Note to readers and users of the Healthiest Wisconsin 2020 Profiles: This Healthiest Wisconsin 2020 Profile is designed to provide background information leading to collective action and results. This profile is a product of the discussions of the Focus Area Strategic Team that was convened by the Wisconsin Department of Health Services during September 2009 through November 2010. The objectives from this Focus Area have been recognized as objectives of Healthiest Wisconsin 2020. (Refer to Section 4 of the Healthiest Wisconsin 2020 plan.) A complete list of Healthiest Wisconsin 2020 Focus Area Strategic Team Members can be found in Appendix A of the plan.

Definition

The definition of public health workforce includes all those who provide one or more of the 10 essential public health services, regardless of the nature of the employing agency. Wisconsin Statute 250.03(L) lists 10 essential services to be carried out by the public health system (originally published as part of the Public Health in America Statement, 1994). Those who help carry out one or more of the 10 essential public health services are part of Wisconsin’s public health system and important partners in Healthiest Wisconsin 2020. The essential public health services include:

1. **Monitor** health status to identify and solve community health problems.
2. **Diagnose and investigate** health problems and health hazards in the community.
4. **Mobilize** community partnerships and action to identify and solve health problems.
5. **Develop policies and plans** that support individual and community health efforts.
6. **Enforce** laws and regulations that protect health and ensure safety.
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** competent public and personal health care workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.
This definition recognizes that a wide range of professional disciplines, in various employment settings (governmental and non-governmental), are needed to sustain a public health system for maximum societal benefit.

Traditionally, the public health workforce was thought to comprise governmental public health employees working for state or local health departments. This workforce is broader than many people may think. It includes job titles such as physician, nurse, dentist, dental hygienist, epidemiologist, sanitarian, food inspector, laboratory scientist, outreach worker, child care provider, communications specialist, educator, nutritionist, translator, quality assurance manager, occupational health inspector, environmental engineer, water hydrologist, administrator, support staff, information technologist, police officer, helpline provider, researcher, grants administrator, county board member, emergency responder, ambulance driver, city planner, legislator, teacher, and many others.

**Importance of the Focus Area**

The role of public health and the public health workforce in Wisconsin and throughout the nation has expanded in both scope and complexity. Recent events, including bioterrorism (e.g., the anthrax scares following September 11, 2001); natural disasters (e.g., Hurricane Katrina and the 2009 Wisconsin floods); and emerging infectious diseases and outbreaks (e.g., HIV/AIDS and the H1N1 influenza pandemic) have drawn attention to the importance of the public health workforce and its link to national security, and individual and community health (Draper, 2008).

However, the public health workforce is engaged in far more than emergency preparedness, response, and recovery activities. Through partnerships between government, public, private, civic, and nonprofit sectors, the public health workforce focuses on preventing disease, and promoting and protecting the health of all individuals and communities.

Investment in the public health system and the workforce that carries out its work is an investment that saves lives and money. For example, 80,000 young children live in Wisconsin homes with lead-paint hazards. An investment in lead-free windows in these homes would save and estimated $40,000-$50,000 per child in health care costs due to lead-related illnesses, for a combined savings of over $3 billion (Wisconsin Department of Health Services, 2008).

Despite the societal benefits of a workforce that is diverse in its demographic make-up, sufficient in number, and well-trained to protect health, the overall investment has not been sufficient or stable. Wisconsin has been relatively successful in reassigning its public health workforce during times of crisis (emergency events, such as responding to H1N1 pandemic influenza). However, this is not sustainable over a long period of time because it leaves workforce shortages and inadequate staff to carry out all of the programs and services needed on a day-to-day basis to improve and protect the public’s health. This is true not only for government agencies, but also for community-serving organizations. Moreover, insufficient workforce capacity and resources compromise attention to diversity, competency, and systematic approaches to addressing current and emerging threats to health (Thacker, 2009).
In 2009, the Association of State and Territorial Health Officials issued the following warning for the approaching decade: “. . . many experts fear that without stable funding and significant investment in programs to attract professionals to governmental public health, an overburdened public health workforce will not be able to maintain and improve health outcomes or adequately handle a scenario involving multiple simultaneous health threats. An example of such an event could be a more virulent H1N1 outbreak coupled with any routine event such as a natural disaster or community outbreak.”

Wisconsin’s workforce needs to keep pace with the expected increases and changes in the population. “Wisconsin’s population is projected to grow by 24.1 percent from 2000 to 2035, an average rate of 3.1 percent in each of the five-year periods. This predicted growth rate is lower than that of the 1990s and early 2000s but markedly faster than that of the 1980s. This projected growth in the state’s population is noteworthy because it must be viewed in the context of an aging population as the “Baby Boomers,” born between the 1945-1964 period, join the ranks of the elderly” (Wisconsin Department of Administration, 2008, page 3).

Unfortunately, as the needs for a sufficient, diverse, and competent workforce grow for both Wisconsin and the nation, the workforce is shrinking; this is due, in part, to large-scale retirement of the existing public health system workforce. The expected population increases and demographic shift pose tremendous public health workforce planning challenges. To illustrate, in 2007 over one-third of the Wisconsin Division of Public Health staff was eligible to retire within one year, 46 percent by 2009 and more than half (54 percent) by 2011.

According to the Wisconsin Department of Health Services Primary Care Program, Wisconsin continues to have many rural and urban communities with shortages of primary care, dental care, and mental health providers, making it more likely that people will postpone seeking care, need to travel greater distances to get care, or have long waiting times before medical appointments (Wisconsin Primary Care Programs, General Information, 2010).

Additionally, rural minority populations and people with low income and low educational attainment will face increasing problems in accessing high-quality health services; disparities in health can be expected to grow without a sufficient workforce. Strong evidence suggests that cultural competence training of the workforce will help improve health care access. There is also sufficient evidence to support expanding efforts to recruit health care professionals from minority groups (Booske, 2009).

At this time there are insufficient data to describe the entire Wisconsin government and non-government public health workforce engaged in carrying out the 10 essential services. Without data, workforce projections cannot be made and planning at all levels of the public health system will be hampered. Investments in public health workforce education, employment opportunities, and compensation are required to recruit and retain public health workers. A strong Wisconsin public health workforce contributes to the health and economic well-being of our state. Workforce policy is both economic policy and public health policy.
Wisconsin Data Highlights

- In 2007, 34 percent of the Division of Public Health staff was eligible to retire within one year. This was expected to increase to 54 percent by 2011 (Wisconsin Public Health Workforce Report, 2008).

- In 2005, the national average staffing ratio for local health department Full-Time Equivalents (FTEs) was 9.3 staff per 10,000 population for small-town and rural health departments and 5.7 staff per 10,000 population for all other local health departments (National Association of City and County Health Officials Workforce Report, 2005).

- In 2006, the Wisconsin average staffing ratio for local health department FTEs was 3.5 staff per 10,000 population in rural counties, and 3.1 staff per 10,000 population in metropolitan counties (Public Health Workforce Report, 2008).

- In 2005, 67 percent of Wisconsin local health officers were age 50 and older (Wisconsin Public Health Workforce Report, 2008).

- In 2008, there were 32 Emergency Medical Services providers per 10,000 people in Wisconsin (Wisconsin Public Health Workforce Report, 2008).

- As of December 31, 2007, 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.

- 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 percent, or 2,120 positions (Wisconsin Public Health Workforce Report, 2008).

- By 2010, an estimated 39 percent of the public-sector health care workforce in Wisconsin will be eligible to retire (Wisconsin Public Health Workforce Report, 2008).

- In 2009 there were 118 primary care, 76 dental, and 108 mental health professional shortage areas in Wisconsin (Wisconsin Department of Health Services, Primary Care Programs).

- Wisconsin has 118 primary care Health Professional Shortage Areas (HPSAs) encompassing 19 percent of the state’s population and requiring 268 additional practitioners to meet the need for care; 76 dental HPSAs encompassing 36 percent of the state’s low-income population and requiring 134 additional practitioners to meet the need for care for low-income populations; and 109 mental health HPSAs encompassing 34 percent of the state’s population and requiring 143 additional practitioners to meet the need for care (Health Resources Services Administration).

- In 2007, 69 of 72 counties had serious shortages of dentists who provided general dental care
to low-income populations. These counties had a population-to-dentist ratio higher than the federal threshold for designated dental shortage areas (4,000 low-income population to 1.0 dentist Full-Time Equivalent) (Wisconsin Department of Health Services, Primary Care Programs).

Objective 1
By 2020, assure a sufficient and diverse health workforce competent to practice in current and evolving delivery systems to improve and protect the health and well-being of all people and populations in Wisconsin.

Objective 1 Indicators
- Percent of the adult population with a usual source of care (Behavioral Risk Factor Surveillance System).
- Provider-to-population ratios for mental health, dental and primary care. (Indicators to be developed.)
- Local health department staff-to-population ratios (Local Health Department Survey).

Objective 1 Rationale
This objective advances the development of a sufficient workforce, competent to practice in current and evolving delivery systems. Responses to Behavioral Risk Factor Surveillance Systems provide an indication of access to regular sources of coordinated primary medical, dental, and mental health care services. Maintaining an adequate local health department full-time equivalent staff to population ratio is required to carry out the core functions and essential public health services to protect and promote health. Persistent patterns of vacancies in local health department staffing patterns may indicate difficulty in carrying out the core functions and essential services. A high ratio of population to primary health care, mental health care, or dental health care providers indicates the community has provider shortages.

Objective 2
By 2020, establish a sustainable system to collect and analyze public health system workforce data including data on sufficiency, competency, and diversity reflecting Wisconsin’s communities.

Objective 2 Indicator
Periodic inventory of data sets that measure public health system workforce sufficiency, competency and diversity. (Indicator to be developed.)

Objective 2 Rationale
An inventory of health workforce data and periodic reports, with uniform demographic information, will assist systems in scientifically based workforce planning and decision-making (e.g., educational pipelines, workforce policy and practice alignment, and employment practices) to support a diverse, sufficient and competent workforce that protects and promotes health.
Potential evidence- or science-based actions to move the focus area objectives forward over the decade

- Recruit and retain sufficient health care workforce.
  - Collect health workforce data about paid and volunteer workers, as recommended by multiple credible groups to improve health care access (Booske, 2009).
  - Develop public-private workforce partnerships as recommended by multiple groups as one way to assure an adequate competent workforce and improve health care access (Booske, 2009).

- Redefine scope of practice within and across professions.
  - Expand the scope of practice for various mid-level practitioners (e.g., dental hygienists, pediatric and psychiatric nurse practitioners) as recommended by multiple groups to improve health care access and increase workforce capacity (Booske, 2009).
  - Expand the use of community health workers as recommended by multiple groups to improve health care access (Booske, 2009).

- Increase cultural competency of providers (Booske, 2009).
  - Provide cultural competence training of the workforce to improve health care access (Booske, 2009).
  - Expand efforts to recruit health care professionals from minority groups.
  - Implement strategies in health care setting to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area (U.S. Department of Health and Human Services, 2001).
  - Ensure that staff in health care settings, at all levels and across all disciplines, receive ongoing education and training in culturally and linguistically appropriate service delivery (U.S. Department of Health and Human Services, 2001).
  - Maintain in health care settings a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area (U.S. Department of Health and Human Services, 2001).

References


Wisconsin Department of Health Services, Wisconsin Primary Care Programs, General Information.

Wisconsin Department of Health Services, Primary Care Program, Population to Provider Shortage Designations. Retrieved March 15, 2010 from [http://dhs.wisconsin.gov/health/PrimaryCare/ShortageDesignation.htm](http://dhs.wisconsin.gov/health/PrimaryCare/ShortageDesignation.htm)


