



Wisconsin Public Health Workforce

2008



Wisconsin Public Health Workforce Report

August 2008

*Bureau of Health Information and Policy
Division of Public Health
Wisconsin Department of Health Services*

Foreword

This report presents a variety of currently available data on the public health workforce in Wisconsin. The statutorily mandated state health plan, *Healthiest Wisconsin 2010*, identifies developing a diverse, sufficient and competent public health workforce as a statewide infrastructure priority. The *Wisconsin Public Health Workforce Report* is the first publication on the public health workforce in Wisconsin.

This report provides baseline public health workforce data. It focuses on the governmental public health workforce, and includes some data about the workforce of selected other public-sector organizations. The report represents a needed first step to bring together information that will enable educational institutions, state and local emergency readiness and public health preparedness experts, community agencies, local health department administrators, boards of health, legislators and others to plan for a trained and qualified public health workforce. Workforce planning helps to assure a diverse, sufficient and competent public health workforce, prepared to promote and protect the health of the public.

Sources of data for this report include:

- 2007 State Public Health Workforce Survey, Association of State and Territorial Health Officials (ASTHO);
- 2006 Wisconsin Local Health Department Survey;
- 2005 National Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO);
- 2008 certification and licensing data for certified Medical First Responders (FR) and licensed Emergency Medical Technicians (EMT) in Wisconsin;
- 2007 Wisconsin Emergency Assistance Volunteer Registry (WEAVR) and data from the Medical Reserve Corps (MRC);
- Two-year (2006-2008) and 10-year (2004-2014) employment projections for the Wisconsin health care workforce by the Wisconsin Department of Workforce Development;
- 2005 demographic data for the Wisconsin health care workforce from the American Community Survey, U.S. Census Bureau;
- 2007 licensing data for Wisconsin health care professionals from the Wisconsin Department of Regulation and Licensing.

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Introduction

Public health assures the conditions in which people can be healthy. It protects individuals, families, and communities from preventable disease and epidemics; it promotes public safety and health. Examples of the work of public health include:

- Monitor health status and conduct community needs assessments to identify community health problems;
- Prevent or control epidemics and spread of disease;
- Respond to disasters and assist communities in recovery;
- Educate the public about current and emerging health issues;
- Enforce laws and regulations that protect health and ensure safety, such as restaurant, hotel, and swimming pool sanitation and safety;
- Prevent or reduce injuries;
- Protect against environmental and occupational hazards;
- Safeguard the purity of food and water and the safety of consumer products;
- Assure the quality, accessibility and availability of health care and essential public health services;
- Link people to needed health and dental services.

Learn more about public health in Wisconsin by visiting the following links:

- Division of Public Health: <http://dhs.wisconsin.gov/aboutdhs/dph/dph.htm>
- Public Health Services: <http://dhs.wisconsin.gov/aboutdhs/dph/DPHSERVS.HTM>
- Public Health Programs: <http://dhs.wisconsin.gov/programs/publichealth.htm>
- Local Health Departments: <http://dhs.wisconsin.gov/localhealth/index.htm>

Who is the public health workforce?

A qualified workforce is critical to the business of public health. Broadly defined, the public health workforce includes all those who provide essential public health services, regardless of the nature of the employing agency (U.S. Department of Health and Human Services, *The Public Health Workforce: An Agenda for the 21st Century* [2000]). This workforce includes a varied range of public health professionals employed in public and private, governmental and non-governmental organizations.

In Wisconsin, the public health workforce includes but is not limited to the following disciplines:

Emergency Medical Services Providers*

- First Responders
- EMT Basics
- EMT Intermediate Technicians
- EMT Intermediates
- EMT Paramedics

Environmental health workers

- Registered Sanitarians*
- Registered Environmental Health Professionals

- Non-credentialed environmental health workers
- Toxicologists
- Radiologists

Epidemiologists
Public health educators*
Laboratory workers
Local health officers*
Public health information system specialists
Public health nutritionists*
Public health dental hygienists*
Public health dentists
Public health managers
Public health nurses*
Public health physicians*

The public health workforce includes disciplines from the broader health care workforce and is reliant upon those disciplines to maintain a diverse, sufficient, and competent workforce. In addition to discipline-specific expertise (competencies), the public health workforce uses core public health competencies to guide its work. Public health competency may be acquired through formal educational processes.

What are the core competencies for public health professionals?

Each discipline that provides essential public health services has discipline-specific competencies to guide educational development and practice (example: nursing). Core public health competencies guide formal public health education and continuing education curriculum development and public health practice.

The *Core Competencies for Public Health Professionals* are a set of skills, knowledge, and attitudes necessary for the broad practice of public health. The list was adopted by the Council on Linkages between Academia and Public Health Practice on April 11, 2001, after a lengthy review process that involved more than 1,000 public health professionals.

The Core Competencies for Public Health Professionals are within eight domains:

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

To learn more about the Council on Linkages Core Public Health Competencies visit the Public Health Foundation site at: <http://www.phf.org/link/corecompetencies.htm>

What are the public health workforce challenges we face?

Despite the importance of public health to our society, critical workforce challenges exist. These challenges include addressing a shortage of competent workers, succession planning to replace an aging workforce, enhancing technical skills, and developing a workforce that reflects the diversity of Wisconsin communities.

Wisconsin's state and local health departments face challenges in maintaining an adequate public health workforce. Currently, nearly one in five workers in the Wisconsin Division of Public Health (DPH) is eligible

* These occupations are referenced in Wisconsin Statutes 251.06(3)(e), sections 186, 187, 188.

Other sources for this list: Association of State and Territorial Health Officials (ASTHO) State Public Health Workforce Survey, 2007; Wisconsin Local Health Department Survey, 2006; Bureau of Local Health Support and Emergency Medical Services (EMS), DHS, 2008.

for retirement. Approximately 50 percent of the public health employees in DPH will be eligible for retirement by 2011. Intense competition exists to recruit and retain qualified employees. Further, the Wisconsin public health workforce does not reflect the ethnic and linguistic diversity of the state population.

A smaller pool of potential and experienced workers, resulting from the aging of the Baby Boomers and the fact that women's labor force participation (a traditional source of public health workers) has already peaked (Lee M. and M. Mather, *U.S. Labor Force Trends*, Population Reference Bureau, June 2008), challenges the overall U.S. labor market. Thus, public health competes with other disciplines to recruit new workers.

What progress is being made to address the workforce challenges?

Despite challenges, progress is being made to assure a diverse, sufficient and competent workforce.

Wisconsin colleges and universities provide numerous public health educational opportunities. For example, currently three Wisconsin institutions offer master's degrees in public health: the University of Wisconsin – La Crosse, the Medical College of Wisconsin, and the University of Wisconsin – Madison School of Medicine and Public Health; the latter also offers a Ph.D. in population health.

The Healthy Wisconsin Leadership Institute is a collaborative effort of the University of Wisconsin School of Medicine and Public Health and the Medical College of Wisconsin. Through its three programs (the Community Teams Program, the Health Policy Program and the Lifelong Learning and Mentoring Program) the Leadership Institute has provided training and support to more than 600 public health practitioners statewide. The Healthy Wisconsin Leadership Institute can be accessed at <http://hwli.org/>.

To assist public health professionals with continuing education, the Wisconsin Division of Public Health hosts the Wisconsin TrainingFinder Real-time Affiliate Integrated Network (TRAIN), the statewide public health learning management system. The Division of Public Health in partnership with the University of Wisconsin Office of Continuing Professional Development is developing core public health competency assessments linked to TRAIN. This will provide individual public health professionals with access to courses and other learning experiences to help them carry out public health services more effectively. Wisconsin TRAIN can be accessed at: <http://wi.train.org>.

Nationally, TRAIN is considered to be the premier online learning resource for professionals who protect the public's health. Wisconsin is one of 24 states and affiliates (including the National Medical Reserve Corps, and CDC's Division of Global Migration and Quarantine) that subscribe to the system, a service of the Public Health Foundation (<http://www.phf.org>).

What will I find in this report?

The *Wisconsin Public Health Workforce Report* presents the most recent data from state employment statistics, the Wisconsin Local Health Department Survey, the Wisconsin Emergency Assistance Volunteer Registry, and national sources. Tables and figures in this publication summarize the most recent available data from each source, ranging between calendar year 2005 and 2008. When possible, tables include data by age, race/ethnicity, and occupation. Although this report focuses largely on the governmental public health workforce, it also presents data about selected non-governmental health care disciplines that are represented in the public health workforce.

- The report begins with a Foreword, Introduction, and Selected Findings.
- The body of the report is organized by data source, with each section presenting the most recent available findings from that source.
- Appendices provide more detailed information from some of these data sources as well as related resource material, such as maps.

Data limitations and caveats. The accuracy of the data presented in this report is affected by a number of factors. Information collected is not directly comparable between data sets due to differences in the data collected, analysis, and reporting methodology. Age, race, and ethnicity information was not collected for some data sets or may be incomplete because reporting these variables was optional. At this time there is no one data source that encompasses the entire public health workforce.

Selected Findings

Wisconsin Division of Public Health Workforce

- In 2006 the average age of a DPH employee was 50.
- The turnover rate for DPH staff in 2006 was 25%; that is, 25% of all employees in 2006 were hired that year.
- The average age of a DPH *new hire* in 2006 was 47.
- The percent of DPH staff in 2007 eligible to retire within one year was 34%. This is expected to increase to 46% by 2009 and to 54% by 2011.

Wisconsin Local Health Department Workforce

- There were 3.2 local health department full-time equivalent employees (FTEs) per 10,000 Wisconsin people in 2006.
- According to the National Association of City and County Health Officials, in 2005 the national average staffing ratio for local health department FTEs was 9.3 per 10,000 population for small-town and rural health departments and 5.7 per 10,000 population for all other local health departments.
- In 2006, the Wisconsin average was 3.5 local health department FTEs per 10,000 population in rural counties, and 3.1 local health department FTEs per 10,000 population in metropolitan counties.

Wisconsin Local Health Officers

- As of 2005, 37% of the 92 local health officers in Wisconsin had worked five years or less in their current position.
- Sixty-seven percent of Wisconsin local health officers were age 50 and older, and 80 percent were female.

Wisconsin Emergency Medical Services Workforce

- As of 2008, the average age of Wisconsin EMS providers is 41.
- There are 32 EMS providers per 10,000 people in Wisconsin.
- Two-thirds of EMS workers in Wisconsin are male, and one-third are female.

Wisconsin Emergency Preparedness Volunteer Workforce

- As of December 31, 2007, WEAVR (the Wisconsin Emergency Assistance Volunteer Registry) had 1,970 unduplicated volunteers registered on the system.
- As of 2007, Medical Reserve Corps units in Wisconsin had 339 recorded volunteers.

Wisconsin Public Sector Employment Projections

- Between 2004 and 2014, Wisconsin health care jobs in the public sector (excluding state and local education and hospitals) are projected to increase by 9.2%, or 2,120 positions.

Demographic Profile of Wisconsin Health Care Workers in the Public Sector

- In 2005, an estimated 31% of Wisconsin's public-sector health care workforce was age 51 and older. An additional 33% was ages 41 to 50.
- Women made up an estimated 83% of the public-sector health care workforce.
- Approximately 88% of Wisconsin's public-sector health care workforce was white.
- By 2010, an estimated 39% of the public-sector health care workforce in Wisconsin will be eligible to retire.

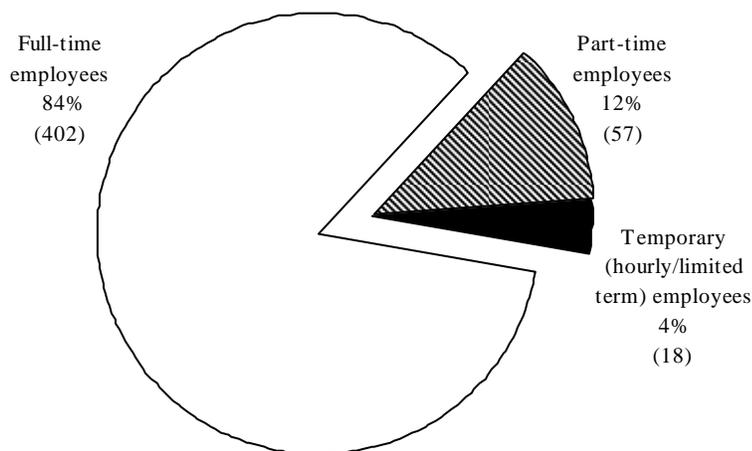
Wisconsin Division of Public Health Workforce

The Wisconsin Division of Public Health (DPH) is part of a cabinet-level agency, the Wisconsin Department of Health Services, and had 477 employees in 2006. DPH administers the following principal programs: Communicable Disease Prevention, Community Health Promotion, Environmental and Occupational Health, Health Information and Policy, Local Health Support, and Emergency Medical Services. Local public health services in Wisconsin are subject to the shared authority of both DPH (the state agency) and local government.

Key Findings - 2006

- In 2006 the average age of a DPH employee was 50.
- The average number of years of service at DPH was 16.
- The turnover rate for DPH staff in 2006 was 25%; that is, 25% of all DPH employees in 2006 were hired that year.
- The percent of DPH positions currently vacant was 13.3%.
- The average age of a DPH *new hire* in 2006 was 47.
- The percent of DPH staff in 2007 eligible to retire within one year was 34%.
- The percent of DPH staff eligible to retire is expected to increase to 46% by 2009 and to 54% by 2011.
- The most severe worker shortage at DPH in 2006 was for public health managers.
- DPH was also experiencing worker shortages in public health nurses and epidemiologists.
- Eighty-three percent of DPH positions were represented by a union.

Figure 1. Type of Employee, Wisconsin Division of Public Health Workforce, 2006



Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.

Notes: This is based on the assumption that retirement eligibility begins at age 55.

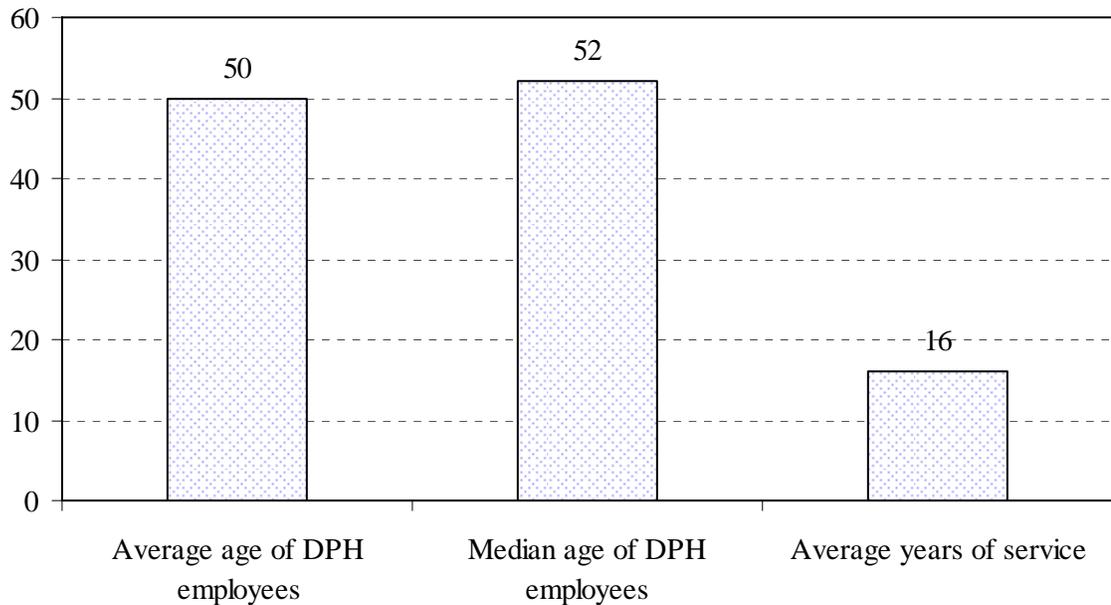
As of January 2006, the total number of DPH employees was 477.

Table 1. Employee Occupational Classifications, Wisconsin Division of Public Health Workforce, 2006

Occupational Classification	Number	Percent
Administrative and clerical personal	91	27%
Environmental health workers	50	15
Epidemiologists	20	6
Health educators	59	18
Public health information system specialists	22	7
Nutritionists	17	5
Public health managers	46	14
Public health nurses	26	8
Public health physicians	5	1
Total	336	100%

Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.

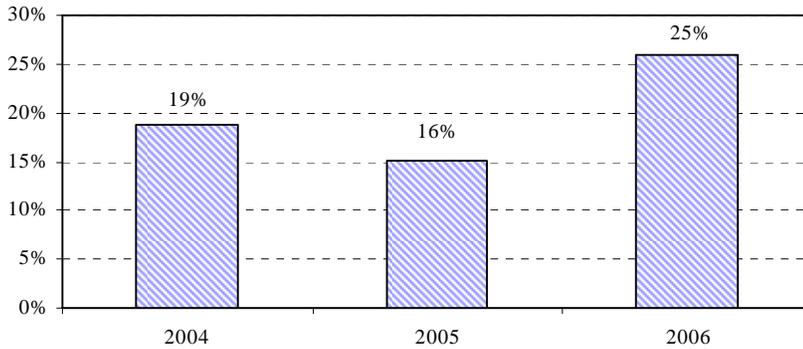
Figure 2. Average Age, Median Age, and Average Years of Service for Current Employees, Wisconsin Division of Public Health Workforce, 2006



Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.

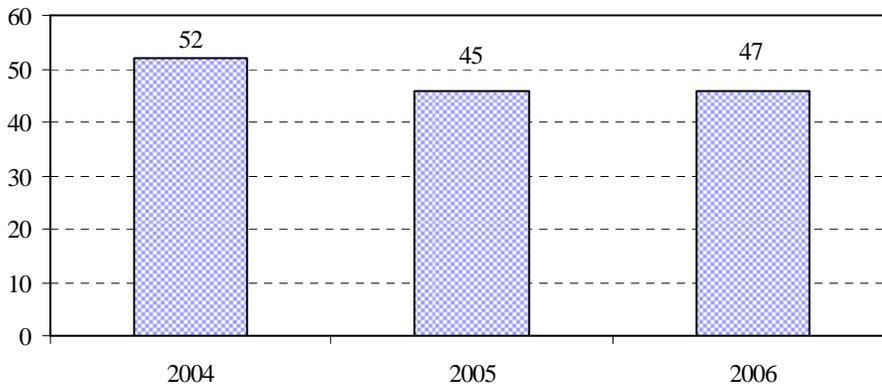
Note: The median age represents the midpoint of all persons in the group (half are older and half are younger than the median age).

Figure 3. Turnover Rate (New Employees as a Percent of Total Employees), Wisconsin Division of Public Health Workforce, 2004-2006



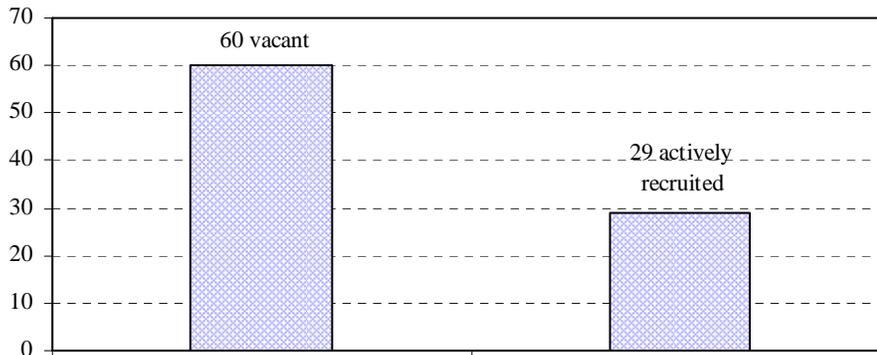
Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.
 Note: Turnover rate is defined as the number of employees in a given category hired during the year, calculated as a percentage of all employees in that category. The smaller the percentage of turnover, the lower the turnover rate, and the greater the continuity of employment.

Figure 4. Average Age of New Employees, Wisconsin Division of Public Health Workforce, 2004-2006



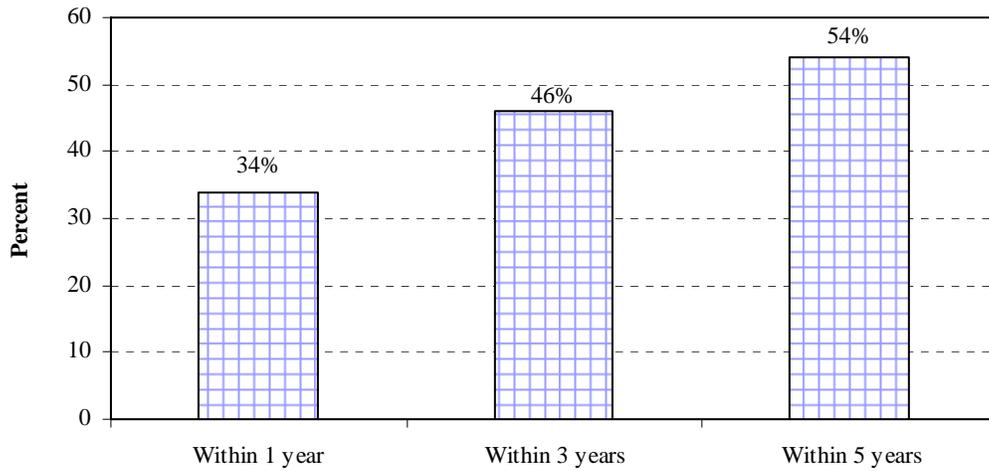
Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.

Figure 5. Number of Vacant Positions and Actively Recruited Positions, Wisconsin Division of Public Health Workforce, 2006



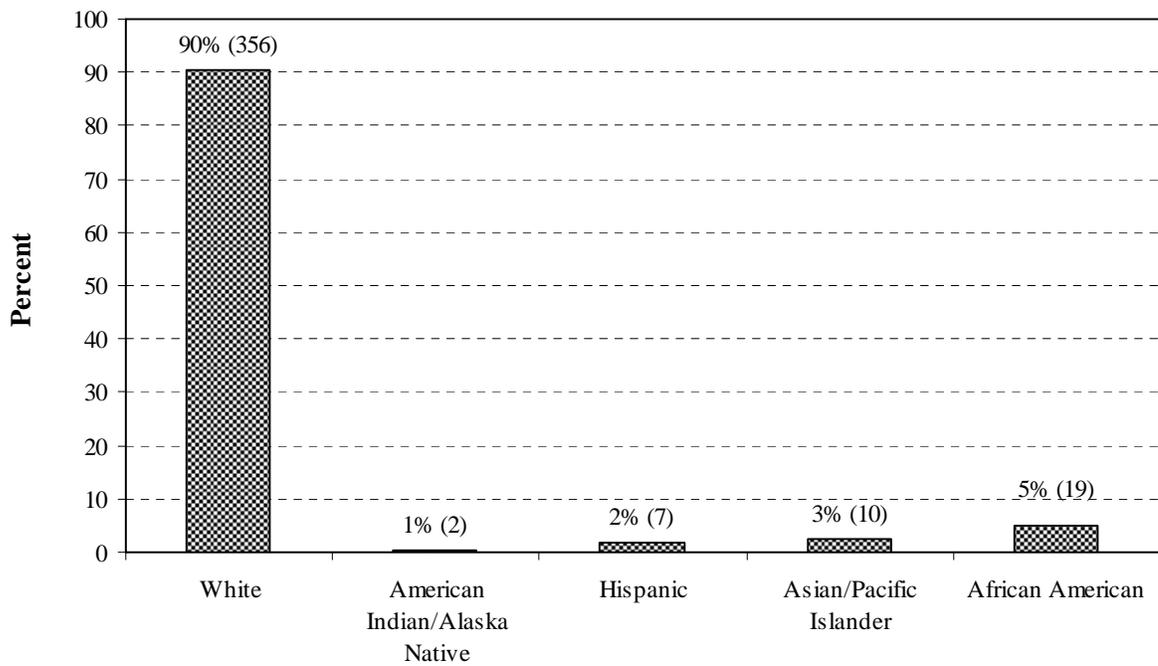
Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.
 Note: The total number of DPH positions was 497 as of January 2006.

Figure 6. Percent of Current Classified Employees Eligible for Retirement, Wisconsin Division of Public Health Workforce, 2006



Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.
 Note: As of January 2006, there were 120 DPH employees eligible to retire based on the assumption that retirement eligibility begins at age 55.

Figure 7. Race and Ethnicity of Employees, Wisconsin Division of Public Health Workforce, 2006



Source: Association of State and Territorial Health Officials (ASTHO), State Public Health Workforce Survey, 2007.
 Note: In 2006, 394 of 477 DPH employees reported race/ethnicity information; 83 (17%) did not report this information.

Wisconsin Local Health Department Workforce

The Wisconsin Department of Health Services (DHS) is mandated by section 251.05, Wisconsin Statutes, to collect information annually from local health departments for use in a local public health data system.

The 2006 Local Health Department (LHD) Survey was conducted within DHS by the Bureau of Local Health Support and Emergency Medical Services, Wisconsin Division of Public Health (DPH). LHD staffing information presented in this report is based on local health department responses to the 2006 annual survey. There were 93 local health departments in Wisconsin in 2006. Ninety-one local health departments responded to the staffing part of the survey. The survey does not include Tribal Health Centers.

Key Findings - 2006

- There were 2,568 local health department staff and an estimated 5,617,744 people in Wisconsin in 2006, for a staffing ratio of 4.6 local health department staff per 10,000 people. (See Appendix C for the staff-to-population ratios for individual local health departments in Wisconsin, as well as a copy of the Local Health Department Survey instrument.)
- There were 1,811 local health department full-time equivalent employees (FTEs) and 5,617,744 people in Wisconsin in 2006, for a staffing ratio of 3.2 LHD FTEs per 10,000 people.
- According to the National Association of City and County Health Officials, in 2005 the national average staffing ratio for local health department FTEs was 9.3 per 10,000 population for small-town and rural health departments and 5.7 per 10,000 population for all other local health departments.
- In 2006, the Wisconsin average was 3.5 local health department FTEs per 10,000 population in rural counties, and 3.1 local health department FTEs per 10,000 population in metropolitan counties.
- There were 153 new hires in all Wisconsin local health departments in 2006.
- Forty-three people retired from Wisconsin LHDs in 2006.
- In 2006, 92 local health department employees were eligible for retirement out of 2,173 total employees.

The average age, race, ethnicity, years of service, turnover rate, percentage of vacant positions, and retirement eligibility projections of local health department employees are unknown because the survey did not request this information.

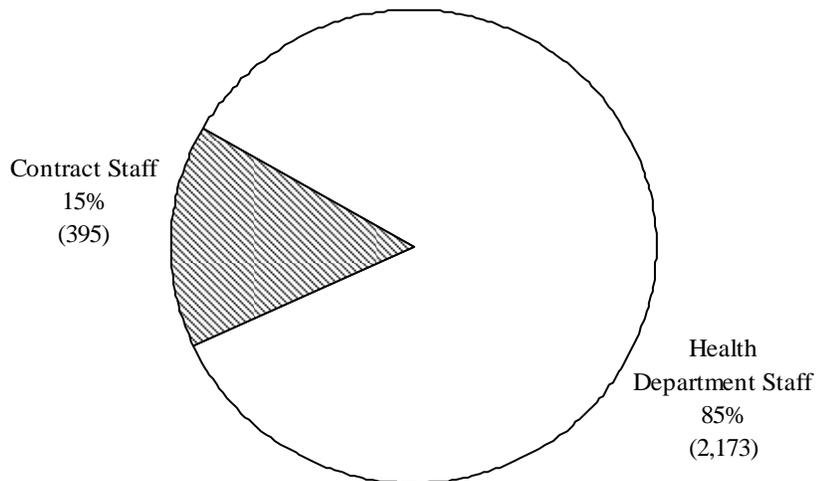
Table 2. Local Health Department Workforce by Occupational Classification, Wisconsin 2006

Occupational Classification	Total LHD Workforce	Number		Percent	
		LHD Staff	Contract Staff	LHD Staff	Contract Staff
Public health nurse	673	661	12	98%	2%
Administrative/clerical	592	584	8	99	1
Registered sanitarian	164	154	10	94	6
Bilingual health aide Interpreter/translator	322	130	192	40	60
Nutritionist	136	118	18	87	13
Other public health professional	135	108	27	80	20
Other registered nurse	76	69	7	91	9
Health educator	66	55	11	83	17
Laboratory worker	48	45	3	94	6
Environmental health worker	44	37	7	84	16
Epidemiologist	21	17	4	81	19
Nurse practitioner	20	15	5	75	25
Public health computer specialist	16	12	4	75	25
Licensed practical nurse	13	12	1	92	8
Dental hygienist	17	6	11	35	65
Public health physician	18	3	15	17	83
Dentist	1	1	0	100	0
Other public health paraprofessional	205	146	59	71	29
Total	2,568	2,173	395	85%	15%

Source: Wisconsin Local Health Department Survey, 2006; Bureau of Health Information and Policy, Division of Public Health, Department of Health Services.

Note: In this table, counts indicate the number of people in the occupational classification, not positions or full-time equivalents.

Figure 8. Number and Percent of Health Department and Contract Staff in the Local Health Department Workforce, Wisconsin 2006



Source: Wisconsin Local Health Department Survey, 2006; Bureau of Health Information and Policy, Division of Public Health, Department of Health Services.

Wisconsin Local Health Officers

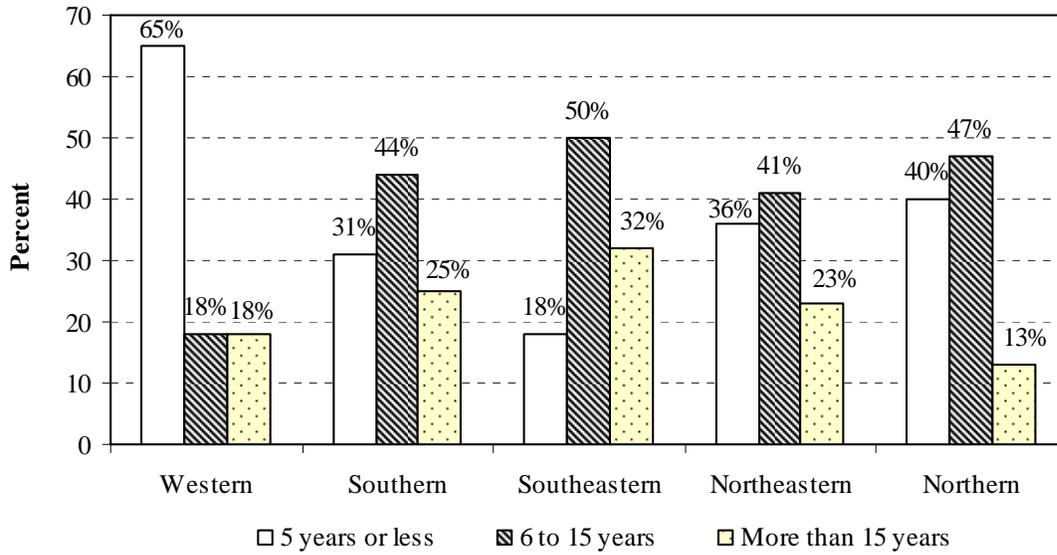
Under Wisconsin statute and administrative rule, a local health officer is “the person in charge of a local health department, including general administration and the supervision of personnel who direct or carry out public health nursing and environmental health programs and other programs or units of the local health department.” The National Association of City and County Health Officials (NACCHO) is the national organization representing local health departments. The Association’s 2005 National Profile of Local Health Departments included the following information about local health officers in Wisconsin.

- As of 2005, 37% of the 92 local health officers in Wisconsin had worked five years or less in their current position.
- Sixty-seven percent of Wisconsin local health officers were age 50 and older, and 80 percent were female.

Key Findings by Region - 2005

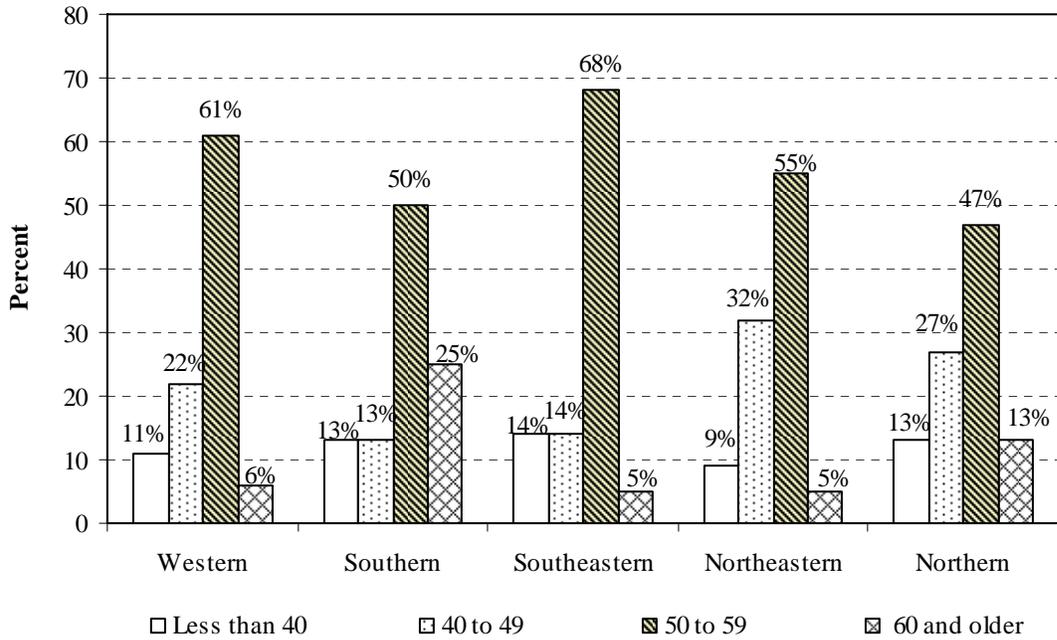
- **Western Region Summary:** The Division of Public Health Western Regional Office serves 18 local health departments, all of which completed the 2005 National Profile Survey. (See Appendix A for a map of the Wisconsin Department of Health regions.) The majority (65%) of health officers in the Western Region had been in their current position for five years or less. A majority (61%) of the health officers in the Western Region were between the ages of 50 and 59 at the time of the survey. Health officers in Wisconsin are more likely to be female than male, and the same was true in the Western Region (72% female).
- **Southern Region Summary:** The Division of Public Health Southern Regional Office served 17 local health departments at the time of the 2005 National Profile Survey. Only 16 of the 17 health departments completed the survey. A plurality of health officers in the Southern Region (44%) had between six and 15 years of experience in their current positions. Half of the health officers were between the ages of 50 and 59 at the time of the survey. A large majority (81%) of officers in the Southern Region were female.
- **Southeastern Region Summary:** The Division of Public Health Southeastern Regional Office served 22 local health departments in 2005. All 22 health departments completed the 2005 National Profile Survey. Half of these 22 health officers had been in their current position for six to 15 years. A majority of health officers in the Southeastern Region (68%) were between the ages of 50 and 59 at the time of the survey. In 2005, 77% of health officers in the Southeastern Region were female.
- **Northeastern Region Summary:** The Division of Public Health Northeastern Regional Office served 22 local health departments in 2005. All 22 health departments completed the 2005 National Profile Survey. A plurality (41%) of health officers in the Northeastern Region had been in their current position for between six and 15 years; an additional 36% had been in their positions five years or less. A majority of health officers (55%) were between the ages of 50 and 59 at the time of the survey. In 2005, 77% of health officers in the Northeastern Region were female.
- **Northern Region Summary:** The Division of Public Health Northern Regional Office served 15 local health departments in 2005, all of which completed the 2005 National Profile Survey. A plurality (47%) of health officers in the Northern Region had been in their current position for six to 15 years and 40% had been in their current position five years or less. In addition, 47% of the health officers were ages 50 to 59 and 27% were ages 40 to 49. At the time of the survey, all 15 health officers in the Northern Region were female.

Figure 9. Years in Current Position for Local Health Officers by Region, Wisconsin 2005



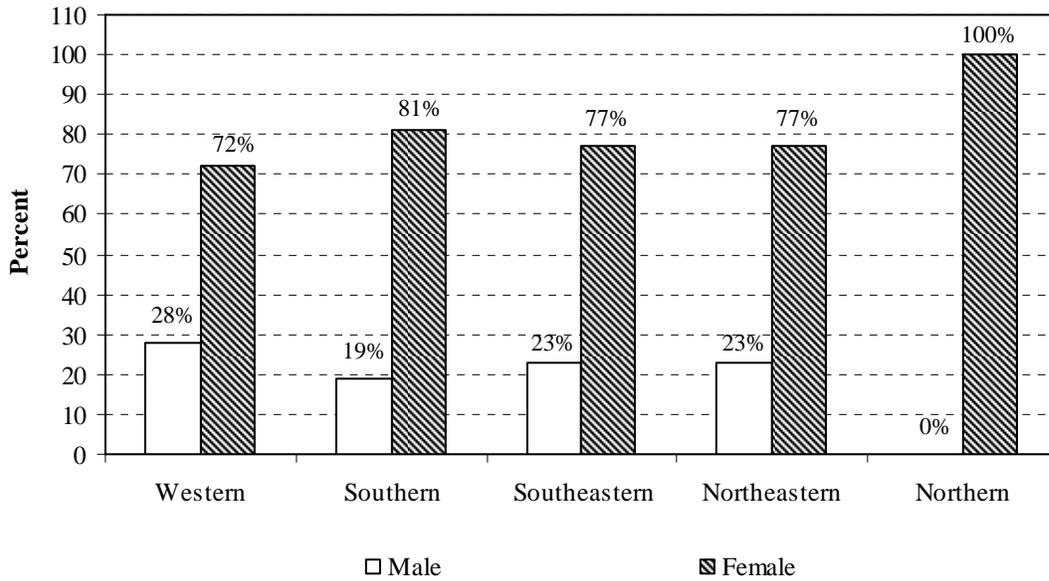
Source: National Profile of Local Health Departments, 2005, National Association of City and County Health Officials.

Figure 10. Age of Local Health Officers by Region, Wisconsin 2005



Source: National Profile of Local Health Departments, 2005, National Association of City and County Health Officials.

Figure 11. Gender of Local Health Officers by Region, Wisconsin 2005



Source: National Profile of Local Health Departments, 2005, National Association of City and County Health Officials.

Wisconsin Emergency Medical Services Workforce

A high-quality Emergency Medical Services (EMS) system reduces both the human suffering and economic loss to society from the premature death and disability resulting from accidents or sudden illness. Wisconsin EMS is dedicated to developing and maintaining the EMS delivery system, ensuring that a uniform quality and standard of pre-hospital emergency medical care is available to everyone in Wisconsin.

The following information was obtained in 2008 from certification and licensing data for certified Medical First Responders and licensed Emergency Medical Technicians in Wisconsin. The Wisconsin Department of Health Services, Division of Public Health, Bureau of Local Health Support and EMS is responsible for the regulation and licensing of the Emergency Medical Services workforce.

Key Findings - 2008

- The average age of Wisconsin EMS providers is 41.
- There are 17,881 EMS providers and 5,580,757 people in Wisconsin, for a staffing ratio of 32 EMS providers per 10,000 people.
- Two-thirds of EMS workers in Wisconsin are male, and one-third are female.

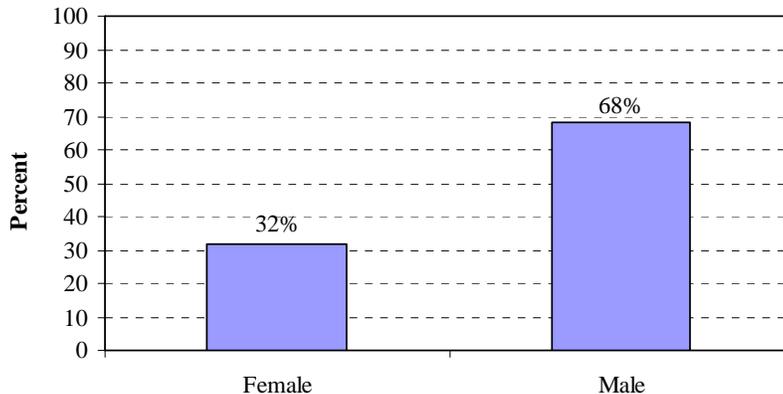
The EMS workforce employment or volunteer status, race, ethnicity, number of years of service, turnover rate, percentage of vacant positions, retirement eligibility, and retirement eligibility projections are unknown because the registry system does not collect this information.

Table 3. Emergency Medical Services Workforce by Occupational Classification, Wisconsin 2008

Occupational Classification	Number	Percent
First Responder	3,748	21%
Emergency Medical Technician (EMT) Basic	8,836	49
EMT Intermediate Technician	2,478	14
EMT Intermediate	267	1
EMT Paramedic	2,552	15
Total	17,881	100%

Source: Wisconsin Department of Health Services, Division of Public Health, Department of Health Services, Division of Public Health, Bureau of Local Health Support and Emergency Medical Services, 2008.

Figure 12. Licensed Emergency Medical Services Workers by Gender, Wisconsin 2008



Source: Wisconsin Department of Health Services, Division of Public Health, Bureau of Local Health Support and Emergency Medical Services, 2008.

Note: Percentages based on a total of 17,881 workers.

Wisconsin Emergency Preparedness Volunteer Workforce

The Wisconsin Emergency Assistance Volunteer Registry (WEAVR) is an online resource that collects and stores contact information on volunteers interested in filling critical response and recovery roles following a major public health emergency. Based on the information collected from each volunteer, public health officials can use WEAVR to identify people willing to fill the specific volunteer roles needed in a particular emergency. If an emergency occurs in which volunteers are needed, public health officials will use the WEAVR registry to generate a list of volunteers who will be contacted based on the information the volunteers provided.

In addition, the Medical Reserve Corps (MRC), sponsored by the Office of the U.S. Surgeon General, is dedicated to establishing teams of local volunteer medical and public health professionals to contribute their skills and expertise throughout the year as well as during times of community need (local response during emergencies and non-emergencies).

The mission of the Medical Reserve Corps (MRC) is to improve the health and safety of communities across the country by organizing and using public health, medical and other volunteers. There are six MRC units in Wisconsin: Brown County MRC (in Green Bay), Dane County MRC (in Madison), Southeast Wisconsin MRC (in Waukesha), Wisconsin Technical Rescue Operations Team MRC (in Kaukauna), Wisconsin Disaster Medical Response Team MRC (in Appleton), and Wisconsin Veterinary Corps (in Madison).

Key Findings - 2007

- As of December 31, 2007, WEAVR had 1,970 unduplicated volunteers registered on the system.
- WEAVR count of volunteers by license:
 - Total count: 2,036*
 - Total unduplicated count of volunteers: 1,970
 - Unduplicated count of volunteers who are unlicensed (or licensure information was missing): 438.
- As of 2007, Medical Reserve Corps units in Wisconsin had 339 recorded volunteers.

* A volunteer may report more than one kind of license; thus the total count is larger than the unduplicated count of volunteers.

Table 4. Emergency Assistance Volunteer Counts by License Type, Wisconsin 2007

License Type	Counts	Percent
Dental hygienist	9	<1%
Advanced practice nurse	60	3
Dentist	14	1
Emergency medical technician	306	15
Licensed practical nurse	49	2
Marriage and Family Therapist	12	1
Pharmacist	36	2
Physician	164	8
Physician assistant	33	2
Professional counselor	43	2
Psychologist	21	1
Registered nurse	689	34
Sanitarian	36	2
Social worker	86	4
Veterinarian/vet. technician	28	1
Other licensed	12	1
Licensure missing or unlicensed	438	22
Total	2,036	100%

Source: Department of Health Services, Division of Public Health, Wisconsin Emergency Assistance Volunteer Registry (WEAVR), 2007.

Notes: "**Other licensed**" includes: audiologists, chiropractors, funeral directors, registered dietitians.

"**Social worker**" includes: advanced practice social workers, independent social workers, licensed clinical social workers, and social workers (not specified).

Table 5. Medical Reserve Corps Volunteers by Occupation, Wisconsin 2007

Occupational Classification	Number	Percent
Physician	13	4%
Nurse	15	4
Pharmacist	1	0
Veterinarian	115	34
Mental health professional	32	9
EMS professional	29	9
Other public health/medical	98	29
Non-public health/medical	36	11
Total	339	100%

Source: Office of the Civilian Volunteer Medical Reserve Corps, Office of the U.S. Surgeon General.

Note: There are no volunteers in Wisconsin Medical Reserve Corps units for the following occupations: physician assistants, nurse practitioners, dentists, dental hygienists and respiratory therapists.

Wisconsin Public Sector Employment Projections

The Wisconsin Department of Workforce Development provides two-year and 10-year employment projections for various industries and occupations. The latest 10-year projection is for the period of 2004-2014, and the latest two-year projection is for the period of 2006-2008.

These projections provide a count of jobs rather than people. (An individual may hold more than one job.) The projections provide an estimate of the number of filled jobs in the projected year. The projections do not estimate the demand for and/or supply of workers. A distinction is not made between full-time and part-time jobs. Thus, comparisons between these employment projections and other sources showing the number of workers should be made with caution.

Projections for individual public health occupations are available in Appendix F.

Key Findings – 2008 and 2014 Projections

- Between 2004 and 2014, Wisconsin health care jobs in the public sector (excluding state and local education and hospitals) are projected to increase by 9.2%, or 2,120 positions.
- Total number of health care jobs in the public sector (excludes state and local education and hospitals)*:
2004: 23,160
2014: 25,280 (an increase of 9.2% between 2004 and 2014)
- Total number of health care jobs in the public sector (excludes state and local education and hospitals)*:
2006: 23,220
2008: 23,540 (an increase of 1.4% between 2006 and 2008)

* Occupations included in these projections represent the most prevalent occupations in Wisconsin's public health sector.

Demographic Profile of Wisconsin Health Care Workers in the Public Sector

The American Community Survey is a nationwide survey conducted by the U.S. Census Bureau each year. It collects and produces population, housing, business and government information, based on a sample of three million households nationwide. This survey is the only source that provides estimated demographic data for the Wisconsin health care workforce in the public sector. (See Appendix E for available demographic information on selected health care professions from the Wisconsin Department of Regulation and Licensing.)

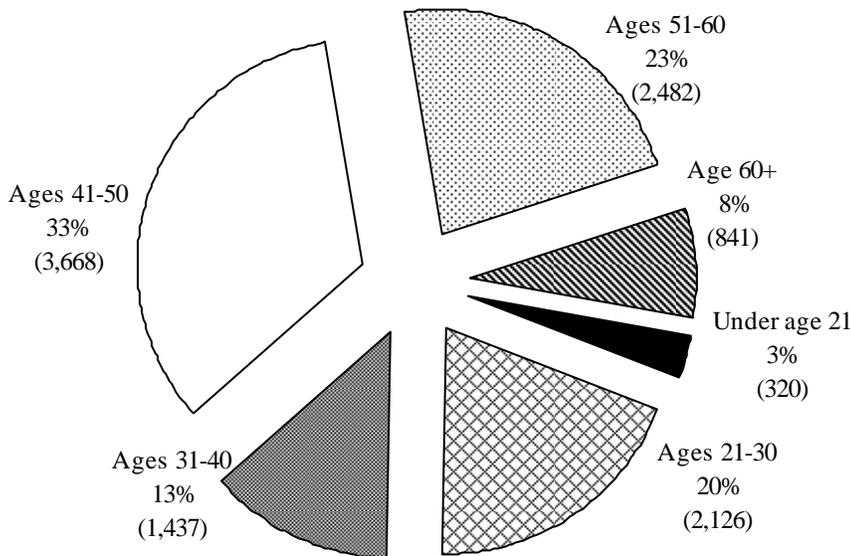
The American Community Survey data presented in this report exclude managers and all workers in education and hospitals.

In 2005, there were an estimated 10,874 health care workers in the public sector in Wisconsin (excluding managers and all workers in education and hospitals).

Key Findings - 2005

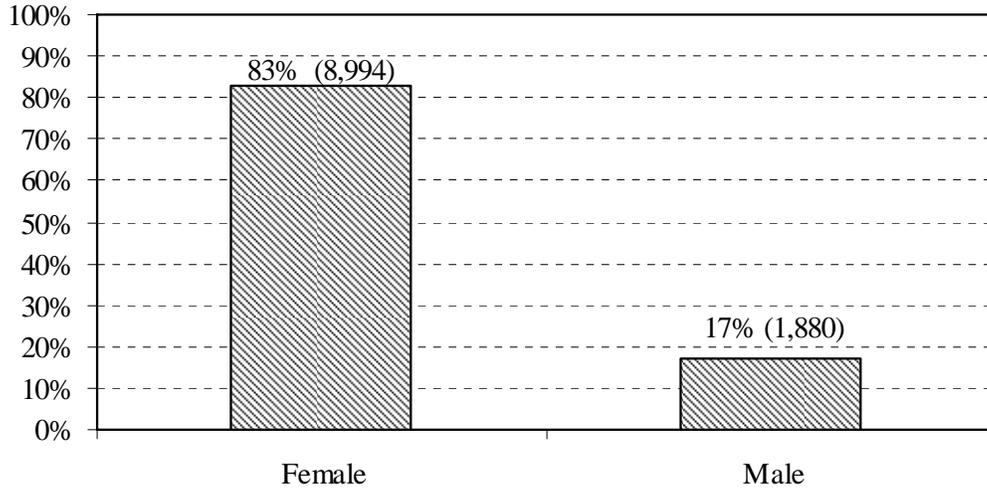
- In 2005, an estimated 31% of Wisconsin’s public-sector health care workforce was age 51 and older. An additional 33% was ages 41 to 50.
- Women made up an estimated 83% of the public-sector health care workforce.
- Approximately 88% of Wisconsin’s public-sector health care workforce was white.
- By 2010, an estimated 39% of the public-sector health care workforce in Wisconsin will be eligible to retire.

Figure 13. Health Care Workforce in the Public Sector by Age, Wisconsin 2005



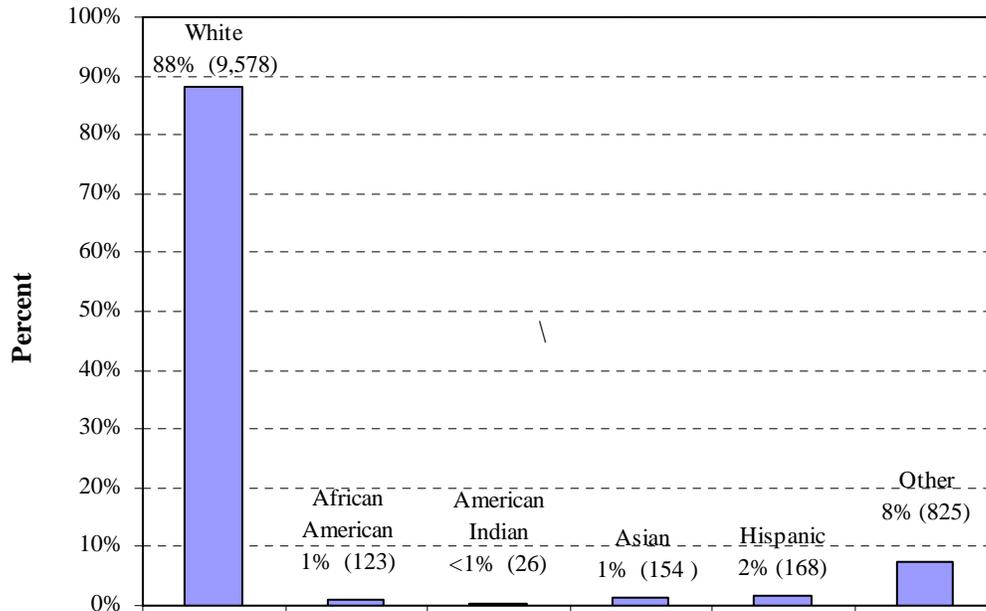
Source: American Community Survey Public Use Microdata Sample (ACS), 2005, U.S. Bureau of the Census.
 Note: Data exclude managers and all workers in education and hospitals.

Figure 14. Health Care Workforce in the Public Sector by Gender, Wisconsin 2005



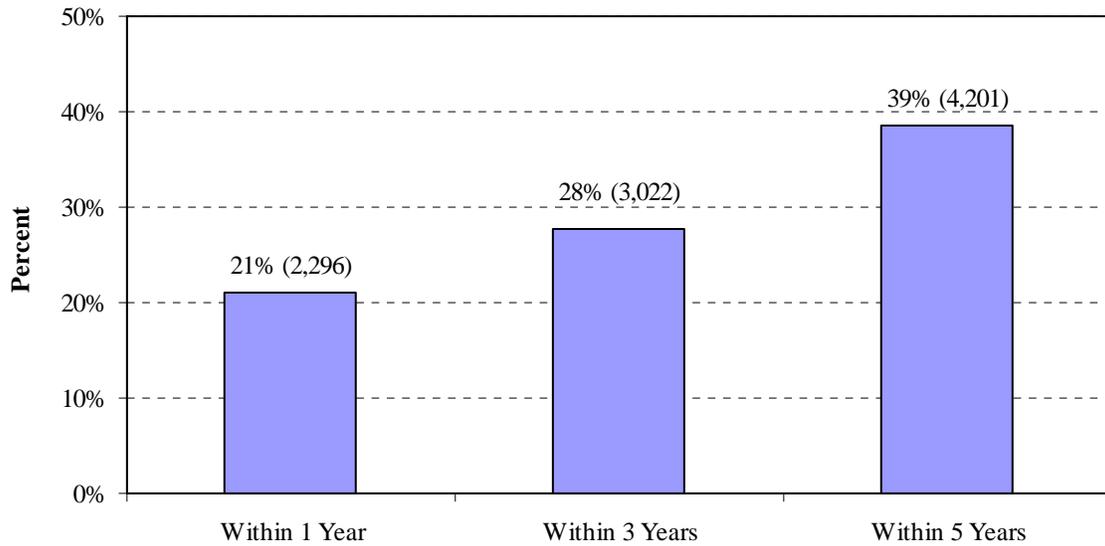
Source: American Community Survey Public Use Microdata (ACS), 2005, U.S. Bureau of the Census.
 Note: Data exclude managers and all workers in education and hospitals.

Figure 15. Health Care Workforce in the Public Sector by Race and Ethnicity, Wisconsin 2005



Source: American Community Survey Public Use Microdata Sample (ACS), 2005, U.S. Bureau of the Census.
 Note: Data exclude managers and all workers in education and hospitals.

Figure 16. Percent of Public-Sector Health Care Workers Eligible for Retirement, Wisconsin 2005



Source: American Community Survey Public Use Microdata Sample (ACS), 2005, U.S. Bureau of the Census.

Note: Data exclude managers and all workers in education and hospitals.

Retirement age is based on the assumption that retirement eligibility begins at age 55.

Appendices

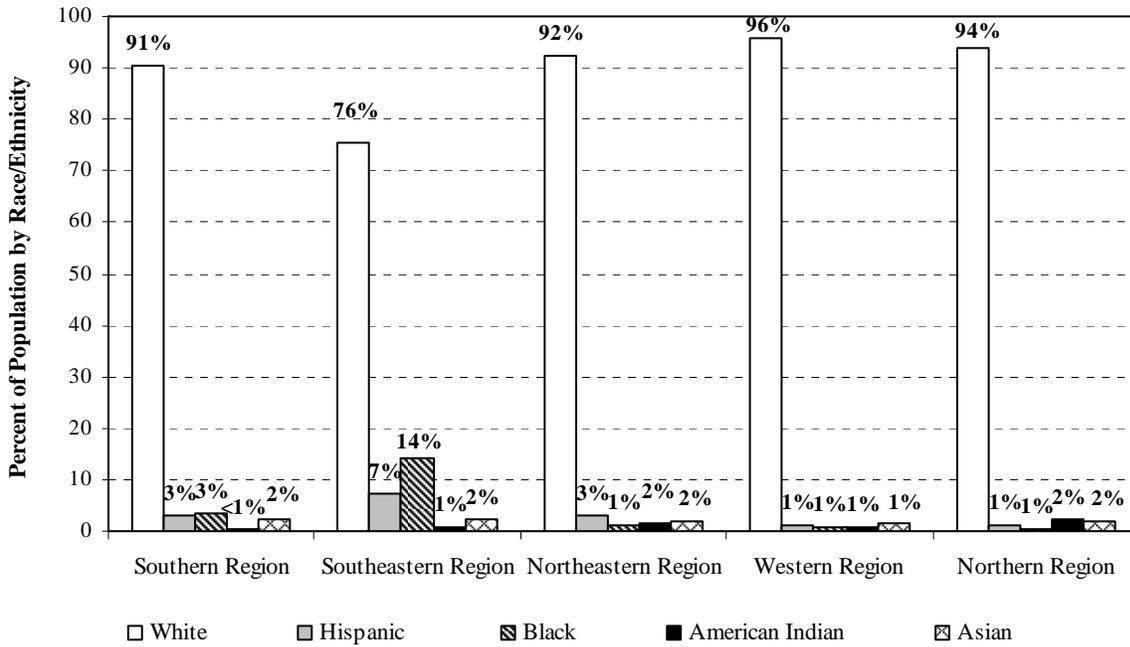
Appendix A. Wisconsin Department of Health Service Regions	24
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Appendix A. Wisconsin Department of Health Services Regions



Appendix B. Population by Race/Ethnicity

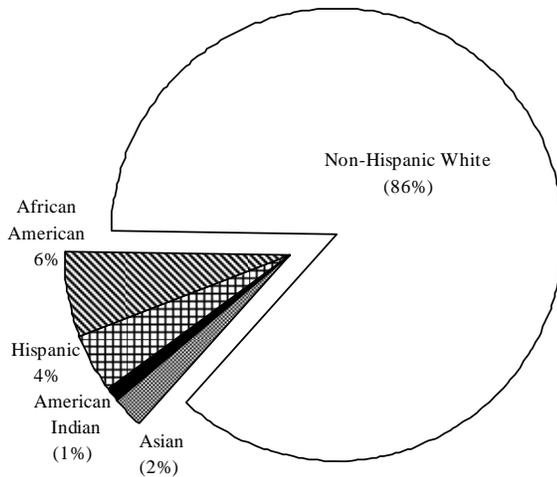
Figure B1. Population Distribution by Race/Ethnicity by Region, Wisconsin 2005



Source: Wisconsin Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services.

Note: Race/ethnicity categories are mutually exclusive.

Figure B2. Population Distribution by Race/Ethnicity, Wisconsin, 2005



Source: Wisconsin Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services.

Note: Race/ethnicity categories are mutually exclusive.

Appendix C. Wisconsin Local Health Department Survey, 2006

Data Tables: Local Health Department Staff, Wisconsin 2006								
LHD	Population	Total Staff	Staff per 10,000 Pop.	Administrator Staff	Public Health Nurse Staff	Other Professional Staff	Para-professional Staff	Support Staff
STATE TOTAL	5,617,744	2,568	4.6	184	673	666	638	408
ADAMS	21,548	17.8	8.3	8	2	4	4	0
ASHLAND	16,906	7	4.1	1	2	2	1	1
BARRON	47,247	13.5	2.9	1	6	4	1	2
BAYFIELD	15,828	17	10.7	1	6	2	4	4
BROWN	220,238	50	2.3	1	15	11	9	14
De Pere	22,495	5	2.2	1	2	1	0	1
BUFFALO	14,142	16	11.3	2	3	3	2	6
BURNETT	16,614	10	6.0	2	3	3	1	1
CALUMET	45,711	15.1	3.3	2	7	2	0	4
CHIPPEWA	60,893	33	5.4	2	7	7	5	12
CLARK	34,501	25	7.2	1	7	2	13	2
COLUMBIA	55,272	15	2.7	2	4	5	4	0
CRAWFORD	17,461	17.2	9.9	6	4	0	5	2
DANE	241,233	114	4.7	8	24	20	49	13
Madison	223,280	230.9	10.3	5	29	30	157	10
DODGE	89,063	12	1.3	0	6	4	2	0
DOOR	29,720	17	5.7	1	7	4	3	2
DOUGLAS	43,932	16	3.6	2	4	6	2	2
DUNN	42,752	24	5.6	1	5	9	4	5
EAU CLAIRE	97,760	64.27	6.6	1	17	20	18	8
FLORENCE	5,258	6	11.4	1	0	3	1	1
FOND DU LAC	100,716	49	4.9	1	21	12	10	5
FOREST	10,276	12	11.7	1	1	5	4	1
GRANT	50,529	30	5.9	1	4	11	6	8
GREEN	36,054	14	3.9	2	4	2	2	4
GREEN LAKE	19,353	8	4.1	1	3	4	0	0
IOWA	23,964	11	4.6	1	4	3	1	2
IRON	6,983	12	17.2	1	1	8	0	2
JACKSON	19,969	10	5.0	2	3	3	2	0
JEFFERSON	56,937	26	4.6	2	8	4	9	3
Watertown	23,155	15	6.5	2	2	5	4	2
JUNEAU	26,903	14	5.2	2	5	3	1	3

Source: Wisconsin Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services.

* No county health department.

County health departments appear in capital letters. Municipal health departments are indented.

The population count reflects the population in each department's jurisdiction. Populations of county LHDs in counties with municipal health departments do not include the populations of those municipalities.

Populations shown are estimates provided by the Wisconsin Department of Administration for January 1, 2006.

Appendix C, continued

Data Tables: Local Health Department Staff, Wisconsin 2006 (continued)								
LHD	Population	Total Staff	Staff per 10,000 Pop.	Administrator Staff	Public Health Nurse Staff	Other Professional Staff	Para-professional Staff	Support Staff
KENOSHA	159,638	58	3.6	4	23	19	4	8
KEWAUNEE	21,157	8	3.8	1	1	3	2	1
LA CROSSE	110,743	64	5.8	10	8	22	14	10
LAFAYETTE	16,311	15.1	9.3	1	4	4	5	1
LANGLADE	21,471	13	6.1	2	8	1	2	0
LINCOLN	30,565	20	6.5	1	8	8	0	3
MANITOWOC	84,640	31	3.7	3	13	5	5	5
MARATHON	132,697	55	4.1	6	15	20	6	8
MARINETTE	44,543	13	2.9	2	3	3	1	4
MARQUETTE	15,252	9	5.9	1	3	2	1	2
MENOMINEE	4,633	1	2.2	1	0	0	0	0
MILWAUKEE*								
Cudahy	18,430	18	9.8	1	4	6	4	3
Franklin	33,000	16.5	5.0	1	5	3	7	1
Greendale	14,040	12	8.5	1	5	2	3	1
Greenfield	36,150	18	5.0	1	4	1	9	3
Hales Corners	7,642	5	6.5	1	2	1	0	1
Milwaukee City	590,370	306	5.2	12	57	97	74	66
North Shore	37,221	9	2.4	1	4	3	0	1
Oak Creek	32,104	16	5.0	1	11	1	1	2
St. Francis	8,808	6	6.8	1	1	2	1	1
Shorewood/ Whitefish Bay	13,470	5	3.7	1	1	2	0	1
South Milwaukee	21,300	12	5.6	1	5	4	0	2
Wauwatosa	46,120	19.1	4.1	2	6	7	0	4
West Allis	64,352	36	5.6	3	10	12	4	7
MONROE	43,555	17	3.9	2	6	2	2	5
OCONTO	38,690	11	2.8	1	4	4	1	1
ONEIDA	38,313	21	5.5	2	5	7	2	5
OUTAGAMIE	100,614	29	2.9	1	10	6	9	3
Appleton	72,004	24	3.3	1	11	9	0	3
OZAUKEE	86,389	21	2.4	2	10	2	2	5
PEPIN	7,634	15	19.6	1	3	6	2	3

Source: Wisconsin Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services.

* No county health department.

County health departments appear in capital letters. Municipal health departments are indented. The population count reflects the population in each department's jurisdiction. Populations of county LHDs in counties with municipal health departments do not include the populations of those municipalities. Populations shown are estimates provided by the Wisconsin Department of Administration for January 1, 2006.

Appendix C, continued

Data Tables: Local Health Department Staff, Wisconsin 2006 (continued)								
LHD	Population	Total Staff	Staff per 10,000 Pop.	Administrator Staff	Public Health Nurse Staff	Other Professional Staff	Para-professional Staff	Support Staff
PIERCE	39,805	33	8.3	1	9	8	1	14
POLK	45,139	33	7.3	2	7	14	5	5
PORTAGE	69,591	30	4.3	1	14	6	6	3
PRICE	16,066	20	12.4	1	6	3	3	7
RACINE*								
Caledonia/ Mt. Pleasant	50,451	9	1.8	1	2	4	1	1
Racine City	82,611	37	4.5	1	9	13	8	6
Western Racine Co.	61,518	18	2.9	2	4	6	4	2
RICHLAND	18,125	10	5.5	1	3	2	3	1
ROCK	158,525	44	2.8	1	17	12	5	9
RUSK	15,572	15	9.6	2	1	4	2	6
ST. CROIX	78,028	25	3.2	2	7	9	4	3
SAUK	60,054	64	10.7	2	7	25	22	8
SAWYER	17,411	13	7.5	1	3	2	1	6
SHAWANO	42,304	13	3.1	1	4	2	6	0
SHEBOYGAN	116,348	52	4.5	4	16	7	20	5
TAYLOR	19,917	12	6.0	1	2	5	3	1
TREMPEALEAU	28,126	13	4.6	2	2	4	1	4
VERNON	29,400	11	3.7	1	5	2	1	2
VILAS	22,412	8	3.6	2	1	3	0	2
WALWORTH	99,761	19.5	2.0	1	7	4	4	4
WASHBURN	17,236	13	7.5	2	4	1	2	4
WASHINGTON	127,871	28	2.2	3	10	1	8	6
WAUKESHA	379,577	62	1.6	5	21	12	14	10
WAUPACA	53,575	31.4	5.9	4	6	13	4	4
WAUSHARA	25,083	15	6.0	1	7	5	0	2
WINNEBAGO	55,645	31	5.6	1	10	9	7	4
Menasha	17,282	16	9.3	1	4	2	8	1
Neenah	25,430	16	6.3	1	5	4	6	
Oshkosh	65,510	14	2.1	1	4	7	0	2
WOOD	76,937	32	4.2	1	10	11	4	6

Source: Wisconsin Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services.

* No county health department.

County health departments appear in capital letters. Municipal health departments are indented. The population count reflects the population in each department's jurisdiction. Populations of county LHDs in counties with municipal health departments do not include the populations of those municipalities. Populations shown are estimates provided by the Wisconsin Department of Administration for January 1, 2006.

Appendix C, continued

Survey Instrument: Wisconsin Local Health Department Staffing Survey, 2006		
LOCAL AGENCY INFORMATION		
Name of Local Health Department		
Name of Person Completing Survey		
Position of Person Completing Survey		
Telephone of Person Completing Survey		
E-mail of Person Completing Survey		
STAFFING INFORMATION		
Staffing Category/Position	FTEs	Number of Staff (whole numbers only)
Number of Health Department Staff Who Are Bilingual or Could Function as a Translator		
Number of Contracted Personnel Who Are Bilingual or Could Function as a Translator		
Administrator – Health Department Staff		
Administrator – Contracted Personnel		
Support Staff – Health Department Staff		
Support Staff – Contracted Personnel		
Computer Specialist – Health Department Staff		
Computer Specialist – Contracted Personnel		
Registered Sanitarian – Health Department Staff		
Registered Sanitarian – Contracted Personnel		
Other Environmental Health Professional – Health Department Staff		
Other Environmental Health Professional – Contracted Personnel		
Epidemiologist – Health Department Staff		
Epidemiologist – Contracted Personnel		
Public Health Nurse – Health Department Staff		
Public Health Nurse – Contracted Personnel		
Other Registered Nurse – Health Department Staff		
Other Registered Nurse – Contracted Personnel		
Licensed Practical Nurse – Health Department Staff		
Licensed Practical Nurse – Contracted Personnel		
Nurse Practitioner – Health Department Staff		
Nurse Practitioner – Contracted Personnel		
Certified Dietitian – Health Department Staff		
Certified Dietitian – Contracted Personnel		
Nutritionist – Health Department Staff		
Nutritionist – Contracted Personnel		
Dietetic Technician – Health Department Staff		
Dietetic Technician – Contracted Personnel		
Physician – Health Department Staff		
Physician – Contracted Personnel		
Dentist – Health Department Staff		
Dentist – Contracted Personnel		
Dental Hygienist – Health Department Staff		
Dental Hygienist – Contracted Personnel		

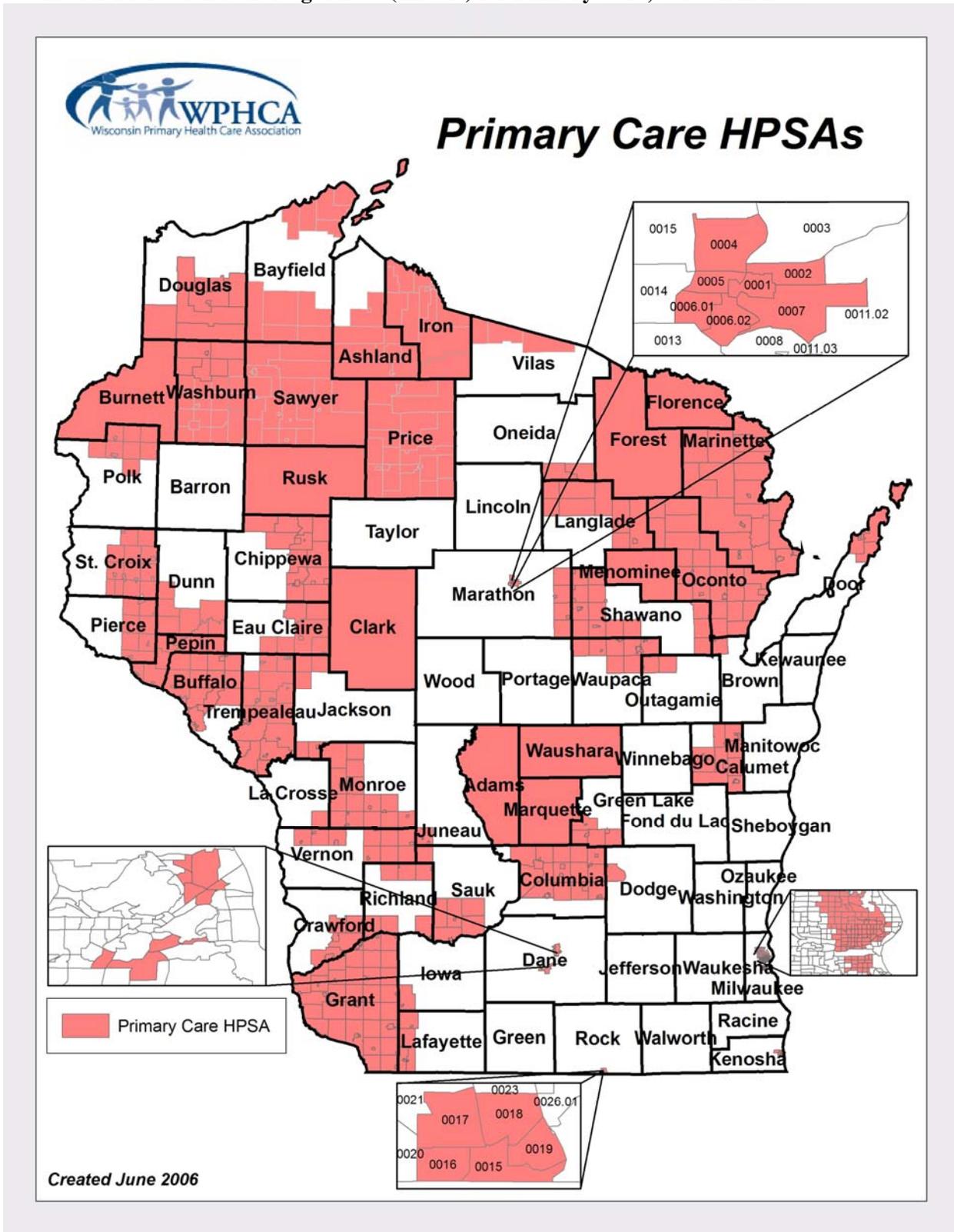
Appendix C, continued

Survey Instrument: Wisconsin Local Health Department Staffing Survey, 2006 (continued)

Public Health Educator – Health Department Staff		
Public Health Educator – Contracted Personnel		
Laboratory Professional – Health Department Staff		
Laboratory Professional – Contracted Personnel		
Laboratory Technician – Health Department Staff		
Laboratory Technician – Contracted Personnel		
Bilingual Health Aide/Interpreter/Translator – Health Department Staff		
Bilingual Health Aide/Interpreter/Translator – Contracted Personnel		
Other Public Health Professional – Health Department Staff		
Other Public Health Professional – Contracted Personnel		
Other Public Health Paraprofessional – Health Department Staff		
Other Public Health Paraprofessional – Contracted Personnel		
Total Number of Staff – Health Department Staff		
Total Number of Staff – Contracted Personnel		

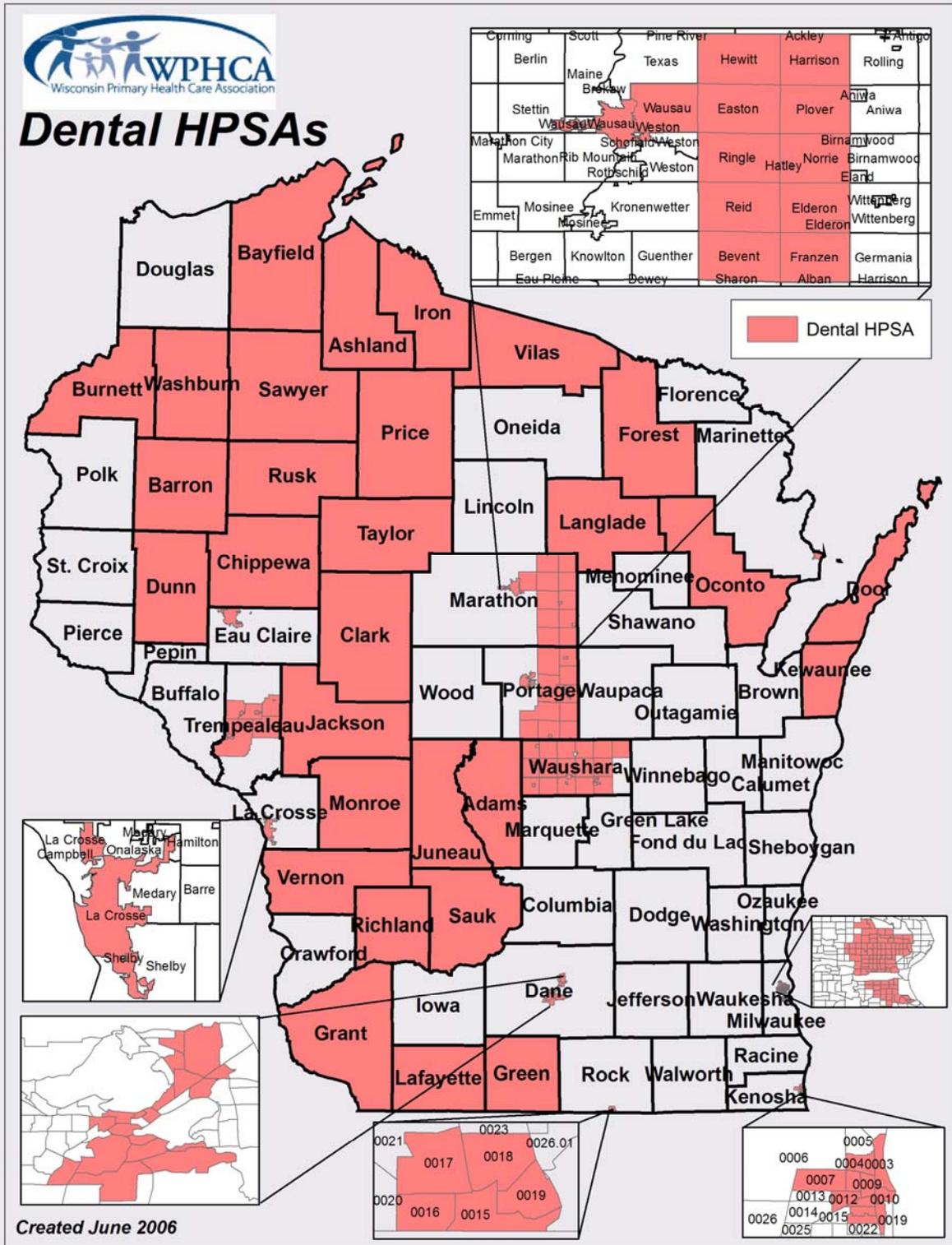
Appendix D. Health Professional Shortage Areas

Health Professional Shortage Areas (HPSAs) for Primary Care, Wisconsin 2006



Source: Wisconsin Primary Health Care Association.

Health Professional Shortage Areas (HPSAs) for Dental Care, Wisconsin 2006



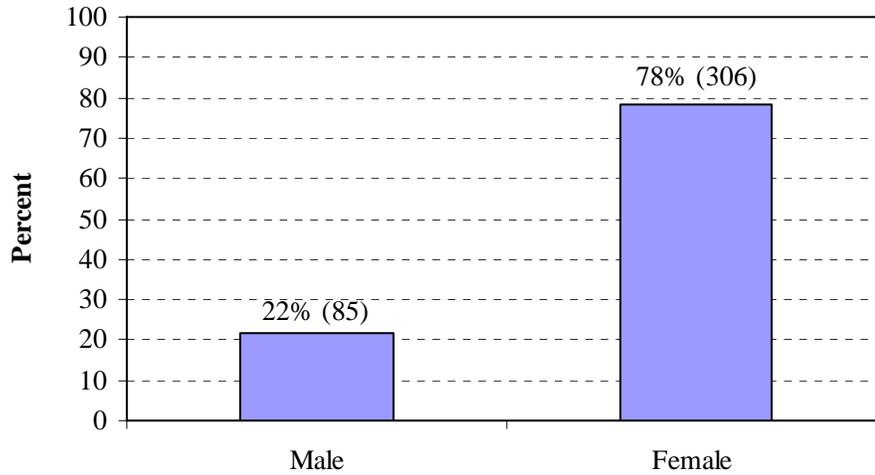
Source: Wisconsin Primary Health Care Association.

Appendix E. Health Care Providers Licensed or Certified by Wisconsin Department of Regulation and Licensing, 2007

Audiologists

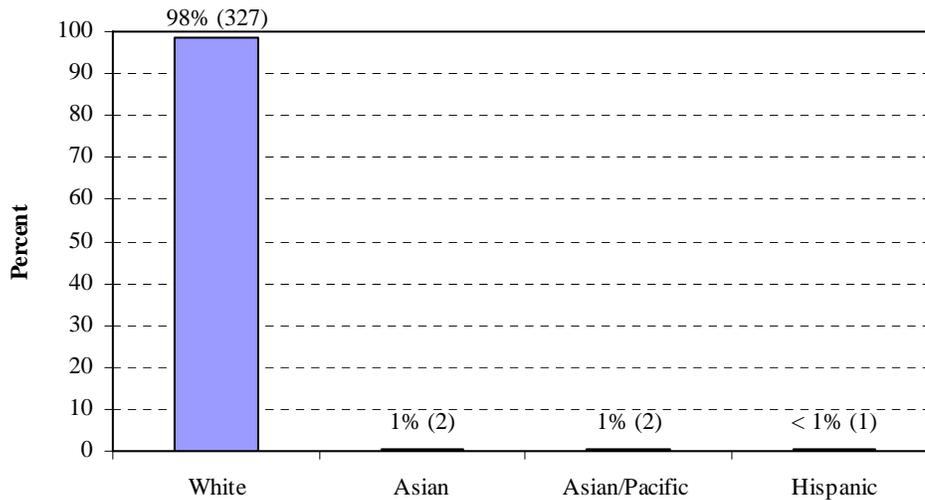
Total number licensed/certified: 404

Gender: Response Rate = 97% (391 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 82% (332 reported)

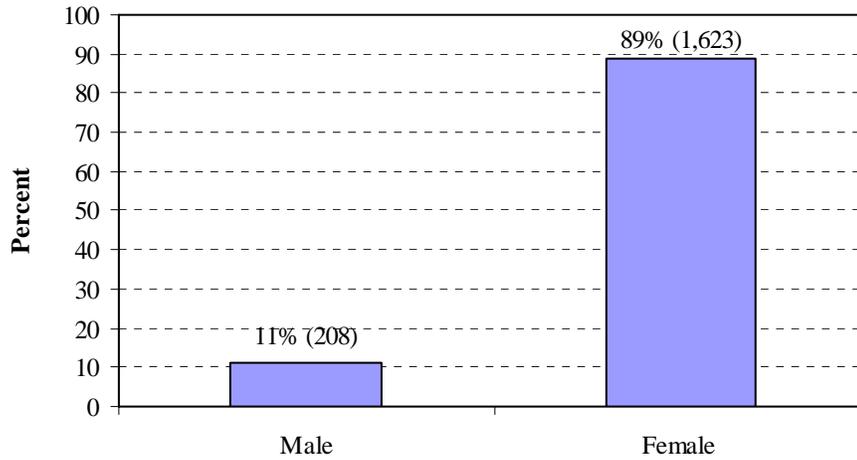


Source: Wisconsin Department of Regulation and Licensing, 2007.

Nurses, advanced practice prescriber

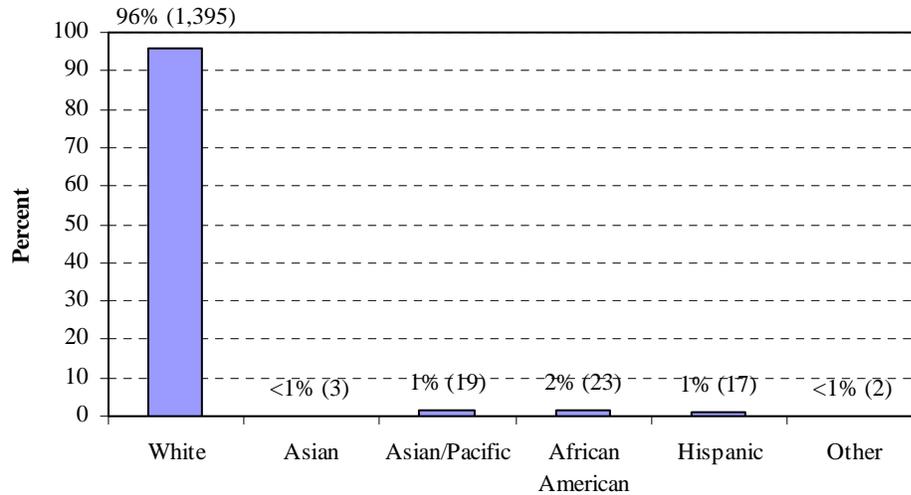
Total number licensed/certified: 3,014

Gender: Response Rate = 61% (1,831 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 48% (1,459 reported)

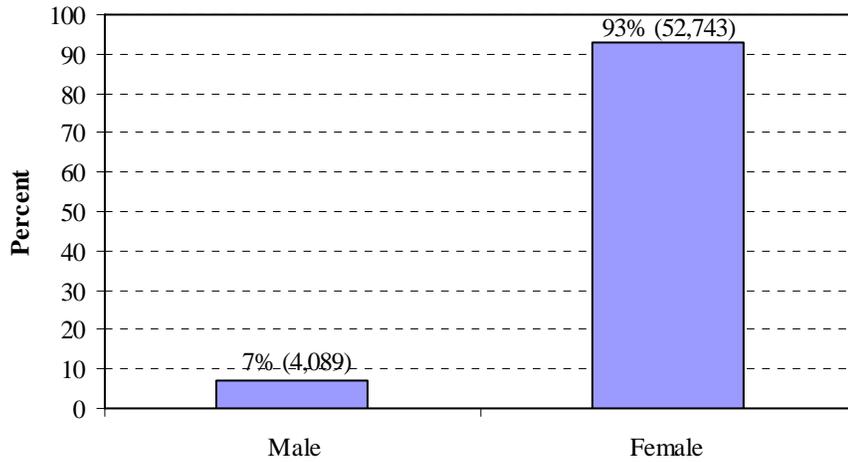


Source: Wisconsin Department of Regulation and Licensing, 2007.

Nurses, RN

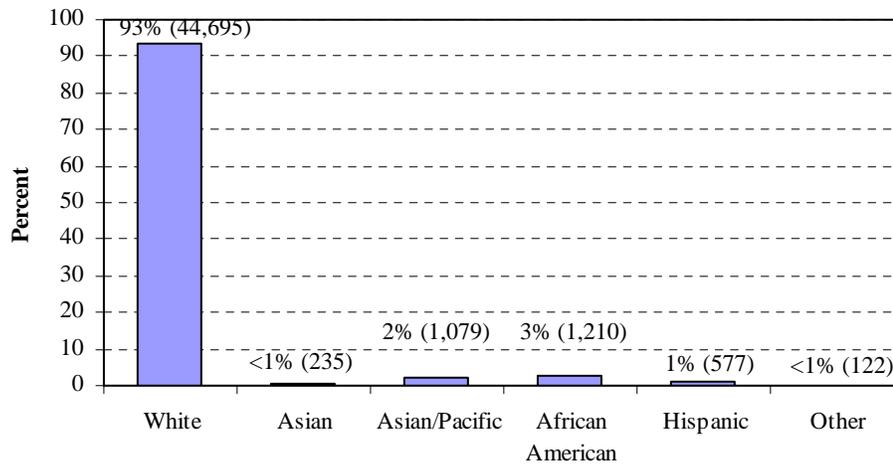
Total number licensed/certified: 83,405

Gender: Response Rate = 68% (56,832 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 57% (47,918 reported)

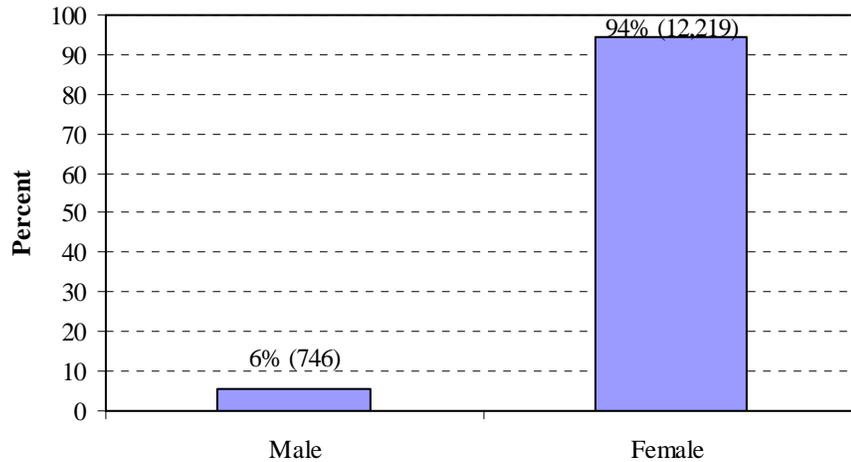


Source: Wisconsin Department of Regulation and Licensing, 2007.

Nurses, LPN

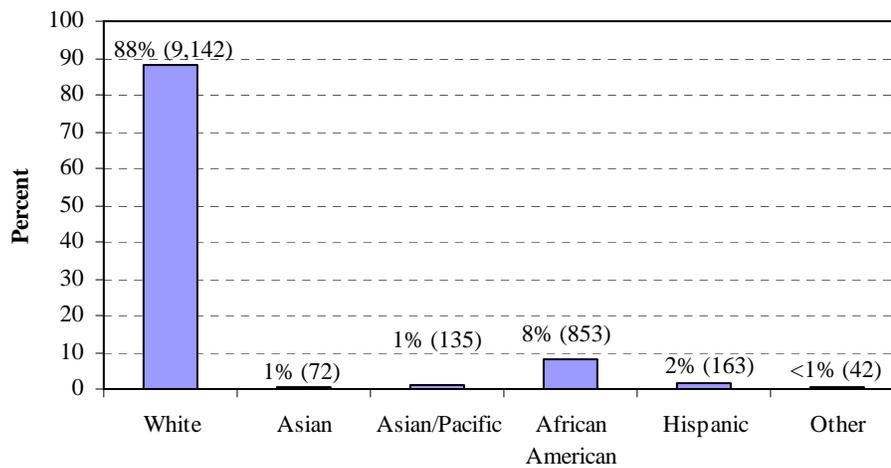
Total number licensed/certified: 20,132

Gender: Response Rate = 64% (12,965 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 52% (10,407 reported)

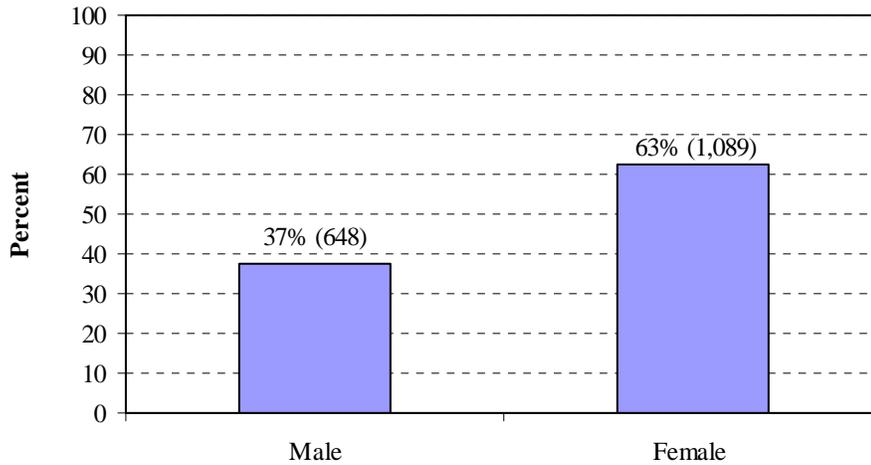


Source: Wisconsin Department of Regulation and Licensing, 2007.

Physician Assistants

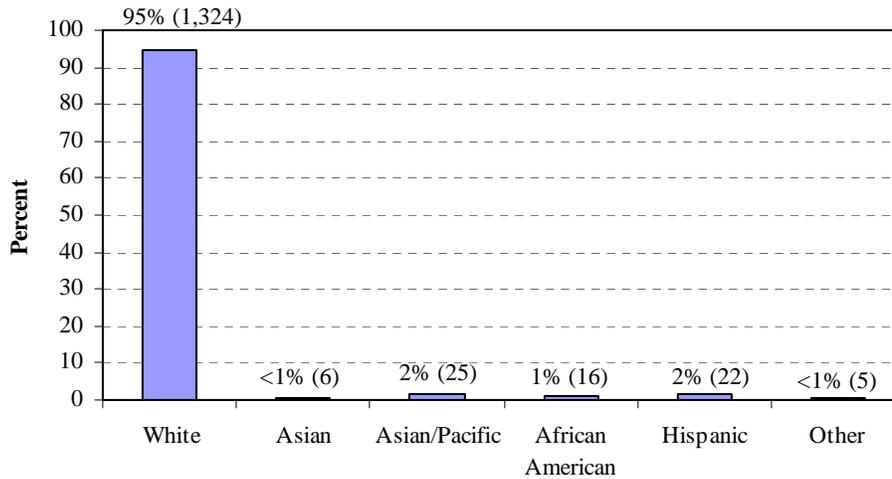
Total number licensed/certified: 1,759

Gender: Response Rate = 99% (1,737 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 79% (1,398 reported)

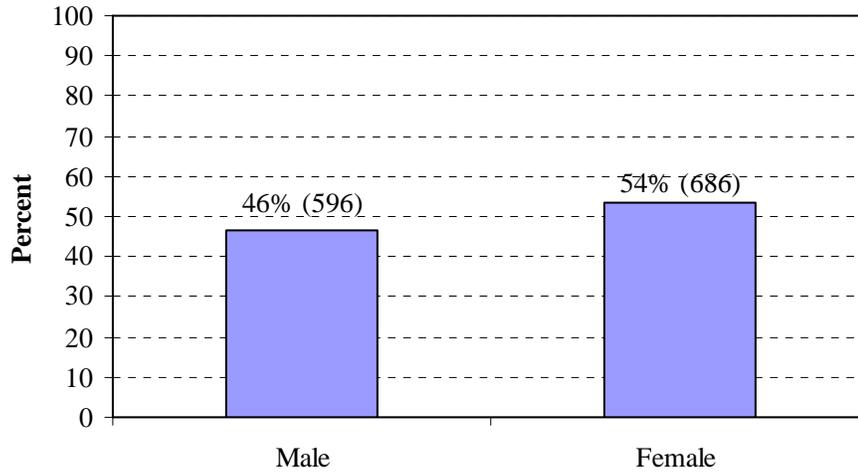


Source: Wisconsin Department of Regulation and Licensing, 2007.

Psychologists

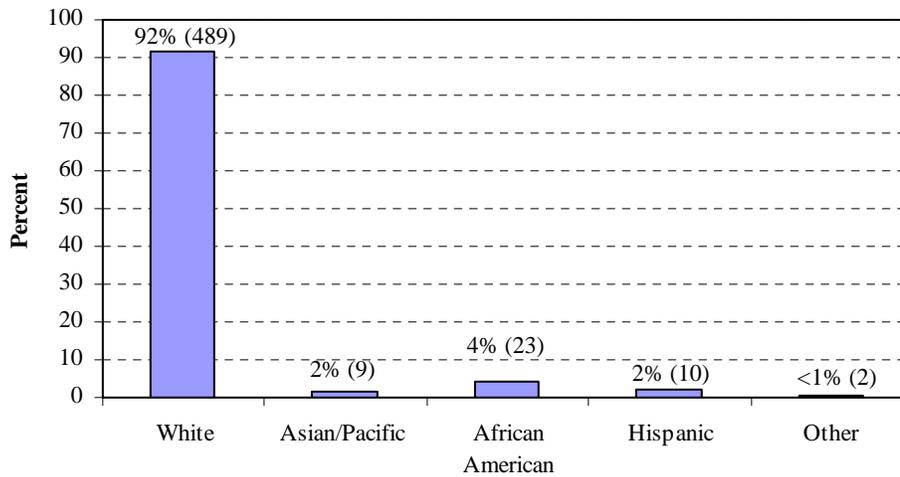
Total number licensed/certified: 1,729

Gender: Response Rate = 74% (1,282 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 31% (533 reported)

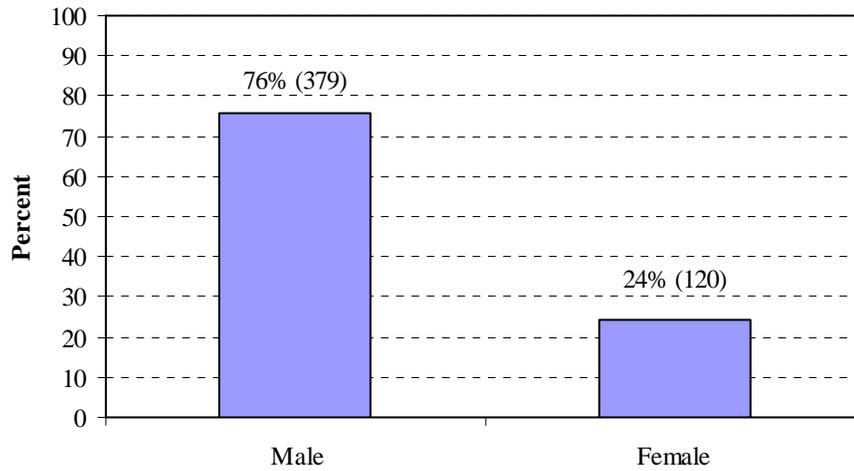


Source: Wisconsin Department of Regulation and Licensing, 2007.

Registered Sanitarians

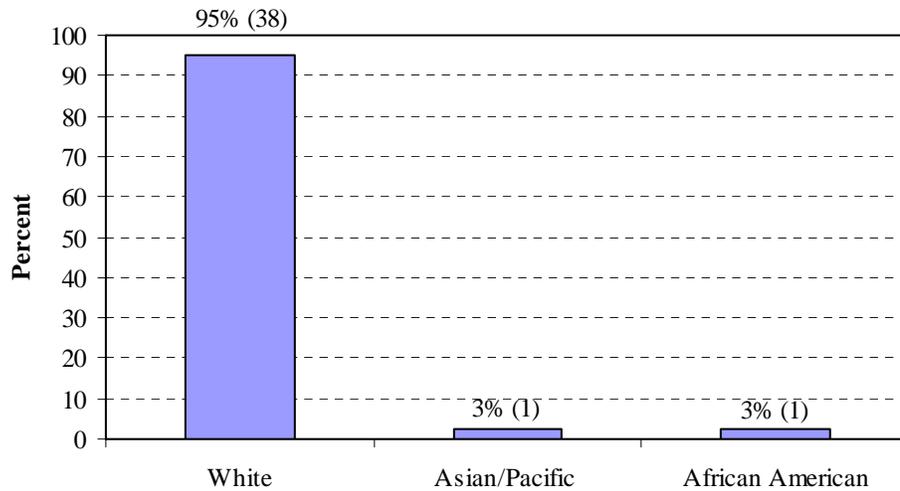
Total number licensed/certified: 525

Gender: Response Rate = 95% (499 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 8% (40 reported)

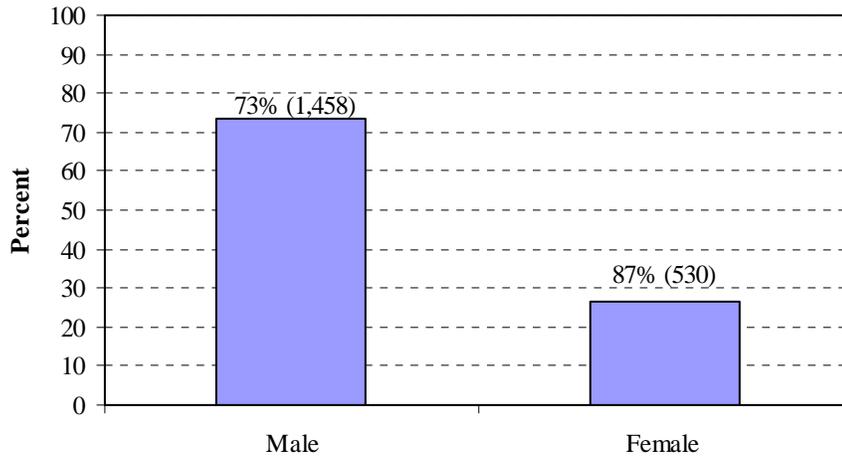


Source: Wisconsin Department of Regulation and Licensing, 2007.

Dentists

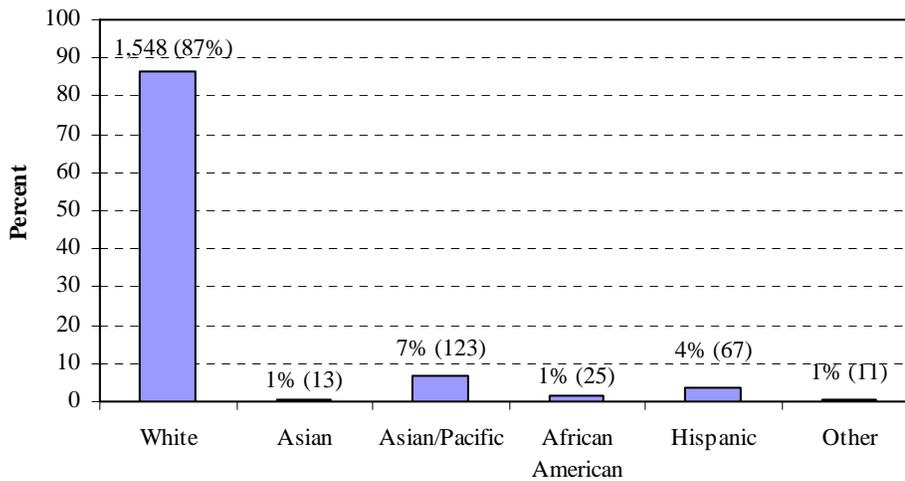
Total number licensed/certified: 5,028

Gender: Response Rate = 40% (1,988 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 36% (1,787 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Dental Hygienists

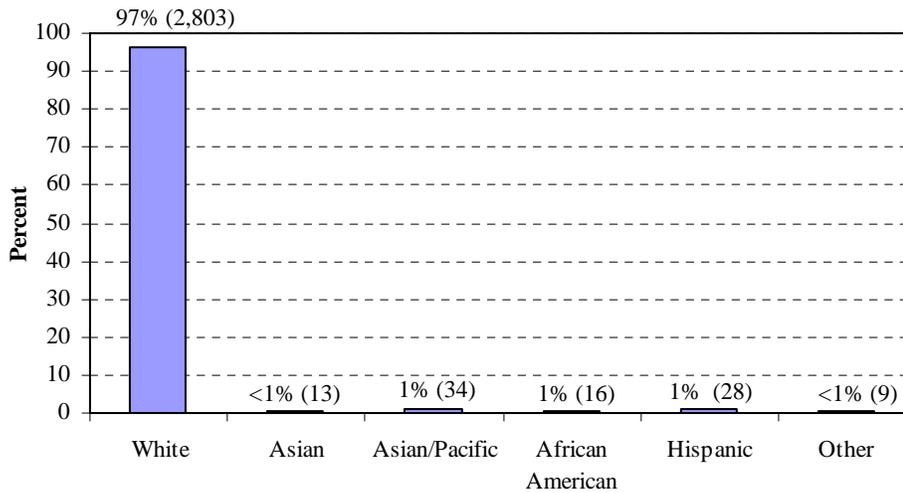
Total number licensed/certified: 5,501

Gender: Response Rate = 55% (3,010 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 53% (2,903 reported)

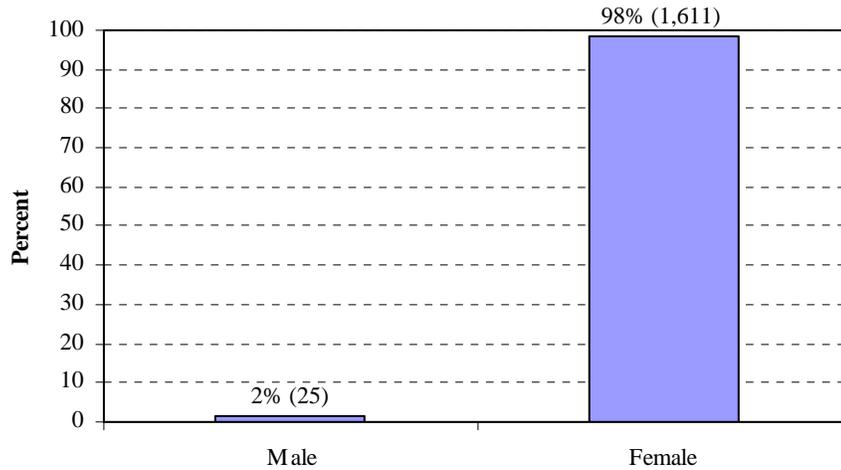


Source: Wisconsin Department of Regulation and Licensing, 2007.

Certified Dietitians

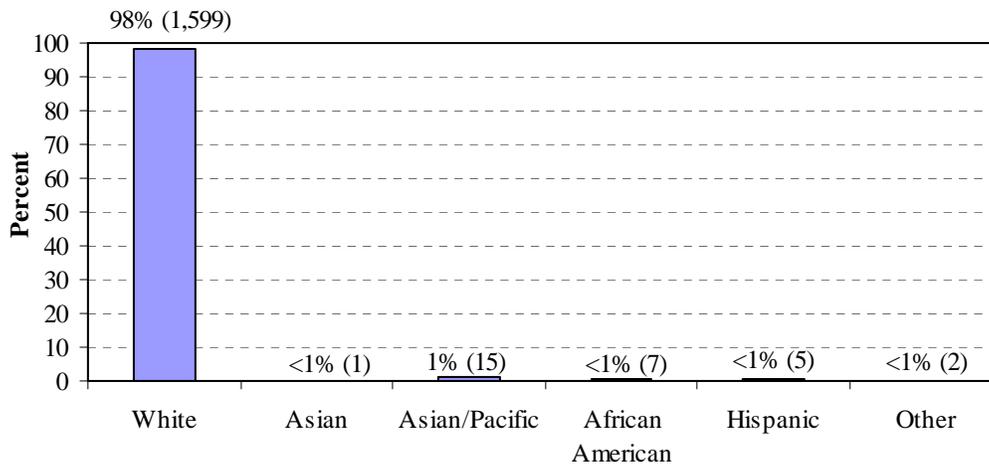
Total number licensed/certified: 1,653

Gender: Response Rate = 99% (1,636 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 99% (1,629 reported)

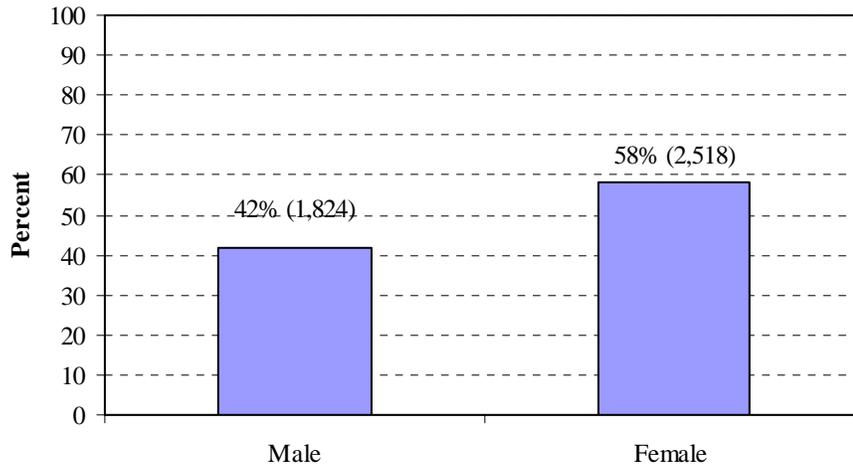


Source: Wisconsin Department of Regulation and Licensing, 2007.

Pharmacists

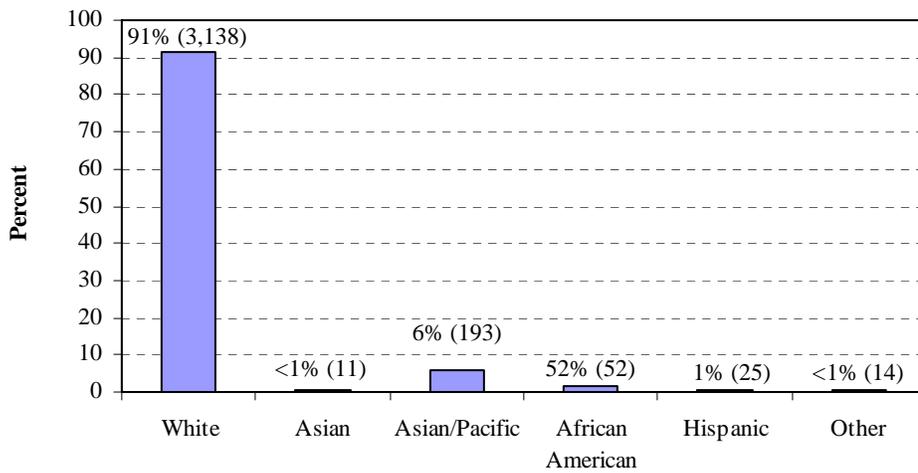
Total number licensed/certified: 6,941

Gender: Response Rate = 63% (4,342 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 49% (3,433 reported)

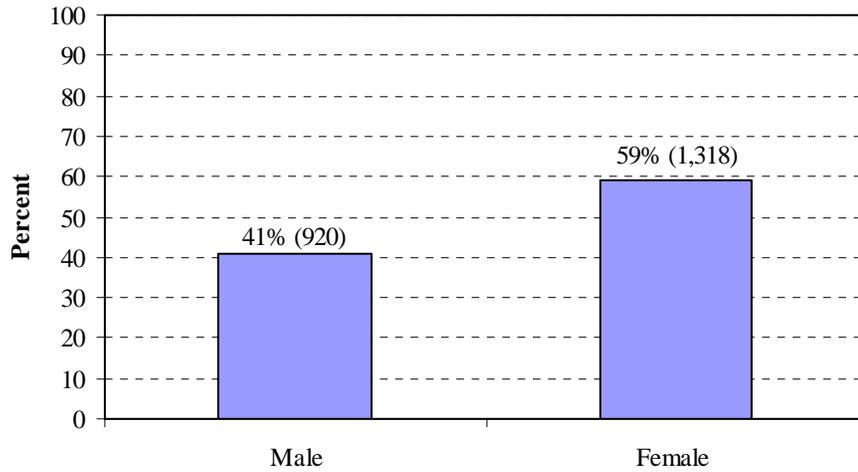


Source: Wisconsin Department of Regulation and Licensing, 2007.

Veterinarians

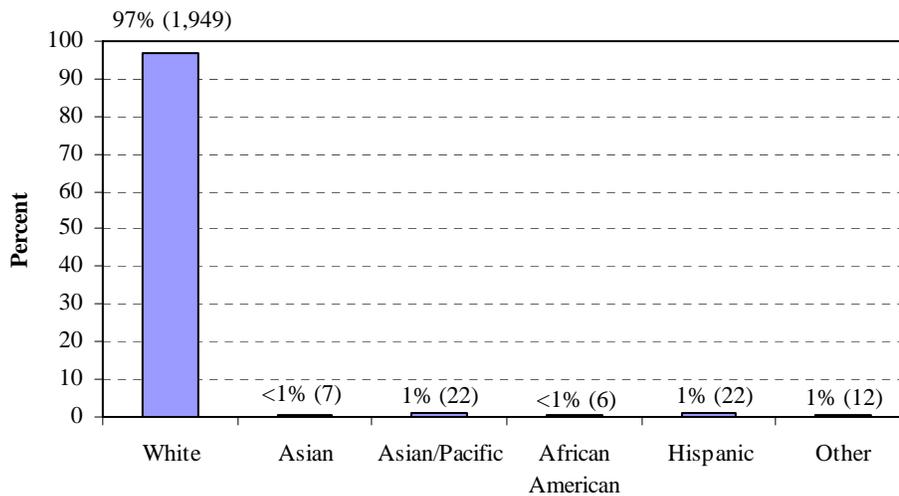
Total number licensed/certified: 3,710

Gender: Response Rate = 60% (2,238 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Race/Ethnicity: Response Rate = 54% (2,018 reported)



Source: Wisconsin Department of Regulation and Licensing, 2007.

Appendix F. Projections for Selected Public Health Occupations: State and Local Government

Projections for Selected Public Health Occupations: State and Local Government, Excluding Education and Hospitals, Wisconsin, 2006 and 2008

SOC Code	Occupational Title	2006 Jobs	2008 Jobs	Change	% Change 2006-2008
00-0000	Total, All Occupations (State and Local Gov Excl Educ and Hosp)	164,530	165,210	680	0.4%
	Total, Selected Public Health Occupations	23,220	23,540	320	1.4%
11-9111	Medical and Health Services Managers	240	240	0	0.0%
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	990	980	-10	-1.0%
13-1061	Emergency Management Specialists	230	240	10	4.3%
17-2081	Environmental Engineers	280	280	0	0.0%
17-2161	Nuclear Engineers	NA	NA	NA	NA
17-3025	Environmental Engineering Technicians	20	30	10	50.0%
19-1012	Food Scientists and Technologists	NA	NA	NA	NA
19-1022	Microbiologists	10	10	0	0.0%
19-1041	Epidemiologists	30	30	0	0.0%
19-1042	Medical Scientists, Except Epidemiologists	NA	NA	NA	NA
19-2041	Environmental Scientists and Specialists, Including Health	520	520	0	0.0%
19-3031	Clinical, Counseling, and School Psychologists	290	290	0	0.0%
19-3039	Psychologists, All Other	NA	NA	NA	NA
19-4011	Agricultural and Food Science Technicians	10	10	0	0.0%
19-4021	Biological Technicians	NA	NA	NA	NA
19-4031	Chemical Technicians	40	40	0	0.0%
19-4091	Environmental Science and Protection Technicians, Including Health	130	130	0	0.0%
21-1011	Substance Abuse and Behavioral Disorder Counselors	90	90	0	0.0%
21-1021	Child, Family, and School Social Workers	2,240	2,250	10	0.4%
21-1022	Medical and Public Health Social Workers	380	390	10	2.6%
21-1023	Mental Health and Substance Abuse Social Workers	350	360	10	2.9%
21-1029	Social Workers, All Other	750	750	0	0.0%
21-1091	Health Educators	230	230	0	0.0%
27-3031	Public Relations Specialists	210	210	0	0.0%
27-3091	Interpreters and Translators	120	120	0	0.0%
29-1021	Dentists, General	50	50	0	0.0%
29-1031	Dietitians and Nutritionists	170	170	0	0.0%
29-1051	Pharmacists	50	50	0	0.0%
29-1062	Family and General Practitioners	50	60	10	20.0%
29-1063	Internists, General	30	30	0	0.0%
29-1066	Psychiatrists	50	50	0	0.0%
29-1071	Physician Assistants	10	10	0	0.0%
29-1111	Registered Nurses	2,980	3,030	50	1.7%
29-1121	Audiologists	30	30	0	0.0%
29-1122	Occupational Therapists	100	100	0	0.0%
29-1123	Physical Therapists	70	70	0	0.0%
29-1127	Speech-Language Pathologists	120	120	0	0.0%
29-1131	Veterinarians	30	30	0	0.0%
29-2021	Dental Hygienists	40	40	0	0.0%

Projections for Selected Public Health Occupations: State and Local Government, Excluding Education and Hospitals, Wisconsin, 2006 and 2008 (continued)

SOC Code	Occupational Title	2006 Jobs	2008 Jobs	Change	% Change 2006-2008
29-2041	Emergency Medical Technicians and Paramedics	4,760	4,910	150	3.2%
29-2061	Licensed Practical and Licensed Vocational Nurses	790	800	10	1.3%
29-2071	Medical Records and Health Information Technicians	60	60	0	0.0%
29-2099	Health Technologists and Technicians, All Other	50	50	0	0.0%
29-9011	Occupational Health and Safety Specialists	120	120	0	0.0%
29-9012	Occupational Health and Safety Technicians	30	30	0	0.0%
29-9099	Healthcare Practitioners and Technical Workers, All Other	NA	NA	NA	NA
31-1011	Home Health Aides	NA	NA	NA	NA
31-1012	Nursing Aides, Orderlies, and Attendants	5,130	5,170	40	0.8%
31-1013	Psychiatric Aides	20	20	0	0.0%
31-9099	Healthcare Support Workers, All Other	210	210	0	0.0%
39-9021	Personal and Home Care Aides	290	300	10	3.4%
43-6013	Medical Secretaries	NA	NA	NA	NA
45-2011	Agricultural Inspectors	NA	NA	NA	NA

Source: Wisconsin Department of Workforce Development, Jan. 9, 2008.

Notes:

Jobs include part-time and full-time nonfarm jobs.

Numbers are rounded to the nearest ten, with numbers less than five rounded to zero. Totals may not add due to rounding.

Local government includes tribal-owned operations.

NA: Information is suppressed to protect employer confidentiality.

Projections information was derived using the May 2006 OES Survey, 2006 QCEW and 2006 CES (3/2006 Benchmark) data. Unpublished data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau was also used. To the extent possible, the projections take into account anticipated changes in Wisconsin's economy from 2006 to 2008. It is important to note that unanticipated events may affect the accuracy of these projections.

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Projections for Selected Public Health Occupations: State and Local Government, Excluding Education and Hospitals, Wisconsin, 2004 and 2014

SOC Code	Occupational Title	2004 Jobs	2014 Jobs	Change	% Change 2004-2014
00-0000	Total, All Occupations (State and Local Gov Excl Educ and Hosp)	164,480	172,300	7,820	4.8%
	Total, Selected Public Health Occupations	23,160	25,280	2,120	9.2%
11-9111	Medical and Health Services Managers	250	260	10	4.0%
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	750	790	40	5.3%
13-1061	Emergency Management Specialists	220	250	30	13.6%
17-2081	Environmental Engineers	240	280	40	16.7%
17-2161	Nuclear Engineers	NA	NA	NA	NA
17-3025	Environmental Engineering Technicians	20	30	10	50.0%
19-1012	Food Scientists and Technologists	NA	NA	NA	NA
19-1022	Microbiologists	10	10	0	0.0%
19-1041	Epidemiologists	30	40	10	33.3%
19-1042	Medical Scientists, Except Epidemiologists	50	50	0	0.0%
19-2041	Environmental Scientists and Specialists, Including Health	450	510	60	13.3%
19-3031	Clinical, Counseling, and School Psychologists	310	330	20	6.5%
19-3039	Psychologists, All Other	NA	NA	NA	NA
19-4011	Agricultural and Food Science Technicians	10	10	0	0.0%
19-4021	Biological Technicians	NA	NA	NA	NA
19-4031	Chemical Technicians	30	30	0	0.0%
19-4091	Environmental Science and Protection Technicians, Including Health	100	100	0	0.0%
21-1011	Substance Abuse and Behavioral Disorder Counselors	80	90	10	12.5%
21-1021	Child, Family, and School Social Workers	1,820	1,910	90	4.9%
21-1022	Medical and Public Health Social Workers	380	400	20	5.3%
21-1023	Mental Health and Substance Abuse Social Workers	350	370	20	5.7%
21-1029	Social Workers, All Other	740	780	40	5.4%
21-1091	Health Educators	230	240	10	4.3%
27-3031	Public Relations Specialists	210	220	10	4.8%
27-3091	Interpreters and Translators	110	130	20	18.2%
29-1021	Dentists, General	50	50	0	0.0%
29-1031	Dietitians and Nutritionists	190	190	0	0.0%
29-1051	Pharmacists	60	70	10	16.7%
29-1062	Family and General Practitioners	60	60	0	0.0%
29-1063	Internists, General	40	40	0	0.0%
29-1066	Psychiatrists	90	100	10	11.1%
29-1071	Physician Assistants	<5	<5	0	0.0%
29-1111	Registered Nurses	3,180	3,530	350	11.0%
29-1121	Audiologists	30	30	0	0.0%
29-1122	Occupational Therapists	130	140	10	7.7%
29-1123	Physical Therapists	120	130	10	8.3%
29-1127	Speech-Language Pathologists	130	140	10	7.7%
29-1131	Veterinarians	30	30	0	0.0%
29-2021	Dental Hygienists	30	40	10	33.3%
29-2041	Emergency Medical Technicians and Paramedics	4,690	5,410	720	15.4%
29-2051	Dietetic Technicians	70	70	0	0.0%

Projections for Selected Public Health Occupations: State and Local Government, Excluding Education and Hospitals, Wisconsin, 2004 and 2014 (continued)

SOC Code	Occupational Title	2004 Jobs	2014 Jobs	Change	% Change 2004-2014
29-2061	Licensed Practical and Licensed Vocational Nurses	890	970	80	9.0%
29-2071	Medical Records and Health Information Technicians	80	90	10	12.5%
29-2099	Health Technologists and Technicians, All Other	50	50	0	0.0%
29-9011	Occupational Health and Safety Specialists	140	150	10	7.1%
29-9012	Occupational Health and Safety Technicians	30	30	0	0.0%
29-9099	Healthcare Practitioners and Technical Workers, All Other	50	60	10	20.0%
31-1011	Home Health Aides	460	500	40	8.7%
31-1012	Nursing Aides, Orderlies, and Attendants	5,470	5,840	370	6.8%
31-1013	Psychiatric Aides	NA	NA	NA	NA
31-9099	Healthcare Support Workers, All Other	210	240	30	14.3%
39-9021	Personal and Home Care Aides	290	310	20	6.9%
43-6013	Medical Secretaries	NA	NA	NA	NA
45-2011	Agricultural Inspectors	140	140	0	0.0%

Source: Wisconsin Department of Workforce Development, Jan. 9, 2008.

Notes:

Jobs include part-time and full-time nonfarm jobs.

Numbers are rounded to the nearest ten, with numbers less than five rounded to zero. Totals may not add due to rounding.

Local government includes tribal-owned operations.

NA: Information is suppressed to protect employer confidentiality.

Projections information was derived using the May 2006 OES Survey, 2006 QCEW and 2006 CES (3/2006 Benchmark) data. Unpublished data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau was also used. To the extent possible, the projections take into account anticipated changes in Wisconsin's economy from 2006 to 2008. It is important to note that unanticipated events may affect the accuracy of these projections.

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Division of Public Health
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