

# Workforce Summary for Minnesota’s Community Health Services System in 2015

September 2016

The following report summarizes 2015 staffing information for the Community Health Services (CHS) System, submitted by Minnesota’s Community Health Boards (CHBs) to the Minnesota Department of Health. The staffing information is reported by job classification and area of public health responsibility. Areas of public health responsibility are: assure health services, healthy communities, infrastructure, environmental health, emergency preparedness, and infectious disease. Complete explanations of the job classifications and areas of public health responsibility can be found in Appendices A and B.

In 2015, Minnesota’s CHS system consisted of 48 CHBs. Of these, 24 are single-county CHBs, 20 are multi-county CHBs, and four are city CHBs.

FTEs per 100,000 were calculated based on the 2015 population estimates from the Minnesota Center for Health Statistics. The CHBs are split into geographic regions for analysis. Appendix C contains a map of the regions.

## CONTENTS

Statewide Workforce Summary .....	1
Regional Workforce Comparisons.....	5
Appendix A: Job Classifications .....	6
Appendix B: Areas of Public Health Responsibility.....	9
Appendix C: SCHSAC Regions .....	10

## STATEWIDE WORKFORCE SUMMARY

In 2015, the CHS System employed 2,612 full-time equivalents (FTEs), a decrease of 10 FTEs (0.4 percent) from 2014. 2013 is the first year FTEs increased since 2009; between 2009 and 2012, the local public health system lost 356 FTEs, or 12 percent of its workforce. In 2015, eighteen CHBs decreased staffing by less than one FTE to 35 FTEs. The median decrease was 1.9 FTEs. Twenty-seven CHBs had increases in staffing. One CHB increased by 14 FTEs (5 percent) with ten CHBs increasing by less than one FTE. One CHB is not included in comparisons because of CHB composition changes in 2014 to 2015.

The CHS System is supported by a variety of job classifications (**Table 1**). Nearly all CHBs employed public health nurses, accounting for 27 percent of the CHS System workforce. Together, public health nurses and other nurses represented 38 percent of the workforce. The other large job classifications were administrative support (12 percent) and public health educator (8 percent). Only eight CHBs (17 percent) have epidemiologists, six of which are located in the metro region.

The distribution of job classifications as a percentage of FTEs in 2015 remained virtually the same as 2014 (**Table 1**).

TABLE 1. PUBLIC HEALTH FTES BY JOB CLASSIFICATION, AND COMMUNITY HEALTH BOARDS WITH FTES IN EACH JOB CLASSIFICATION, MINNESOTA, 2015

JOB CLASSIFICATION	FTES		COMMUNITY HEALTH BOARDS	
	NUMBER	PERCENT OF TOTAL	# WITH FTES IN JOB CLASS	% WITH FTES IN JOB CLASS
Public health nurse	696.21	27%	47	98%
Administrative support	316.26	12%	47	98%
Other nurse	274.35	11%	39	81%
Paraprofessional	179.26	7%	37	77%
Public health program specialist	110.41	4%	16	33%
Medical and public social worker	119.98	5%	18	38%
Public health educator	204.14	8%	37	77%
Health administrator	101.99	4%	48	100%
Administrative/business professional	131.99	5%	37	77%
Environmental scientist and specialist	120.35	5%	24	50%
Nutritionist	130.62	5%	31	65%
Technician	21.1	1%	11	23%
Health planner	79.56	3%	16	33%
Epidemiologist	15.39	1%	8	17%
Other*	110.62	4%	n/a	n/a
Total	2612.00	100.0%	n/a	n/a

Figure 2 shows the total number of FTEs by CHB. Five CHBs (10 percent) had less than 15 total FTEs. The median number of FTEs was 35 with a range of 6 to 406 FTEs. The five largest CHBs by population accounted for 39 percent of all FTEs and employed 1007 FTEs. This was more FTEs than the 33 smallest CHBs (≤ 45 FTEs) combined. The CHBs 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, 2015

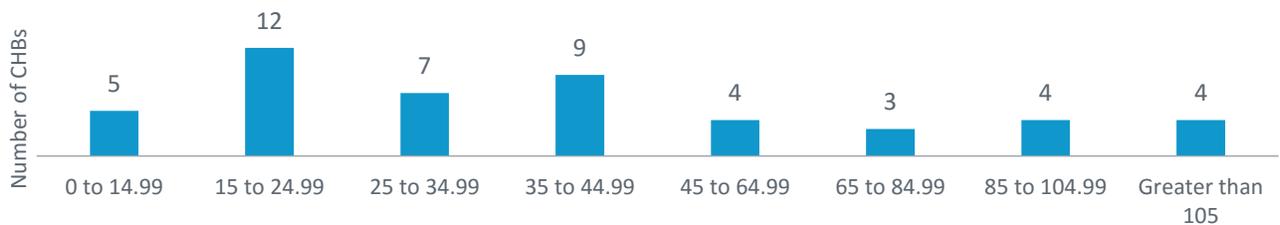


Figure 3 shows the FTEs per 100,000 population. Twenty CHBs (42percent) had fewer than 50 FTEs per 100,000. The median number of FTEs per 100,000 for CHBs in Minnesota was 54, with a range of 10.7 to 134. A majority of the CHBs with the highest FTEs per 100,000 provided direct services to smaller, rural populations.

\* 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 3. DISTRIBUTION OF FTES PER 100,000 POPULATION, MINNESOTA COMMUNITY HEALTH BOARDS, 2015

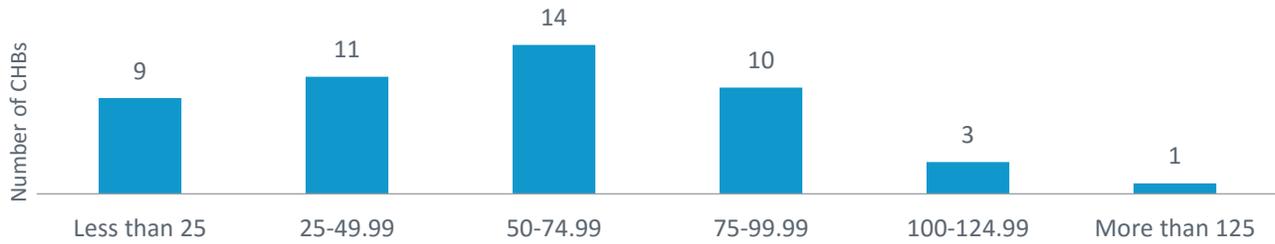
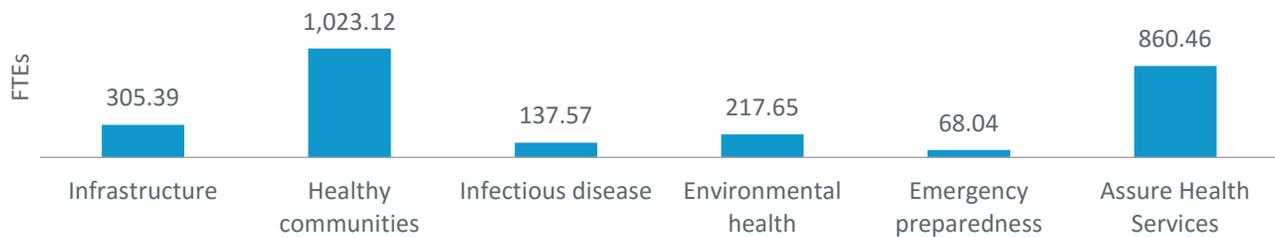


Figure 4 shows the number of FTEs working in each area of public health responsibility. Two areas (assure health services and healthy communities) accounted for 72 percent of the entire workforce.

FIGURE 4. TOTAL FTES IN EACH AREA OF RESPONSIBILITY, MINNESOTA CHBS, 2015



Below are brief summaries examining the number and type of staff in each area of public health responsibility.

### INFRASTRUCTURE

Community health boards classified 305 FTEs as working in the area of infrastructure, which accounted for 11.6 percent of all FTEs. While all community health boards classified at least a portion of an FTE for infrastructure, six community health boards had less than 1 FTE for this area of public health responsibility. Thirty-two percent of FTEs were administrative support. Health administrators (18 percent) and administrative/business professionals (15 percent) also accounted for a high percentage of FTEs in this area.

### HEALTHY COMMUNITIES

The area of healthy communities was staffed by 1,023 FTEs, or 39 percent of the CHS workforce; an 0.8 percent increase (8 FTEs) from 2014. Public health nurses accounted for 33 percent of FTEs in this area. Other staff in the area of healthy communities included health educators (13 percent), public health nutritionists (12 percent), administrative support (9 percent), paraprofessionals (7 percent), and public health program specialists (5 percent).

### INFECTIOUS DISEASE

In the CHS System, 138 FTEs (5 percent of all FTEs) were reported as working in the area of infectious disease, with an increase of 5 FTEs over 2014. Nurses, including public health and other nurses, accounted for 46 percent of the staff in the area of infectious disease. Other professions included administrative support (12 percent), and public health educators (9 percent). It is important to note that two CHBs accounted for 40 percent of FTEs in the area of infectious disease and 17 CHBs had less than 1 FTE in this area.

## ENVIRONMENTAL HEALTH

Environmental health was staffed by 218 FTEs, or 8 percent of the CHS workforce. Over half (51 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 CHBs accounted for 65 percent of all FTEs in this area and eight CHBs reported no FTEs in this area.

## EMERGENCY PREPAREDNESS

Emergency preparedness accounted for three percent of all FTEs (68 FTEs), a decrease of 6 percent (4 FTEs) from 2014. 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 (12 percent) and program specialist (11 percent).

## ASSURE HEALTH SERVICES

The area of assure health services employed 860 FTEs, a decrease of 36 FTEs (4 percent) from 2014. Nurses, including public health and other nurses, accounted for 52 percent of FTEs in this area. Other staff included paraprofessionals (12 percent), medical and public social workers (12 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 205 FTEs, a decrease of 44 FTEs (18 percent) from 2014 and 95 FTEs (32 percent) less than 2011. These FTEs account for 24 percent of all assure health services FTEs and 8 percent of all FTEs.

## RACE AND ETHNICITY

TABLE 5. STAFF RACE/ETHNICITY, MINNESOTA CHBS, 2015

Data on race and ethnicity of CHB staff are available for 47 CHBs (See **Table 5**). About 6.2 percent of CHB staff identified as a race other than white. This is an increase from 5.5 percent in 2014. 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 2014, 1.6 percent of staff reported as Hispanic, compared to 1.9 percent in 2015.

RACE/ETHNICITY	COUNT	FREQUENCY
White	2453	91.87%
Asian	63	2.36%
Black or African-American	54	2.02%
Hispanic	51	1.91%
American Indian or Native Alaskan	12	0.45%
Native Hawaiian / Other Pacific Islander	6	0.22%
More than one race reported	1	0.04%
Other/unknown	30	1.12%
<b>Total</b>	<b>2670</b>	<b>100.00%</b>

## REGIONAL WORKFORCE COMPARISONS

**Table 6** shows the total number of FTEs and FTEs per 100,000 population by region. The metro region had the most FTEs (1172) but the smallest number of FTEs per 100,000 (33). FTEs in the Southeast region decreased 5 percent (18 FTEs) from 2014, while the Northeast region decreased by 6 percent (8 FTEs). The West Central region had the largest increase by 15 percent, while the other regions had increases with a range of less than 1 to 11 percent in the total FTEs since 2014. Some CHBs 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, 2015

REGION	TOTAL FTES	% OF TOTAL	FTES PER 100,000 POP.
Northwest	125	5%	73
Northeast	129	5%	40
West Central	201	8%	89
Central	301	12%	41
Metro	1172	45%	33
Southwest	155	6%	71
South Central	193	7%	67
Southeast	336	13%	67
<b>All Regions</b>	<b>2612</b>	<b>100%</b>	<b>48</b>

**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 (78 percent) and infectious disease (57 percent).

TABLE 7. FTES WORKING IN EACH AREA OF PUBLIC HEALTH RESPONSIBILITY, BY REGION, MINNESOTA, 2015

REGION	INFRA-STRUCTURE	HEALTHY COMMUNITIES	INFECTIOUS DISEASE	ENVIRONMENTAL HEALTH	EMERGENCY PREPAREDNESS	ASSURE HEALTH SERVICES	TOTAL
Northwest	14	50	6	0	4	51	<b>125</b>
Northeast	18	68	3	4	4	31	<b>129</b>
West Central	19	65	4	7	3	103	<b>201</b>
Central	39	146	13	10	10	84	<b>301</b>
Metro	101	432	79	169	30	360	<b>1172</b>
Southwest	23	66	12	7	5	42	<b>155</b>
South Central	31	74	7	8	6	66	<b>193</b>
Southeast	61	122	14	11	6	123	<b>336</b>
<b>All Regions</b>	<b>305</b>	<b>1023</b>	<b>138</b>	<b>218</b>	<b>68</b>	<b>860</b>	<b>2612</b>

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## 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.

**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 (Infrastructure):** This area of public health responsibility describes aspects of the public health infrastructure that are essential to a well-functioning public health system – including assessment, planning, and policy development. This includes those components of the infrastructure that are required by law for community health boards. It also includes activities that assure the diversity of public health services and prevents the deterioration of the public health system.

**Promote Healthy Communities and Healthy Behaviors (Healthy Communities):** This area of public health responsibility includes activities to promote positive health behaviors and the prevention of adverse health behaviors – in all populations across the lifespan in the areas of alcohol, arthritis, asthma, cancer, cardiovascular/stroke, diabetes, health aging, HIV/AIDS, Infant, child, and adolescent growth and development, injury, mental health, nutrition, oral/dental health, drug use, physical activity, pregnancy and birth, STDs/STIs, tobacco, unintended pregnancies, and violence. It also includes activities that enhance the overall health of communities.

**Prevent the Spread of Infectious Disease (Infectious Disease):** This area of responsibility focuses on infectious diseases that are spread person to person, as opposed to diseases that are initially transmitted through the environment (e.g., through food, water, vectors and/or animals). It also includes the public health department activities to detect acute and communicable diseases, assure the reporting of communicable diseases, prevent the transmission of disease (including immunizations), and implement control measures during communicable disease outbreaks.

**Protect against Environmental Health Hazards (Environmental Health):** This area of responsibility includes aspects of the environment that pose risks to human health (broadly defined as any risk emerging from the environment), but does not include injuries. This area also summarizes activities that identify and mitigate environmental risks, including foodborne and waterborne diseases and public health nuisances.

**Prepare for and Respond to Disasters, and Assist Communities in Recovery (Emergency Preparedness):** This area of responsibility includes activities that prepare public health to respond to disasters and assist communities in responding to and recovering from disasters.

**Assure the Quality and Accessibility of Health Services (Assure Health Services):** This area of responsibility includes activities to assess the availability of health-related services and health care providers in local communities. It also includes activities related to the identification of 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

SCHSAC: State Community Health Services Advisory Committee

