

Workforce Summary for Minnesota's Community Health Services System in 2016

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COMMUNITY HEALTH SERVICES SYSTEM IN 2016

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This report summarizes 2016 community health services system staffing, which Minnesota's community health boards submitted to the Minnesota Department of Health (MDH) in 2017. Community health boards report staffing by job classification (see [Appendix A](#) for more information) and area of public health responsibility (see [Appendix B](#)).

In 2016, Minnesota's community health services system consisted of 49 community health boards: 26 single-county community health boards, 19 multi-county community health boards, and four city community health boards.

MDH calculated full-time equivalent hours (FTEs) per 100,000 people based on 2016 population estimates from the [Minnesota Center for Health Statistics](#). We split community health boards into geographic regions for analysis (see [Appendix C](#) for a map).

Statewide Workforce Summary

Between 2009 and 2012, the community health services system in Minnesota lost 356 FTEs, or 12 percent of its workforce. In 2013, FTEs increased by 3 percent. In 2016, the community health services system employed 2,612 FTEs, the same as 2015. In 2016, twenty-one community health boards decreased staffing by less than one FTE to 35 FTEs. The median decrease was 0.88 FTEs. Twenty-six community health boards had increases in staffing. One community health board increased by 18 FTEs (19 percent) with nine community health boards increasing by less than one FTE. Two community health boards are not included in comparisons because of community health board composition changes in 2015 to 2016.

The community health services system is supported by a variety of job classifications (Table 1). Nearly all community health boards employed public health nurses, accounting for 26 percent of the system's workforce. Together, public health nurses and other nurses represented 37 percent of the workforce. The other large job classifications were administrative support (12 percent) and paraprofessional (7 percent). Only eight community health boards (16 percent) have epidemiologists and five of these community health boards are located in the metro region.

The distribution of job classifications as a percentage of FTEs in 2016 remained virtually the same as 2015 (**Table 1**).

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Table 1. Public health FTEs by job classification and community health boards with FTEs in each job classification, Minnesota, 2016

Job classification	FTEs		Community health boards	
	#	% of total	# with FTEs in job class	% with FTEs in job class
Public health nurse	682.85	26%	48	98%
Administrative support	304.93	12%	46	94%
Other nurse	276.08	11%	40	82%
Paraprofessional	189.15	7%	38	78%
Public health educator	165.71	6%	35	71%
Medical and public social worker	138.13	5%	20	41%
Administrative/business professional	137.96	5%	39	80%
Nutritionist	135.71	5%	35	71%
Environmental scientist and specialist	126.58	5%	23	47%
Other*	113.3	4%	n/a	n/a
Public health program specialist	110.24	4%	17	35%
Health administrator	103.81	4%	49	100%
Health planner	82.56	3%	18	37%
Technician	31.3	1%	11	22%
Epidemiologist	14.05	1%	8	16%
Total	2612.00	100%	n/a	n/a

* Includes occupation safety and health specialist, dental worker, public health informatician, physician, physical therapist, mental health counselor, interpreter, licensure/inspection/regulatory specialist, service/maintenance, other public health professional, and other.

Figure 2 shows the total number of FTEs by community health board. Six community health boards (12 percent) had less than 15 total FTEs. The median number of FTEs was 37 with a range of 6 to 388 FTEs. The five largest community health boards by population accounted for 37 percent of all FTEs and employed 963 FTEs. This was more FTEs than the 34 smallest community health boards (\leq 45 FTEs) combined. The community health boards employing more than 85 FTEs were mostly located in the metro region, contain a large urban area or are comprised of multiple counties.

Figure 2. Distribution of total FTEs among community health boards, Minnesota, 2016

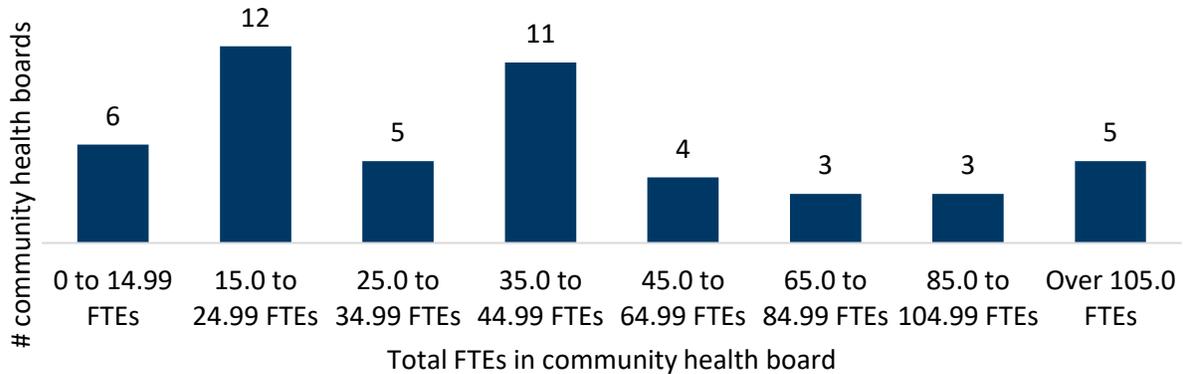


Figure 3 shows the number of FTEs per 100,000 population served by the community health board. Twenty-one community health boards (43 percent) had fewer than 50 FTEs per 100,000. The median number of FTEs per 100,000 for community health boards in Minnesota was 55, with a range of 12 to 132. A majority of the community health boards with the highest FTEs per 100,000 provided direct services to smaller, rural populations.

Figure 3. Distribution of FTEs per 100,000 population, Minnesota community health boards, 2016

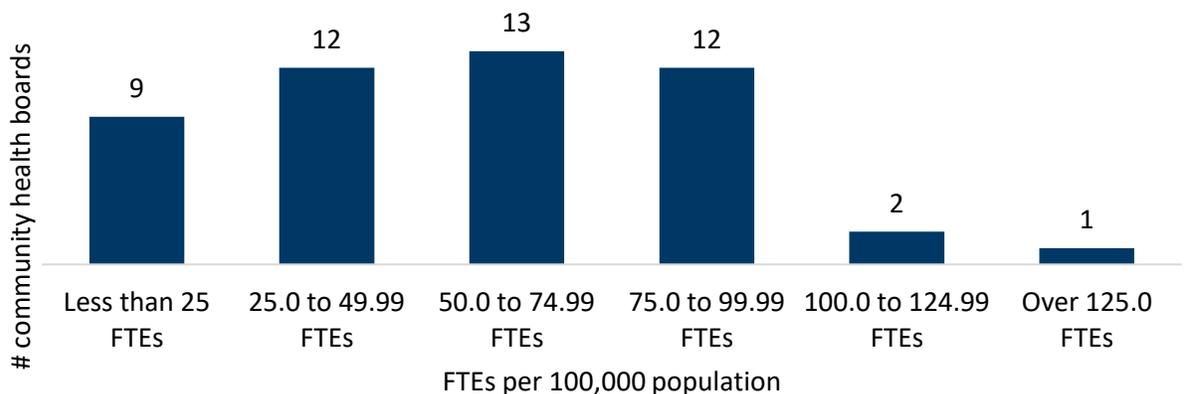
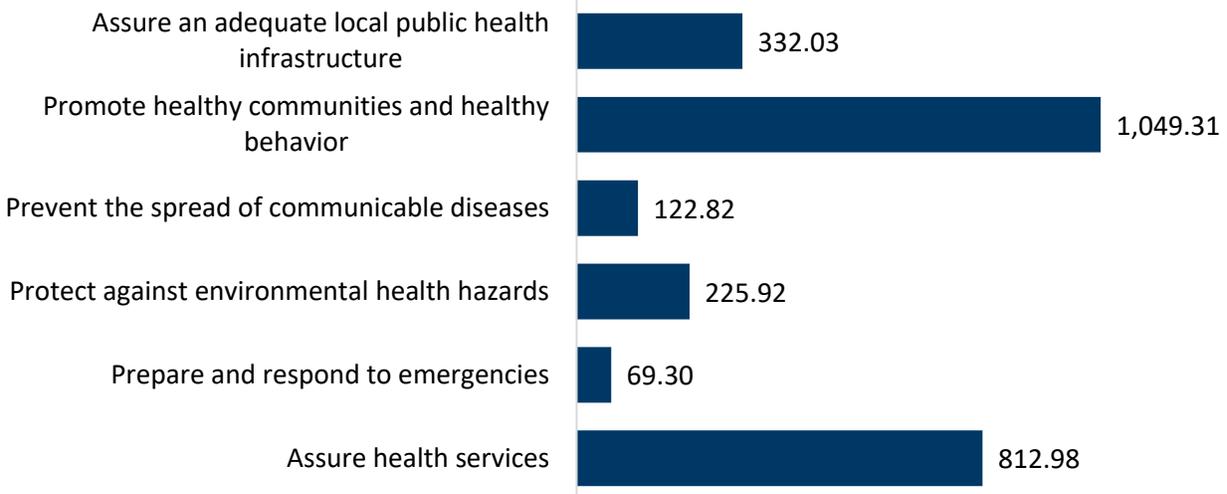


Figure 4 shows the number of FTEs working in each area of public health responsibility. Two areas (assure health services and healthy communities) accounted for 71 percent of the entire workforce.

Figure 4. Total FTEs in each area of responsibility, Minnesota community health boards, 2016



The number and type of staff in each area of public health responsibility are summarized below.

Assure an Adequate Local Public Health Infrastructure

Community health boards classified 332 FTEs as working in the area of infrastructure, which accounted for 12.7 percent of all FTEs. While all community health boards classified at least a portion of an FTE for infrastructure, seven community health boards had less than 1 FTE for this area of public health responsibility. Thirty percent of FTEs were administrative support. Health administrators (18 percent) and administrative/business professionals (16 percent) also accounted for a high percentage of FTEs in this area.

Promote Healthy Communities and Healthy Behavior

The area of healthy communities was staffed by 1,049 FTEs, or 40 percent of the community health services workforce; a 2.6 percent increase (26 FTEs) from 2015. Public health nurses accounted for 34 percent of FTEs in this area. Other staff in the area of healthy communities included health educators (11 percent), public health nutritionists (12 percent), administrative support (9 percent), paraprofessionals (7 percent), and public health program specialists (4 percent).

Prevent the Spread of Communicable Diseases

In the community health services system, 123 FTEs (5 percent of all FTEs) were reported as working in the area of infectious disease, with a decrease of 15 FTEs compared to 2015. Nurses, including public health and other nurses, accounted for 48 percent of the staff in the area of infectious disease. Other professions included administrative support (10 percent), and public health program

specialist (8 percent). It is important to note that two community health boards accounted for 37 percent of FTEs in the area of infectious disease and 19 community health boards had less than 1 FTE in this area.

Protect Against Environmental Health Hazards

Environmental health was staffed by 226 FTEs, or 9 percent of the community health services workforce. Over half (52 percent) of the environmental health FTEs were environmental scientists and specialists. Other occupations included administrative support (9 percent), licensure/inspection/regulatory specialist (15 percent) and service/maintenance (4 percent). It is important to note that four community health boards accounted for 65 percent of all FTEs in this area and six community health boards reported no FTEs in this area.

Prepare and Respond to Emergencies

Emergency preparedness accounted for three percent of all FTEs (69 FTEs), an increase of 2 percent (1 FTE) from 2015. Twenty-one percent of emergency preparedness FTEs were public health nurses. Other professions in this area were administrative support (9 percent), health planner (14 percent), public health educator (14 percent) and program specialist (11 percent).

Assure Health Services

The area of assure health services employed 813 FTEs, a decrease of 47 FTEs (6 percent) from 2015. Nurses, including public health and other nurses, accounted for 49 percent of FTEs in this area. Other staff included paraprofessionals (13 percent), medical and public social workers (14 percent), and administrative support (9 percent).

A significant part of assure health services includes providing direct services through home health care, hospice, correctional health, and emergency medical services programs.

These direct services accounted for 231 FTEs, an increase of 26 FTEs (13 percent) from 2015 and 69 FTEs (23 percent) less than 2011. These FTEs account for 28 percent of all assure health services FTEs and 9 percent of all FTEs.

Race and Ethnicity

Table 5. Staff race/ethnicity, Minnesota community health boards, 2016

Race/Ethnicity	Count	Frequency
White	2,491	92.26%
Asian	72	2.67%
Black or African-American	55	2.04%
Hispanic	54	2.00%
American Indian or Native Alaskan	9	0.33%
Native Hawaiian / Other Pacific Islander	2	0.07%
More than one race reported	4	0.15%
Other/unknown	13	0.48%
Total	2,700	100.00%

Data on race and ethnicity of community health board staff are available for 48 community health boards (See **Table 5**). About 5.7 percent of community health board staff identified as a race other than white. This is a decrease from 6.2 percent in 2015. Race other than white was determined by grouping black or African-American; American Indian or Alaska Native; Asian; Native, Hawaiian, or Other Pacific Islander; two or more races; and other/ unknown into one category. In 2015, 1.9 percent of staff reported as Hispanic, there was no change in 2016.

Regional Workforce Comparisons

Table 6 shows the total number of FTEs across each region, and FTEs per 100,000 population by region. The metro region had the most FTEs (1126) but the smallest number of FTEs per 100,000 (31). The Northeast region had the largest increase by 17 percent, while the other regions had increases with a range of less than 1 to 4 percent in the total FTEs since 2015. Some community health boards outside the metro provided direct services, which contributed to the higher number of FTEs per 100,000 in Greater Minnesota.

Table 6. Regional FTE totals and FTEs per 100,000 population, Minnesota, 2016

Region	Total FTEs	% of total	FTEs per 100,000 pop.
Northwest	127	5%	74
Northeast	151	6%	46
West Central	206	8%	90
Central	302	12%	40
Metro	1,126	43%	31
Southwest	154	6%	71
South Central	198	8%	68
Southeast	348	13%	69
All Regions	2,612	100%	47

Table 7 shows the number of FTEs working in each area of public health responsibility by region. The areas of assure health services and healthy communities accounted for the most FTEs in all regions. The metro region accounted for over half of the FTEs in the areas of environmental health (77 percent) and infectious disease (55 percent).

Table 7. FTEs working in each area of public health responsibility, by region, Minnesota, 2016

Region	Assure an adequate local public health infrastructure	Promote healthy communities and healthy behavior	Prevent the spread of communicable diseases	Protect against environmental health hazards	Prepare and respond to emergencies	Assure health services	Total
Northwest	16	46	5	1	4	54	127
Northeast	24	81	4	3	3	35	151
West Central	22	61	3	11	3	107	206
Central	46	143	12	10	11	80	302
Metro	103	451	68	174	30	300	1,126
Southwest	23	68	10	8	5	39	154
South Central	33	76	8	9	6	67	198
Southeast	66	122	12	11	7	130	348
All Regions	332	1,049	123	226	69	813	2,612

Appendix A. Job Classifications

The staffing glossary includes brief definitions and decision guidelines for the titles in the expanded Bureau of Health Professions listing. The listing was developed over the course of the enumeration project conducted by Columbia University School of Nursing Center for Health Policy. These definitions have been slightly modified to better describe Minnesota's public health workforce; modifications have been noted.

Health Administrator: This single category encompasses all positions identified as leading a public health agency, program or major sub-unit. This includes occupations in which employees set broad policies, exercise overall responsibility for execution of these policies, direct individual departments or special phases of the agency's operations, or provide specialized consultation on a regional, district or area basis. Examples of occupations include department heads, bureau chiefs, division chiefs, directors, deputy directors, CHS administrators, public health nursing directors, and environmental health directors. This does NOT include managers, supervisors, or team leaders.

Administrative/Business Professional: Performs work in business, finance, auditing, management and accounting. Individuals trained at a professional level in their field of expertise prior to entry into public health. Examples of occupations include office manager and accountants.

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. Examples of occupations include 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, secretaries, clerical support, WIC clerks, and receptionists.

Environmental Scientist and Specialist: Applies biological, chemical, and public health principles to control, eliminate, ameliorate, and/or prevent environmental health hazards. Examples of occupations include 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, and entomologist.

Epidemiologist: 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.

Health Planner/Researcher/Analyst: 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).

Interpreter: Individuals who translate information in one language to another language for public health purposes. (This definition was modified.)

Licensure/Inspection/Regulatory Specialist: 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.

Medical & Public Health Social Worker: 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. This job classification includes titles specifically referring to social worker. (This category has been modified from the original occupational title and includes "Mental Health/Substance Abuse Social Worker.")

Mental Health Counselor: Emphasizes prevention and works with individuals and groups to promote optimum mental health. This occupation 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. It can also provide services for persons having mental, emotional, or substance abuse problems and 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. It includes such titles as community health worker and crisis team worker. This category excludes psychiatrists, psychologists, social workers, marriage and family therapists, and substance abuse counselors.

Occupation Safety & Health Specialist: 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. Occupations include industrial hygienist, occupational therapist, occupational medicine specialist and safety specialist. It also includes a physician or nurse specifically identified as an occupational health specialist.

Other Nurse: Helps plan, develop, implement and evaluate nursing and public health interventions for individuals, families and populations at risk of illness or disability. Other nurses include nurses with the following titles: RN, NP, and LPN. A nurse that has a baccalaureate or higher degree with a major in nursing and meets the requirements stated in Minnesota Rules Chapter 6316 should be classified as a "Public Health Nurse." (This is not an official EEO-4/CHP/BHPr+ definition.)

Other Public Health Professional: This includes positions in a public health setting occupied by professionals (preparation at the baccalaureate level or above) that do not fall under the specific professional categories. (This category has been slightly modified from the original occupational title.). Examples of occupations include physician assistant, laboratory professional, EMS professional, intern, speech therapist, and public relations/media specialist.

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. This includes research assistants, medical aides, child support workers, home health aides, library assistants and clerks, ambulance drivers and attendants, homemaker, case aide, community outreach/field worker, and advocate.

Public Health Dental Worker: 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 it neglects the professional/technician distinction and includes the entire range of qualifications, from dental surgeon to dental hygienist.

Public Health Educator: 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 Informatician: Provides informatics expertise to establish policies, practices, and procedures for public health informatics within a program or across the agency to ensure effective use of information and information technology. Also known as public health informatics analyst, public health informatics specialist, health scientist (Informatics).

Public Health Nurse: Plans, develops, implements and evaluates nursing and public health interventions for individuals, families and populations at risk of illness or disability. This title only includes public health nurses who meet the requirements stated in Minnesota Rules Chapter 6316. Public health nurses must have a baccalaureate or higher degree with a major in nursing. (This category has been modified from the original occupational title.)

Public Health Nutritionist: 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. Examples include community nutritionist, community dietitian, nutrition scientist, and registered dietician.

Public Health Physical Therapist: 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: 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. Examples include MD and DO generalists and specialists, some of whom have training in public health or preventive medicine. This job classification does not include physicians working in administrative positions (health administrator or official) and some in specialty areas (epidemiology, occupational health).

Public Health Program Specialist: 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. This job classification includes public health workers reported as public health program specialists 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, and nursing).

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. This includes chauffeurs, laundry and dry cleaning operatives, truck drivers, bus drivers, garage laborers, custodial employees, grounds keepers, drivers, transportation, and housekeepers.

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Technicians: This classification includes occupations that require a combination of basic scientific or technical knowledge and manual skill that can be obtained through specialized post-secondary school education or through equivalent on-the-job training. Examples include computer programmers, drafters, survey and mapping technicians, photographers, technical illustrators, technicians (medical, dental, electronic, physical sciences), inspectors, environmental health technicians, nutritional technicians, detox technicians, EMS technicians, hearing and vision technicians, laboratory technicians, and computer specialists.

Appendix B. Areas of Public Health Responsibility

Assure an adequate local public health infrastructure: Assure an adequate local public health infrastructure by maintaining the basic foundational capacities to a well-functioning public health system that includes data analysis and utilization; health planning; partnership development and community mobilization; policy development, analysis, and decision support; communication; and public health research, evaluation, and quality improvement.

Promote healthy communities and healthy behavior: Promote healthy communities and healthy behavior through activities that improve health in a population, such as investing in healthy families; engaging communities to change policies, systems, or environments to promote positive health or prevent adverse health; providing information and education about healthy communities or population health status; and addressing issues of health equity, health disparities, and the social determinants to health.

Prevent the spread of communicable diseases: Prevent the spread of communicable disease by preventing diseases that are caused by infectious agents through detecting acute infectious diseases, ensuring the reporting of infectious diseases, preventing the transmission of infectious diseases, and implementing control measures during infectious disease outbreaks.

Protect against environmental health hazards: Protect against environmental health hazards by addressing aspects of the environment that pose risks to human health, such as monitoring air and water quality; developing policies and programs to reduce exposure to environmental health risks and promote healthy environments; and identifying and mitigating environmental risks such as food and waterborne diseases, radiation, occupational health hazards, and public health nuisances.

Prepare and respond to emergencies: Prepare and respond to emergencies by engaging in activities that prepare public health departments to respond to events and incidents and assist communities in recovery, such as providing leadership for public health preparedness activities with a community; developing, exercising, and periodically reviewing response plans for public health threats; and developing and maintaining a system of public health workforce readiness, deployment, and response.

Assure health services: Assure health services by engaging in activities such as assessing the availability of health-related services and health care providers in local communities, identifying gaps and barriers in services; convening community partners to improve community health systems; and providing services identified as priorities by the local assessment and planning process.

Appendix C. SCHSAC Regions

