georgia

NOTES ON DATA:

State data summarized by EEO categories.

State laboratory workers were identified from APHL survey.

Local data reported as aggregate count only.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Georgia Department of Human Resources, Division of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

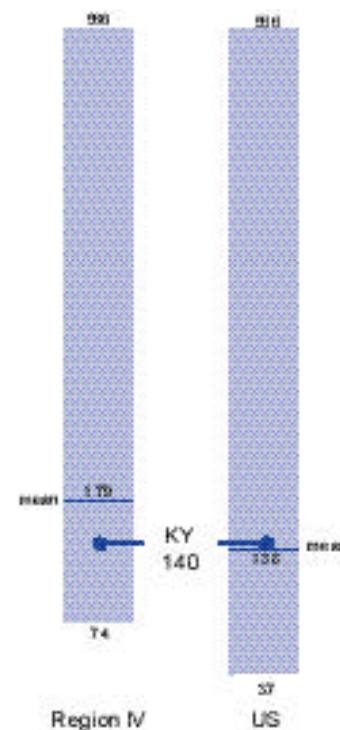
Kentucky

The Department of Health Services is the state health agency for Kentucky. It is a component of a superagency called the Cabinet for Human Resources. The interaction between state and local public health departments in Kentucky may be characterized as shared organizational control. Under this arrangement local health departments are under the authority of the state health agency, as well as the local government and board of health (CDC, 1991).

There are 52 local health departments in Kentucky. Seventeen of these are district (multicounty health departments), 33 are single-county health departments, and 2 are city-county health departments. The districts contain five health departments that were city-county units before their merger into the districts. The two city-county health departments consist of Jefferson County which has a city of the 1st class (Louisville) and Fayette County/Lexington City, which has an Urban County Form of government (ibid).

Kentucky is in the middle third of states in ratio of public health workers to population, with over four-fifths of workers at the local level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

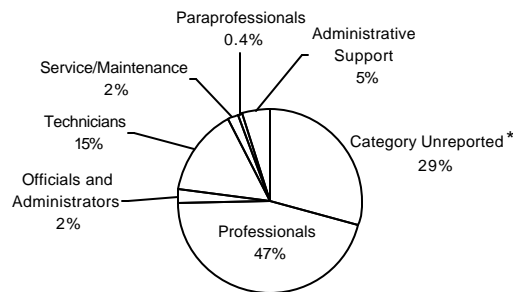
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: KENTUCKY

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	78	60	-	-	138
Professionals	623	1771	-	141	2535
Technicians	97	752	-	-	849
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	23	-	1	24
Administrative Support	100	178	-	-	278
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	3	114	-	-	117
Category Unreported	-	1619	2	-	1621
Total	901	4,517	2	142	5,562

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: KENTUCKY

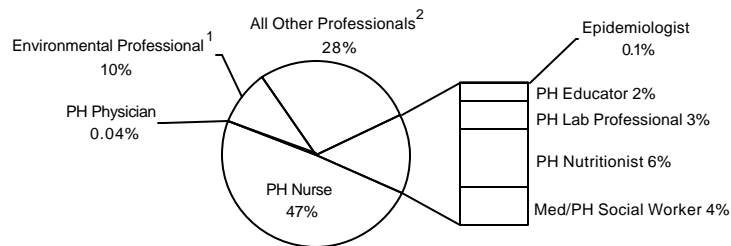
The large number of workers unreported by category reflects a lack of information about more than one-quarter of local health department workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: KENTUCKY

The proportion of professionals identified as nurses is comparatively high.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: KENTUCKY

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	78	60	-	-	138
Professionals					
Administrative/Business Professional	17	78	-	-	95
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	4	-	-	-	4
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	52	-	-	-	52
Environmental Scientist & Specialist	193	-	-	-	193
Epidemiologist	3	-	-	-	3
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	21	-	-	-	21
Infection Control/Disease Investigator	6	-	-	-	6
Licensure/Inspection/Regulatory Specialist	197	-	-	-	197
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	97	-	-	97
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	3	-	-	-	3
PH Dental Worker	-	-	-	-	-
PH Educator	-	49	-	-	49
PH Laboratory Professional	69	-	-	-	69
PH Nurse	19	1210	-	-	1229
PH Nutritionist	1	-	-	141	142
PH Optometrist	-	-	-	-	-
PH Pharmacist	6	-	-	-	6
PH Physical Therapist	-	-	-	-	-
PH Physician	1	-	-	-	1
PH Program Specialist	29	60	-	-	89
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	1	-	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	1	-	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	277	-	-	277
Technicians					
Computer Specialist	13	-	-	-	13
Environmental Engineering Technician	64	-	-	-	64
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	4	-	-	-	4
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	15	12	-	-	27
Other Public Health Technician	1	740	-	-	741
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	23	-	1	24
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	100	-	-	-	100
Unspecified Clerical/Support	-	178	-	-	178
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	3	114	-	-	117
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1619	-	-	1619
Total	901	4,517	2	142	5,562

Kentucky

NOTES ON DATA:

State data provided by occupation.

Local data is a mix of aggregate count per agency and count by occupational categories.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Kentucky Department for Public Health.

Kentucky Department for Public Health, Division of Local Health Operations.

Kentucky Natural Resources and Environmental Protection Cabinet.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

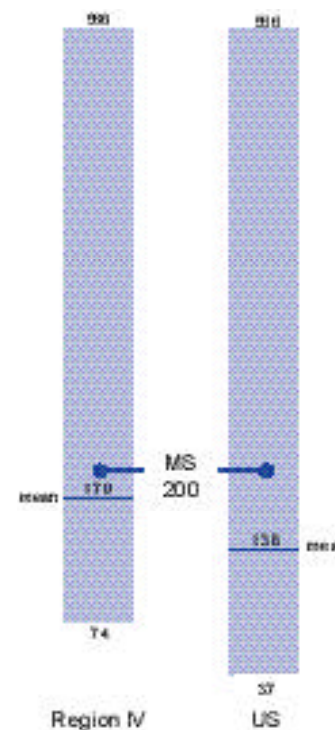
Mississippi

The Mississippi State Department of Health (MSDH) is a free-standing, independent agency. Interaction between state and local public health departments in Mississippi may be characterized as centralized organizational control. Under this arrangement, local health departments function directly under the state's authority (CDC, 1991).

Mississippi has 81 local health departments (LHDs), consisting of 80 county health departments and 1 multi-county health department. In some counties are full-time branches of the main health department. In addition to the county health departments and full-time branches, MSDH operates home health programs through a network of 15 regional offices. The entire health department system operates under the State Board of Health and MSDH through the nine district offices to LHDs and full-time branches (ibid).

Mississippi is in the upper third of states in ratio of public health workers to population, with approximately two thirds reported as working for the state health department.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

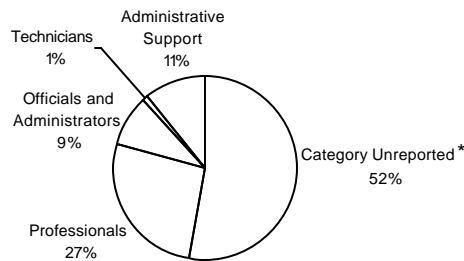
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MISSISSIPPI

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	500	-	-	-	500
Professionals	1445	-	-	40	1485
Technicians	55	-	-	-	55
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	-	-
Administrative Support	600	-	-	-	600
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	1088	1812	2	-	2902
Total	3,688	1,812	2	40	5,542

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MISSISSIPPI

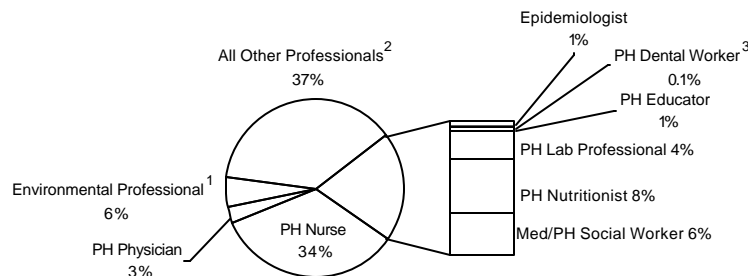
The large number of workers in the unreported category reflects state workers identified only by the program area in which they work, and the lack of specific information on local workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MISSISSIPPI

The reported proportion of nurses is high, and may reflect the decision by the state to operate home health programs. Many professionals cannot be identified due to reporting without a specific job title.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MISSISSIPPI

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	500	-	-	-	500
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	5	-	-	-	5
Biostatistician	4	-	-	-	4
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	10	-	-	-	10
Environmental Scientist & Specialist	75	-	-	-	75
Epidemiologist	15	-	-	-	15
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	5	-	-	-	5
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	90	-	-	-	90
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	2	-	-	-	2
PH Educator	9	-	-	-	9
PH Laboratory Professional	59	-	-	-	59
PH Nurse	500	-	-	-	500
PH Nutritionist	75	-	-	40	115
PH Optometrist	-	-	-	-	-
PH Pharmacist	6	-	-	-	6
PH Physical Therapist	-	-	-	-	-
PH Physician	40	-	-	-	40
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	5	-	-	-	5
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	545	-	-	-	545
Technicians					
Computer Specialist	30	-	-	-	30
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	25	-	-	-	25
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	600	-	-	-	600
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	1088	-	2	-	1090
Unidentifiable	-	1812	-	-	1812
Total	3,688	1,812	2	40	5,542

Mississippi

NOTES ON DATA:

State agency data summarized by occupational categories and OPM category.

State laboratory workers were further identified from APHL survey.

Local data available only as aggregate count from NACCHO survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consist of March of Dimes staff.

DATA SOURCES:

Mississippi State Department of Health.

Tulane University School of Public Health, South Central Partnership for Workforce Development Datafile.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

North Carolina

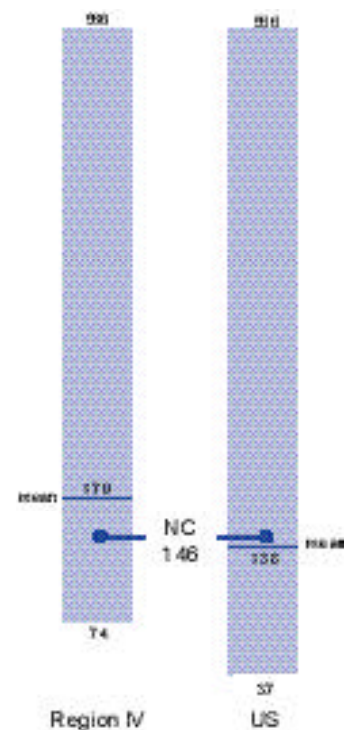
The Department of Health (DHHS) is organized into 23 major divisions, one of which is the Division of Public Health. The Division of Public Health and the Office of the State Health Director are considered the state health agency. Interaction between state and local public health departments in North Carolina may be characterized as shared organizational control. Under this arrangement, local health departments are under the authority of the state health agency as well as the local government and board of health (CDC, 1991).

North Carolina has 86 local health departments, consisting of 79 county and 7 multi-county (covering 21 counties) health departments, which provide public health services to all 100 counties (ibid).

The large number of professionals working in other than state and local health departments reflects a very large number of public health students.

North Carolina is in the middle third of states in ratio of public health workers to population, with a large majority at the local level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

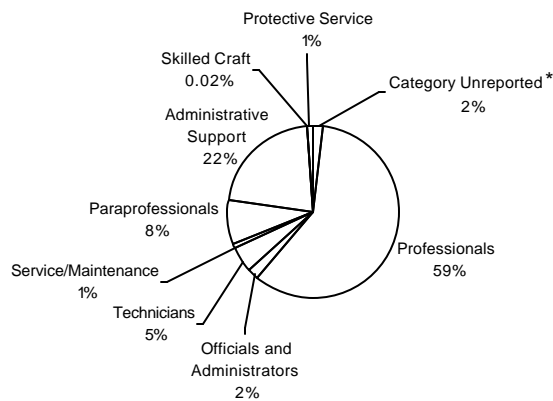
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NORTH CAROLINA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	159	85	-	-	244
Professionals	782	4516	1229	20	6547
Technicians	89	438	-	-	527
Protective Service Workers	-	113	-	-	113
Paraprofessionals	20	928	-	-	948
Administrative Support	325	2110	-	-	2435
Skilled Craft Workers	2	-	-	-	2
Service/Maintenance	-	92	-	-	92
Category Unreported	-	252	2	-	254
Total	1,377	8,534	1,231	20	11,162

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NORTH CAROLINA

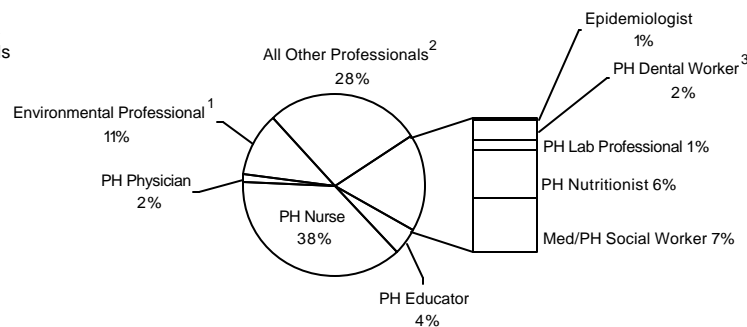
This state has a comparatively low proportion of staff uncategorized. The proportion of professionals is high; data include at least some workers in environmental health and mental health and public health students some of whom may be working in public health.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NORTH CAROLINA

The proportion of reported nurses is high and may be due to the fact that this state has a small proportion of professionals in non-specific job titles.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NORTH CAROLINA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	159	85	-	-	244
Professionals					
Administrative/Business Professional	17	-	-	-	17
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	26	-	20	-	46
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	2	718	29	-	749
Epidemiologist	9	-	25	-	34
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	22	-	-	-	22
Infection Control/Disease Investigator	43	40	-	-	83
Licensure/Inspection/Regulatory Specialist	7	-	-	-	7
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	39	406	-	-	445
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	88	-	-	88
Occupation Safety & Health Specialist	10	93	-	-	103
PH Dental Worker	65	91	-	-	156
PH Educator	42	248	-	-	290
PH Laboratory Professional	91	-	-	-	91
PH Nurse	64	2376	-	-	2440
PH Nutritionist	41	313	15	20	389
PH Optometrist	-	-	-	-	-
PH Pharmacist	1	24	-	-	25
PH Physical Therapist	24	-	-	-	24
PH Physician	28	77	-	-	105
PH Program Specialist	102	-	11	-	113
PH Student	-	-	1093	-	1093
PH Veterinarian/Animal Control Specialist	2	-	-	-	2
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	36	-	-	-	36
Public Relations/Media Specialist	4	-	-	-	4
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	107	42	20	-	169
PH Professional, Title Unspecified	-	-	16	-	16
Technicians					
Computer Specialist	35	-	-	-	35
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	2	-	-	-	2
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	38	222	-	-	260
Other Public Health Technician	14	216	-	-	230
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	113	-	-	113
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	20	928	-	-	948
Administrative Support					
Administrative Business Staff	15	-	-	-	15
Administrative Support Staff	310	2110	-	-	2420
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	2	-	-	-	2
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	92	-	-	92
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	252	-	-	252
Total	1,377	8,534	1,231	20	11,162

North Carolina

NOTES ON DATA:

State and local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey.

Other data include March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

North Carolina Division of Public Health.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

South Carolina

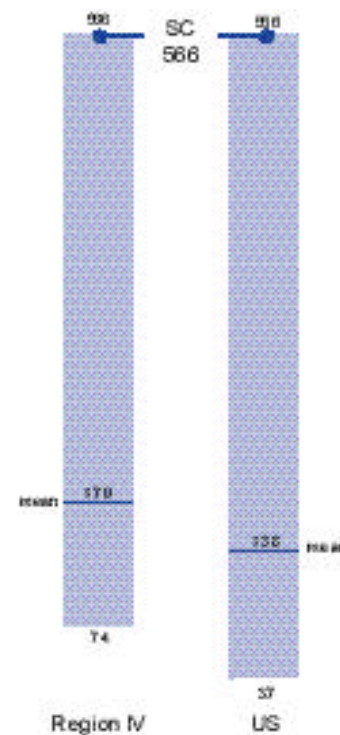
The South Carolina Department of Health and Environmental Control (SCDHEC) is the state health and environmental agency. DHEC is governed by the Board of Health and Environmental Control, which is appointed by the Governor. DHEC provides health and environmental services through a District organizational system with 2-6 counties comprising a district. There is a main health department in each of the 46 counties with some counties having additional satellite sites. Home Health Services are provided through SCDHEC (SCDHEC Office of Communications 10/24/00).

South Carolina is a rural state in which state agencies operate under a decentralized service model. Public health workforce numbers in South Carolina reflect staff delivering and supporting community-based public health services in all state agencies. These include drug, alcohol and substance abuse services, disability and special needs services, health and human services, mental health services, and social services.

A large proportion of both professionals and paraprofessionals are a part of the state-sponsored home health agency.

South Carolina has the highest ratio of public health workers to population, probably related to the policy decision to provide home health services.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

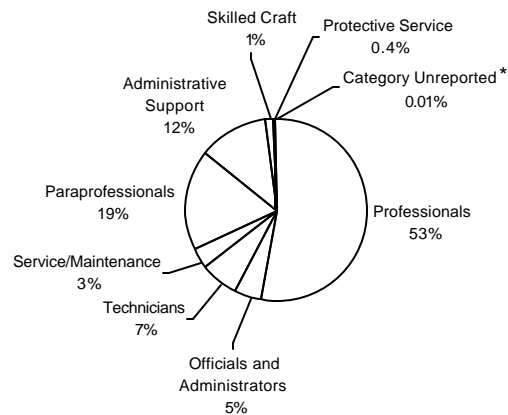
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: SOUTH CAROLINA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	1061	-	-	-	1061
Professionals	9408	-	698	1380	11486
Technicians	1483	-	-	-	1483
Protective Service Workers	85	-	-	-	85
Paraprofessionals	4054	-	-	51	4105
Administrative Support	2698	-	-	-	2698
Skilled Craft Workers	319	-	-	-	319
Service/Maintenance	751	-	-	-	751
Category Unreported	-	-	2	-	2
Total	19,859	-	700	1,431	21,990

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: SOUTH CAROLINA

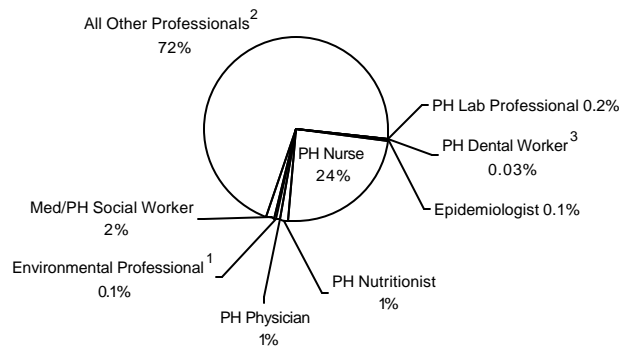
The proportion of workers categorized as professionals is typical of the expertise needed to deliver public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: SOUTH CAROLINA

The proportion of environmental professionals is comparatively low, especially given the responsibilities of the state health agency. The environmental health workers may be employed in job titles that are categorized as other public health professionals.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: SOUTH CAROLINA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	1061	-	-	-	1061
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	5	-	5
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	15	-	15
Epidemiologist	-	-	7	-	7
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	190	-	-	-	190
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	3	3
PH Educator	-	-	-	-	-
PH Laboratory Professional	23	-	2	-	25
PH Nurse	1704	-	-	1091	2795
PH Nutritionist	-	-	2	144	146
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	48	48
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	77	77
PH Program Specialist	-	-	-	-	-
PH Student	-	-	625	-	625
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	17	17
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	7491	-	7	-	7498
PH Professional, Title Unspecified	-	-	35	-	35
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	1483	-	-	-	1483
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	85	-	-	-	85
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	4054	-	-	51	4105
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	2698	-	-	-	2698
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	319	-	-	-	319
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	751	-	-	-	751
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	19,859	-	700	1,431	21,990

South Carolina

NOTES ON DATA:

State data mix of occupational listing and summary by EEO categories.

State laboratory workers were further identified from APHL survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

South Carolina Department of Health and Environmental Control.

South Carolina Budget and Control Board, Division of Research and Statistical Services.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

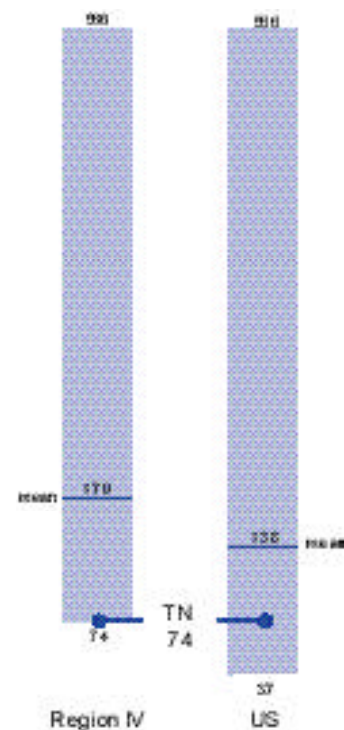
Tennessee

The state health agency is the Tennessee Department of Health (TDH). It is a free-standing, independent agency that consists of five bureaus. The interaction of state and local public health departments in Tennessee may be characterized as a mixed centralized and decentralized organizational control. Under this arrangement, local health services may be provided by TDH in some jurisdictions or by LHDs in other jurisdictions (CDC, 1991).

Tennessee has 94 county health departments and one city-county health department. Tremendous variation exists in the size of these departments and the level of services provided (ibid).

Tennessee is in the lower third of states in ratio of public health workers to population, with nearly two thirds working at the state level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IV: AL, FL, GA, KY, MS, NC, SC, and TN
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

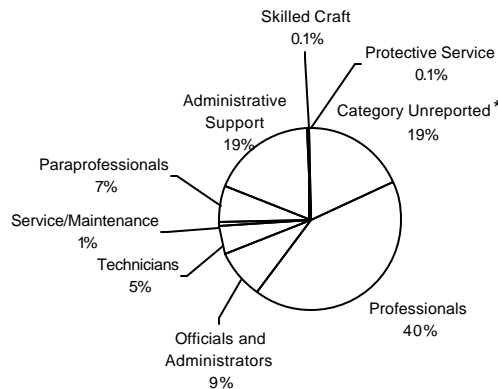
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: TENNESSEE

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	319	39	-	-	358
Professionals	1327	241	-	75	1643
Technicians	78	111	-	-	189
Protective Service Workers	-	4	-	-	4
Paraprofessionals	198	-	-	74	272
Administrative Support	588	177	-	-	765
Skilled Craft Workers	-	6	-	-	6
Service/Maintenance	10	34	-	-	44
Category Unreported	-	764	2	-	766
Total	2,520	1,376	2	149	4,047

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: TENNESSEE

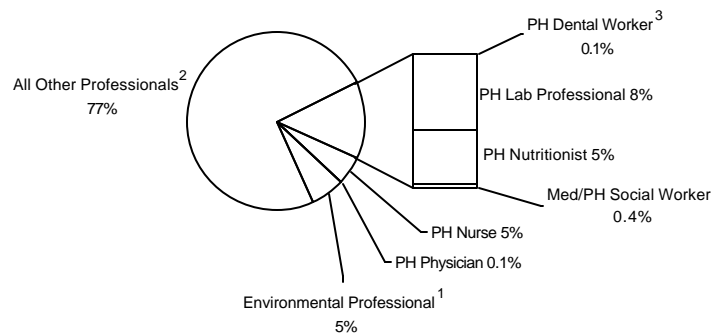
The proportion of workers identified as professionals is lower than many states.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: TENNESSEE

The information regarding laboratory and nutrition professionals is from national reports; very little detail is available on other professional categories. The identifiable number of physicians is extremely low-others are probably employed either in job titles that are administrative, or are within the general professional category.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: TENNESSEE

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	319	39	-	-	358
Professionals					
Administrative/Business Professional	-	1	-	-	1
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	90	-	-	90
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	33	-	-	33
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	6	-	-	6
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	5	-	-	5
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	1	-	-	1
PH Educator	-	-	-	-	-
PH Laboratory Professional	127	-	-	-	127
PH Nurse	-	84	-	-	84
PH Nutritionist	-	15	-	75	90
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	2	-	-	2
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	4	-	-	4
PH Professional, Title Unspecified	1200	-	-	-	1200
Technicians					
Computer Specialist	-	8	-	-	8
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	25	-	-	25
Other Public Health Technician	-	78	-	-	78
Technician, Title Unspecified	78	-	-	-	78
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	4	-	-	4
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	198	-	-	74	272
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	177	-	-	177
Unspecified Clerical/Support	588	-	-	-	588
Skilled Craft					
Skilled Craft Worker	-	6	-	-	6
Service/Maintenance					
Food Services/Housekeeping	-	1	-	-	1
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	10	33	-	-	43
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	764	-	-	764
Total	2,520	1,376	2	149	4,047

Tennessee

NOTES ON DATA:

State data summarized in EEO categories.

State laboratory workers were identified from the APHL survey.

Local data sources provide both aggregate counts per agency and occupational listings.

Additional nutritionists within the state identified from the ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Tennessee Department of Health.

Memphis and Shelby County Health Department.

Metropolitan Health Department of Nashville and Davidson County.

Hamilton County Health Department.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

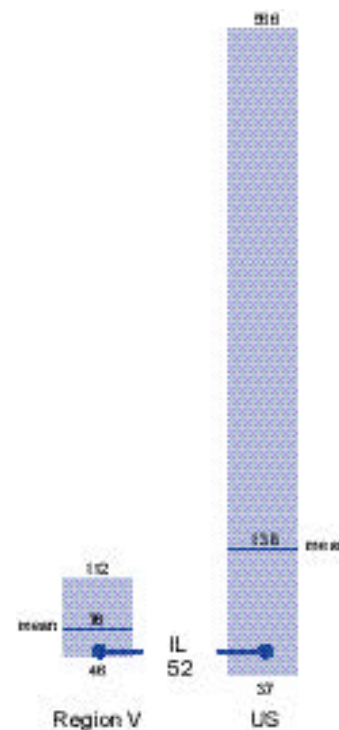
Illinois

The state health agency, the Illinois Department of Public Health (IDPH), is a freestanding, independent agency. The interaction between state and local public health departments in Illinois may be characterized as mixed centralized and decentralized organizational control. Under this arrangement, local health services that are required by statute are provided by the IDPH in four jurisdictions and by local governmental units, boards of health, or LHDs in other jurisdictions (CDC, 1991).

There are 93 local health departments covering 98 counties and 99 percent of the Illinois population. Five city, 3 township (known as districts in Illinois), 7 multi-county units (serving 20 counties), 1 city-county, and 77 county health departments make up the 93 local health departments. In Illinois, local governments are the primary source of support for local public health services; the people locally decide whether these services are provided (ibid).

Illinois is in the lower third of states in ratio of public health workers to population, with over two-thirds at the local level.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

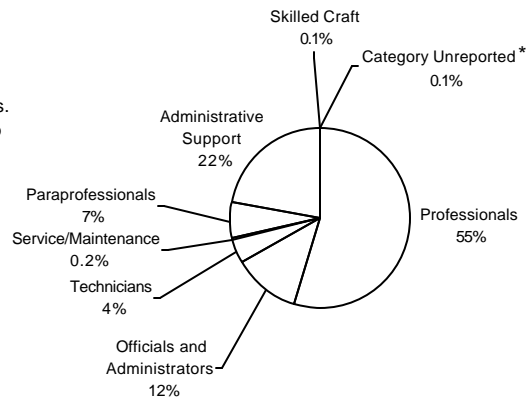
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: ILLINOIS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	335	448	-	-	783
Professionals	656	2195	408	150	3409
Technicians	79	190	-	-	269
Protective Service Workers	-	-	-	-	-
Paraprofessionals	87	326	-	-	413
Administrative Support	134	1259	-	-	1393
Skilled Craft Workers	6	-	-	-	6
Service/Maintenance	12	-	-	-	12
Category Unreported	-	-	4	-	4
Total	1,309	4,418	412	150	6,289

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: ILLINOIS

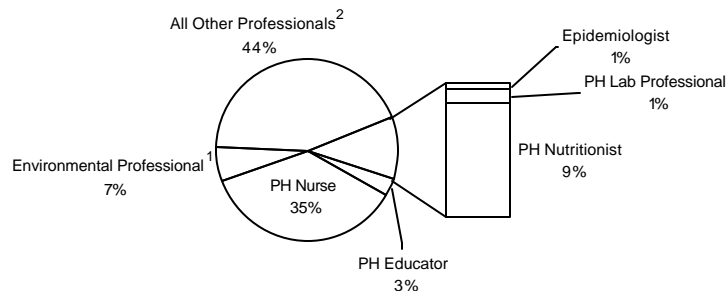
The proportion of professionals is higher than some states, as is the proportion of job titles that are administrative. Occupants of administrative positions may also carry out a substantial proportion of professional duties. Few environmental staff and no mental health or substance abuse staff are included.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: ILLINOIS

The large proportion of professionals who are nurses are all reported from the local level. The majority of professional staff at the state level could not be specified by job title.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: ILLINOIS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	335	448	-	-	783
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	212	11	-	223
Epidemiologist	-	-	22	-	22
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	121	-	-	121
Licensure/Inspection/Regulatory Specialist	-	152	-	-	152
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	106	-	-	106
PH Laboratory Professional	37	-	-	-	37
PH Nurse	-	1206	-	-	1206
PH Nutritionist	-	156	-	150	306
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	181	-	-	181
PH Student	-	-	341	-	341
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	61	14	-	75
PH Professional, Title Unspecified	619	-	20	-	639
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	190	-	-	190
Technician, Title Unspecified	79	-	-	-	79
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	87	326	-	-	413
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	1259	-	-	1259
Unspecified Clerical/Support	134	-	-	-	134
Skilled Craft					
Skilled Craft Worker	6	-	-	-	6
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	12	-	-	-	12
Category Unreported					
Programs	-	-	4	-	4
Unidentifiable	-	-	-	-	-
Total	1,309	4,418	412	150	6,289

Illinois

NOTES ON DATA:

State data provided as a summary by EEO category.

State laboratory workers were identified from APHL survey.

Local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Illinois Department of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Indiana

The Indiana State Department of Health (ISDH), the state health agency, is a freestanding, independent agency. Interaction between state and local public health departments in Indiana may be characterized as decentralized organizational control. Under this arrangement local governments directly operate health departments with a local board of health (CDC, 1991).

Indiana has 94 local health departments, composed of 1 multi-county, 3 city, and 90 county health departments. According to state law, ISDH is the superior agency to each of the local health departments (ibid).

Two thirds of reported workers are at the local level.

Indiana is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

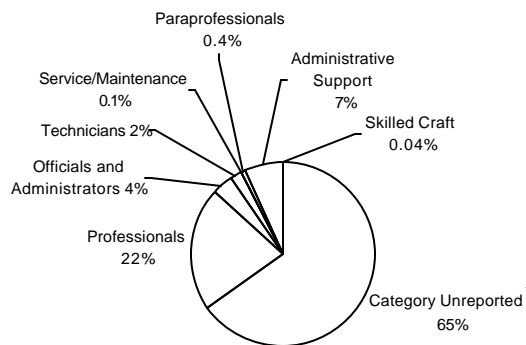
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: INDIANA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	101	-	-	-	101
Professionals	425	-	-	170	595
Technicians	61	-	-	-	61
Protective Service Workers	-	-	-	-	-
Paraprofessionals	10	-	-	-	10
Administrative Support	194	-	-	-	194
Skilled Craft Workers	1	-	-	-	1
Service/Maintenance	3	-	-	-	3
Category Unreported	13	1773	2	-	1788
Total	808	1,773	2	170	2,753

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: INDIANA

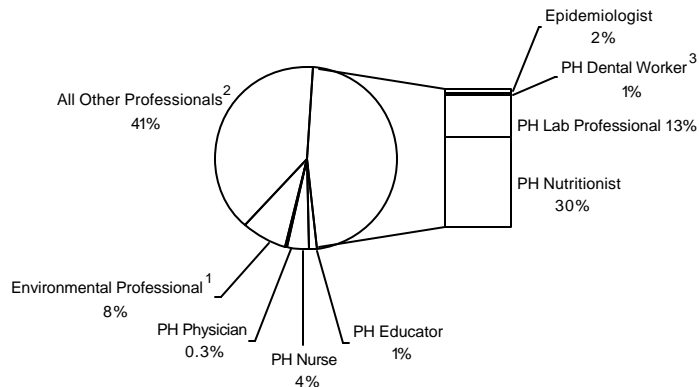
The data available for Indiana leave over half of workers uncategorized, limiting the utility of more detailed observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: INDIANA

Most reported nutritionists could not be identified by type of agency. The reported proportion of physicians and nurses is comparatively small; many may be included in the large number of unspecified local staff.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: INDIANA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	101	-	-	-	101
Professionals					
Administrative/Business Professional	21	-	-	-	21
Attorney/Hearing Officer	10	-	-	-	10
Biostatistician	4	-	-	-	4
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	6	-	-	-	6
Environmental Scientist & Specialist	41	-	-	-	41
Epidemiologist	10	-	-	-	10
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	14	-	-	-	14
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	164	-	-	-	164
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	2	-	-	-	2
PH Dental Worker	6	-	-	-	6
PH Educator	8	-	-	-	8
PH Laboratory Professional	79	-	-	-	79
PH Nurse	22	-	-	-	22
PH Nutritionist	7	-	-	170	177
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	1	-	-	-	1
PH Physician	2	-	-	-	2
PH Program Specialist	13	-	-	-	13
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	12	-	-	-	12
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	37	-	-	-	37
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	24	-	-	-	24
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	10	-	-	-	10
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	17	-	-	-	17
Administrative Support Staff	177	-	-	-	177
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	1	-	-	-	1
Service/Maintenance					
Food Services/Housekeeping	3	-	-	-	3
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	13	1773	-	-	1786
Total	808	1,773	2	170	2,753

Indiana

NOTES ON DATA:

State and local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Indiana State Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Michigan

The state health agency is an independent, freestanding agency known as the Michigan Department of Community Health. Interaction between state and local public health departments in Michigan may be characterized as decentralized organizational control. Under this arrangement, local government directly operates health departments with a local board of health (CDC, 1991).

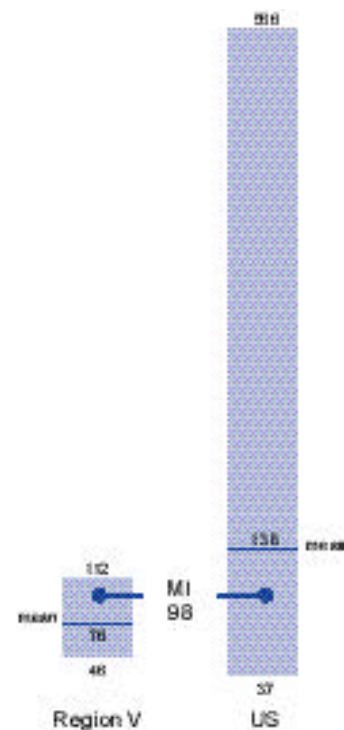
Michigan has 45 local health departments, consisting of 30 county health departments, 14 multi-county health departments (known as districts) and 1 city health department. Two local health departments in Michigan are currently associated health departments (ibid).

The total of reported workers includes a large number of public health students, some of whom may also be employed in public health, leading to an over count.

The large number of professionals reported but unspecified as to place of work makes interpretation difficult

Michigan is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

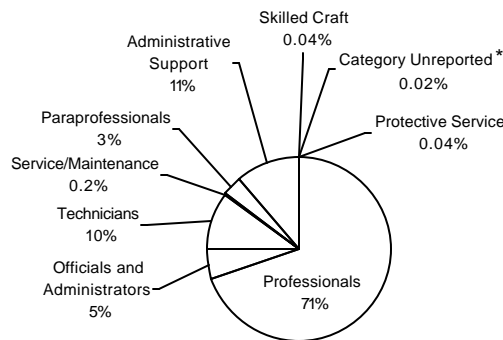
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MICHIGAN

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	173	332	-	-	505
Professionals	726	1230	923	3886	6765
Technicians	75	225	-	665	965
Protective Service Workers	-	4	-	-	4
Paraprofessionals	123	166	-	46	335
Administrative Support	353	739	-	-	1092
Skilled Craft Workers	4	-	-	-	4
Service/Maintenance	20	1	-	-	21
Category Unreported	-	-	2	-	2
Total	1,474	2,697	925	4,597	9,693

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MICHIGAN

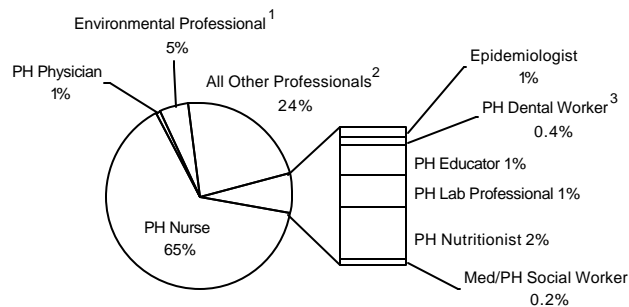
The proportion of staff in the professional category is higher than many jurisdictions, in part because of the large number of nurses reported.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MICHIGAN

Most professionals at the state level are unspecified as to job title. The comparatively high proportion of nurses may represent school nurses employed by educational agencies, or nurses who self-identify with public health working in other health organizations.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MICHIGAN

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	173	332	-	-	505
Professionals					
Administrative/Business Professional	-	18	-	-	18
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	15	2	13	-	30
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	305	24	-	329
Epidemiologist	14	4	18	-	36
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	14	-	-	14
Infection Control/Disease Investigator	-	7	-	-	7
Licensure/Inspection/Regulatory Specialist	-	3	-	-	3
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	15	-	-	15
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	6	-	-	6
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	1	26	-	-	27
PH Educator	-	91	-	-	91
PH Laboratory Professional	93	6	-	-	99
PH Nurse	8	621	-	3730	4359
PH Nutritionist	-	60	3	99	162
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	3	-	-	3
PH Physician	-	-	-	57	57
PH Program Specialist	-	36	-	-	36
PH Student	-	-	820	-	820
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	2	-	-	2
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	11	26	-	37
PH Professional, Title Unspecified	595	-	19	-	614
Technicians					
Computer Specialist	-	28	-	-	28
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	14	-	-	14
Health Information Systems/Data Analyst	-	7	-	-	7
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	17	-	-	17
Other Public Health Technician	-	159	-	665	824
Technician, Title Unspecified	75	-	-	-	75
Protective Service					
Investigations Specialist	-	1	-	-	1
Other or Unspecified Protective Service Worker	-	3	-	-	3
Paraprofessionals					
Community Outreach/Field Worker	-	75	-	-	75
Other or Unspecified Paraprofessional	123	91	-	46	260
Administrative Support					
Administrative Business Staff	-	88	-	-	88
Administrative Support Staff	-	651	-	-	651
Unspecified Clerical/Support	353	-	-	-	353
Skilled Craft					
Skilled Craft Worker	4	-	-	-	4
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	20	1	-	-	21
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	1,474	2,697	925	4,597	9,693

Michigan

NOTES ON DATA:

State data provided by occupation and EEO category.

State laboratory workers were identified from APHL survey.

Local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey

Additional physicians and nurses within the state were identified from reports by state agencies.

Other data includes March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Michigan Association of Local Public Health.

Michigan Office of the State Registrar and Division of Health Statistics.

Michigan Department of Community Health, Office of the State Registrar and Division of Health Statistics.

Michigan Department of Community Health, Community Public Health Administration.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Minnesota

The Minnesota Department of Health (MDH), the state health agency, is a freestanding, cabinet-level agency. Interaction between state and local public health departments in Minnesota may be characterized as shared organizational control, with local health departments under the authority of the MDH as well as the local government and board of health (CDC, 1991).

Three-fourths of reported public health workers are at the local level.

Minnesota is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

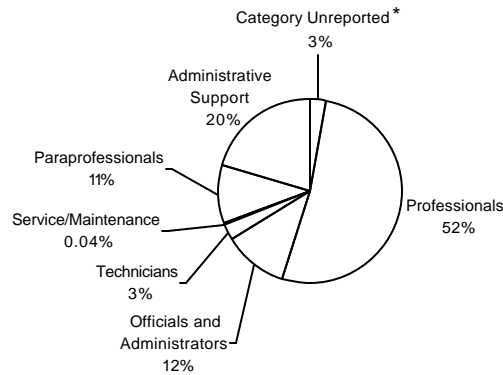
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MINNESOTA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	191	435	-	-	626
Professionals	729	1564	451	-	2744
Technicians	121	20	-	-	141
Protective Service Workers	-	-	-	-	-
Paraprofessionals	32	513	-	19	564
Administrative Support	223	865	-	-	1088
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	2	-	-	-	2
Category Unreported	-	159	2	-	161
Total	1,298	3,556	453	19	5,326

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MINNESOTA

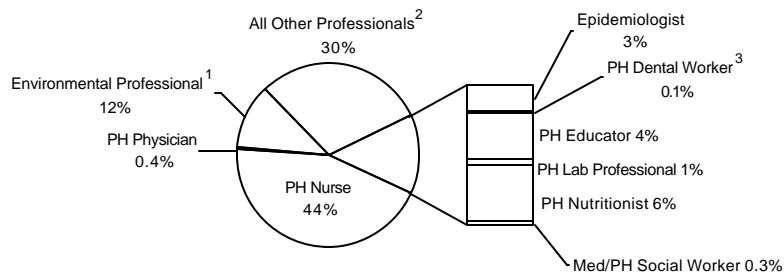
Very few workers in this state are unreported by category. Data include a limited number of environmental, mental health and substance abuse workers.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MINNESOTA

The proportion of nurses reported is comparatively high; the vast majority of them are at the local level. The other professionals include public health students, who may also work in public health and thus be counted elsewhere as well.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MINNESOTA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	191	435	-	-	626
Professionals					
Administrative/Business Professional	47	-	-	-	47
Attorney/Hearing Officer	1	-	-	-	1
Biostatistician	-	-	11	-	11
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	30	-	-	-	30
Environmental Scientist & Specialist	104	175	17	-	296
Epidemiologist	40	14	22	-	76
Health Economist	2	-	-	-	2
Health Planner/Researcher/Analyst	164	-	-	-	164
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	25	9	-	-	34
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	8	-	-	-	8
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	4	-	-	4
Occupation Safety & Health Specialist	9	-	-	-	9
PH Dental Worker	-	3	-	-	3
PH Educator	24	94	-	-	118
PH Laboratory Professional	20	-	-	-	20
PH Nurse	75	1127	-	-	1202
PH Nutritionist	12	134	5	-	151
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	6	4	-	-	10
PH Program Specialist	125	-	5	-	130
PH Student	29	-	362	-	391
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	5	-	4	-	9
PH Professional, Title Unspecified	-	-	25	-	25
Technicians					
Computer Specialist	90	-	-	-	90
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	1	-	-	-	1
Health Information Systems/Data Analyst	1	-	-	-	1
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	22	-	-	-	22
Other Public Health Technician	7	20	-	-	27
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	31	-	-	-	31
Other or Unspecified Paraprofessional	1	513	-	19	533
Administrative Support					
Administrative Business Staff	17	-	-	-	17
Administrative Support Staff	206	865	-	-	1071
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	-	-	-	2
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	159	-	-	159
Total	1,298	3,556	453	19	5,326

Minnesota

NOTES ON DATA:

State and local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey.

Other data include March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Minnesota Department of Health.

Minnesota Department of Health, Community Health Services Division.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Ohio

The state health agency is the Ohio Department of Health (ODH), a freestanding, independent agency. Interaction between state and local public health departments in Ohio may be characterized as shared organizational control. Under this arrangement, local health departments are under the authority of ODH, as well as the local government and board of health (CDC, 1991).

Ohio currently has 143 local public health agencies, including 23 county, 56 combined general (city-county), 9 contracting, and 55 city health departments. Ohio uses the word “district” to denote all local health departments (county, city or combined) (ibid).

The majority of reported workers are at the local level, with little information about mental health or substance abuse workers.

Ohio is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

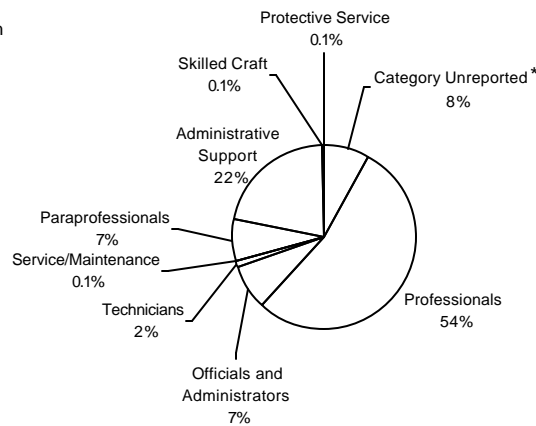
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: OHIO

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	186	372	-	-	558
Professionals	692	3099	158	82	4031
Technicians	55	70	-	-	125
Protective Service Workers	10	-	-	-	10
Paraprofessionals	-	538	-	-	538
Administrative Support	350	1303	-	-	1653
Skilled Craft Workers	4	-	-	-	4
Service/Maintenance	9	-	-	-	9
Category Unreported	49	582	2	-	633
Total	1,355	5,964	160	82	7,561

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: OHIO

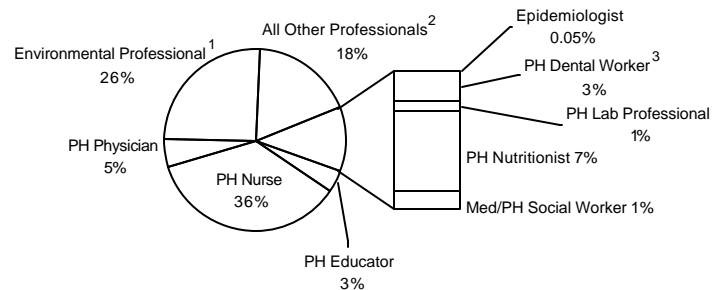
The distribution of workers across categories is typical, with relatively few workers unreported by category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: OHIO

The reported proportion of physicians is comparatively high. This may reflect the high number of local agencies in the state, each employing one or more physicians. The relative proportions of environmental and nursing professionals is closer to the anecdotally described local experience than many states.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: OHIO

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	186	372	-	-	558
Professionals					
Administrative/Business Professional	50	-	-	-	50
Attorney/Hearing Officer	4	-	-	-	4
Biostatistician	7	-	3	-	10
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	1	-	-	-	1
Environmental Scientist & Specialist	80	978	3	-	1061
Epidemiologist	-	-	2	-	2
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	36	-	-	-	36
Infection Control/Disease Investigator	53	-	-	-	53
Licensure/Inspection/Regulatory Specialist	200	93	-	-	293
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	4	56	-	-	60
Mental Health / Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	4	-	-	-	4
PH Dental Worker	12	90	-	-	102
PH Educator	-	140	-	-	140
PH Laboratory Professional	32	-	-	-	32
PH Nurse	76	1353	-	-	1429
PH Nutritionist	11	175	-	82	268
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	214	-	-	214
PH Program Specialist	78	-	2	-	80
PH Student	11	-	136	-	147
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	22	-	-	-	22
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	11	-	7	-	18
PH Professional, Title Unspecified	-	-	5	-	5
Technicians					
Computer Specialist	41	-	-	-	41
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	3	-	-	-	3
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	4	-	-	-	4
Other Public Health Technician	7	70	-	-	77
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	5	-	-	-	5
Other or Unspecified Protective Service Worker	5	-	-	-	5
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	538	-	-	538
Administrative Support					
Administrative Business Staff	81	-	-	-	81
Administrative Support Staff	269	1303	-	-	1572
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	4	-	-	-	4
Service/Maintenance					
Food Services/Housekeeping	3	-	-	-	3
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	6	-	-	-	6
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	49	582	-	-	631
Total	1,355	5,964	160	82	7,561

Ohio

NOTES ON DATA:

State data provided by occupation and EEO category.

Local data provided by occupation and OPM category.

Additional nutritionists within the state identified from ASTPHND survey.

Other data include March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Ohio Department of Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Wisconsin

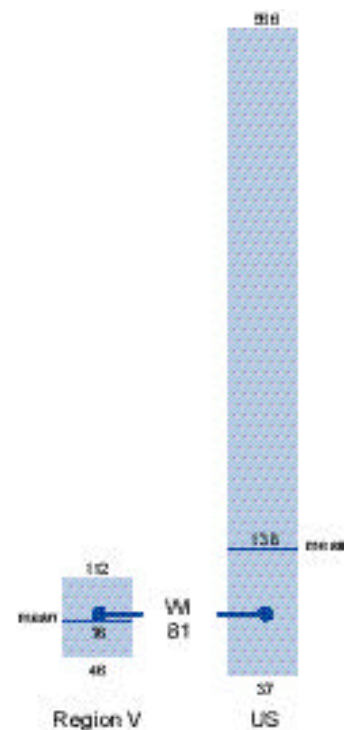
The state health agency is the Wisconsin Division of Public Health. It is a component of a superagency called the Department of Health and Family Services. Interaction between state and local public health departments in Wisconsin may be characterized as decentralized organizational control. Under this arrangement local government directly operates health departments with a local board of health (CDC, 1991).

Wisconsin has 97 local public health departments, ranging in size from those with a single nurse to full-service health departments. They consist of 71 county, 25 city or village health departments, and 1 city-county health department. For the most part, they are locally administered, locally funded, and responsible to local governmental authorities (ibid).

The reported number of state workers is 50% higher than local workers and reflects in part the complete reporting of all workers in state government from programs that have statutory responsibility for one or more public health functions, regardless of agency.

Wisconsin is in the middle third of states in ratio of public health workers to population

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region V: IL, IN, MI, MN, OH, and WI
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

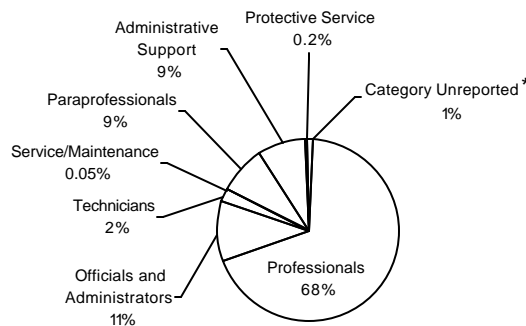
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: WISCONSIN

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	256	212	-	-	468
Professionals	1763	940	-	184	2887
Technicians	93	-	-	-	93
Protective Service Workers	10	-	-	-	10
Paraprofessionals	198	150	-	31	379
Administrative Support	75	299	-	-	374
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	2	-	-	-	2
Category Unreported	2	55	2	-	59
Total	2,399	1,656	2	215	4,272

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: WISCONSIN

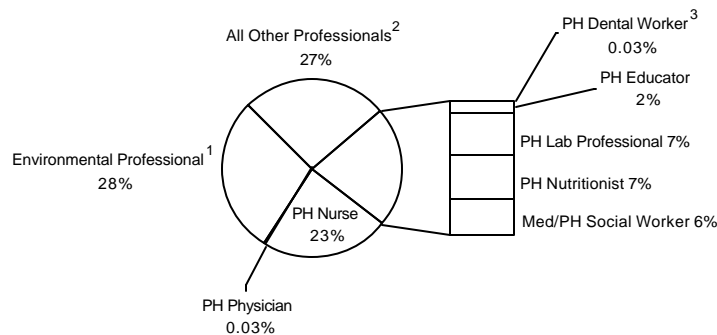
The proportion of professionals is comparatively high, with an extremely small proportion of workers not identifiable as to category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: WISCONSIN

The approximately equal proportions of environmental and nursing professionals is consistent with anecdotal descriptions of local public health experience.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: WISCONSIN

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	256	212	-	-	468
Professionals					
Administrative/Business Professional	46	-	-	-	46
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	236	-	-	-	236
Environmental Scientist & Specialist	445	146	-	-	591
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	55	-	-	-	55
Infection Control/Disease Investigator	1	-	-	-	1
Licensure/Inspection/Regulatory Specialist	324	-	-	-	324
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	166	-	-	-	166
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	1	-	-	-	1
PH Educator	62	-	-	-	62
PH Laboratory Professional	196	-	-	-	196
PH Nurse	112	548	-	-	660
PH Nutritionist	19	-	-	184	203
PH Optometrist	-	-	-	-	-
PH Pharmacist	1	-	-	-	1
PH Physical Therapist	-	-	-	-	-
PH Physician	1	-	-	-	1
PH Program Specialist	35	-	-	-	35
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	1	-	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	2	-	-	-	2
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	60	-	-	-	60
PH Professional, Title Unspecified	-	246	-	-	246
Technicians					
Computer Specialist	23	-	-	-	23
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	7	-	-	-	7
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	56	-	-	-	56
Other Public Health Technician	7	-	-	-	7
Technician, Title Unspecified	-	-	-	-	-
Protective Service	-	-	-	-	-
Investigations Specialist	10	-	-	-	10
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	3	-	-	-	3
Other or Unspecified Paraprofessional	195	150	-	31	376
Administrative Support					
Administrative Business Staff	14	-	-	-	14
Administrative Support Staff	61	-	-	-	61
Unspecified Clerical/Support	-	299	-	-	299
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	-	-	-	2
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	2	55	-	-	57
Total	2,399	1,656	2	215	4,272

Wisconsin

NOTES ON DATA:

State data provided by occupation.

Public health workers within some agencies selected according to job title from list of all agency personnel.

Local data provided by occupation and summary by OPM category.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Wisconsin Department of Health and Family Services.

Wisconsin Department of Health and Family Services, Division of Public Health.

Wisconsin Department of Agriculture, Trade & Consumer Protection; Wisconsin Turning Point Initiative.

Wisconsin Department of Natural Resources; Wisconsin Turning Point Initiative.

Wisconsin State Lab of Hygiene; Wisconsin Turning Point Initiative.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

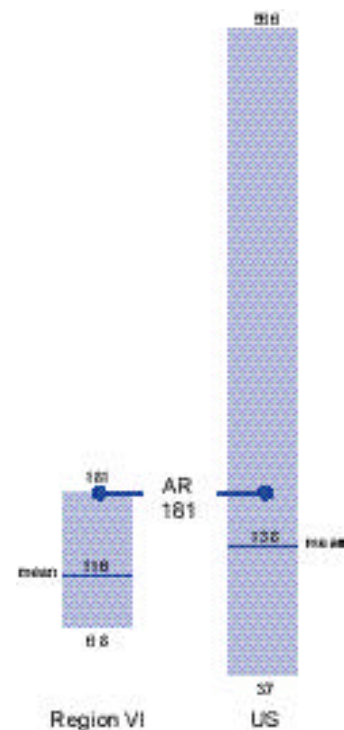
Arkansas

The Arkansas Department of Health is a free-standing, independent agency. Interaction between state and local public health departments in Arkansas may be characterized as centralized organizational control. Under this arrangement, local health departments function directly under the state's authority and are operated by the ADH or State Board of Health (CDC, 1991).

Over half of public health workers are at the state level.

Arkansas is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VI: AR, LA, NM, OK and TX
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

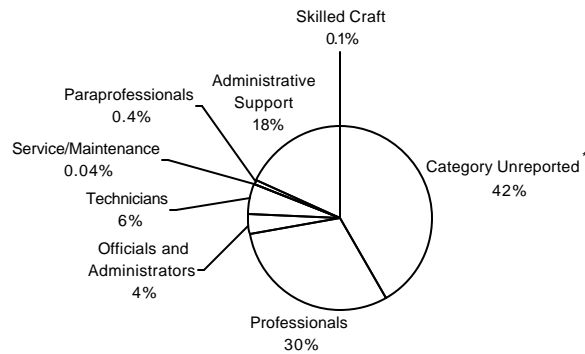
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: ARKANSAS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	171	-	-	-	171
Professionals	1363	-	-	26	1389
Technicians	260	-	-	-	260
Protective Service Workers	-	-	-	-	-
Paraprofessionals	18	-	-	-	18
Administrative Support	843	-	-	-	843
Skilled Craft Workers	5	-	-	-	5
Service/Maintenance	2	-	-	-	2
Category Unreported	-	1921	2	-	1923
Total	2,662	1,921	2	26	4,611

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: ARKANSAS

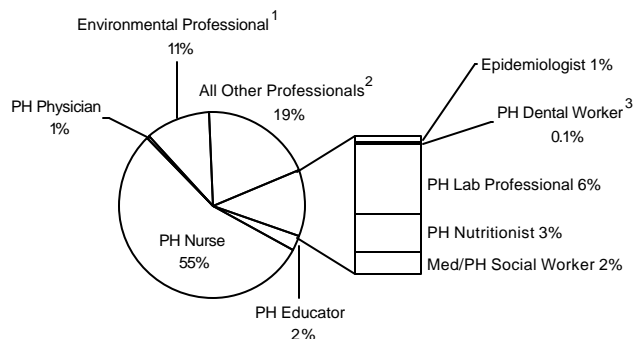
The proportion of professionals is comparatively low, but data available leave nearly half of workers uncategorized, limiting the utility of observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: ARKANSAS

The proportion of nurses is comparatively high. The proportion of workers in the unreported category is due to the lack of detail available regarding local health department workers.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: ARKANSAS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	171	-	-	-	171
Professionals					
Administrative/Business Professional	72	-	-	-	72
Attorney/Hearing Officer	3	-	-	-	3
Biostatistician	5	-	-	-	5
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	13	-	-	-	13
Environmental Scientist & Specialist	145	-	-	-	145
Epidemiologist	10	-	-	-	10
Health Economist	7	-	-	-	7
Health Planner/Researcher/Analyst	32	-	-	-	32
Infection Control/Disease Investigator	22	-	-	-	22
Licensure/Inspection/Regulatory Specialist	57	-	-	-	57
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	26	-	-	-	26
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	1	-	-	-	1
PH Educator	33	-	-	-	33
PH Laboratory Professional	82	-	-	-	82
PH Nurse	759	-	-	-	759
PH Nutritionist	17	-	-	26	43
PH Optometrist	-	-	-	-	-
PH Pharmacist	7	-	-	-	7
PH Physical Therapist	-	-	-	-	-
PH Physician	7	-	-	-	7
PH Program Specialist	37	-	-	-	37
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	1	-	-	-	1
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	2	-	-	-	2
Other Public Health Professional	22	-	-	-	22
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	48	-	-	-	48
Environmental Engineering Technician	4	-	-	-	4
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	1	-	-	-	1
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	23	-	-	-	23
Other Public Health Technician	184	-	-	-	184
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	18	-	-	-	18
Administrative Support					
Administrative Business Staff	68	-	-	-	68
Administrative Support Staff	775	-	-	-	775
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	5	-	-	-	5
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	-	-	-	2
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1921	-	-	1921
Total	2,662	1,921	2	26	4,611

Arkansas

NOTES ON DATA:

State data provided by occupation.

Local data available only as aggregate count from NACCHO survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other workers consist of March of Dimes staff.

DATA SOURCES:

Arkansas Department of Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Louisiana

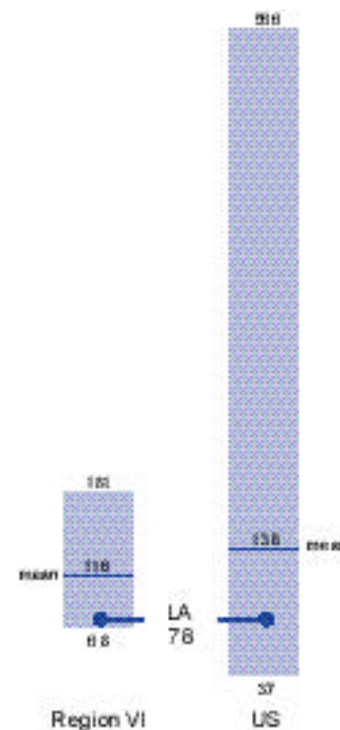
The state health agency is the Office of Public Health (OPH). It is a component of a superagency called the Department of Health and Hospitals. Interaction between the state and 62 of the 64 local public health departments in Louisiana may be characterized as centralized organizational control. The other two (Orleans and Plaquemines) are decentralized. Under this arrangement local health services in the state are provided by OPH in most jurisdictions and by local government in two jurisdictions. There is a health unit in each of the 64 parishes. Sixty-two of these are parish health units, which are units of the OPH. The other two are independent, local health departments located in Orleans and Plaquemines Parishes. The Orleans Parish unit is a city-parish (county) unit and Plaquemines is a parish (county) unit (CDC, 1991).

No data were reported regarding the two independent parish health departments.

One third of the reported workforce is public health students, which is extremely unusual. Some of these may also be employed in public health and reported elsewhere.

Louisiana is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VI: AR, LA, NM, OK and TX
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

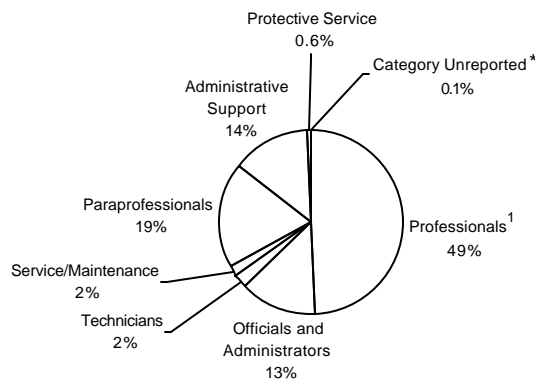
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: LOUISIANA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	295	-	-	-	295
Professionals	1014	-	1275	11	2300
Technicians	46	-	-	-	46
Protective Service Workers	13	-	-	-	13
Paraprofessionals	355	-	-	61	416
Administrative Support	309	-	-	-	309
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	40	-	-	-	40
Category Unreported	-	-	2	-	2
Total	2,072	-	1,277	72	3,421

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: LOUISIANA

Does not include public health students. The distribution of workers by occupational category is typical of the range needed to provide public health services.

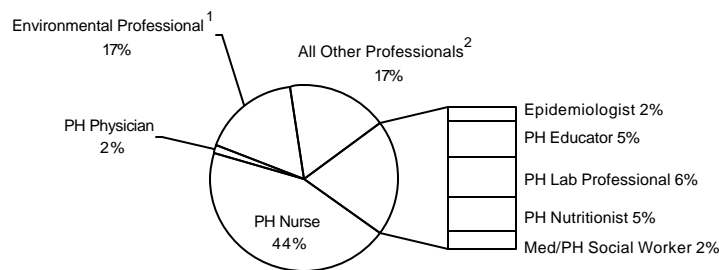


¹ Excluding public health students

* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: LOUISIANA

Does not include any public health students. The proportion of professionals identified as nurses is comparatively high, and probably reflects policy decisions regarding access to health services.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists

² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: LOUISIANA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	295	-	-	-	295
Professionals					
Administrative/Business Professional	8	-	-	-	8
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	5	-	6	-	11
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	1	-	-	-	1
Environmental Scientist & Specialist	167	-	17	-	184
Epidemiologist	14	-	10	-	24
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	5	-	-	-	5
Infection Control/Disease Investigator	46	-	-	-	46
Licensure/Inspection/Regulatory Specialist	13	-	-	-	13
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	27	-	-	-	27
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	56	-	-	-	56
PH Laboratory Professional	61	-	-	-	61
PH Nurse	479	-	-	-	479
PH Nutritionist	34	-	9	11	54
PH Optometrist	-	-	-	-	-
PH Pharmacist	8	-	-	-	8
PH Physical Therapist	-	-	-	-	-
PH Physician	18	-	-	-	18
PH Program Specialist	30	-	-	-	30
PH Student	31	-	1175	-	1206
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	1	-	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	10	-	24	-	34
PH Professional, Title Unspecified	-	-	34	-	34
Technicians					
Computer Specialist	23	-	-	-	23
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	3	-	-	-	3
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	9	-	-	-	9
Other Public Health Technician	11	-	-	-	11
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	13	-	-	-	13
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	355	-	-	61	416
Administrative Support					
Administrative Business Staff	5	-	-	-	5
Administrative Support Staff	304	-	-	-	304
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	36	-	-	-	36
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	4	-	-	-	4
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	2,072	-	1,277	72	3,421

Louisiana

NOTES ON DATA:

State data provided by occupation.

No data available regarding the two separate local agencies.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Louisiana Office of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

New Mexico

The Public Health Division (PHD) of the Health Department is named as the state health agency by the New Mexico Public Health Act. The interactions between state and local health departments in New Mexico may be characterized as centralized organizational control. Under this arrangement, the PHD or a state board of health operates local public health departments (CDC, 1991).

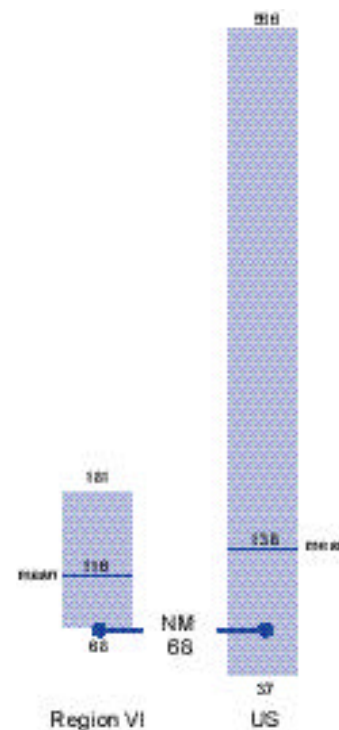
New Mexico has 53 local public health offices that provide public health services to local areas. Although these units provide the same basic services as local public health agencies in other states, New Mexico does not consider them local health units (ibid).

The majority of public health workers are at the state level, in professional categories.

There is limited information on environmental health, mental health and substance abuse workers.

New Mexico is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VI: AR, LA, NM, OK and TX
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

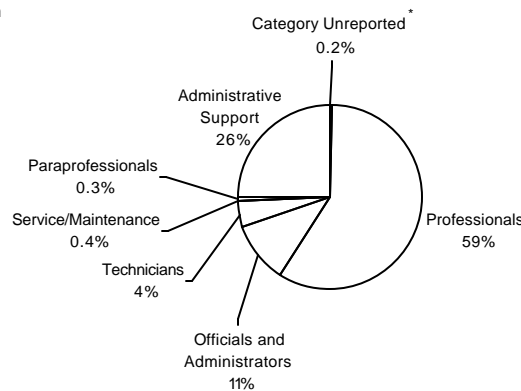
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NEW MEXICO

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	132	-	-	-	132
Professionals	692	-	-	-	692
Technicians	52	-	-	-	52
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	4	4
Administrative Support	297	-	-	-	297
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	5	-	-	-	5
Category Unreported	-	-	2	-	2
Total	1,178	-	2	4	1,184

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NEW MEXICO

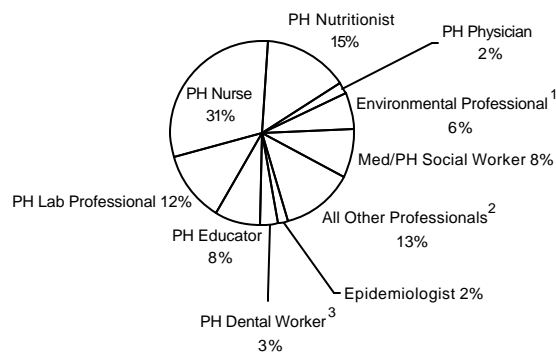
There is a comparatively large proportion of workers in professional categories, and a comparatively small proportion in the paraprofessional category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEW MEXICO

Of the identified professionals, the range of expertise is reflective of the field of public health.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEW MEXICO

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	132	-	-	-	132
Professionals					
Administrative/Business Professional	32	-	-	-	32
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	5	-	-	-	5
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	43	-	-	-	43
Epidemiologist	13	-	-	-	13
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	15	-	-	-	15
Infection Control/Disease Investigator	20	-	-	-	20
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	58	-	-	-	58
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	21	-	-	-	21
PH Educator	56	-	-	-	56
PH Laboratory Professional	86	-	-	-	86
PH Nurse	211	-	-	-	211
PH Nutritionist	104	-	-	-	104
PH Optometrist	-	-	-	-	-
PH Pharmacist	2	-	-	-	2
PH Physical Therapist	-	-	-	-	-
PH Physician	13	-	-	-	13
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	2	-	-	-	2
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	11	-	-	-	11
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	43	-	-	-	43
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	2	-	-	-	2
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	1	-	-	-	1
Other Public Health Technician	6	-	-	-	6
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	4	4
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	297	-	-	-	297
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	3	-	-	-	3
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	-	-	-	2
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	1,178	-	2	4	1,184

New Mexico

NOTES ON DATA:

State agencies provided occupational listing.

State laboratory workers were identified from APHL survey.

Additional nutritional staff within the state identified from ASTPHND survey.

Other workers consist of March of Dimes staff.

DATA SOURCES:

New Mexico Department of Health, Public Health Division.

New Mexico Environment Department.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Oklahoma

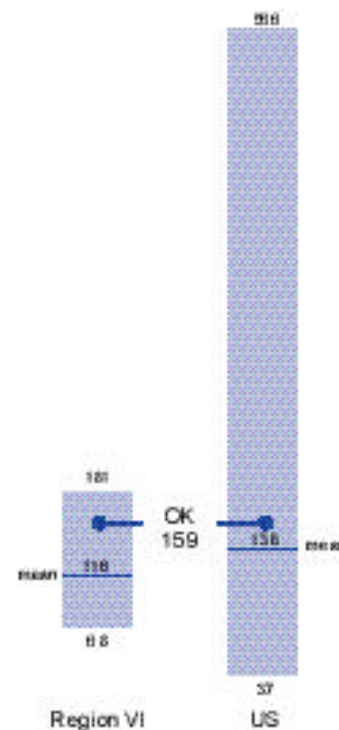
The Oklahoma State Department of Health (OSDH), the state health agency, is a free-standing, independent agency. Interaction between state and local public health departments in Oklahoma may be characterized as mixed centralized and decentralized organizational control. Mandated local health services may be provided by the OSDH in some jurisdictions (CDC, 1991).

Oklahoma has 69 local health departments, 67 of which are county health departments and 2 are city-county health departments. To date, 69 of the 77 counties have comprehensive health departments. The remaining eight counties have no health departments but do have county superintendents of health, appointed by the Commissioner of Health. Any public health services available to these counties are provided by neighboring counties or OSDH. Except for “autonomous” counties (Oklahoma and Tulsa), the authority is centralized in the OSDH. Counties with more than 225,000 population are considered autonomous and have free-standing health departments that are semi-autonomous from the OSDH. Oklahoma and Tulsa are in this category (ibid).

Over half the workforce is at the state level.

Oklahoma is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VI: AR, LA, NM, OK and TX
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

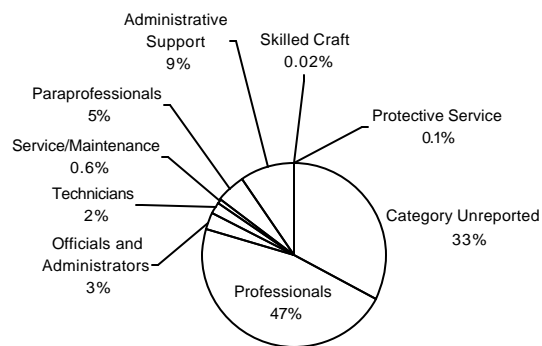
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: OKLAHOMA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	161	-	-	-	161
Professionals	2088	-	355	50	2493
Technicians	116	-	-	-	116
Protective Service Workers	3	-	-	-	3
Paraprofessionals	258	-	-	16	274
Administrative Support	502	-	-	-	502
Skilled Craft Workers	1	-	-	-	1
Service/Maintenance	33	-	-	-	33
Category Unreported	-	1741	2	-	1743
Total	3162	1,741	357	66	5,326

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: OKLAHOMA

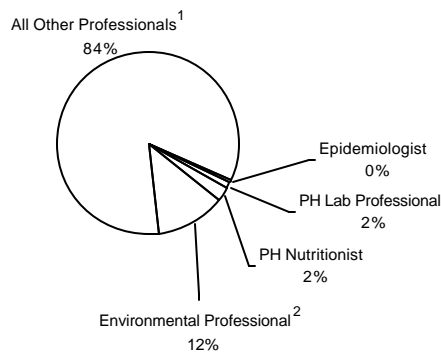
The proportion of workers reported as professional is slightly lower than many states, and is increased by a number of public health students, who may be working in public health and also counted elsewhere. Nearly one-third of the workforce is unreported as to category, making observations difficult.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: OKLAHOMA

The information regarding laboratory and nutrition professionals is from national reports. The comparatively high proportion of workers in the unreported category is due to the lack of detail available regarding professionals in the state workforce.



¹ Includes professionals in other titles and professionals unidentified by title
² Includes Environmental Engineers and Environmental Scientists & Specialists
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: OKLAHOMA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	161	-	-	-	161
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	5	-	5
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	90	-	-	-	90
Environmental Scientist & Specialist	200	-	8	-	208
Epidemiologist	-	-	6	-	6
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	39	-	-	-	39
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	50	50
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	321	-	321
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	9	-	9
PH Professional, Title Unspecified	1759	-	6	-	1765
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	116	-	-	-	116
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	3	-	-	-	3
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	258	-	-	16	274
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	502	-	-	-	502
Skilled Craft					
Skilled Craft Worker	1	-	-	-	1
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	33	-	-	-	33
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1741	-	-	1741
Total	3,162	1,741	357	66	5,326

Oklahoma

NOTES ON DATA:

State data provided as a mix of EEO categorizations and specific environmental occupations.

Local data available only as aggregate number from NACCHO survey.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Oklahoma State Department of Health.

Oklahoma Department of Environmental Quality.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Texas

The Texas Department of Health (TDH), a freestanding, independent agency. Interaction between state and local public health departments in Texas may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

Texas has 71 state-participating local health departments including 33 county, 27 city-county, 8 city, and 3 multi-county health departments. The total count varies from this because counties with multiple cities that have merged their health departments are called districts (ibid).

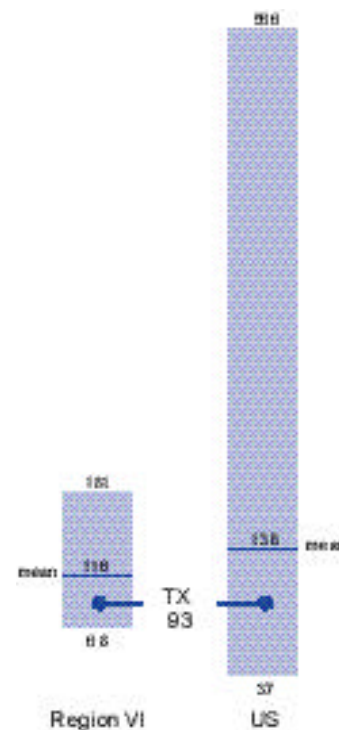
There is also a category of local health entities that provide public health services and are classified as Non-participating Units. These units are small and usually provide only a limited range of services. The exact number and location of these units are not available (ibid).

The state provides public health services to local areas that do not have a local health department. These services are provided through the regional offices (ibid).

Available data do not allow separation of state and local staff.

Texas is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VI: AR, LA, NM, OK and TX
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

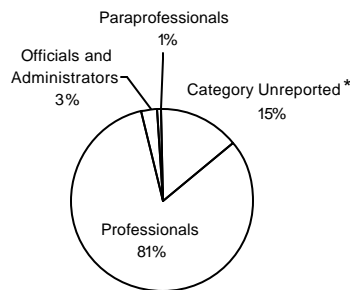
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: TEXAS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	-	-	-	597	597
Professionals	-	-	1076	14148	15224
Technicians	-	-	-	-	-
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	103	103
Administrative Support	-	-	-	-	-
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	6	2757	2763
Total	-	-	1,082	1,605	18,687

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: TEXAS

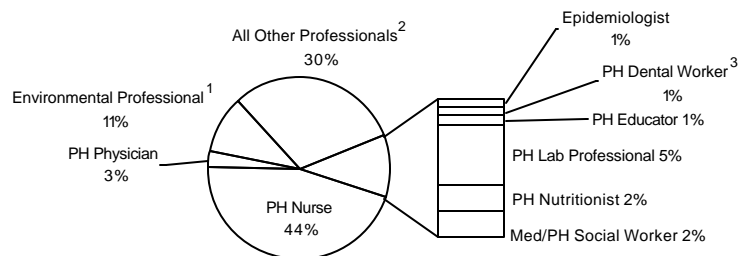
The proportion of workers identified as professionals is comparatively high, reflecting the special interest in professionals on the part of the data source. The unreported category is likely to include mostly workers in technical and support positions.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: TEXAS

Research recently done regarding the Texas public health workforce makes it likely that the reported proportions are accurate.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: TEXAS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	-	-	597	597
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	19	68	87
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	622	622
Environmental Scientist & Specialist	-	-	14	988	1002
Epidemiologist	-	-	22	86	108
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	109	109
Infection Control/Disease Investigator	-	-	-	96	96
Licensure/Inspection/Regulatory Specialist	-	-	-	1078	1078
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	307	307
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	1775	1775
PH Dental Worker	-	-	-	94	94
PH Educator	-	-	-	135	135
PH Laboratory Professional	-	-	19	684	703
PH Nurse	-	-	-	6780	6780
PH Nutritionist	-	-	-	307	307
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	58	58
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	398	398
PH Program Specialist	-	-	-	394	394
PH Student	-	-	836	-	836
PH Veterinarian/Animal Control Specialist	-	-	-	34	34
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	21	135	156
PH Professional, Title Unspecified	-	-	145	-	145
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	103	103
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	6	-	6
Unidentifiable	-	-	-	2757	2757
Total	-	-	1,082	17,605	18,687

Texas

NOTES ON DATA:

State and local data were provided summarized together by occupational categories.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff and students and faculty of schools of public health.

DATA SOURCES:

Texas Department of Health.

University of Texas, Houston, School of Public Health, Center for Health Policy Studies, 1996, The Professional Public Health Workforce in Texas.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

Iowa

The state health agency is a freestanding, independent agency named the Iowa Department of Public Health. Interaction between state and local public health departments in Iowa may be characterized as decentralized organizational control. Under this arrangement local governments directly operate health departments (CDC, 1991).

Iowa has 99 local health departments. These consist of 93 county units, 5 city units and 1 city-county unit (the city-county unit is designated as a district by Iowa). Iowa uses the term “boards of health” rather than health departments (ibid.).

The majority of reported workers are at the local level.

Iowa is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VII: IA, KS, MO, and NE
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

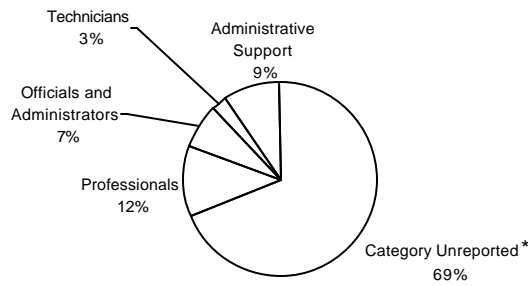
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: IOWA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	38	137	-	-	175
Professionals	181	-	-	111	292
Technicians	68	-	-	-	68
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	-	-
Administrative Support	51	174	-	-	225
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	1631	2	-	1633
Total	338	1,942	2	111	2,393

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: IOWA

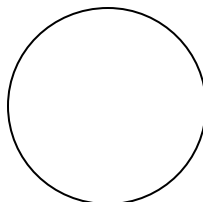
The data available for Iowa leave over half of workers uncategorized, limiting the utility of more detailed observations.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: IOWA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: IOWA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	38	137	-	-	175
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	126	-	-	-	126
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	111	111
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	55	-	-	-	55
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	68	-	-	-	68
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	51	174	-	-	225
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	1631	-	-	1631
Total	338	1,942	2	111	2,393

Iowa

NOTES ON DATA:

State data provided as a summary using OPM categories

State laboratory workers were identified from APHL survey.

Local data partially summarized in OPM categories, with remaining identified from NACCHO survey as aggregate count.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other workers consist of March of Dimes staff.

DATA SOURCES:

Iowa Department of Public Health.

Iowa Department of Public Health, Division of Administration and Regulatory Affairs.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Kansas

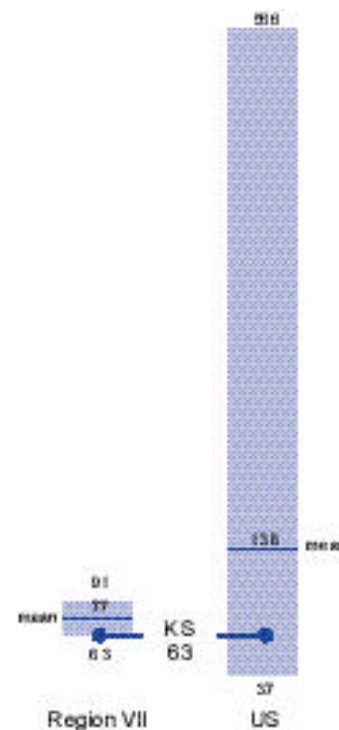
The Kansas Department of Health and Environment (KDHE) is the official state health agency. KDHE is a freestanding, independent agency. The interaction between state and local health departments in Kansas may be characterized as primarily decentralized organizational control (CDC, 1991).

Kansas has 99 local health departments. Local health departments exist in all 105 counties. Two multi-county departments provide service to 8 counties, city/county health departments serve 7 counties, and county health departments serve the remaining 84 counties. One county, Stevens, provides health services through contract with a county hospital. Within the 84 counties are several informal “program-sharing” arrangements, whereby one county health department may contract with KDHE to provide service for several surrounding, usually contiguous, counties. A public health cooperative has been established by seven contiguous counties to improve public health capacity through a formal, established inter-local agreement (ibid.).

Three-fourths of Kansas’s public health workers are at the local level. There is limited information on environmental health, mental health and substance abuse workers.

Kansas is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VII: IA, KS, MO, and NE
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

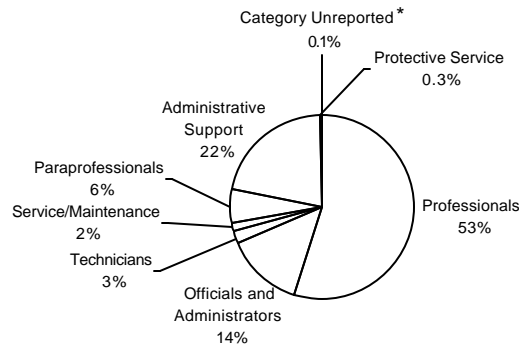
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: KANSAS

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	54	176	-	-	230
Professionals	267	621	-	23	911
Technicians	4	39	-	-	43
Protective Service Workers	5	-	-	-	5
Paraprofessionals	-	97	-	1	98
Administrative Support	63	298	-	-	361
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	28	-	-	28
Category Unreported	-	-	2	-	2
Total	393	1,259	2	24	1,678

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: KANSAS

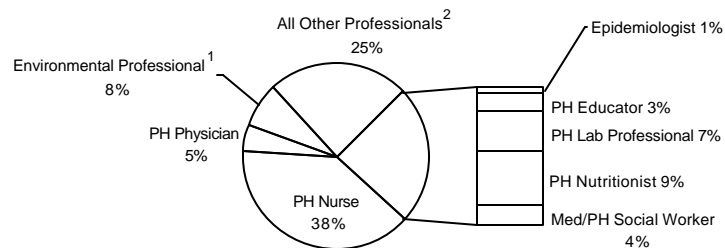
The distribution of workers is typical, with a very small proportion in the unreported category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: KANSAS

The reported proportion of physicians is comparatively high. Among identified professionals, the range of expertise is reflective of the field of public health.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: KANSAS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	54	176	-	-	230
Professionals					
Administrative/Business Professional	1	-	-	-	1
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	2	-	-	2
Environmental Scientist & Specialist	-	68	-	-	68
Epidemiologist	12	-	-	-	12
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	23	-	-	-	23
Infection Control/Disease Investigator	1	-	-	-	1
Licensure/Inspection/Regulatory Specialist	117	45	-	-	162
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	3	29	-	-	32
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	9	18	-	-	27
PH Laboratory Professional	59	5	-	-	64
PH Nurse	23	328	-	-	351
PH Nutritionist	4	54	-	23	81
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	27	-	-	27
PH Physical Therapist	-	-	-	-	-
PH Physician	-	45	-	-	45
PH Program Specialist	8	-	-	-	8
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	7	-	-	-	7
Technicians					
Computer Specialist	4	-	-	-	4
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	3	-	-	3
Other Public Health Technician	-	36	-	-	36
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	5	-	-	-	5
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	69	-	-	69
Other or Unspecified Paraprofessional	-	28	-	1	29
Administrative Support					
Administrative Business Staff	-	53	-	-	53
Administrative Support Staff	63	245	-	-	308
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	28	-	-	28
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	393	1,259	2	24	1,678

Kansas

NOTES ON DATA:

State data provided by occupation.

State laboratory workers were identified from APHL report.

Local data provided by occupation.

Additional nutritionists within the state identified from ASTPHND survey.

Other workers are March of Dimes staff.

DATA SOURCES:

Kansas Association of Local Health Departments & Kansas Department of Health and Environment: Office of Local and Rural Health. "Kansas Local Health Department Educational and Salary Survey", 1999.

Kansas Department of Health and the Environment.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Missouri

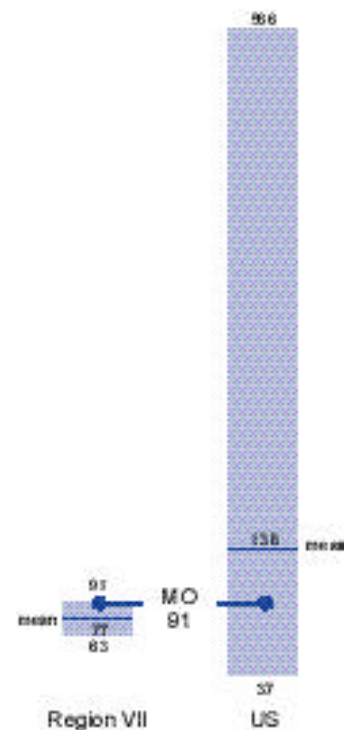
The Missouri Department of Health, the state health agency, is a freestanding, independent agency. Interaction between state and local public health departments in Missouri may be characterized as decentralized organizational control. Under this arrangement, local government directly operates health departments with or without a local board of health (CDC, 1991).

There are 114 local health departments in Missouri, consisting of 104 county, 4 city, 3 city-county, and 3 multi-county health departments (ibid.).

Three-fourths of reported workers are at the local level. It is difficult to identify the degree to which environmental, mental health and substance abuse workers are included.

Missouri is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VII: IA, KS, MO, and NE
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

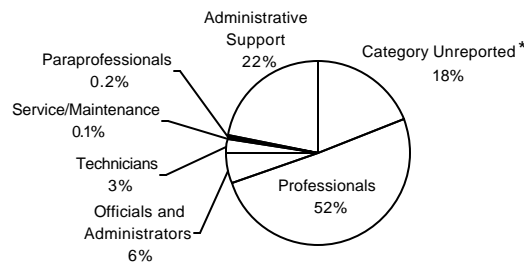
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MISSOURI

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	174	112	-	-	286
Professionals	628	1556	296	-	2480
Technicians	36	98	-	-	134
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	10	10
Administrative Support	331	761	-	-	1092
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	5	-	-	-	5
Category Unreported	-	941	2	-	943
Total	1,174	3,468	298	10	4,950

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MISSOURI

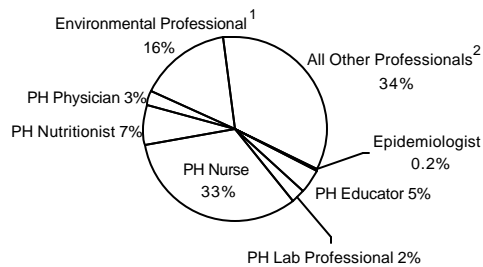
The reported distribution of workers is typical.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MISSOURI

Information on laboratory and nutrition professionals is from national data files. Lack of detail on professionals in the workforce makes interpretation difficult.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MISSOURI

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	174	112	-	-	286
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	2	-	2
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	390	7	-	397
Epidemiologist	-	-	4	-	4
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	112	-	-	112
PH Laboratory Professional	58	-	-	-	58
PH Nurse	-	811	-	-	811
PH Nutritionist	-	180	1	-	181
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	63	-	-	63
PH Program Specialist	-	-	-	-	-
PH Student	-	-	258	-	258
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	12	-	12
PH Professional, Title Unspecified	570	-	12	-	582
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	1	-	-	-	1
Other Public Health Technician	-	98	-	-	98
Technician, Title Unspecified	35	-	-	-	35
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	10	10
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	761	-	-	761
Unspecified Clerical/Support	331	-	-	-	331
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	5	-	-	-	5
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	941	-	-	941
Total	1,174	3,468	298	10	4,950

Missouri

NOTES ON DATA:

State data summarized by EEO categories.

State laboratory workers were identified from APHL survey.

Local data provided by OPM category with some occupations specified.

Additional nutritional staff within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff, students and faculty of schools of public health.

DATA SOURCES:

Missouri Department of Health.

Missouri Department of Health, Center for Local Public Health Services.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

March of Dimes, National Office.

Nebraska

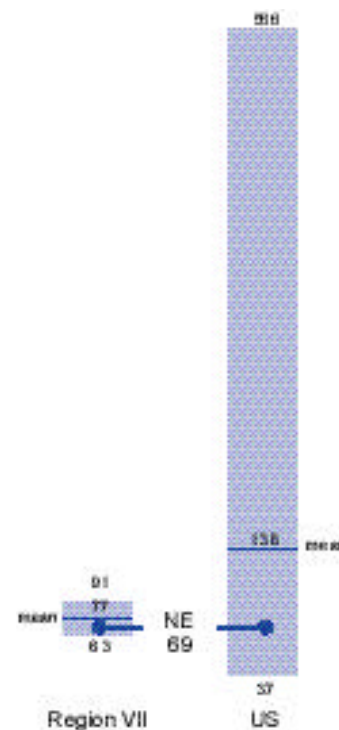
In 1996, the Nebraska Legislature passed the Nebraska Partnership for Health and Human Services Act. This created a unified system of three new functionally organized agencies called the Nebraska Department of Health and Human Services System (HHSS). The agencies are the Department of Health and Human Services, Department of Health and Human Services Regulation and Licensure and Department of Health and Human Services Finance and Support. A Policy Cabinet made up of the three agency directors, a Policy Secretary and Chief Medical Officer directs the system. There is an Office of Public Health within the Department of Health and Human Services (CDC, 1991, updated 1999).

There are 16 local health departments covering 22 of Nebraska's 93 counties. The county, city/county, and district health departments operate under state statutes with little connection to HHSS. However, local health departments must be organized with state approval and the local health director must be confirmed by HHSS. There are also many contractual arrangements between state and local health departments, most of which come in the form of specific programs. The state does not have the power to direct local policy for local health departments (ibid.).

One fourth of workers are at the state level with the remainder primarily local.

Nebraska is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VII: IA, KS, MO, and NE
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

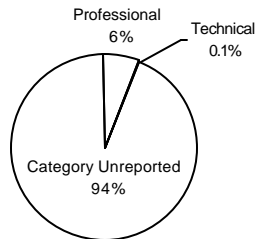
ESTIMATED PH WORKERS BY OPM OCCUPATIONAL CATEGORY AND SETTING: NEBRASKA

Category	State	Local	Other*	Agency Unspecified	Total
Administrative	-	-	-	-	-
Professional	12	-	-	63	75
Technical	1	-	-	-	1
Clerical/Support	-	-	-	-	-
Category Unreported	857	220	2	-	1079
Total	870	220	2	63	1,155

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY OPM OCCUPATIONAL CATEGORY: NEBRASKA

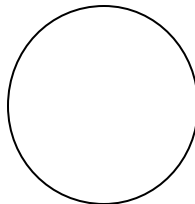
Data available for Nebraska leave almost all workers uncategorized, so detailed observations are not possible.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEBRASKA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEBRASKA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	-	-	-	-
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	12	-	-	-	12
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	63	63
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	1	-	-	-	1
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	857	220	-	-	1077
Total	870	220	2	63	1,155

Nebraska

NOTES ON DATA:

State data provided as an aggregate count.

State laboratory workers were identified from APHL survey.

Local data provided as an aggregate count only.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other workers consist of March of Dimes staff.

DATA SOURCES:

Nebraska Health and Human Services System, Office of Public Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

March of Dimes, National Office.

Colorado

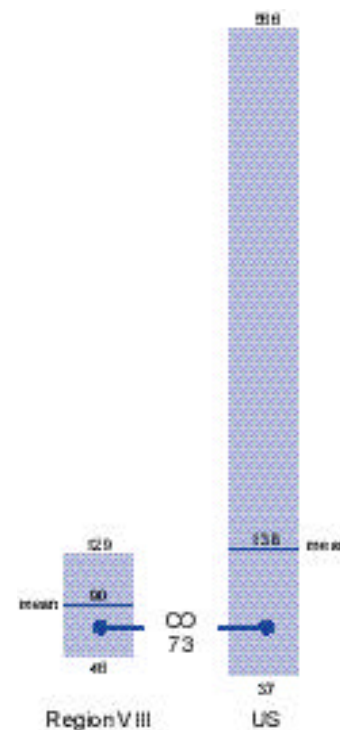
The Colorado Department of Public Health and Environment (CDPHE), the state health agency, is an independent, freestanding agency. Interaction between state and local public health departments in Colorado may be characterized as decentralized organizational control. Under this arrangement local government directly operates health departments with a local board of health. CDPHE has no direct oversight of local health departments except through specific contractual agreements (CDC, 1991).

Colorado has 77 local health departments, four of which are multi-county health departments, called regional and district health departments. Colorado has 10 county health departments and the four regional and district health departments as full-fledged health departments organized under state statutes as health departments. These LHDs provide services to 23 counties and 90 percent of the state's population. In the remaining 40 counties not covered by organized health departments, the county commissioners serve as the board of health (ibid).

The numbers of workers at the state and local level are approximately equal; this distribution is probably inaccurate due to the number of professionals reported but unspecified as to place of work.

Colorado is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

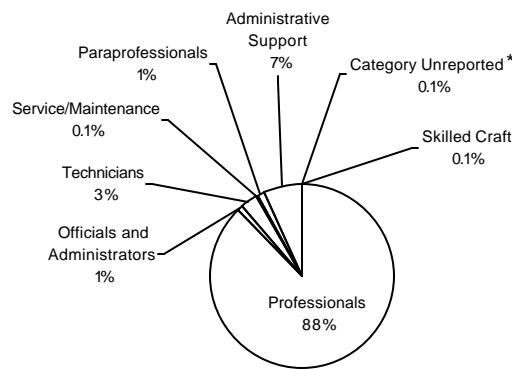
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: COLORADO

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	27	-	-	-	27
Professionals	692	1,000	842	51	2,585
Technicians	88	-	-	-	88
Protective Service Workers	-	-	-	-	-
Paraprofessionals	42	-	-	1	43
Administrative Support	194	-	-	-	194
Skilled Craft Workers	4	-	-	-	4
Service/Maintenance	3	-	-	-	3
Category Unreported	-	-	2	-	2
Total	1,050	1,000	844	52	2,946

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: COLORADO

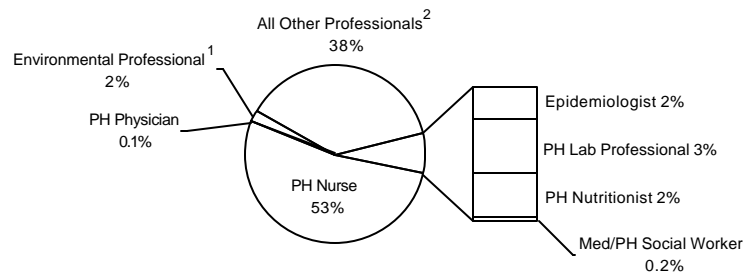
The proportion of professionals is comparatively high, with an extremely small proportion of workers not identifiable as to category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: COLORADO

Colorado has detailed information on nurses. More nurses identify themselves as public health nurses in a statewide survey than are found working for state or local health departments, and may include school nurses working directly for school districts or nurses who self-identify as public health and are working in other health organizations.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: COLORADO

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	27	-	-	-	27
Professionals					
Administrative/Business Professional	6	-	-	-	6
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	53	-	-	-	53
Epidemiologist	46	-	-	-	46
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	226	-	-	-	226
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	4	-	-	-	4
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	72	-	-	-	72
PH Nurse	11	500	842	-	1353
PH Nutritionist	11	-	-	51	62
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	2	-	-	-	2
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	261	-	-	-	261
PH Professional, Title Unspecified	-	500	-	-	500
Technicians					
Computer Specialist	8	-	-	-	8
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	15	-	-	-	15
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	21	-	-	-	21
Other Public Health Technician	44	-	-	-	44
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	2	-	-	-	2
Other or Unspecified Paraprofessional	40	-	-	1	41
Administrative Support					
Administrative Business Staff	6	-	-	-	6
Administrative Support Staff	188	-	-	-	188
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	4	-	-	-	4
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	3	-	-	-	3
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	1,050	1,000	844	52	2,946

Colorado

NOTES ON DATA:

State data was provided by occupational category.

Local data gives aggregate count of total workforce, specifying number of nurses.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes nurses in non-governmental public health and March of Dimes staff.

DATA SOURCES:

Colorado Department of Public Health and Environment.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND)
1994 Survey Datafile.

March of Dimes, National Office.

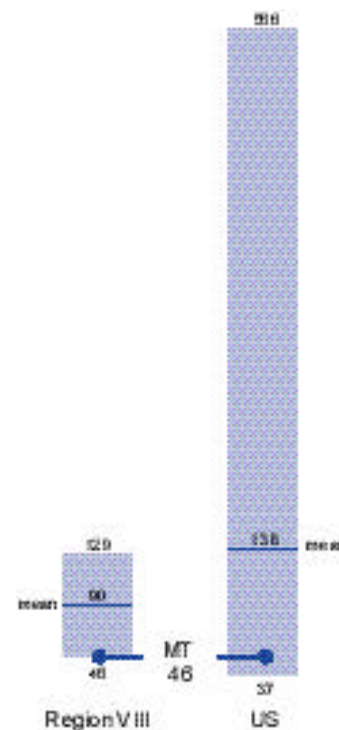
Montana

The Montana Department of Health and Environmental Sciences (MDHES), the state health agency, is a free-standing, independent agency. Interaction between state and local public health departments in Montana may be characterized as decentralized organizational control. Under this arrangement the local government directly operates a health department and may or may not have a local board of health (CDC, 1991).

Montana has 49 local health departments that include 6 city-county and 43 county health departments. Seven counties do not have health departments and receive public health services from adjoining counties through a contractual arrangement. Counties with health departments often contract for additional public health services from a neighboring county. Public health nurses and/or sanitarians that are based in one county may provide services to several nearby counties (ibid).

Montana is in the lower third of states in ratio of public health workers to population, while the proportion of workers reported as professionals is comparatively high.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

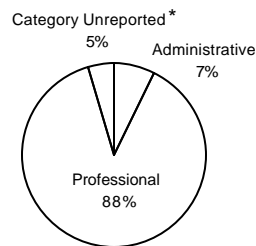
ESTIMATED PH WORKERS BY OPM OCCUPATIONAL CATEGORY AND SETTING: MONTANA

Category	State	Local	Other*	Agency Unspecified	Total
Administrative	30	-	-	-	30
Professional	97	248	-	11	356
Technical	-	-	-	-	-
Clerical/Support	-	-	-	-	-
Category Unreported	17	-	2	-	19
Total	144	248	2	11	405

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY OPM OCCUPATIONAL CATEGORY: MONTANA

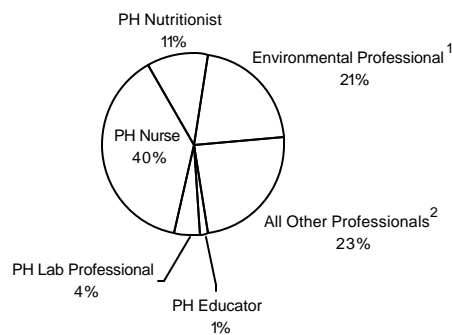
Data reported from the local level did not include administrative titles; it is likely that some professionals at the local level carry administrative duties and would be re-classified if job duties were known.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MONTANA

No physicians are identified in the professional category; it is likely that some carry administrative duties at the state level and are included there. Information regarding laboratory and nutrition professionals is from national reports.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MONTANA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	30	-	-	-	30
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	76	-	-	76
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	5	-	-	5
PH Laboratory Professional	15	-	-	-	15
PH Nurse	-	139	-	-	139
PH Nutritionist	-	28	-	11	39
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	82	-	-	-	82
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	17	-	-	-	17
Total	144	248	2	11	405

Montana

NOTES ON DATA:

State data summarized workers in OPM categories.

State laboratory workers were identified from APHL survey.

Local data covers only limited but key occupational categories.

Nutritionists identified from ASTPHND national survey that were not identified in other data sets were added as additional workers.

Other data consists of March of Dimes staff.

DATA SOURCES:

Montana Department of Public Health and Human Services.

Montana Department of Public Health and Human Services, Health Policy and Services Division.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

North Dakota

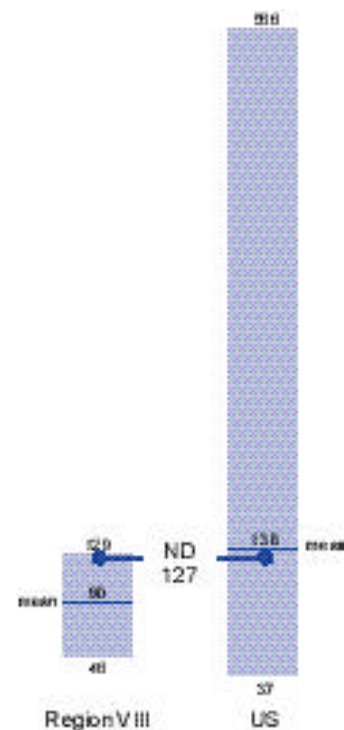
The state health agency is the North Dakota Department of Health (ND DOH), a freestanding, independent agency. Interaction between the ND DOH and local public health units in North Dakota may be characterized as decentralized organizational control. Under this arrangement, local boards of health and city governing bodies directly operate local public health units (CDC, 1991).

North Dakota has 26 local health units, including 7 multi-county, 4 city/county, and 15 county health units. Local health units are autonomous from the ND DOH (ibid.).

Data regarding the workforce is only available at a summary level, limiting the observations that can be made.

North Dakota is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

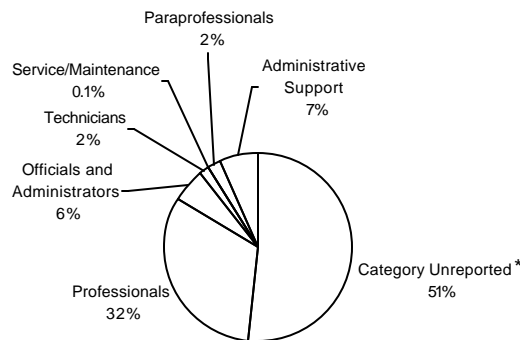
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: NORTH DAKOTA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	47	-	-	-	47
Professionals	172	-	-	84	256
Technicians	14	-	-	-	14
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	18	18
Administrative Support	53	-	-	-	53
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	1	-	-	-	1
Category Unreported	-	414	2	-	416
Total	287	414	2	102	805

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: NORTH DAKOTA

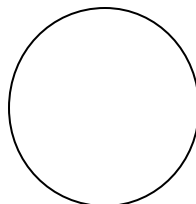
No local health department workers could be identified by category making observations about this workforce difficult.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NORTH DAKOTA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NORTH DAKOTA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	47	-	-	-	47
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	6	-	-	-	6
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	84	84
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	166	-	-	-	166
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	14	-	-	-	14
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	18	18
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	53	-	-	-	53
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	1	-	-	-	1
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	414	-	-	414
Total	287	414	2	102	805

North Dakota

NOTES ON DATA:

Information provided summarized state agency employees in EEO categories.

State laboratory workers were identified from APHL survey.

Local workers identified from NACCHO survey as aggregate number per county only.

Nutritionists identified from ASTPHND national survey that were not identified in other data sets were added as additional workers.

Other workers consist of March of Dimes staff.

DATA SOURCES:

North Dakota Department of Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

South Dakota

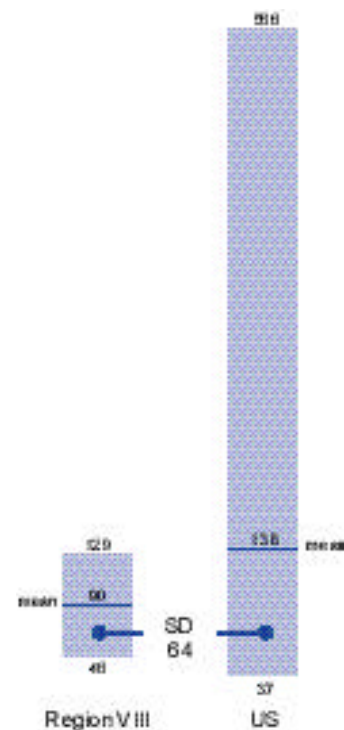
The South Dakota Department of Health, the state health agency, is a freestanding, independent agency. The interaction between state and local public health departments in South Dakota may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units, boards of health, or health departments in other jurisdictions (CDC, 1991).

South Dakota has two local health departments, consisting of one county and one-city health department, with very limited services. All public health services are provided by the state health agency (ibid).

The majority of reported public health workers are at the state level, in professional categories.

South Dakota is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

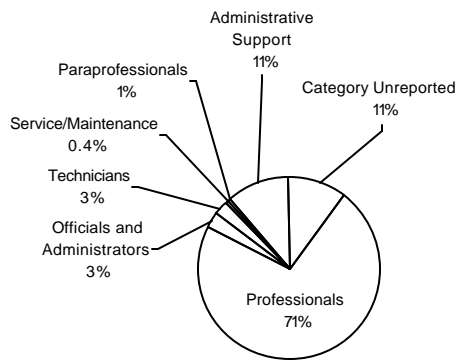
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: SOUTH DAKOTA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	13	-	-	-	13
Professionals	325	-	-	12	337
Technicians	12	-	-	-	12
Protective Service Workers	-	-	-	-	-
Paraprofessionals	1	-	-	2	3
Administrative Support	52	-	-	-	52
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	2	-	-	-	2
Category Unreported	-	49	2	-	51
Total	405	49	2	14	470

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: SOUTH DAKOTA

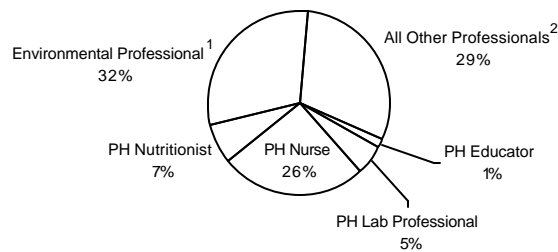
The proportion of workers is comparatively large in professional categories and small in administration. This may reflect blurring of job titles and duties with professionals also filling administrative roles.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: SOUTH DAKOTA

Approximately equal proportions of environmental professionals and nurses are consistent with anecdotal descriptions of the front-line workers in public health.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: SOUTH DAKOTA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	13	-	-	-	13
Professionals					
Administrative/Business Professional	10	-	-	-	10
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	2	-	-	-	2
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	54	-	-	-	54
Environmental Scientist & Specialist	53	-	-	-	53
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	1	-	-	-	1
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	14	-	-	-	14
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	5	-	-	-	5
PH Laboratory Professional	17	-	-	-	17
PH Nurse	86	-	-	-	86
PH Nutritionist	11	-	-	12	23
PH Optometrist	-	-	-	-	-
PH Pharmacist	2	-	-	-	2
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	55	-	-	-	55
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	1	-	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	14	-	-	-	14
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	4	-	-	-	4
Other Public Health Technician	8	-	-	-	8
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	1	-	-	2	3
Administrative Support					
Administrative Business Staff	3	-	-	-	3
Administrative Support Staff	49	-	-	-	49
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	2	-	-	-	2
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	49	-	-	49
Total	405	49	2	14	470

South Dakota

NOTES ON DATA:

Information was provided at the state level by occupation.

Local data available only as aggregate count from NACCHO survey.

Additional nutritionists within the state identified from ASTPHND survey.

Other workers consist of March of Dimes staff.

DATA SOURCES:

South Dakota Department of Labor, Labor Market Information Center.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Utah

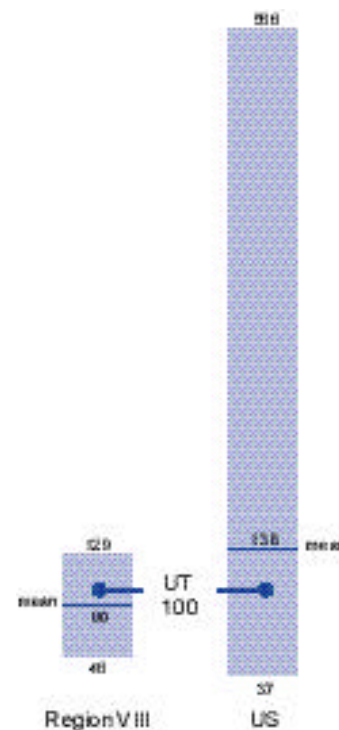
The Utah Department of Health (UDH), the state health agency, is a freestanding, independent agency. Interaction of state and local public health departments in Utah may be characterized as decentralized organizational control. Under this arrangement, local governments are responsible for creating health departments with appointed local boards of health (CDC, 1991).

Utah has 12 local health departments, six of which are city/county (single county) and six multi-county (districts). Local health departments are legally separate and autonomous from the UDH (ibid.).

The workforce is divided approximately equally between the state and local levels.

Utah is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

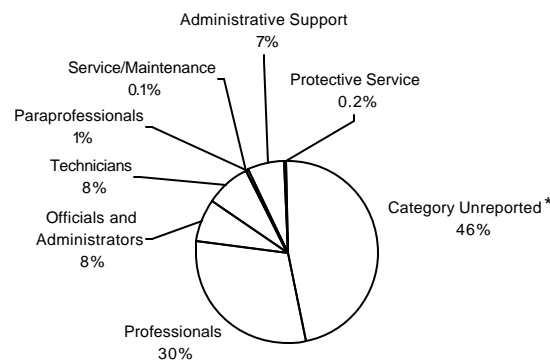
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: UTAH

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	165	-	-	-	165
Professionals	594	-	-	55	649
Technicians	168	-	-	-	168
Protective Service Workers	4	-	-	-	4
Paraprofessionals	9	-	-	5	14
Administrative Support	143	-	-	-	143
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	2	-	-	-	2
Category Unreported	-	993	2	-	995
Total	1,085	993	2	60	2,140

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: UTAH

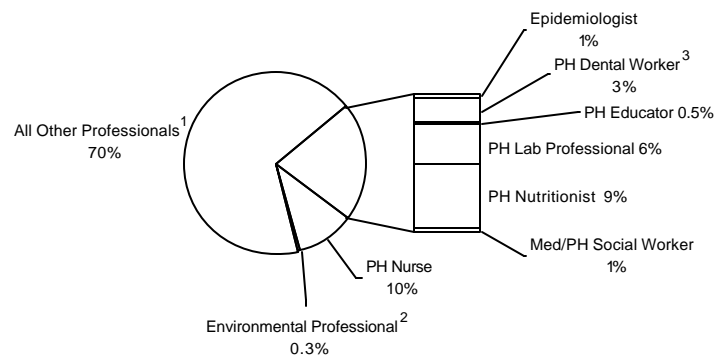
Nearly half of the workforce is unreported as to category, making observations difficult.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: UTAH

Many professionals at the state level are categorized as 'public health program specialist', a title that may encompass a range professional occupations; no detail is available regarding professional categories at the local level.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: UTAH

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	165	-	-	-	165
Professionals					
Administrative/Business Professional	19	-	-	-	19
Attorney/Hearing Officer	6	-	-	-	6
Biostatistician	1	-	-	-	1
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	2	-	-	-	2
Epidemiologist	6	-	-	-	6
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	18	-	-	-	18
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	38	-	-	-	38
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	4	-	-	-	4
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	22	-	-	-	22
PH Educator	3	-	-	-	3
PH Laboratory Professional	37	-	-	-	37
PH Nurse	65	-	-	-	65
PH Nutritionist	6	-	-	55	61
PH Optometrist	-	-	-	-	-
PH Pharmacist	1	-	-	-	1
PH Physical Therapist	1	-	-	-	1
PH Physician	-	-	-	-	-
PH Program Specialist	346	-	-	-	346
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	3	-	-	-	3
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	13	-	-	-	13
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	89	-	-	-	89
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	26	-	-	-	26
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	23	-	-	-	23
Other Public Health Technician	30	-	-	-	30
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	2	-	-	-	2
Other or Unspecified Protective Service Worker	2	-	-	-	2
Paraprofessionals					
Community Outreach/Field Worker	4	-	-	-	4
Other or Unspecified Paraprofessional	5	-	-	5	10
Administrative Support					
Administrative Business Staff	13	-	-	-	13
Administrative Support Staff	130	-	-	-	130
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	2	-	-	-	2
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	993	-	-	993
Total	1,085	993	2	60	2,140

Utah

NOTES ON DATA:

Information provided from the state by occupation.

Local data available only as aggregate count from NACCHO data file.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Utah Department of Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Wyoming

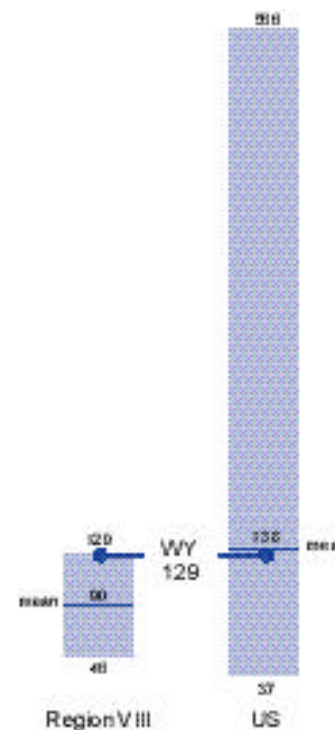
The state health agency, the Division of Public Health (DPH), is a component of a super agency called the Department of Health. Interaction of state and local health departments in Wyoming may be characterized as mixed centralized and decentralized organizational control. Under this arrangement certain local health services are provided by the state health agency while other services are provided by local governmental units, boards of health, or health departments (CDC, 1991).

There are 23 local health units in Wyoming. Twenty-one of these are county units and two are city-county departments. All except the two largest (Natrona and Laramie counties) are solely Public Health Nursing Offices (ibid.).

Just over half of the workers are at the state level; a similar proportion is identified as professionals.

Wyoming is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region VIII: CO, MT, ND, SD, UT, and WY
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

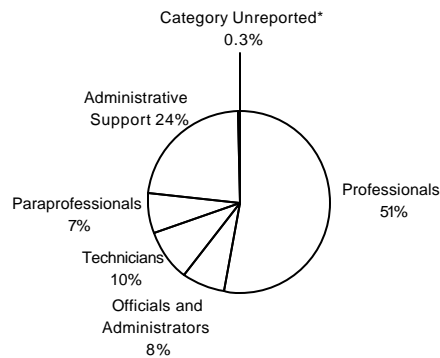
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: WYOMING

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	18	29	-	-	47
Professionals	193	111	-	17	321
Technicians	53	6	-	-	59
Protective Service Workers	-	-	-	-	-
Paraprofessionals	13	32	-	-	45
Administrative Support	85	61	-	-	146
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	2	-	2
Total	362	239	2	17	620

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: WYOMING

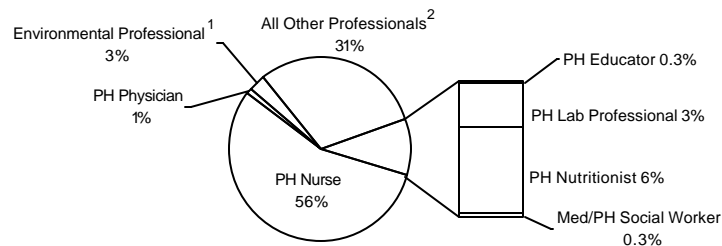
The proportions of workers in occupational categories is typical.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: WYOMING

The comparatively low proportion of environmental professionals at both state and local levels probably reflects the organizational structure of agencies in the state.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: WYOMING

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	18	29	-	-	47
Professionals					
Administrative/Business Professional	1	-	-	-	1
Attorney/Hearing Officer	2	-	-	-	2
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	1	-	-	-	1
Environmental Scientist & Specialist	-	9	-	-	9
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	1	-	-	1
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	1	-	-	1
PH Laboratory Professional	9	1	-	-	10
PH Nurse	86	92	-	-	178
PH Nutritionist	-	2	-	17	19
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	1	3	-	-	4
PH Program Specialist	93	-	-	-	93
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	1	-	-	1
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	1	-	-	1
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	16	-	-	-	16
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	18	-	-	-	18
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	2	-	-	-	2
Other Public Health Technician	17	6	-	-	23
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	13	32	-	-	45
Administrative Support					
Administrative Business Staff	11	-	-	-	11
Administrative Support Staff	74	-	-	-	74
Unspecified Clerical/Support	-	61	-	-	61
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	362	239	2	17	620

Wyoming

NOTES ON DATA:

State agency data provided by occupation.

Local data identified from WWAMI survey using occupational categories and supplemented with information from state agency.

Additional nutritionists within the state identified from ASTPHND survey.

Other data consists of March of Dimes staff.

DATA SOURCES:

Wyoming Department of Health, Office of Administration and Information.

Wyoming Department of Health, Division of Family and Community Health.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

WWAMI Center for Health Workforce Studies, 1999, Local Health Districts & the PH Workforce: A Case Study of Wyoming & Idaho.

March of Dimes, National Office.

Arizona

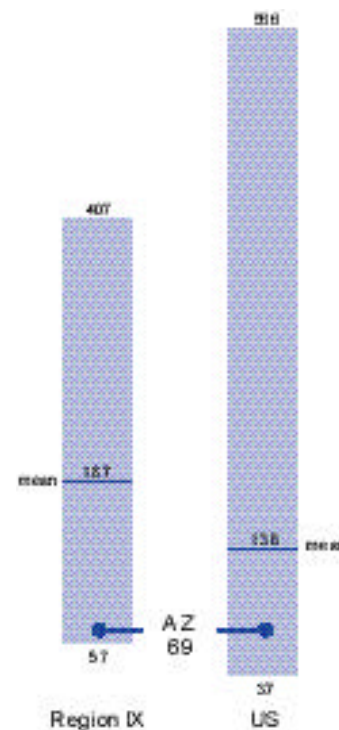
The Arizona Department of Health Services (ADHS), the state health agency, is a freestanding, independent agency. The interaction between state and local public health departments in Arizona may be characterized as decentralized organizational control. Under this arrangement, local government directly operates a health department with or without a board of health (CDC, 1991).

Arizona has 15 local health departments in the form of county health departments. Local health departments are each separate and independent from the ADHS. Each local health department is the direct extension of the ADHS, ensuring that mandatory services are provided at the county level (ibid.).

Data regarding the workforce is only available at a summary level, which limits the observations that can be made.

Arizona is in the lower third of states in ratio of public health workers to population, with approximately two thirds working in local health departments.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

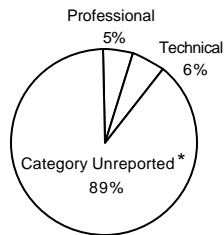
ESTIMATED PH WORKERS BY OPM OCCUPATIONAL CATEGORY AND SETTING: ARIZONA

Category	State	Local	Other*	Agency Unspecified	Total
Administrative	-	-	-	-	-
Professional	82	-	-	93	175
Technical	-	-	-	187	187
Clerical/Support	-	-	-	-	-
Category Unreported	943	1990	2	-	2935
Total	1,025	1,990	2	280	3297

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY OPM OCCUPATIONAL CATEGORY: ARIZONA

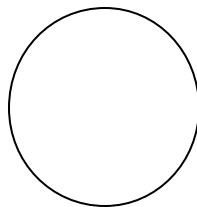
The information on workers identified as professional and technical comes from national reports; the workers in unreported categories may include additional individuals in these as well as all other categories.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: ARIZONA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: ARIZONA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	-	-	-	-
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	28	-	-	-	28
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	54	-	-	-	54
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	93	93
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	187	187
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	943	-	2	-	945
Unidentifiable	-	1990	-	-	1990
Total	1,025	1,990	2	280	3,297

Arizona

NOTES ON DATA:

State data reported primarily by agency type.

Local data was provided by the state as an aggregate count with no details.

State laboratory workers identified from APHL report.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other workers are March of Dimes staff.

DATA SOURCES:

Arizona Department of Health Services.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

California

The Department of Health Services is a component of the super agency called the California Health and Welfare Agency. The interaction between state and local public health departments in California may be characterized as mixed centralized and decentralized organizational control. Under this arrangement, local health services in the state may be provided by the state health agency in some jurisdictions and by local governmental units in others (CDC, 1991).

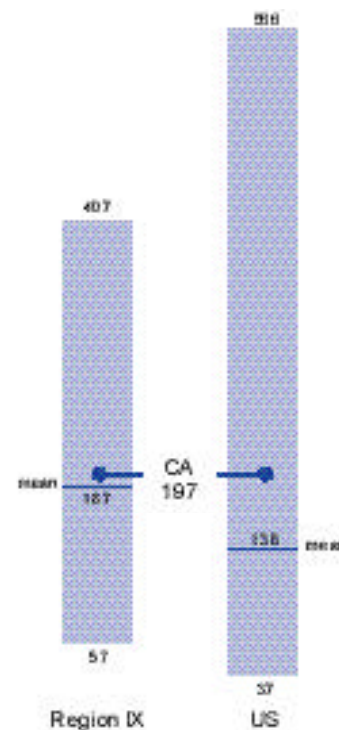
There are 61 local health departments in California. These consist of 58 county and 3 city health departments. There are 12 contract counties, which, due to their small population, are supplied with public health nurses and sanitarians by the state (ibid.).

California county public health departments contract for direct and preventive services for the non-MediCal eligible as part of a statutory indigent care system. Over 45,000 local workers may be committed to indigent care services in California counties.

The large number of professional working in other than state and local health departments reflects the number of faculty and students in California's schools of public health.

California is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

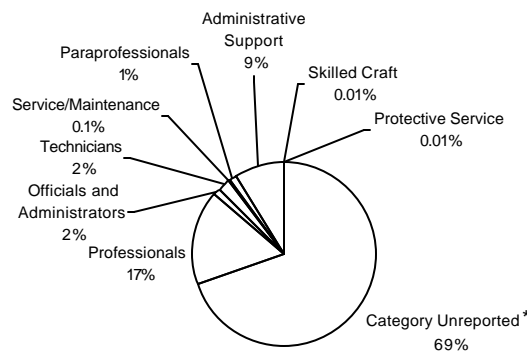
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: CALIFORNIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	574	412	-	-	986
Professionals	2781	5869	2185	-	10835
Technicians	696	822	-	-	1518
Protective Service Workers	9	-	-	-	9
Paraprofessionals	23	769	-	-	792
Administrative Support	1273	4534	-	-	5807
Skilled Craft Workers	6	-	-	-	6
Service/Maintenance	36	20	-	-	56
Category Unreported	42	45362	4	-	45408
Total	5,440	57,788	2,189	-	65,417

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: CALIFORNIA

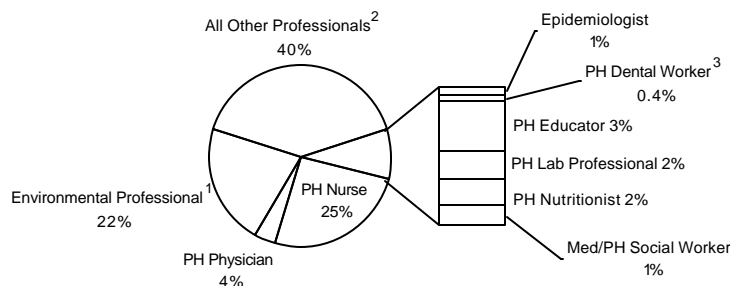
The local health departments report over 45,000 workers unidentifiable by category, largely committed to provision of indigent care; it is likely that many are professionals including physicians and nurses.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: CALIFORNIA

The relative balance between environmental and nursing professionals is consistent with anecdotal reports regarding the staffing of local health departments; this distribution might change if 'other professionals' were identified.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: CALIFORNIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	574	412	-	-	986
Professionals					
Administrative/Business Professional	269	6	-	-	275
Attorney/Hearing Officer	70	-	-	-	70
Biostatistician	3	-	20	-	23
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	128	9	-	-	137
Environmental Scientist & Specialist	165	2045	37	-	2247
Epidemiologist	9	2	49	-	60
Health Economist	2	-	-	-	2
Health Planner/Researcher/Analyst	441	1	-	-	442
Infection Control/Disease Investigator	94	20	-	-	114
Licensure/Inspection/Regulatory Specialist	501	16	-	-	517
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	9	116	-	-	125
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	441	-	-	441
Occupation Safety & Health Specialist	6	19	-	-	25
PH Dental Worker	3	41	-	-	44
PH Educator	49	267	-	-	316
PH Laboratory Professional	181	2	-	-	183
PH Nurse	330	2360	-	-	2690
PH Nutritionist	47	114	10	-	171
PH Optometrist	2	-	-	-	2
PH Pharmacist	55	-	-	-	55
PH Physical Therapist	5	-	-	-	5
PH Physician	88	324	-	-	412
PH Program Specialist	143	-	7	-	150
PH Student	-	-	1915	-	1915
PH Veterinarian/Animal Control Specialist	3	51	-	-	54
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	3	3	-	-	6
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	175	32	48	-	255
PH Professional, Title Unspecified	-	-	99	-	99
Technicians					
Computer Specialist	411	17	-	-	428
Environmental Engineering Technician	17	1	-	-	18
Environmental Science and Protection Technician	-	163	-	-	163
Health Information Systems/Data Analyst	217	14	-	-	231
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	27	443	-	-	470
Other Public Health Technician	24	184	-	-	208
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	9	-	-	-	9
Paraprofessionals					
Community Outreach/Field Worker	-	5	-	-	5
Other or Unspecified Paraprofessional	23	764	-	-	787
Administrative Support					
Administrative Business Staff	107	68	-	-	175
Administrative Support Staff	1166	4466	-	-	5632
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	6	-	-	-	6
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	36	20	-	-	56
Category Unreported					
Programs	-	-	4	-	4
Unidentifiable	42	45362	-	-	45404
Total	5,440	57,788	2,189	-	65,417

California

NOTES ON DATA:

State agency provided by job titles.

Local workforce identified from NACCHO report.

Other data includes students and faculty of schools of public health and March of Dimes staff.

DATA SOURCES:

California Department of Health Services.

Los Angeles County Department of Health Services, Division of Environmental Health.

California Conference of Directors of Environmental Health.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of Schools of Public Health 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

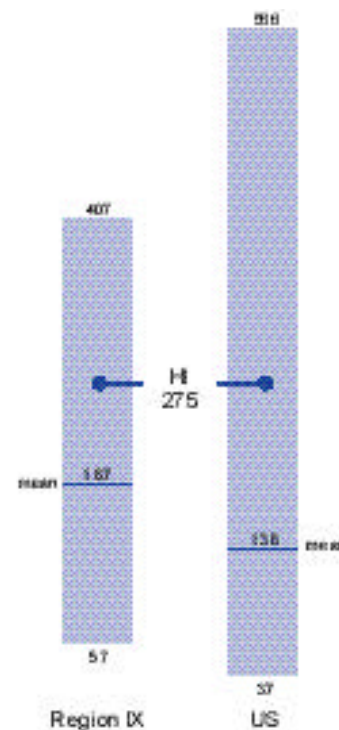
Hawaii

The Hawaii Department of Health (HDH) is an independent state agency reporting directly to the Governor. The HDH includes three District Health Offices, which administer public health and environmental health service programs on the islands of Hawaii, Maui and Kauai. The central office on Oahu provides all public health and environmental health services on this island. There are no county health departments. The District Health Offices provide services that are usually provided by county health departments in other states. In this regard, the public health programs in Hawaii may be characterized as very centralized (CDC, 1991).

The available information allows only broad generalizations about this workforce.

Hawaii is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

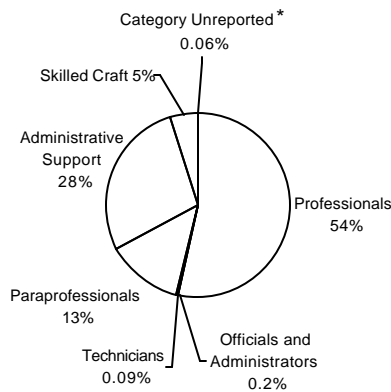
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: HAWAII

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	6	-	-	-	6
Professionals	1692	-	-	39	1731
Technicians	3	-	-	-	3
Protective Service Workers	-	-	-	-	-
Paraprofessionals	405	-	-	33	438
Administrative Support	916	-	-	-	916
Skilled Craft Workers	163	-	-	-	163
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	2	-	2
Total	3,185	-	2	72	3,259

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: HAWAII

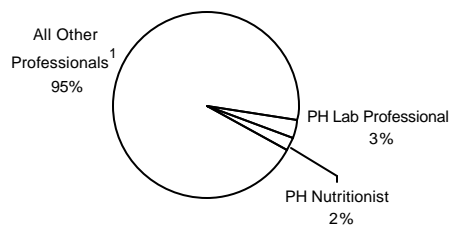
The proportion of workers categorized as professionals is typical of the expertise needed to deliver public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: HAWAII

The information on laboratory and nutrition professionals is from national reports; no detail is available on other professionals in this state.



¹ Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: HAWAII

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	6	-	-	-	6
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	58	-	-	-	58
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	39	39
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	1634	-	-	-	1634
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	3	-	-	-	3
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	405	-	-	33	438
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	916	-	-	-	916
Skilled Craft					
Skilled Craft Worker	163	-	-	-	163
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	-	-	-	-
Total	3,185	-	2	72	3,259

Hawaii

NOTES ON DATA:

State agency provided a summary of employees in EEO-4 categories

State laboratory workers were identified from APHL report.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other workers are March of Dimes staff.

DATA SOURCES:

Hawaii Department of Health.

Association of Public Health Laboratories (APHL), Fiscal Year 1991 Consolidated Annual Report.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Nevada

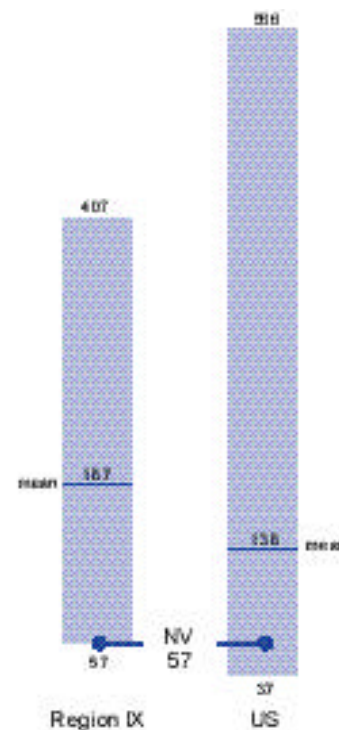
The Nevada State Health Division (NSHD), the state health agency, is a component of a super agency named the Department of Human Resources. Interaction between state and local public health departments in Nevada may be characterized as mixed centralized and decentralized organizational control. Under this arrangement, NSHD and local governmental units in rural jurisdictions provide local health services. In Washoe and Clark counties, services are provided through the combined efforts of NSHD and the local health district. Both Clark and Washoe counties have local boards of health (CDC, 1991).

There are two local health departments in Nevada, consisting of the full-service health districts in Reno (Washoe county) and Las Vegas (Clark county). In the remaining 15 counties, public health services are provided by NSHD staff in local field offices supplemented, in some counties, by local staff (ibid.).

Public health workers work at the state and local health levels in nearly equal proportions, according to available information.

Nevada is in the lower third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

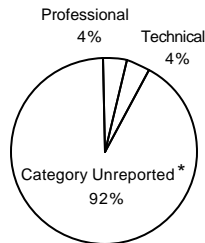
ESTIMATED PH WORKERS BY OPM OCCUPATIONAL CATEGORY AND SETTING: NEVADA

Category	State	Local	Other*	Agency Unspecified	Total
Administrative	-	-	-	-	-
Professional	23	-	-	21	44
Technical	-	-	-	42	42
Clerical/Support	-	-	-	-	-
Category Unreported	402	537	2	-	941
Total	425	537	2	63	1,027

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY OPM OCCUPATIONAL CATEGORY: NEVADA

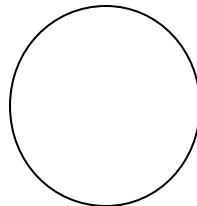
Information on laboratory and nutrition professionals is from national reports. Other data regarding the workforce is only available at a summary level, limiting observations that can be made.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: NEVADA

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: NEVADA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	-	-	-	-
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	23	-	-	-	23
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	21	21
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	42	42
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	402	537	-	-	939
Total	425	537	2	63	1,027

Nevada

NOTES ON DATA:

State agency provided number of workers as an aggregate count.

Laboratory workers were identified from APHL report.

Local data identified from NACCHO survey.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data is March of Dimes staff.

DATA SOURCES:

Nevada Department of Human Resources Health Division.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

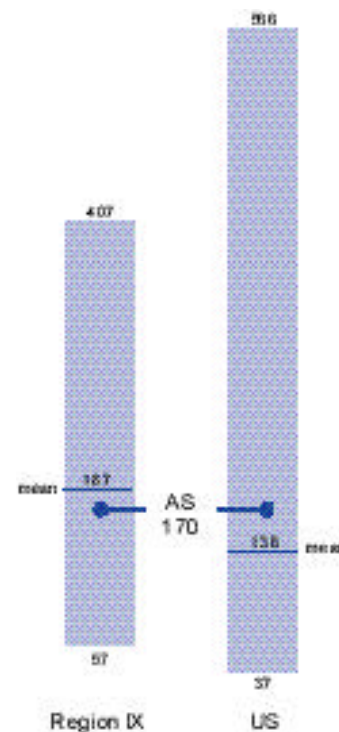
March of Dimes, National Office.

American Samoa

The Office of Public Health is part of the Department of Medical Services, which reports directly to the Governor. Primary level out-patient services and community preventive services are provided at 6 clinical locations including 5 community health centers and a central clinic in the L.B.J. Tropical Medical Center in Fagaalu on the main island of Tutuila. In addition, public health workers are employed in the school health program and provide service at the ECE and Elementary School campuses.

American Samoa is similar to the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

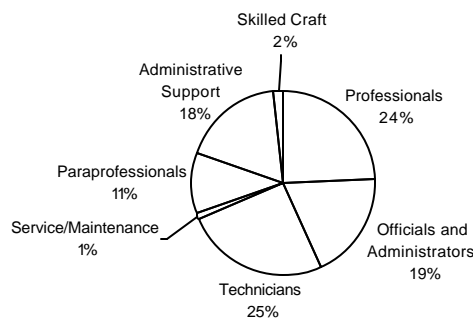
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: AMERICAN SAMOA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	21	-	-	-	21
Professionals	27	-	-	-	27
Technicians	28	-	-	-	28
Protective Service Workers	-	-	-	-	-
Paraprofessionals	12	-	-	-	12
Administrative Support	20	-	-	-	20
Skilled Craft Workers	2	-	-	-	2
Service/Maintenance	1	-	-	-	1
Category Unreported	-	-	-	-	-
Total	111	-	-	-	111

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: AMERICAN SAMOA

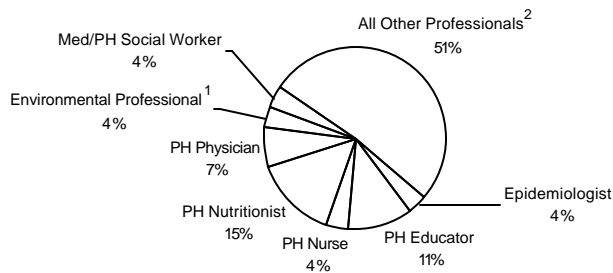
The comparatively high proportion of officials and administrators may reflect a number of professionals who are the single expert in an area, and thus carry an administrative title while also filling a professional role in delivering essential public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: AMERICAN SAMOA

The proportion of physicians is comparatively high.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: AMERICAN SAMOA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	21	-	-	-	21
Professionals					
Administrative/Business Professional	1	-	-	-	1
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	2	-	-	-	2
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	1	-	-	-	1
Epidemiologist	1	-	-	-	1
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	2	-	-	-	2
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	1	-	-	-	1
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	1	-	-	-	1
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	3	-	-	-	3
PH Laboratory Professional	-	-	-	-	-
PH Nurse	1	-	-	-	1
PH Nutritionist	4	-	-	-	4
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	2	-	-	-	2
PH Program Specialist	7	-	-	-	7
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	1	-	-	-	1
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	5	-	-	-	5
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	7	-	-	-	7
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	1	-	-	-	1
Other Public Health Technician	15	-	-	-	15
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	5	-	-	-	5
Other or Unspecified Paraprofessional	7	-	-	-	7
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	20	-	-	-	20
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	2	-	-	-	2
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	1	-	-	-	1
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	-	-	-	-	-
Total	111	-	-	-	111

American Samoa

NOTES ON DATA:

Workforce information was provided as a summary by occupation.
Public health workers in American Samoa are classified as state level.

DATA SOURCES:

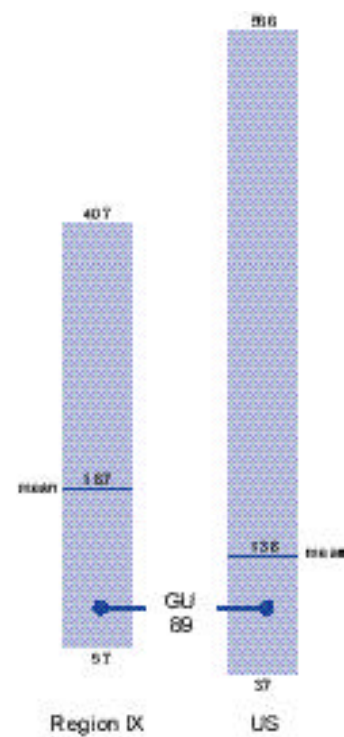
American Samoa Department of Health.

Guam

Department of Public Health and Social Services is a line agency within the Executive Branch of the Government of Guam. The Division of Public Health, a component of Department of Public Health and Social Services, ensures the provision of direct and indirect health care services for individuals, families, high-risk groups, and the community at three health facilities. Services are also provided in schools, home settings and other community locations, in accordance with legal mandates and the identified collective health needs of the population.

Guam is similar to the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

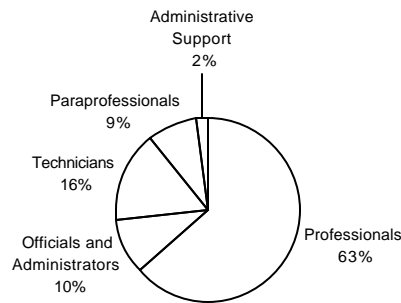
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: GUAM

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	14	-	-	-	14
Professionals	87	-	-	-	87
Technicians	22	-	-	-	22
Protective Service Workers	-	-	-	-	-
Paraprofessionals	12	-	-	-	12
Administrative Support	3	-	-	-	3
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	-	-	-
Total	138	-	-	-	138

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: GUAM

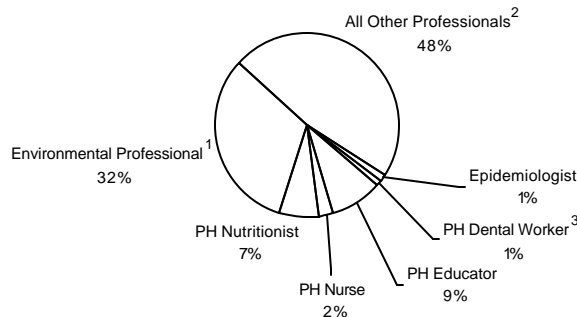
The proportion of staff in the professional category is higher than many jurisdictions.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: GUAM

The reported number of nurses is comparatively low and may reflect an unusual organizational arrangement in this territory. The proportion of environmental professionals is comparatively high.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: GUAM

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	14	-	-	-	14
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	1	-	-	-	1
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	1	-	-	-	1
Environmental Scientist & Specialist	27	-	-	-	27
Epidemiologist	1	-	-	-	1
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	12	-	-	-	12
Licensure/Inspection/Regulatory Specialist	25	-	-	-	25
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	1	-	-	-	1
PH Educator	8	-	-	-	8
PH Laboratory Professional	-	-	-	-	-
PH Nurse	2	-	-	-	2
PH Nutritionist	6	-	-	-	6
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	3	-	-	-	3
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	16	-	-	-	16
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	6	-	-	-	6
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	12	-	-	-	12
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	3	-	-	-	3
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	-	-	-	-	-
Total	138	-	-	-	138

Guam

NOTES ON DATA:

Public health workforce information for Guam was provided as a workforce summary by occupation.

All public health workers in Guam are classified as state level workers

DATA SOURCES:

Guam Health Planning and Development Agency, 21st Century Health Work Force Survey (1992).

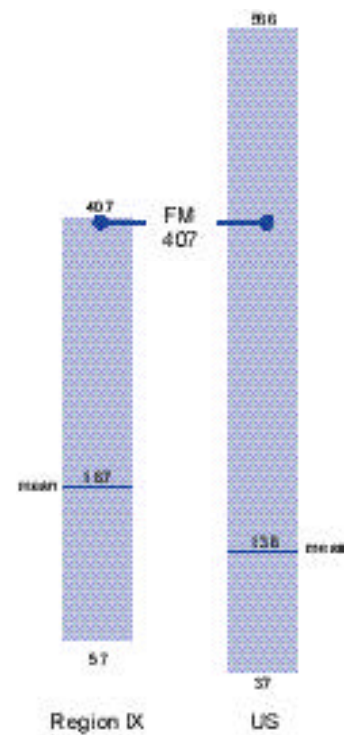
Micronesia

Public health services for the four states (Chuuk, Kosrae, Pohnpei and Yap) are provided by the Department of Health, Education, and Social Affairs, located in Pohnpei. The Department reports directly to the Office of the President.

The majority of reported workers are at the local level, rather than centralized.

The Federated States of Micronesia are similar to the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

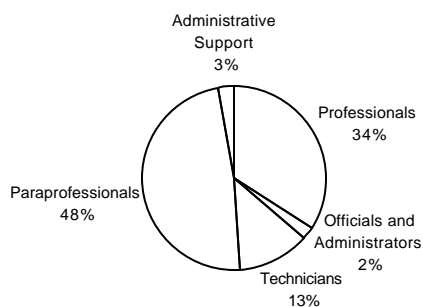
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: MICRONESIA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	-	6	-	-	6
Professionals	9	91	-	-	100
Technicians	-	37	-	-	37
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	142	-	-	142
Administrative Support	-	8	-	-	8
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	-	-	-	-	-
Total	9	284	-	-	293

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: MICRONESIA

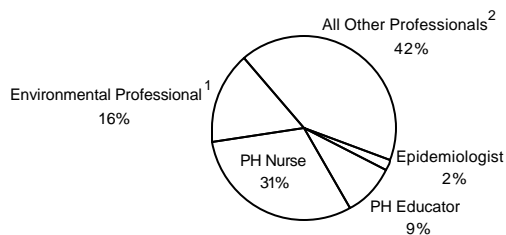
The proportion of workers reported as paraprofessional is comparatively high and may reflect a different policy regarding delivery of services than other jurisdictions.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: MICRONESIA

Nearly half of all professionals are not specified, making further observations difficult.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: MICRONESIA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	6	-	-	6
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	1	15	-	-	16
Epidemiologist	2	-	-	-	2
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	4	-	-	4
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	21	-	-	21
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	1	8	-	-	9
PH Laboratory Professional	-	-	-	-	-
PH Nurse	-	31	-	-	31
PH Nutritionist	-	-	-	-	-
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	5	-	-	-	5
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	4	-	-	4
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	8	-	-	8
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	11	-	-	11
Health Information Systems/Data Analyst	-	1	-	-	1
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	25	-	-	25
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	18	-	-	18
Other or Unspecified Paraprofessional	-	124	-	-	124
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	8	-	-	8
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	-	-	-	-	-
Total	9	284	-	-	293

Micronesia

NOTES ON DATA:

Information was provided in the form of summary of workers in each state by occupational title.

Central (national office in Pohnpei) agency staff are classified as state level.

Workers in the island states (Chuuk, Kosrae, Pohnpei and Yap) classified as local level.

DATA SOURCES:

Federated States of Micronesia Department of Health, Education & Social Affairs, National Health Statistics Office.

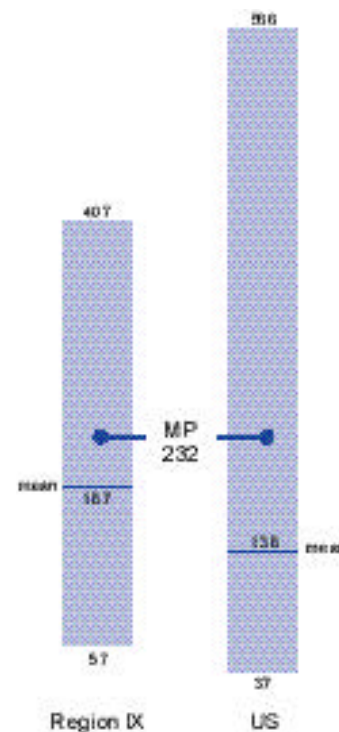
N. Mariana Islands

The Department of Public Health in the Commonwealth of the Northern Mariana Islands (CNMI) is a CNMI government owned and operated facility. It is composed of three main divisions: the Commonwealth Health Center; the Division of Public Health, and the Community Guidance Center. As an integral component of the Department of Public Health, the Division of Public Health is responsible for improving the quality of life through encouraging and empowering the community to achieve its highest possible level of wellness and ensuring the availability of efficient and quality health care and prevention services.

The available workforce information does not reflect any workers in administrative or technical categories. This is extremely unusual and probably reflects a gap in available data.

Northern Mariana Islands are similar to the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region IX: AZ, CA, HI, NV, AS, GU, FM, and MP
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

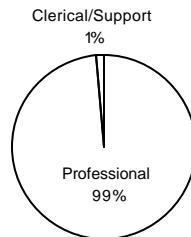
ESTIMATED PH WORKERS BY OPM OCCUPATIONAL CATEGORY AND SETTING: N. MARIANA ISLANDS

Category	State	Local	Other*	Agency Unspecified	Total
Administrative	-	-	-	-	-
Professional	305	-	-	-	305
Technical	-	-	-	-	-
Clerical/Support	4	-	-	-	4
Category Unreported	-	-	-	-	-
Total	309	-	-	-	309

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY OPM OCCUPATIONAL CATEGORY: N. MARIANA ISLANDS

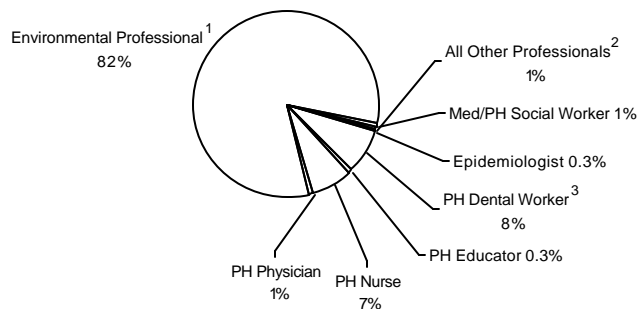
It is not possible to make any observations with the vast majority of workers appearing in a single occupational category.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: N. MARIANA ISLANDS

The reported proportion of environmental professionals is comparatively high. The proportion of unidentified professionals is comparatively low.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: N. MARIANA ISLANDS

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	-	-	-	-	-
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	252	-	-	-	252
Epidemiologist	1	-	-	-	1
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	2	-	-	-	2
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	2	-	-	-	2
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	23	-	-	-	23
PH Educator	1	-	-	-	1
PH Laboratory Professional	-	-	-	-	-
PH Nurse	22	-	-	-	22
PH Nutritionist	-	-	-	-	-
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	2	-	-	-	2
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	-	-
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	4	-	-	-	4
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	-	-	-
Unidentifiable	-	-	-	-	-
Total	309	-	-	-	309

N.Mariana Islands

NOTES ON DATA:

Information was provided as a summary of workforce by occupation.

All reported public health workers in the N. Mariana Islands are classified as state level.

DATA SOURCES:

Commonwealth of North Mariana Islands Department of Public Health.

Alaska

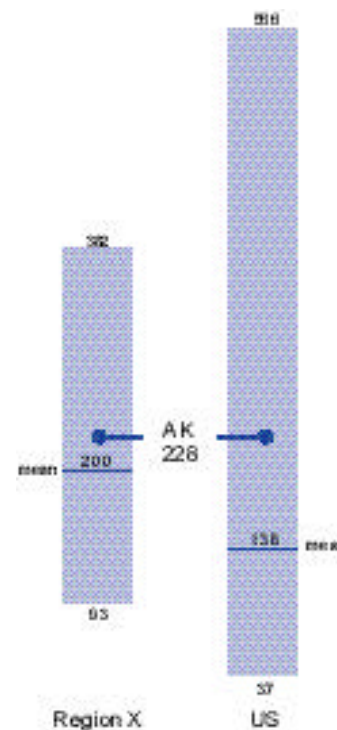
The Division of Health, the state health agency, is a component of the super agency, the Alaska Department of Health and Social Services. Interaction between state and local public health departments in Alaska may be characterized as mixed centralized and decentralized organizational control. Under this arrangement local health services may be provided by the state health agency in some jurisdictions and by local governmental units or by non-profit departments, which receive grants from the state health agency to provide specific services (CDC, 1991).

Alaska has two local health departments: the North Slope Borough and the Anchorage Municipal Health Department. In addition, some public health services, often in the realm of personal health services, are provided by the Regional Native Health Corporations. In areas that are not served by local health departments the state provides direct health services through the Section of Nursing in the Division of Public Health. The Section of Nursing supports 21 health centers, which serve over 200 communities and consist of state employees who are under state direction and who report within the state chain of command (ibid.).

The numbers reported here do not include mental health, substance abuse or other state agencies with public health responsibilities.

Alaska is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region X: AK, ID, OR, and WA
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

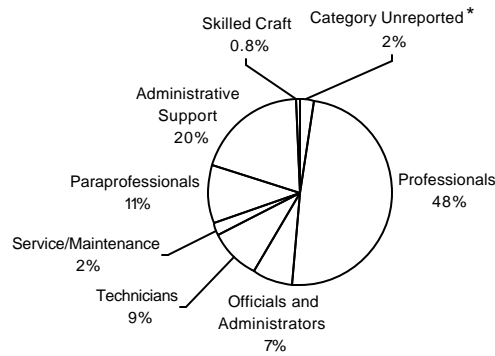
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: ALASKA

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	77	21	1	-	99
Professionals	515	129	12	35	691
Technicians	82	43	-	-	125
Protective Service Workers	-	-	-	-	-
Paraprofessionals	31	98	4	16	149
Administrative Support	191	85	1	-	277
Skilled Craft Workers	1	10	-	-	11
Service/Maintenance	5	21	-	-	26
Category Unreported	-	33	2	-	35
Total	902	440	20	51	1,413

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: ALASKA

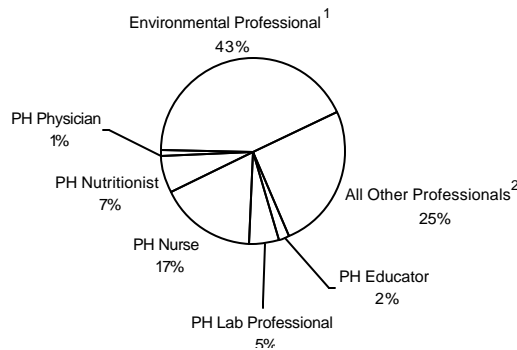
A workforce that is half professionals is typical of the expertise needed to deliver essential public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: ALASKA

The high proportion of environmental professionals is atypical. This may represent a strong commitment to environmental health; it may also be due to other public health services being delivered through contract or other arrangements that led to under-reporting in this enumeration.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: ALASKA

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	77	21	1	-	99
Professionals					
Administrative/Business Professional	10	3	-	-	13
Attorney/Hearing Officer	-	2	-	-	2
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	55	-	-	-	55
Environmental Scientist & Specialist	225	20	-	-	245
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	11	-	-	-	11
Infection Control/Disease Investigator	4	5	-	-	9
Licensure/Inspection/Regulatory Specialist	3	-	-	-	3
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	27	-	-	27
Occupation Safety & Health Specialist	1	-	2	-	3
PH Dental Worker	-	-	-	-	-
PH Educator	1	1	10	-	12
PH Laboratory Professional	37	-	-	-	37
PH Nurse	109	7	-	-	116
PH Nutritionist	-	10	-	35	45
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	6	-	-	-	6
PH Program Specialist	45	3	-	-	48
PH Student	2	6	-	-	8
PH Veterinarian/Animal Control Specialist	1	1	-	-	2
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	3	-	-	-	3
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	2	7	-	-	9
PH Professional, Title Unspecified	-	37	-	-	37
Technicians					
Computer Specialist	30	2	-	-	32
Environmental Engineering Technician	11	-	-	-	11
Environmental Science and Protection Technician	27	-	-	-	27
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	13	-	-	-	13
Other Public Health Technician	1	41	-	-	42
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	23	4	-	27
Other or Unspecified Paraprofessional	31	75	-	16	122
Administrative Support					
Administrative Business Staff	17	4	-	-	21
Administrative Support Staff	174	30	1	-	205
Unspecified Clerical/Support	-	51	-	-	51
Skilled Craft					
Skilled Craft Worker	1	10	-	-	11
Service/Maintenance					
Food Services/Housekeeping	1	16	-	-	17
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	4	5	-	-	9
Volunteers					
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	28	-	-	28
Total	902	440	20	51	1,413

Alaska

NOTES ON DATA:

State data includes occupational listings from Division of Public Health and Department of Environmental Conservation.

Local data includes Anchorage Department of Health and Human Services and the North-Slope Borough Health Department.

Additional nutritionists within the state identified from ASTPHND survey.

Other data include occupational listings from Alaska Native Tribal Health Consortium and March of Dimes workers.

DATA SOURCES:

Alaska Division of Public Health.

Alaska Department of Environmental Conservation

Alaska Native Tribal Health Consortium, Village Operations.

Municipality of Anchorage Department of Health and Human Services.

North-Slope Borough Health Department.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Idaho

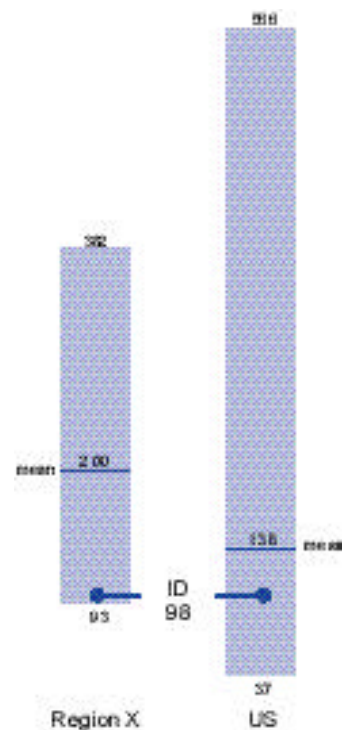
The state health agency is the Idaho Department of Health and Welfare, with primary health-related responsibility delegated to the Division of Health. The interaction between state and local public health departments in Idaho may be characterized as decentralized organizational control. Under this arrangement local governments directly operate health departments with a local board of health (CDC, 1991).

During the 1970's, Idaho enacted legislation to provide uniform public health services for every county through seven multi-county health departments, which are called district health departments. Each district is autonomously governed by a local board of health (ibid.).

The data available for Idaho leave over half of workers uncategorized, limiting the utility of more detailed observations.

Idaho is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region X: AK, ID, OR, and WA
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

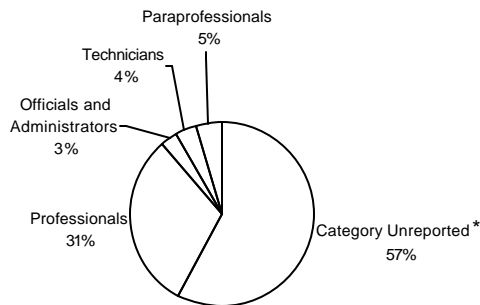
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: IDAHO

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	1	33	-	-	34
Professionals	53	323	-	7	383
Technicians	-	43	-	-	43
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	59	59
Administrative Support	-	-	-	-	-
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	121	582	2	-	705
Total	175	981	2	66	1,224

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: IDAHO

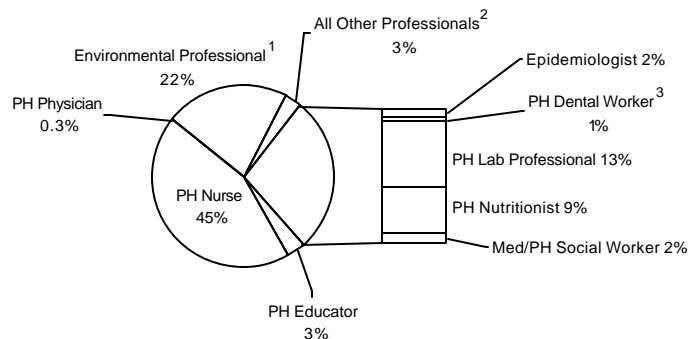
Of the workers who could be assigned to occupational categories, the proportion of administrators is comparatively low, and the proportion of professionals is high.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: IDAHO

Of the identified professionals, the range of expertise is reflective of the field of public health. With over half of local workers unidentifiable by category, other observations are not meaningful.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: IDAHO

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	1	33	-	-	34
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	85	-	-	85
Epidemiologist	1	7	-	-	8
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	1	-	-	1
Infection Control/Disease Investigator	-	6	-	-	6
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	8	-	-	8
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	3	-	-	3
PH Educator	-	11	-	-	11
PH Laboratory Professional	51	-	-	-	51
PH Nurse	1	168	-	-	169
PH Nutritionist	-	28	-	7	35
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	1	-	-	1
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	5	-	-	5
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	-	-	-	-	-
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	43	-	-	43
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	59	59
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	-	-	-	-	-
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services					
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	121	-	2	-	123
Unidentifiable	-	582	-	-	582
Total	175	981	2	66	1,224

Idaho

NOTES ON DATA:

State data provided a limited detail regarding the workforce.

Local data received from agencies provided no breakdown, but WWAMI report allowed for some enumeration within the aggregate.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff.

DATA SOURCES:

Idaho Public Health Districts Conference Office.

Idaho Department of Health and Welfare.

WWAMI Center for Health Workforce Studies; Local Health Districts & the PH Workforce: A Case Study of Wyoming & Idaho.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

March of Dimes, National Office.

Oregon

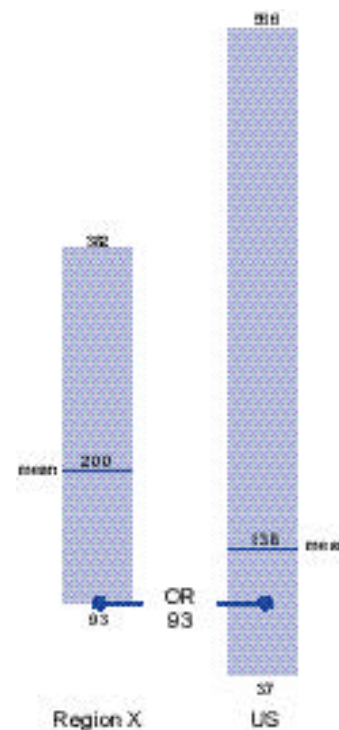
The Health Division is the state health agency in Oregon. It is a component of a superagency called the Department of Human Services. Interaction between state and local public health departments in Oregon may be characterized as decentralized organizational control. Under this arrangement, local governments directly operate health departments with or without a local board of health (CDC, 1991).

Oregon has 34 local public health departments. These consist of 33 county health departments and 1 multi-county health department (regional health department) that covers 2 rural counties (Wasco and Sherman). In three counties (Columbia, Wheeler and Union) the local government contracts with private health clinics to perform as the health department. One county (Gilliam) has no health department (ibid).

The data reported do not include information from state agencies providing environmental health, mental health or substance abuse services, so totals are lower than actual.

Oregon is in the middle third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region X: AK, ID, OR, and WA
US: 50 States, 6 territories and District of Columbia
Pop. Data: US Census Bureau, July 1999

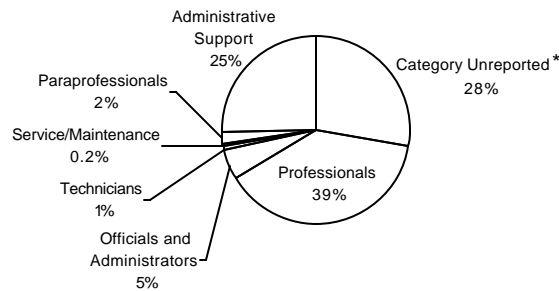
ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: OREGON

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	66	92	-	-	158
Professionals	225	893	-	58	1176
Technicians	15	17	-	-	32
Protective Service Workers	-	-	-	-	-
Paraprofessionals	3	-	-	66	69
Administrative Support	132	644	-	-	776
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	7	-	-	-	7
Category Unreported	-	856	2	-	858
Total	448	2,502	2	124	3,076

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: OREGON

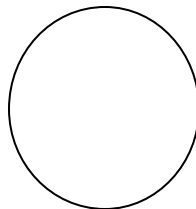
The proportion of workers who could be categorized as professionals is typical of the expertise needed to deliver public health services.



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: OREGON

Available data did not permit the development of information at this level of detail.



ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: OREGON

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	66	92	-	-	158
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	-	-	-
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	-	-	-
Epidemiologist	-	-	-	-	-
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	63	-	-	-	63
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	-	58	58
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	-	-	-
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	-	-	-
PH Professional, Title Unspecified	162	893	-	-	1055
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	-	-	-	-	-
Technician, Title Unspecified	15	17	-	-	32
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	3	-	-	66	69
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	132	644	-	-	776
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	7	-	-	-	7
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	-	856	-	-	856
Total	448	2,502	2	124	3,076

Oregon

NOTES ON DATA:

State data received as EEO-4 report.

State laboratory workers were identified from APHL survey.

Local health department data found in NACCHO survey was combined with OPM category data received directly from the state.

Nutritionists identified from ASTPHND survey that were not identified in other data sets were added as additional workers.

Other data is March of Dimes staff.

DATA SOURCES:

Oregon Department of Human Services, Health Division.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Data File.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Public Health Laboratories (APHL), Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999.

March of Dimes, National Office.

Washington

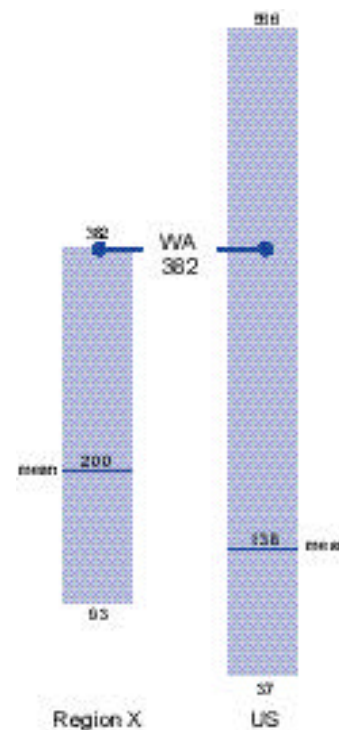
The Washington State Department of Health is a cabinet-level agency, with a Secretary of Health appointed by the Governor and confirmed by the Senate. The Department's program responsibilities include: epidemiology, health statistics and the state laboratory; community prevention and health promotion programs (including many federal programs such as WIC); environmental health; and licensing of all health professions and facilities, among others. (The Department does not administer Medicaid.) There is a State Board of Health, which has specific statutory authority for some portions of the health code, while the State Department of Health has authority for other portions. The State and local jurisdictions maintain a very active partnership. Local jurisdictions provide the bulk of direct services, while state programs retain direct service responsibility where some centralization makes sense (CDC, 1991).

There are 34 local health Departments and Districts. Departments are included within the County government structure. "Districts" are independent of the county government, but only allowed under the county's authority. There are four multi-county districts. A local Board of Health, comprised of a majority of local elected officials, governs each local health jurisdiction. The Boards include County Commissioners but also may include elected officials from cities or towns, and may include a minority number of non-elected members (ibid.).

The high number of workers recorded as 'other public health technician' reflects the inclusion of all emergency medical services personnel as part of the state public health workforce.

Washington is in the upper third of states in ratio of public health workers to population.

ESTIMATED RATIO OF PUBLIC HEALTH WORKERS PER 100,000 POPULATION



Region X: AK, ID, OR, and WA
 US: 50 States, 6 territories and District of Columbia
 Pop. Data: US Census Bureau, July 1999

ESTIMATED PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING: WASHINGTON

Category	State	Local	Other*	Agency Unspecified	Total
Officials and Administrators	78	-	-	-	78
Professionals	482	1843	697	113	3135
Technicians	16147	-	-	-	16147
Protective Service Workers	-	-	-	-	-
Paraprofessionals	-	-	-	14	14
Administrative Support	254	-	-	-	254
Skilled Craft Workers	-	-	-	-	-
Service/Maintenance	-	-	-	-	-
Category Unreported	236	2120	2	-	2358
Total	17,197	3,963	699	127	21,986

* See notes on data

ESTIMATED PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY: WASHINGTON

Does not include emergency medical personnel. It is difficult to make further observations with nearly half of workers uncategorized.

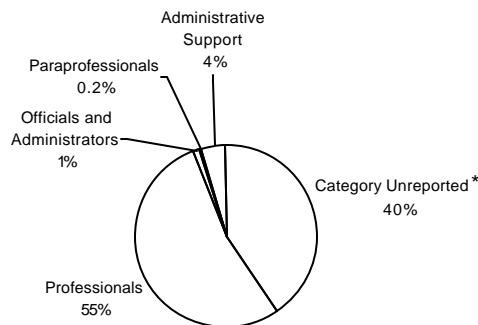
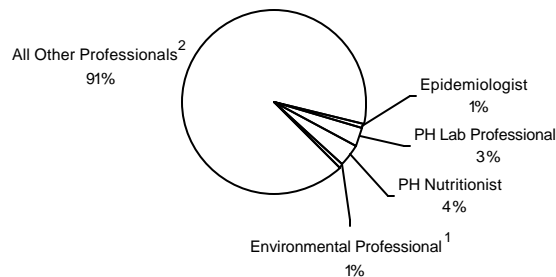


Chart does not include EMT's.
 * Indicates public health workers not identified by occupational category or title
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE: WASHINGTON

The information regarding a limited number of specific professionals is from national reports; some 'other health professionals' may be members of these groups as well.



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
 Percentages may not add to 100% due to rounding

ESTIMATED PUBLIC HEALTH WORKERS BY OCCUPATIONAL TITLE: WASHINGTON

Occupation	State	Local	Other	Agency Unspecified	Total
Officials and Administrators					
Health Administrator	78	-	-	-	78
Professionals					
Administrative/Business Professional	-	-	-	-	-
Attorney/Hearing Officer	-	-	-	-	-
Biostatistician	-	-	23	-	23
Clinical, Counseling, and School Psychologist	-	-	-	-	-
Environmental Engineer	-	-	-	-	-
Environmental Scientist & Specialist	-	-	30	-	30
Epidemiologist	-	-	26	-	26
Health Economist	-	-	-	-	-
Health Planner/Researcher/Analyst	-	-	-	-	-
Infection Control/Disease Investigator	-	-	-	-	-
Licensure/Inspection/Regulatory Specialist	-	-	-	-	-
Marriage and Family Therapist	-	-	-	-	-
Medical & Public Health Social Worker	-	-	-	-	-
Mental Health/Substance Abuse Social Worker	-	-	-	-	-
Mental Health Counselor	-	-	-	-	-
Occupation Safety & Health Specialist	-	-	-	-	-
PH Dental Worker	-	-	-	-	-
PH Educator	-	-	-	-	-
PH Laboratory Professional	83	-	17	-	100
PH Nurse	-	-	-	-	-
PH Nutritionist	-	-	5	113	118
PH Optometrist	-	-	-	-	-
PH Pharmacist	-	-	-	-	-
PH Physical Therapist	-	-	-	-	-
PH Physician	-	-	-	-	-
PH Program Specialist	-	-	-	-	-
PH Student	-	-	565	-	565
PH Veterinarian/Animal Control Specialist	-	-	-	-	-
Psychiatric Nurse	-	-	-	-	-
Psychiatrist	-	-	-	-	-
Psychologist	-	-	-	-	-
Public Relations/Media Specialist	-	-	-	-	-
Substance Abuse & Behavioral Disorders Counselor	-	-	-	-	-
Other Public Health Professional	-	-	15	-	15
PH Professional, Title Unspecified	399	1843	16	-	2258
Technicians					
Computer Specialist	-	-	-	-	-
Environmental Engineering Technician	-	-	-	-	-
Environmental Science and Protection Technician	-	-	-	-	-
Health Information Systems/Data Analyst	-	-	-	-	-
Occupational Health and Safety Technician	-	-	-	-	-
PH Laboratory Specialist	-	-	-	-	-
Other Public Health Technician	16147	-	-	-	16147
Technician, Title Unspecified	-	-	-	-	-
Protective Service					
Investigations Specialist	-	-	-	-	-
Other or Unspecified Protective Service Worker	-	-	-	-	-
Paraprofessionals					
Community Outreach/Field Worker	-	-	-	-	-
Other or Unspecified Paraprofessional	-	-	-	14	14
Administrative Support					
Administrative Business Staff	-	-	-	-	-
Administrative Support Staff	-	-	-	-	-
Unspecified Clerical/Support	254	-	-	-	254
Skilled Craft					
Skilled Craft Worker	-	-	-	-	-
Service/Maintenance					
Food Services/Housekeeping	-	-	-	-	-
Patient Services	-	-	-	-	-
Other or Unspecified Service/Maintenance	-	-	-	-	-
Category Unreported					
Programs	-	-	2	-	2
Unidentifiable	236	2120	-	-	2356
Total	17,197	3,963	699	127	21,986

Washington

NOTES ON DATA:

State data summarizes employees in OPM categories.

Local data identified in University of Washington report and NACCHO data file.

Additional nutritionists within the state identified from ASTPHND survey.

Other data includes March of Dimes staff and student and faculty of schools of public health.

DATA SOURCES:

State of Washington Department of Health.

University of Washington, School of Public Health and Community Medicine, Northwest Center for Public Health Practice and Center for Health Education and Research; Profile & Training Needs Assessment of Community/Public Health Professionals in Washington.

National Association of County and City Health Officials (NACCHO) 1997 National Profile of Local Health Departments Datafile.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND) 1994 Survey Datafile.

Association of Schools of Public Health, 1998 Annual Data Report.

Association of Schools of Public Health, U.S. Schools of Public Health Data Report on Faculty, Fall 1997.

March of Dimes, National Office.

The Federal Public Health Workforce

Federal Data

Federal Public Health Workforce

The federal civilian and military workforce in this current best estimate of the nation's public health workforce includes 75,726 civilian employees, 5,718 members of the US Public Health Service, and 4,310 members of the military (Air Force, Army and Navy). Information on the federal civilian workforce was obtained from the US Office of Personnel Management (OPM). The majority of civilians (57%) work in the Department of Health and Human Services (DHHS). The other civilian employees are identified in Agriculture, Education, Energy, Environmental Protection, Housing and Urban Development, Justice, Labor, Transportation, Treasury and Veterans Affairs.

The federal agencies included in this enumeration have a mission related to essential public health services (see Appendix A) or have offices or divisions that provide one or more of the essential services of public health. Because the mission of the US Department of Health and Human Services is to protect health and provide essential human services and is consistent with the mission of public health, all DHHS workers were included in the count and thus their proportion of the federal public health workforce is overestimated. In other agencies, job titles were chosen based on the likelihood that at least one of the essential services of public health constitute the primary responsibilities of a given job or occupational title.

The Department of Veterans Affairs (DVA) was treated differently. The OPM report identified 78,196 DVA workers in health jobs with titles similar to those reported by public health agencies. The vast majority of the professionals identified in this way were in nursing, medicine or social work and thus likely to be involved with the provision of personal medical care in a DVA facility. For that reason, only those job titles clearly not associated with patient care, such as those in occupational health and safety and environmental health, were included. This reduced the DVA total to 342, which is probably below the actual number performing public health service.

The federal public health workforce is predominantly professional, with 58,897 of the workers classified as such. As is generally true in public health, the single largest profession identified is nursing, with 4,311. What is very different from the state or local level is that there are nearly as many physicians (4,055) identified as there are nurses in non-supervisory positions. The combination of the two environmental professional categories includes 7,043 workers, 62% of whom are from the Environmental Protection Agency. There are two categories of professional workers that have over 9,000 workers each: public health laboratory professionals and licensure/inspection/regulatory

Federal Data

specialists. Neither of these is surprising, given the surveillance and research components of the federal public health agencies' mission. In the other direction, only 126 health educators were identified in this workforce, perhaps revealing the more local nature of educational activities.

Workers in technician positions cluster in the 'other public health technician' and 'other paraprofessional' categories, indicated a technical workforce widely scattered across programs, or in positions with titles not specific to the CHP/BHPr+ categories. Titles chosen did not include those of general clerical and other administrative workers outside of DHHS, and it is expected that their number as part of the public health workforce in federal agencies is underestimated.

DATA SOURCES:

Civilian data

Table W-E: Full time civilian white-collar employment by occupation gender and selected agency all areas September 30, 1997 as found in Federal Civilian Workforce Statistics (United States of Office of Personnel Management [OPM] 1998).

Military Data

U.S. Air Force Surgeon General's Office.

Army Center for Health Promotion and Preventive Medicine.

Navy Bureau of Medicine & Surgery, Office of the Chief, Medical Corps.

USPHS Program Support Center.

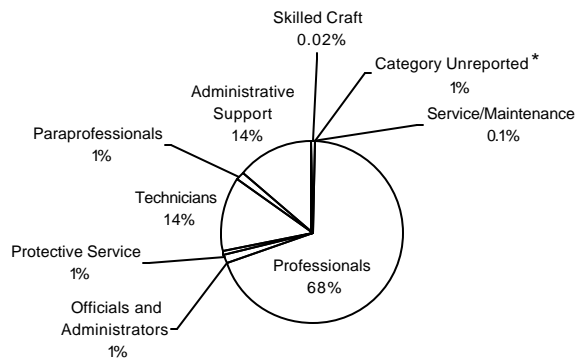
ESTIMATED PUBLIC HEALTH WORKFORCE IN FEDERAL AGENCIES

Occupation	DHHS	USPHS	Agriculture	Education	Energy	EPA	HUD	Justice	Labor	Transportation	Treasury	Veterans Affairs	Air Force	Army	Navy	TO TAL
Administrators																
Health Administrator	796	-	-	-	-	-	-	-	-	-	-	-	259	97	-	1,152
Professionals																
Administrative/Business Professional	3129	-	-	-	-	-	-	-	-	-	-	-	-	4	-	3,133
Attorney/Hearing Officer	350	-	-	-	-	-	-	-	-	-	-	-	-	1	-	351
Biostatistician	683	-	-	-	-	-	-	-	-	-	-	-	-	1	-	684
Clinical Counseling & School Psychologist	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Environmental Engineer	330	439	50	-	158	1979	-	-	-	48	3	2	1	82	-	3,092
Environmental Scientist & Specialist	189	351	46	-	204	2388	22	4	-	485	2	-	1	167	92	3,951
Epidemiologist	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	5
Health Economist	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86
Health Planner/Researcher/Analyst	1843	-	29	-	1	1	12	-	-	178	-	-	7	3	-	2,074
Infection Control/Disease Investigator	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Licensure/Inspection/Regulatory Specialist	2206	-	6695	-	-	5	-	-	-	-	716	-	-	3	-	9,625
Marriage and Family Therapist	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical & Public Health Social Worker	150	-	2	-	-	-	-	14	-	-	-	-	-	1	-	170
Mental Health/Substance Abuse Social Worker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mental Health Counselor	-	112	-	-	-	-	-	-	-	-	-	-	1	-	-	113
Occupation Safety & Health Specialist	152	654	85	4	150	30	-	248	1357	57	34	325	58	436	29	3,619
PH Dental Worker	544	568	-	-	-	-	-	64	-	2	-	-	56	-	6	1,240
PH Educator	63	-	-	-	-	-	-	2	-	-	-	1	54	6	-	126
PH Laboratory Professional	5770	257	471	-	830	2051	2	20	12	27	13	-	-	150	-	9,603
PH Nurse	2844	1025	31	-	6	1	-	302	14	31	35	-	-	22	-	4,311
PH Nutritionist	100	80	77	-	-	-	-	8	-	-	-	-	2	2	-	269
PH Optometrist	4	-	-	-	-	-	-	-	-	-	-	-	-	1	-	5
PH Pharmacist	410	736	6	-	-	25	-	3	-	-	-	-	-	-	-	1,180
PH Physical Therapist	10	-	-	-	-	-	-	-	-	-	-	-	1	1	-	12
PH Physician	1908	1393	3	-	4	6	-	198	10	39	1	-	20	27	446	4,055
PH Program Specialist	3739	-	-	-	-	-	-	-	-	-	-	-	95	2	-	3,836
PH Student	36	-	-	-	-	-	-	-	-	-	-	-	1	-	-	37
PH Veterinarian/Animal Control Specialist	104	103	1700	-	-	8	-	-	-	-	-	12	-	2	-	1,929
Psychiatric Nurse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychiatrist	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychologist	254	-	11	2	2	5	1	331	11	66	3	-	1	1	-	688
Public Relations/Media Specialist	439	-	-	-	-	-	-	-	-	-	-	-	-	9	-	448
Substance Abuse/Behavioral Disorders Counselor	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
Other Public Health Professional	3356	-	2	-	16	85	-	630	22	20	4	-	25	70	20	4,250
PH Professional, Title Unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Technicians																
Computer Specialist	2560	-	-	-	-	-	-	-	-	-	-	-	-	5	-	2,565
Environmental Engineering Technician	278	-	-	-	-	-	-	-	-	-	-	-	-	16	-	294
Environmental Science & Protection Technician	15	-	3	-	2	190	-	-	-	2	-	2	-	14	-	228
Health Information Systems/Data Analyst	-	-	-	-	7	-	-	129	-	4	-	-	-	32	-	172
Occupational Health and Safety Technician	-	-	-	-	-	-	-	-	-	-	-	-	3	90	-	93
PH Laboratory Specialist	608	-	3510	-	-	82	-	31	-	4	-	-	-	27	-	4,262
Other Public Health Technician	2731	-	6	-	-	-	-	92	-	12	-	-	8	332	900	4,081
Technician, Title Unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service																
Investigations Specialist	326	-	-	-	-	-	-	-	-	-	-	-	-	-	-	326
Other or Unspecified Protective Service Worker	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	103
Paraprofessionals																
Community Outreach/Field Worker	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	102
Other or Unspecified Paraprofessional	1054	-	1	-	-	-	-	47	-	2	3	-	17	10	-	1,134
Administrative Support																
Administrative Business Staff	2495	-	-	-	-	-	-	-	-	-	-	-	-	3	-	2,498
Administrative Support Staff	9153	-	-	-	-	-	-	-	-	-	-	-	1	189	-	9,343
Unspecified Clerical/Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Skilled Craft Workers																
Skilled Craft Worker	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Service/Maintenance																
Food Services/Housekeeping	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Patient Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other or Unspecified Service/Maintenance	29	-	-	-	-	-	-	-	-	-	-	-	1	2	-	32
Category Unreported																
Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentifiable	56	-	-	-	-	-	-	-	-	-	-	-	376	11	-	44
TOTAL:	49,034	12,728	6	1,380	6,856	37	2,123	1,426	977	817	342	991	1,826	1,493	85,754	

ESTIMATED FEDERAL PH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY AND SETTING

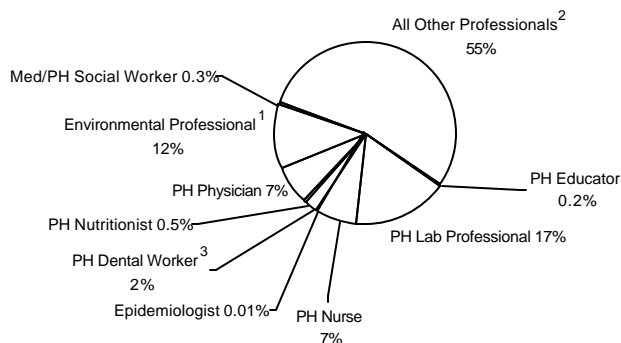
Occupation	DHHS	USPHS	Agriculture	Education	Energy	EPA	HUD	Justice	Labor	Transportation	Treasury	Veterans Affairs	Air Force	Army	Navy	Total
Officials and Administrators	796	-	-	-	-	-	-	-	-	-	-	259	97	-	-	1,152
Professionals	28699	5718	9208	6	1371	6584	37	1824	1426	953	814	340	326	998	593	58,897
Technicians	6192	-	3519	-	9	272	-	252	-	22	-	2	11	516	900	11,695
Protective Service	429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429
Paraprofessionals	1156	-	1	-	-	-	-	47	-	2	3	-	17	10	-	1,236
Administrative Support	11648	-	-	-	-	-	-	-	-	-	-	-	1	192	-	11,841
Skilled Craft	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Service/Maintenance	41	-	-	-	-	-	-	-	-	-	-	-	1	2	-	44
Category Unreported	56	-	-	-	-	-	-	-	-	-	-	-	376	11	-	443
Total:	49,034	5,718	12,728	6	1,380	6,856	37	2,123	1,426	977	817	342	991	1,826	1,493	85,754

ESTIMATED FEDERAL PUBLIC HEALTH WORKERS BY EEO-4 OCCUPATIONAL CATEGORY



* Indicates public health workers not identified by occupational category or title
Percentages may not add to 100% due to rounding

ESTIMATED FEDERAL PUBLIC HEALTH PROFESSIONALS BY SELECTED OCCUPATIONAL TITLE



¹ Includes Environmental Engineers and Environmental Scientists & Specialists
² Includes professionals in other titles and professionals unidentified by title
³ Includes Dentists, Dental Hygienists and other dental workers
 Percentages may not add to 100% due to rounding

Public Health Workers in Voluntary Associations and Organizations

Voluntary Associations and Organizations

National voluntary organizations report a total of 15,385 staff and 2,864,825 volunteers as part of the public health workforce. This information comes from four nation-wide organizations: American Cancer Society, American Lung Association, American Red Cross and March of Dimes. Each is involved with public health in a variety of activities including coalition-building, health education, and emergency response. Very limited data on community partner organizations was reported by states, and only one state (Alaska) identified any workers as 'volunteer'. This information should be viewed as an extremely incomplete picture of the role played by voluntary organizations and other community partners. A full enumeration would include many other associations, plus the public health workers in such entities as migrant and community health centers, AIDS service organizations and large health systems.

- The only health professionals specifically reported from voluntary organizations are 8,000 nurses in staff positions and 1,000 volunteer health educators.
- The American Cancer Society reports 2,500,000 volunteers engaged in unspecified activities.
- The reported volunteers may include individuals who also appear elsewhere in the enumeration, as people who work in official health agencies may also be community volunteers in areas of interest.
- Although these nation-wide voluntary organizations are managed, and perform a variety of administrative and business functions, no salaried staff were reported in these categories. It is likely that if a standardized approach to regular data collection were established, more complete information would be available.

Voluntary Associations and Organizations

ESTIMATED PUBLIC HEALTH WORKFORCE IN SELECT VOLUNTARY AGENCIES

	American Cancer Society	American Lung Assoc.	American Red Cross	March of Dimes	Total
Salaried Staff					
National Office	-	-	-	57	57
Regional Program Services	-	-	-	6	6
Chapter Program Services	-	-	-	108	108
Public Affairs and Advocacy	-	-	-	12	12
Nurses	-	-	8,000	-	8,000
Category Unreported	6,000	1,202	-	-	7,202
Total Salaried Staff	6,000	1,202	8,000	183	15,385
Volunteers					
Volunteer Chairpersons	-	-	-	46	46
Community Awareness Volunteers	-	-	-	600	600
Public Health Education Volunteers	-	-	-	1,000	1,000
Category Unreported	2,500,000	333,179	30,000	-	2,863,179
Total Volunteers	2,500,000	333,179	30,000	1646	2,864,825
Grand Total (Staff and Volunteers)	2,506,000	334,381	38,000	1829	2,880,210

Summary

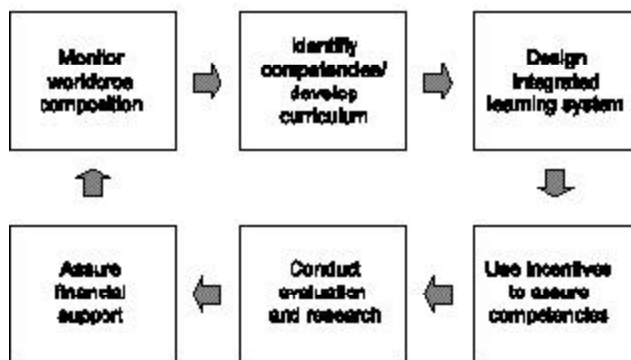
The data from this project provide the beginnings of a 21st century database on the size and composition of the public health workforce. It is clear that letting over 20 years elapse between enumeration efforts and the absence of a clear national policy on definitions complicates the process. Analysis of trends is virtually impossible. Information is now available, however, that can influence planning in a number of ways. For example, those familiar with day-to-day operations in health agencies recognize the critical role a staff member such as a vital records clerk, a receptionist, a laboratory assistant or a transportation worker play in both ordinary and emergency operations. These workers need a basic understanding of the mission of public health and at least some preparation for emergency response. The information that at least 57,815 workers

are identified in clerical and support positions affects the scope of the training effort required. Similar numbers are needed for every component of the current Federal effort to develop a strategic plan for preparing and sustaining a competent public health workforce (see Figure).

As another example, the extremely small number of workers identified as public health educators (2,230) should raise questions, given the current focus on improving health literacy in the population to support healthy choices. It may be that this job title is not in common use, and that many professionals providing health education are hidden within 'public health program specialist', 'other public health professional', or unspecified professional titles. This may also reflect the fact that public health organizations have yet to create the necessary number of positions in this important practice area, or that there is not an adequate supply of

persons prepared to take such jobs. The answer to these questions will require further study.

This effort has revealed a number of questions of both a policy and a technical nature that must be answered before the next enumeration is begun. At the policy level, the key questions are: How often? What universe? How detailed? Differing cycles of budget and staffing decision-making across the country mean that the exact composition of the public health workforce is a moving target. Some states make major changes only every second year; in others, annual decision-making cycles at the local level may have substantial impact on workforce. An annual enumeration is probably not a cost-effective approach to monitoring trends, while a five-year interval may be too extended to be of



STRATEGIC ELEMENTS FOR PUBLIC HEALTH WORKFORCE DEVELOPMENT

(from CDC/ASTDR Strategic Plan for Public Health Workforce Development, April 2000)

Summary

value. A policy decision on interval to be regularly used would allow reporting units to plan ahead and build up the internal systems to assure an accurate report. Classification decisions and methodology should be documented to build an institutional memory of the process.

The universe to be included must be determined in advance for a regular reporting system to be accurate and valuable. If limited only to official state health agencies and their local partners, it will clearly under report the size of the workforce. Directors of the other agencies involved (e.g., environmental health, mental health, substance abuse, occupational safety), however, may not understand their role in the same way, and may not see the importance of contributing to a regular reporting system. Data gaps in this report reflect this concern. It may be that collaboration with the National Governors Association and the National Association of Counties will be necessary to develop an effective plan.

At every step of this project, interested parties asked about the size of the workforce in community organizations committed to a public health goal, such as private and voluntary agencies. A clear agreement on how far to reach into these partner circles will facilitate the development of methods for including them in the process.

In addition to defining the universe of job sites a policy decision must be made about the level of detail to accumulate. Is it enough to know about the workforce only by eight EEO-4 categories? Is that sufficient for some of the categories, as long as the professional and technical areas are specified in greater detail? Does every occupation or job within public health need to be accounted for at the same level of detail, or is detail on some of them more critical than on others? Are there professions for which workforce development planning is so critical that they must be tracked no matter what job category or title they might be in? One example is public health nurses, who, in addition to the specific public health nurse occupational title, can be found in administrator, epidemiologist, public health program specialist, investigator, occupational health and probably several other categories. Is it important to know what level of education these nurses have achieved? What services they provide? As the single largest professional group, and in some small agencies the sole professional employee, it may be critical to know these details, but it would add significantly to the reporting burden.

It is noteworthy that workforce numbers about physicians and nurses developed in this process do not match well with the usual numbers reported in other documents for physicians practicing in public health or public health nurses. This appears to be due to the lack of common definitions and the discrepancies that arise because of differences between agency reports about workers, and workers' self-reports. Some effort should be made to explain the differences, if not eliminate them, by mutual agreement with other reporting systems.

The present enumeration does not accumulate detailed information about the workforce that is often studied to identify trends. Items that might be considered for future inclusion are educational background, gender, age, ethnicity, length of employment and

job function. Adding any one of these would mean a significant difference in workload to the reporting agency, and should only be considered if knowing that information would make a difference in subsequent policy deliberations. For this to be realistic, any established public health workforce database must be maintained with ready access for legislators, planners and policy makers at local, state, and national levels.

The reporting structure is an area where policy and technical decision-making converge. Should state health agencies report for the entire public health workforce within the state? If not, to whom should the collecting body turn? What about federal public health workers within a state? The present approach does not allow for counting them by state, but simply as a national workforce, as if they did not relate to the states within which they work. They may not. What about local data? Not all local public health agencies are accustomed to reporting through the state agency, yet maintaining individual reporting relationships with nearly 3,000 local units could be a prohibitive national expense. Finally, who should be held responsible for reporting on the non-governmental part of this workforce, if that is to be included? And exactly how is that non-governmental component to be defined?

At a more technical level, a final data dictionary must be validated for use by applying approaches that match what has been done in standard occupational classifications. Every effort should be made to use electronic methods both for data collection and reporting. Those managing reporting or data entry at the state or local level should receive adequate support and training to assure quality and consistency of all entries.

This experience with developing a current best estimate of the public health workforce has been a revealing one. It has documented an apparent erosion of public health capacity over a 20-year period. Useful information about the composition of the workforce and its distribution across the states and territories is now available. The groundwork has been laid for an essential policy debate about the type of workforce information needed on a regular basis for policymaking. As a result the public health community can move efficiently toward a regular documentation of the public health workforce for use in planning for education, recruitment and retention of a qualified workforce.

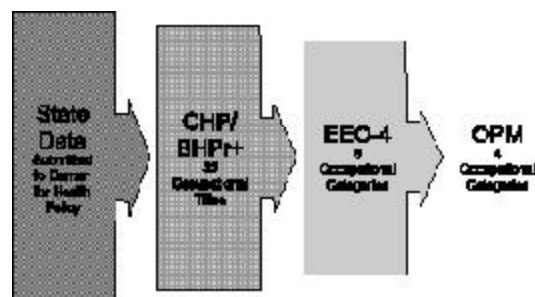
Technical Notes

Methods

This enumeration is a qualitative and descriptive study of the public health workforce. It is based on existing reports, summaries and surveys that could be located and provides a 'best current estimate' of the workforce. No original survey data collection was conducted. The information was solicited by a combination of letter, phone and electronic communication. Information received by the project came in a variety of formats organized according to the method that best served the jurisdiction from which it was received.

Over 7,500 occupational titles were received in reports, surveys and summaries from states and other reporting sources. There is no standard system for collection of public health workforce information. The information received by the enumeration project was not uniform and did not conform to any single format. The project created a classification scheme using public agency occupational categories and titles. The classification scheme is based on:

- 4 occupational categories used by the US Office of Personnel Management (OPM)
- 8 occupational categories used by the Equal Employment Opportunity Commission (EEO-4), which can be linked upward to the OPM categories
- 55 occupational titles adapted by the Center for Health Policy from a taxonomy of titles developed by the Bureau of Health Professions (CHP/BHP+) to conventional titles. It includes public health titles added to the Bureau of Labor Statistics Standard Occupational Classifications in 1998. These titles are linked upward into the EEO-4 and then the OPM categories.



ENUMERATION 2000 CLASSIFICATION SCHEME

Technical Notes

Detailed definitions and descriptions of the OPM, EEO-4, and CHP/BHPr+ categories and titles can be found in Appendix C. The project combined and adjusted these three systems into a numerically coded, tiered classification scheme (see Figure, p.275) to accommodate the wide range of information received. A detailed table of the occupational categories and titles appears in the Introduction on p. 19.

Data counting: Headcounts

The project received workforce numbers in the three forms: full time equivalents (FTE's), headcounts, and numbers that were unstipulated as either. Whenever possible the project used headcounts, over FTE's. This decision was based on projected uses of the data, the most important being planning for training and continuing education. Recognizing that individual workers need training and continuing education whether full or part time, and recognizing the dependence of many smaller health departments on part time personnel, it was decided to use headcounts whenever the information was available.

Data coding: Occupational categories and titles

Appendix C, Part 1 and Part 2 contain definitions of the OPM and EEO-4 occupational categories used in this project.

Appendix C, Part 3 contains the definitions of CHP/BHPr+ occupational titles which incorporate decision rules that were used when information was received by the project in the form of job titles.

Data from national reports and data files

National Association of County and City Health Officials (NAACHO)

The National Association of County and City Health Officers 1996-97 survey data file provided workforce information on 2,440 local health departments out of 2,880 surveyed (86% response rate).

Workforce numbers used those provided in response to survey question #8: "What is the total number of employees currently on the department's payroll?"

Workforce numbers from the NACCHO data file were used in states where local health department workforce numbers were not provided. In states where local workforce numbers were incomplete for some localities, the use of NACCHO data file numbers to augment numbers already provided was determined by the individual characteristics of each state's data (see Notes on the Data for CA, CT, IA, MA, ND, NV, OR, WA). If a state provided recent (after 1997) local health department numbers that did not agree with but were similar to the NAACHO data file, the state provided numbers were used.

Association of Public Health Laboratories (APHL)

The Association of Public Health Laboratories *Fiscal Year 1991 Consolidated Annual Report* and the *Annual Reporting and Laboratory Capability Survey on State Public Health Laboratories, Fiscal Year 1999* provided counts of state public health laboratory professionals and technicians. The 1991 report provided data from 51 of the 54 member laboratories. The 1999 survey provided data from 37 of the 50 states. When available, 1999 APHL data was always used before 1991 APHL data.

Public health laboratory workforce numbers from the 1999 or 1991 APHL data files were used in states where no information was provided about laboratory personnel but where unidentifiable or unspecified workforce numbers were provided. Laboratory workers were subtracted from the unspecified or unidentifiable workers in these cases, and added to the appropriate lab title.

If a state reported fewer laboratory workers than were reported in the 1999 APHL data file and also had workers in unidentifiable or unspecified categories, the additional APHL numbers were subtracted from the unidentifiable or unspecified workers and added to the appropriate state laboratory titles.

Association of State and Territorial Public Health Nutrition Directors (ASTPHND)

The Association of State and Territorial Public Health Nutrition Directors conducts a cyclical survey of public health nutritionists in each state with support from the Maternal and Child Health Bureau at HRSA (Haughton, et al, 1998). The 1994 survey data file provided the number of public health nutritionists in most states.

In states where information on public health nutritionists was provided by the ASTPHND survey, that number was accepted as the most accurate count of public health nutritionists working within that state. Some state and local agencies identified the exact number of nutritionists they employ, but those numbers were always smaller than the ASTPHND survey's statewide count. In those cases, the agency-specific data were used as subsets of the larger, more general number.

Many states did not identify the number of nutritionists they employ because their workforce was summarized using categories, not titles. For those states the number of nutritionists identified by the ASTPHND survey was added as if it identified additional workers. This may lead to over estimation of the workforce for that state, as the nutritionists working in state and local public health agencies were likely counted both by the agencies in their summaries and by the ASTPHND survey. The result is a possible double counting of nutritionists employed in state and local agencies. Because those nutritionists make up only part of the nutritionists working in public health in those states, and because all the nutritionists together are only a fraction of a state's total workforce, it was felt to be more informative to provide an accurate number of nutritionists (ASTPHND's count) and a slightly enlarged total workforce count. Providing

Technical Notes

no count of nutritionists would have resulted in a reduced total workforce count (due to the exclusion of nutritionists working outside state and local agencies that were counted by ASTPHND).

Association of Schools of Public Health (ASPH)

The Association of Schools of Public Health's *1998 Annual Data Report* and *U.S. Schools of Public Health Data Report on Faculty, Fall 1997* provided counts of the faculty and students in schools of public health. Faculty and students in schools of public health were enumerated with the workforce of the state in which their school of public health is located.

Faculty members were categorized according to their academic department. For example, epidemiology faculty were classified as 'Epidemiologist'; environmental faculty were classified as 'Environmental Scientist and Specialist', etc. Faculty in departments that could not be associated with an occupational title, such as Maternal and Child Health faculty, were classified as 'Other PH Professional'.

Students in schools of public health were classified as 'PH Student'.

Support staff in schools of public health was not enumerated.

Coding Federal Data

Federal Civilian Public Health Workforce

Data for the federal public health workforce was compiled from *Table W-E: Full time civilian white-collar employment by occupation gender and selected agency all areas September 30 1997* as found in *Federal Civilian Workforce Statistics* (United States Office of Personnel Management [OPM] 1998). The titles selected were coded into the project's data classification scheme applying the rules used for state and territorial workforce. Federal agencies were selected based on the likelihood that the agency provided essential public health services. Federal occupational titles were selected based on the job function associated with each title. A detailed description of the method used to enumerate the federal public health workforce appears on p.263.

Military Public Health Workforce

Information on public health workers in the military was received from the Army, Navy and Air Force in the form of workers per military occupational title. This information was first translated from the military title into a corresponding or analogous civilian occupational title. The information was then assigned to the project's data classification scheme applying the rules used for the civilian workforce.

For military titles with no clearly analogous civilian title or for which the translation from military coding was unclear the project consulted the military source for clarification of the role performed in the title. A military database that provided a crosswalk between military titles and civilian SOC's was utilized to a limited degree in this process.

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Appendices

Appendix A
Public Health in America

Appendix B
History of Public Health Enumeration

Appendix C
Definitions and Decision Rules

Appendix A

Public Health in America



PUBLIC HEALTH IN AMERICA

Vision:

Healthy People in Healthy Communities

Mission:

*Promote Physical and Mental Health and Prevent
Disease, Injury, and Disability*

Public Health

- ? Prevents epidemics and the spread of disease
- ? Protects against environmental hazards
- ? Prevents injuries
- ? Promotes and encourages healthy behaviors
- ? Responds to disasters and assists communities in recovery
- ? Assures the quality and accessibility of health services

Essential Public Health Services

- ? Monitor health status to identify community health problems
- ? Diagnose and investigate health problems and health hazards in the community
- ? Inform, educate, and empower people about health issues
- ? Mobilize community partnerships to identify and solve health problems
- ? Develop policies and plans that support individual and community health efforts
- ? Enforce laws and regulations that protect health and ensure safety
- ? Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- ? Assure a competent public health and personal health care workforce
- ? Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- ? Research for new insights and innovative solutions to health problems

Adopted: Fall 1994. Source: Public Health Functions Steering Committee, Members (July 1995):
American Public Health Association-Association of Schools of Public Health-Association of State and Territorial Health Officials-Environmental Council of the States-
National Association of County and City Health Officials-National Association of State Alcohol and Drug Abuse Directors-National Association of State Mental Health
Program Directors-Public Health Foundation-U.S. Public Health Service—Agency for Health Care Policy and Research-Centers for Disease Control and Prevention-
Food and Drug Administration-Health Resources and Services Administration-Indian Health Service-National Institutes of Health-Office of the Assistant Secretary
for Health-Substance Abuse and Mental Health Services Administration

Appendix B

History of Public Health Enumeration

History of Public Health Enumeration

Over the last 80 years there has been sustained interest in enumerating the public health workforce. Government agencies have taken the lead in most enumeration efforts. The US Public Health Service (USPHS), which was founded in 1912, conducted an enumeration of the workforce in municipal health departments of the 100 largest cities (i.e. serving a population more than 100,000) in 1923. Using field surveys administered by Public Health Service officers and sanitary engineers, this report provides intensive descriptions of staffing, educational preparation, expenditures, and includes recommendations on financing and staffing (US Public Health Service, 1926). It is an impressive record of the comprehensiveness of public health thinking at the close of the progressive era in American history. At the time the largest 100 cities employed 8,760 public health workers, excluding laborers and hospital personnel. On average full time nurses and inspectors were employed at about 7 per 100,000 population, physicians were employed part time at about 4.5 per 100,000 population. The average health department employed 27 persons per 100,000 population.

During the Great Depression, in response to drastic reductions in municipal health budgets, the USPHS again surveyed municipal health departments to assess the effects of reduced funding (Moutin, 1935). In 1933, data for 68 departments found less than 2 public health physicians per 100,000 population and between 7 and 14 public health nurses per 100,000. While the number of nurses increased, other staff numbers fell, and total staff had been reduced to about 22 per 100,000. Nurses most likely performed a spectrum of public health functions during this time, as they continue to do today. This early analysis of public health services echoes modern observations on the difficulties involved in evaluating expenditures when services and personnel must overlap in function: “Not infrequently, one worker might be employed on two or more activities, and yet, the salary might be paid out of only one appropriation item” (p.545).

The growth of federal government agencies in the post-New Deal era allowed increased monitoring of public health. The new Department of Health, Education & Welfare (DHEW) commissioned annual reports on local public health resources between 1946 and 1952 which reviewed staffing and staff shortages, per capita expenditures, and minimum required staffing standards (Greve, & Campbell, 1952; 1953a; 1953b). Extreme shortages of public health nurses were noted during this period coinciding with the Korean War. The public health workforce ranged between 33,000 to 37,036 persons at this time.

Follow-up reports on the organization and staffing of local health services were published yearly by the DHEW through 1960, (Greve & Campbell, 1954; 1957; 1958; 1959; 1961). These reports, compiled from information provided by state health officers, initially analyzed only full time employees of official health agencies and full time public

Appendix B

health staff in other official agencies. By the late 1950's the importance of part-time staff and public health staff working in areas not served by full-time health departments was recognized and the reports began to include those numbers. In 1958 the workforce numbered 53,901, an approximate ratio of 32 public health workers/100,000 population. 41,724 of these workers were employees of official health agencies. Among official agency personnel 1,414 were physicians, 14,028 were nurses and 5,359 were professional sanitarians.

In 1972 Federal funding to schools of public health was sharply decreased. These cuts were broadly applied to educational institutions nationwide and can be traced to over-extended Federal expenditures on ambitious Great Society domestic programs, escalation of the Vietnam War effort, and simultaneous constraints in international finance. In fiscal 1973 schools of public health faced cuts of up to 34% in faculty positions, with accompanying cuts in student traineeships. Additional reductions were planned the following year. In response the University of North Carolina School of Public Health rapidly formed a task force on community health manpower which released an alarmed report estimating current public health staffing levels and the potential impact of lost funding on training programs, manpower production, and the nation's health (University of North Carolina, 1973). The number of professional public health personnel at the masters level or higher was estimated to be 19,757, based on the size of the average graduating class in the early 1970s.

Subsequently, the Health Professions Educational Assistance Act was enacted in 1976, which included a requirement that DHEW submit biennial reports to Congress on the nation's public health personnel (public law 94-484, section 793c). This requirement was strengthened in the Health Services Research, Health Statistics, and Health Technology Act of 1978 (public law 95-623). These reports, still required today, provide information on the types of personnel and activities involved in public health services, the supply of required staff and their geographic distribution. Direct counts or survey methods have not been employed in these reports. Instead, workforce estimates have been generated by compiling information from governmental agencies, professional associations and schools of public health. The first report estimated the professional and technical core of the public health workforce at 150,000 (DHEW, 1979, p. 8). The second report performed further analysis of 1979 estimates and a thorough investigation of available data. It was concluded that there were 500,000 public health workers performing both primary public health functions full time, and related public health functions part time, in more than 3,000 local health departments and other settings nationwide (DHHS, 1982, p. 20, p. 36). Subsequent reports to Congress did not provide new public health workforce counts, but relied on the 500,000 estimate.

Funding reductions during the Regan administration once again prompted Federal scrutiny of public health manpower. In the early 1980's the Health Resources and Services Administration contracted with the American Public Health Association (APHA) to conduct a nationwide survey of public health employees (De la Puente, 1983). As a first step APHA staff designed a comprehensive methodology for enumerating the workforce by clarifying occupational definitions and characterizing the workforce by title,

function, education and work setting. The final survey was never carried out due to the costliness of the methodology proposed and due to paradoxical fears that a comprehensive enumeration might identify such a large number of public health workers that resources would be further directed away from public health.

More recently, the Center for Health Policy Studies at the University of Texas in Houston enumerated and analyzed the public health workforce in Texas (Kennedy et. al., 1999) by adapting the methodology developed in 1983 by the APHA. The study collected data using both the agency staff sampling methodology (versus a direct count), and the comprehensive scope of public health settings recommended by the APHA.

Also during the mid-1990's the Center for Health Policy Research at George Washington University prepared a report for the Health Resources and Services Administration (HRSA) concerning training and educational needs of public health workforce in five states; Illinois, Maryland, Missouri, Oregon, and Rhode Island (Solloway, 1997). This study enumerated workers using personnel data for full-time employees from state health agencies in five states. Employees were classified using a taxonomy of public health titles developed by Bureau of Health Professions (BHP) at HRSA.

The National Association of County and City Health Officials (NACCHO), in collaboration with the Centers for Disease Control and Prevention (CDC), conducts regular national profiles of local health departments. Numbers of full time employees of local health departments were obtained for 1996-97 employing a direct survey methodology. With an 86% response rate this survey yields the most complete aggregate numerical count to date of workers in 2,880 local health departments. The data, however, provides the number of local employees only, with no information on occupational categories or titles (NACCHO, 1997). Analysis is currently underway on data collected during 1999-2000 from a sample of local health departments, which includes occupational information

Researchers at the Center for Health Workforce Studies at the University of Washington have published a study on the public health workforce in local health districts of Wyoming and Idaho and are completing similar analyses of Alaska, Montana and Washington. They use a questionnaire based on selected occupational titles to collect data from administrators of local health department units in each state, providing ratios of workers to population (Richardson et. al., 1999).

In October 2000, prompted by the national health workforce objectives found in Healthy People 2010, the DHHS/CDC released a three-tiered strategic plan for public health workforce development. The plan focuses on the development of basic infrastructure, organizational capacity, information and knowledge systems, and workforce competency. Understanding the size and composition of the public health workforce is fundamental to achieving the developmental goals of these agencies. Currently HRSA is sponsoring, with CDC participation, a collaborative effort within the public health community through the Public Health Leadership Institute to develop a consensus for regular enumeration of the workforce.

Appendix C

Definitions and Decisions Rules

Part 1

US Office of Personnel Management
OPM Definition of Occupational Categories

Part 2

US Equal Employment Opportunity Commission
EEO-4 Description of Occupational Categories

Part 3

Center for Health Policy/Bureau of Health Professions Occupational Titles
CHP/BHPr+ Definitions and Decision Rules

Appendix C Part 1

US Office of Personnel Management (OPM) Definition of Occupational Categories

Occupational Category White-collar occupations are classified according to five major occupational categories (i.e., Professional, Administrative, Technical, Clerical, and Other). The category definitions are based on the subject matter of work, the level of difficulty or responsibility involved, and the educational requirements of each occupation. It is important to note that occupational categories are merely a statistical concept to aid understanding and analysis of Federal civilian employment; these data are not submitted by the agencies but are assigned by the U.S. Office of Personnel Management (OPM) based on the occupation and sometimes on grade or salary as determined by OPM's Office of Classification. Occupational categories are defined as follows:

Professional occupations are those that require knowledge in a field of science or learning characteristically acquired through education or training equivalent to a bachelor's degree or higher degree with major study in or pertinent to the specialized field, as distinguished from general education. The work of a professional occupation requires the exercise of discretion, judgement, and personal responsibility for the application of an organized body of knowledge that is constantly studied to make new discoveries and interpretations, and to improve the data, materials, and methods.

Administrative occupations are those that involve the exercise of analytical ability, judgement, discretion, personal responsibility, and the application of a substantial body of knowledge of principles, concepts, and practices applicable to one or more fields of administration or management. While these positions do not require specialized educational majors, they do involve the type of skills (analytical, research, writing, judgement) typically gained through a college level general education, or through progressively responsible experience.

Technical occupations are those that involve work that is nonroutine in nature and is typically associated with, and supportive of a professional or administrative field. Such occupations involve extensive practical knowledge gained through on-the-job experience, or specific training less than that represented by college graduation. Work in these occupations may involve substantial elements of the work of the professional or administrative field, but requires less than full competence in the field involved.

Appendix C Part 1

Clerical occupations are those that involve structured work in support of office, business, or fiscal operations; duties are performed according to established policies or techniques and require training, experience, or working knowledge related to the tasks to be performed.

Other occupations are those miscellaneous occupations that do not fall into the above professional, administrative, technical or clerical categories.

Appendix C Part 2

US Equal Employment Opportunity Commission (EEO-4) Definitions of Occupational Categories

Officials and Administrators Occupations in which employees set broad policies, exercise overall responsibility for execution of these policies, of direct individual departments or special phases of the agency's operations, or provide specialized consultation on a regional, district or area basis. Includes: department heads, bureau chiefs, division chiefs, directors, deputy directors, etc.

Professionals Occupations which require specialized and theoretical knowledge which is usually acquired through college training or through work experience and other training which provides comparable knowledge. Includes: personnel and labor relations workers, social workers, doctors, psychologists, registered nurses, economists, dietitians, lawyers, systems analysts, accountants, etc.

Technicians Occupations which require a combination of basic scientific or technical knowledge and manual skill which can be obtained through specialized post-secondary school education or through equivalent on-the-job training. Includes: computer programmers, drafters, survey and mapping technicians, licensed practical nurses, photographers, technical illustrators, technicians (medical, dental, electronic, physical sciences), inspectors, etc.

Protective Service Workers Occupations in which workers are entrusted with public safety, security and protection from destructive forces. Includes: police patrol officers, guards, deputy sheriffs, bailiffs, correctional officers, detectives, marshals, etc.

Paraprofessionals Occupations in which workers perform some of the duties of a professional or technician in a supportive role, which usually require less formal training and/or experience normally required for professional or technical status. Included: research assistants, medical aides, child support workers, home health aides, library assistants and clerks, ambulance drivers and attendants, etc.

Appendix C Part 2

Administrative Support (Including Clerical and Sales) Occupations in which workers are responsible for internal and external communication, recording and retrieval of data and/or information and other paperwork required in an office. Includes: bookkeepers, messengers, clerk-typists, stenographers, court transcribers, hearing reporters, statistical clerks, dispatchers, license distributors, payroll clerks, office machine and computer operators, telephone operators, legal assistants, etc.

Skilled Craft Workers Occupations in which workers perform jobs which require special manual skill and a thorough and comprehensive knowledge of the processes involved in the work which is acquired through on-the-job training and experience or through apprenticeship or other formal training programs. Includes: mechanics and repairers, electricians, etc.

Service-Maintenance Occupations in which workers perform duties which result in or contribute to the comfort, convenience, hygiene or safety of the general public or which contribute to the upkeep and care of buildings, facilities or grounds of public property. Workers in this group may operate machinery. Includes: chauffeurs, laundry and dry cleaning operatives, truck drivers, bus drivers, garage laborers, custodial employees, grounds keepers, etc.

Appendix C Part 3

Center for Health Policy/Bureau of Health Professions (CHP/BHPr+) Definitions of Occupational Titles and Decision Rules

This Appendix includes brief definitions and decision guidelines for the titles in the expanded Bureau of Health Professions listing developed over the course of the enumeration project conducted by Columbia University School of Nursing Center for Health Policy. The CHP/BHPr+ classification was used for data entry when information was received by the project at the level of individual job title.

Appendix C Part 3

Health Administrator

This single category encompasses all positions identified as leading a public health agency, program or major sub-unit.

Definition: plans, analyzes, organizes, directs, coordinates and evaluates the use of resources to deliver health services education or policy in establishments such as clinics, public health agencies, managed care organizations, industrial and other types of businesses, or related entities; manages and/or regulates health agencies and facilities. Includes job titles such as director, administrator, chief, manager or one of the many titles indicating chief public health official of a jurisdiction (e.g., secretary of health, health officer, health official). Titles that included the term 'coordinating...' or 'senior...' were classified with the profession referenced (e.g., coordinating nutritionist with public health nutritionist, senior public health nurse with public health nurse).

The following titles are within the Professional category of both OPM and EEO-4 classifications. They cover positions requiring preparation at the baccalaureate level or higher, positions usually described as professional.

Administrative/Business Professional

Definition: perform work in business, finance, auditing, management and accounting; trained at a professional level in their field of expertise prior to entry into public health.

Attorney/Hearing Officer

Definition: provide legal advice to public health department, provide legal representation of public health officials in courts and administrative law proceedings, preside over administrative law hearings of various kinds. This title includes both attorney and those professionals without law degrees specifically identified as administrative law judge or administrative hearings officer.

Behavioral/Mental Health/Substance Abuse Specialist

Definition: assesses and treats persons with alcohol or drug dependency problems. May counsel individuals, families, or groups. May engage in alcohol and drug prevention programs; identifies, studies, plans and evaluates interventions designed to prevent, resolve or ameliorate health problems through the application of methods and techniques drawn from the social and behavioral sciences. Includes such job titles as behavioral scientist, substance abuse counselor, certified substance abuse counselor, certified alcohol counselor, certified alcohol and drug counselor, certified abuse and drug addiction counselor, drug abuse counselor, drug counselor (associate degree or higher), alcoholic counselor. Use of this title is superseded by 1998 SOC title 'Substance Abuse and Behavioral Disorders Counselor' for most titles.

Biostatistician

Definition: applies mathematical and statistical principles to the compilation, analysis and reporting of health-related information.

Clinical, counseling and school psychologist

Definition: diagnoses and treats mental disorders by using individual, child, family, and group therapies. May design and implement behavior modification programs in a school setting.

Environmental Engineer

Definition: applies engineering principles to control, eliminate, ameliorate, and/or prevent environmental health hazards. Includes all environmental positions identified as engineer, which is assumed to require preparation at least at the baccalaureate level (e.g. water supply/waste water engineer, solid waste engineer, air pollution engineer, sanitary engineer).

Environmental Scientist and Specialist

Definition: applies biological, chemical, and public health principles to control, eliminate, ameliorate, and/or prevent environmental health hazards. Includes environmental researcher, environmental health specialist, food scientist, soil and plant scientist, air pollution specialist, hazardous materials specialist, toxicologist, water/waste water solid waste specialist, sanitarian, entomologist.

Environmental Health & Protection Specialist

Definition: plans, develops, implements and evaluates standards and systems to improve the quality of the physical environment as it affects health; manages environmental health programs; does research on environmental health problems; and promotes public awareness of the need to prevent and eliminate environmental health hazards. Includes environmentalist, environmental scientist, sanitarian, radiation control specialist, air pollution control specialist, vector control specialist, sanitary engineer, air pollution engineer, and chemical engineer. Use of this title is superseded by 1998 SOC titles 'Environmental Engineer' and 'Environmental Scientist and Specialist.'

Epidemiologist

Definition: investigates, describes and analyzes the distribution and determinants of disease, disability, and other health outcomes, and develops the means for their prevention and control; investigates, describes and analyzes the efficacy of programs and interventions. Includes individuals specifically trained as epidemiologists, and those trained in another discipline (e.g., medicine, nursing, environmental health) working as epidemiologists under job titles such as nurse epidemiologist.

Appendix C Part 3

Health Economist

Definition: conducts research, prepares reports, or formulates plans to aid in solution of economic problems arising from production and distribution of goods and services related to healthcare. May collect and process economic and statistical data using econometric and sampling techniques. Includes economist, economic research analyst, health care financial analyst or specialist, health economist, health financial analyst, medical economist.

Health Planner/Researcher/Analyst

Definition: analyzes needs and plans for the development of public health and other health programs, facilities and resources, and/or analyzes and evaluates the implications of alternative policies relating to public health and health care. Includes a number of job titles without reference to the specific training that the individual might have (e.g. health analyst, community planner, research scientist).

Infection Control/Disease Investigator

Definition: assists in identifying and locating individuals or groups at risk of specified health problems and incorporating them into appropriate health promotion and disease prevention programs. Includes public health investigator or venereal disease investigator without reference to educational preparation. This title may be undercounted if individuals with specific professional preparation (nursing, environmental health, laboratory science) primarily doing investigations are employed under the professional title.

Licensure/Inspection/Regulatory Specialist

Definition: audits, inspects and surveys programs, institutions, equipment, products and personnel, using approved standards for design or performance. Includes those who perform regular inspections of a specified class of sites or facilities, such as restaurants, nursing homes, and hospitals where personnel and materials present constant and predictable threats to the public, without specification of educational preparation. This classification probably includes a number of individuals with preparation in environmental health, nursing and other health fields.

Marriage and Family Therapist

Definition: provides services for families having mental, emotional, or substance abuse problems. May provide such services as individual and group therapy. Does not include marriage and family social worker.

Medical & Public Health Social Worker

Definition: identifies, plans, develops, implements and evaluates social work interventions on the basis of social and interpersonal needs of total populations or populations-at-risk in order to improve the health of a community and promote and protect the health of individuals and families. Includes titles specifically referring to social worker, except those referring to mental health or substance abuse.

Mental Health Counselor

Definition: emphasizes prevention and works with individuals and groups to promote optimum mental health. May help individuals deal with addictions and substance abuse; family, parenting, and marital problems; suicidal tendencies; stress management; problems with self-esteem; and issues associated with aging, and mental and emotional health. Provides services for persons having mental, emotional, or substance abuse problems. May provide such services as individual and group therapy, crisis intervention, and social rehabilitation. May also arrange for supportive services to ease patients, return to the community. This category excludes psychiatrists, psychologists, social workers, marriage and family therapists, and substance abuse counselors. It includes such titles as community health worker and crisis team worker.

Mental Health/Substance Abuse Social Worker

Definition: provides services for persons having mental, emotional, or substance abuse problems. May provide such services as individual and group therapy, crisis intervention, and social rehabilitation. May also arrange for supportive services to ease patients' return to the community. Includes marriage and family social worker, psychiatric social worker, and psychotherapist social worker.

Occupation Safety & Health Specialist

Definition: reviews, evaluates, and analyzes workplace environments and exposures and designs programs and procedures to control, eliminate, ameliorate, and/or prevent disease and injury caused by chemical, physical, biological, and ergonomic risks to workers. Includes industrial hygienist, occupational medicine specialist and safety specialist. Includes a physician or nurse specifically identified as an occupational health specialist.

Other Public Health Professional:

Definition: positions in a public health setting occupied by professionals (preparation at the baccalaureate level or above) that do not fall under the specific categories above. Used to classify what an agency reports as 'other professionals' if the report generally specifies professionals into a wide range of the CHP/BHPr+ classifications. If the report specifies only one or two professions (e.g., nurses and physicians) and all others are listed as 'other professionals' then these other professionals would be classified only at the EEO-4 level, not within CHP/BHPr+ level.

Appendix C Part 3

Psychiatric Nurse

Definition: provides nursing services specific to a population with psychiatric care needs, or participates in mental health promotion programs. Includes nurses with advanced training and specialization in psychiatric or mental health nursing as well as registered nurses employed specifically to fill positions in psychiatric or mental health program. Includes nurses employed to provide services in inpatient psychiatric programs.

Psychiatrist

Definition: provides medical services specific to the diagnosis, treatment or prevention of mental disorders. Limited to physicians specifically identified as having training/certification as specialists. Includes psychiatrists employed to provide services in inpatient psychiatric programs.

Psychologist

Definition: diagnoses and treats mental disorders by using individual, child, family, and group therapies. May design and implement behavior modification programs. Limited to individuals specifically identified as psychologists, as contrasted with the more general mental health categories, but excludes clinical, counseling and school psychologists, for whom there is a specific category. Includes psychologists employed to provide services in inpatient psychiatric programs.

Public Health Dental Worker

Definition: plans, develops, implements and evaluates dental health programs to promote and maintain optimum oral health of the public; public health dentists may provide comprehensive dental care; the dental hygienist may provide limited dental services under professional supervision. This category is specific in its inclusion of only employees trained in dentistry or dental health, but abnormally broad in that neglects the professional/technician distinction and includes the entire range of qualifications, from dental surgeon to dental hygienist.

Public Health Educator

Definition: designs, organizes, implements, communicates, provides advice on and evaluates the effect of educational programs and strategies designed to support and modify health-related behaviors of individuals, families, organizations, and communities. This title includes all job titles that include health educator, unless specified to another specific category, such as dental health educator or occupational health educator.

Public Health Laboratory Professional

Definition: plans, designs and implements laboratory procedures to identify and quantify agents in the environment which may be hazardous to human health, biological agents believed to be involved in the etiology of diseases in animals or humans, such as bacteria, viruses and parasites, or other physical, chemical and biological hazards. May be involved in research and the development or production of anti-microbial agents. Includes microbiologist, chemist, toxicologist, physicist, virologist, entomologist and non-specified laboratory professionals. Laboratory staff with less than baccalaureate level education are classified with technical occupational titles.

Public Health Nurse

Definition: plans, develops, implements and evaluates nursing and public health interventions for individuals, families and populations at risk of illness or disability. This title covers all positions identified at the registered nurse level, unless specified as performing work defined under some other professional title (epidemiology, occupational health). Includes graduates of diploma and associate degree programs with the RN license. Includes community health nurse, nurse practitioner, nurse specialist, school nurse, public health nurse, and nurse clinician. Positions specified as licensed practical nurse are classified as 'Other Public Health Technician.'

Public Health Nutritionist

Definition: plans, develops, implements and evaluates programs or scientific studies to promote and maintain optimum health through improved nutrition; collaborates with programs that have nutrition components; may involve clinical practice as a dietitian. Includes titles such as community nutritionist, community dietitian, nutrition scientist, and registered dietitian.

Public Health Optometrist

Definition: diagnoses, treats, analyzes eye and vision conditions, and implements programs to reduce or prevent eye problems in the population.

Public Health Pharmacist

Definition: combines pharmacy and public health skills to plan, organize, manage, and perform drug-related activities with a specific public health focus or within a public health setting; may work in agency-run pharmacies, or serve as the liaison between private pharmacies and the public health agency in regards to standards, procedures, and education. Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

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Public Health Physical Therapist

Definition: assesses, plans, organizes, and participates in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of individuals, populations and groups suffering from disease or injury.

Public Health Physician

Definition: identifies persons or groups at risk of illness or disability, and develops, implements and evaluates programs or interventions designed to prevent, treat or ameliorate such risks; may provide direct medical services within the context of such programs. Includes MD and DO generalists and specialists, some of whom have training in public health or preventive medicine. Undercounts physicians working in public health because many are found in administrative positions (health administrator or official), and some in specialty areas (epidemiology, occupational health).

Public Health Program Specialist

Definition: plans, develops, implements and evaluates programs or interventions designed to identify persons at risk of specified health problems, and to prevent, treat or ameliorate such problems. Includes public health workers reported as public health program specialist without specification of the program, as well as some reported as specialists working on a specific program (e.g. AIDS Awareness Program Specialist, immunization program specialist.) Includes individuals with a wide range of educational preparation, and may include individuals who have preparation in a specific profession (e.g., dental health, environmental health, medicine, nursing).

Public Health Student

Definition: engages in formal study toward a degree from a school of public health or program in public health, or an intern in a public health program area. Some of those reported in this category may be counted elsewhere, as many public health training programs are part time, and are offered to individuals already employed in public health.

Public Health Veterinarian/Animal Control Specialist

Definition: identifies and assesses health risks to humans from animals; plans, manages and evaluates programs to reduce these risks.

Public Relations / Media Specialist

Definition: represents public health issues to the media and public. Acts as a spokesperson for public health agencies. Engages in promoting or creating good will for public health organizations by writing or selecting favorable publicity material and releasing it through various communications media. Prepares and arranges displays, makes speeches, and performs related publicity efforts. In addition to the job titles associated with media spokesperson, this category also includes titles associated with other aspects of public relations and media, such as graphic artist.

Substance Abuse and Behavioral Disorders Counselor

Definition: emphasizes prevention and works with individuals and groups to promote optimum mental health, specializing in addictions and substance abuse. This category includes such titles as addiction counselor, alcoholism worker, and drug abuse worker.

The following titles include positions requiring some level of post-secondary education, but less than the baccalaureate level— positions generally referred to as technical. They are within the OPM Technical category, and encompass Technician, Protective Service Worker and Paraprofessional levels in EEO-4.

Community Outreach/Field Worker

Definition: assists public health professionals in community contact, referrals or program development. This category includes individuals with on-the-job training in specific program areas, but does not include individuals with post-secondary education or credentials. Includes community health aide, immunization outreach worker, ESPDT outreach, maternal and infant advocate, and school health aide.

Computer Specialist

Definition: manages specialized technical aspects of computer operation, applications, operating systems and hardware. Includes computing consultant, applications programmer, computer service technician, data entry technician, data processing specialist, network technician, information technology specialist, and vital records support specialist. Does not include those that operate computers as part of administrative or professional tasks. Includes 'data entry technician' because they learn standards of procedure (like error checking) not done by administrative assistants (e.g. word processing specialists).

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Environmental Engineering Technician

Definition: assists environmental engineers and other environmental health professionals in the control, elimination, amelioration, and/or prevention of environmental health hazards. May collect data and implement procedures or programs developed by environmental engineers and other environmental health professionals. This category includes such titles as air pollution technician, water/waste water plant operator and testing technician.

Environmental Science and Protection Technician

Definition: assists environmental scientists and specialists and other environmental health professionals in the control, elimination, and/or prevention of environmental health hazards. Includes air pollution technicians and vector control workers.

Health Information Systems/Data Analyst

Definition: plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.

Investigations Specialist

Definition: plan and conduct investigations related to suspected violations of federal, state, or local laws. Includes medical investigator, field investigator and criminal investigator.

Occupational Health and Safety Technician

Definition: collects data on workplace environments and exposures for analysis by Occupational Safety and Health Specialists. Implements programs and conducts evaluation of programs designed to limit chemical, physical, biological, and ergonomic risks to workers.

Other Paraprofessional

Definition: workers with on-the-job training in specific program areas, but not specified as outreach workers or other technical titles.

Other Protective Service Worker

Definition: protective service workers not specifically identified as investigators. Includes animal control officer, rabies officer and security personnel.

Other Public Health Technician

Definition: technician titles not named above as well as those that qualify as technicians by level of education such as licensed practical nurse and practical nurse. Includes safety, research, hearing and vision, and health promotion technicians. Includes emergency service personnel.

Public Health Laboratory Specialist

Definition: plans, performs and evaluates laboratory analyses and procedures, and is not elsewhere classified. Perform routine tests in medical laboratory for use in treatment and diagnosis of disease. Prepare vaccines, biologicals, and serums for prevention of disease. Prepare tissue samples for Pathologists, take blood samples, and execute such laboratory tests as urinalysis and blood counts. May work under the general supervision of a medical laboratory technologist. Includes medical laboratory technician, histologic technician, cytotechnologist, forensic evidence technician, specimen control & receiving technician.

The following classifications represent worker categories generally considered support staff, providing assistance in general areas of agency operations and management. They are not specific to public health. They encompass the Clerical/Support category of OPM and the Administrative Support, Skilled Craft and Service/Maintenance categories in EEO-4.

Administrative Business Staff

Definition: perform support work in areas of business and financial operations. Includes bookkeeper, accounting clerk and auditing clerk.

Administrative Support Staff

Definition: perform non-technical support work in all areas of management and program administration. Includes typist, receptionist, and stenographer.

Skilled Craft Worker

Definition: perform jobs which require special manual skill and a thorough and comprehensive knowledge of the processes involved in the work which is acquired through on-the-job training and experience or through apprenticeship or other formal training programs. Includes mechanic and repairer, electrician.

Food Services/Housekeeping

Definition: perform duties in an organization or department that prepares and serves food and beverages. Performs any combination of light cleaning duties to maintain commercial establishments in a clean and orderly manner. Includes cook, kitchen aide, food support worker, housekeeping and laundry worker.

Patient Services

Definition: perform duties that support the direct care of individual patients, usually in inpatient settings. Includes nurse aid, nursing assistant, and patient care aid.

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Other Service/Maintenance

Definition: perform duties which result in or contribute to the comfort, convenience, hygiene or safety of the general public or which contribute to the upkeep and care of buildings, facilities or grounds of public property. Workers in this group may operate machinery. Includes chauffeur, laundry and dry cleaning operative, truck driver, bus driver, garage laborer, custodial employee, and grounds keeper.

The following categories were developed within the CHP/BHPr+ to keep reported volunteers separate from those in salaried positions.

Volunteer Health Administrator

Definition: plans, analyzes, organizes, directs, coordinates and evaluates the use of resources to deliver voluntary agency services, education or policy functions on a volunteer basis.

Volunteer Health Educator

Definition: designs, organizes, implements, communicates, provides advice on and evaluates the effect of educational programs and strategies designed to support and modify health-related behaviors of individuals, families, organizations, and communities on a volunteer basis.

Volunteer Other/Paraprofessional

Definition: participates in public health services other than as an administrator or health educator on a volunteer basis.