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Building a Solid Foundation for Health

2015 Report to the Minnesota Legislature on Public Health System Development

Minnesota Department of Health
January 2015

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For more information, contact:
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Protecting, maintaining and improving the health of all Minnesotans

January 2015

Dear Colleague:

We are pleased to share with you *Building a Solid Foundation for Health: 2015 Report to the Minnesota Legislature on Public Health System Development*. The report was prepared to comply with Minnesota Statutes Chapter 62Q.33, which requires a biennial report on local public health system development.

Minnesota's local governmental public health system was designed to ensure that the public's health and safety are protected while providing the flexibility local governments need to identify and address local priorities. The strengths and accomplishments of the public health system as well as the challenges and opportunities it currently faces are described through a series of brief regional summaries. Unique attributes and successes of each region are highlighted, along with the Minnesota Department of Health's role in supporting the system.

In a time of constrained resources, community health boards (CHBs) are facing ever-increasing demands to address complex public health issues. Several persistent and pressing challenges require attention if the local public health system is to be able to fully meet its responsibility to protect and improve health for all Minnesotans. These include: reduced federal funding for emergency preparedness; health inequities between multiple populations; increasing demands to be able to work effectively with health care systems; reliance on unpredictable and inflexible funding; differences in capacity between small and large jurisdictions; and difficulty maintaining an adequate workforce.

Despite these challenges, the local public health system has accomplished a great deal: creating new partnerships, implementing new technologies, providing critical health services, and responding to local emergencies. MDH and the CHBs that make up the local public health system continuously strive for improvement. Together, we help assure that all Minnesotans, no matter where they live, have the opportunity to live long, healthy lives in thriving communities.

If you have any questions, please contact Debra Burns at 651-201-3873.

Sincerely,

Edward P. Ehlinger, MD, MSPH
Commissioner of Health
Post Office Box 64975
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Minnesota's State and Local Public Health System

From farms to towns to cities, Minnesotans take pride in their communities. These communities provide opportunity for jobs, education, social connection, and the activities and resources that support healthy, fulfilling lives. A strong state and local public health system helps create the conditions that allow all people to be as healthy as they can be—something valued by all Minnesotans.

This report describes how the Minnesota Department of Health (MDH) and 48 locally-governed community health boards[1] work together to protect and improve health for the people of Minnesota. It discusses this partnership's strengths, its pressing and persistent challenges, and opportunities for innovation and change. It also includes brief profiles of each region in Minnesota[2] that highlight unique attributes, successes, and challenges at the local level. The issues identified in these sections were developed through discussions with the State Community Health Services Advisory Committee (SCHSAC), and with local health department administrators and directors statewide.

Public Health System Strengths

A Partnership of Governments

Minnesota's public health system functions as a partnership between state and local governments, and is designed to ensure the public's health and safety are protected statewide, while also providing local governments with the flexibility needed to identify and address local needs. Both levels of government have statutory authorities and responsibilities.

- The Commissioner of Health has general authority as the state's public health official, and is responsible for the development and maintenance of an organized system of programs and services for protecting, maintaining, and improving health. State statute also requires the commissioner to provide administrative and program support to local public health.
- Community health boards (CHBs) protect and improve health within their jurisdictions. CHBs may consist of a single county, single city, a city and county together, or two or more counties together. CHBs carry out activities to address locally identified health priorities within six areas of public health responsibility: (1) assuring an adequate local public health infrastructure; (2) promoting healthy communities and healthy behaviors; (3) preventing the spread of infectious disease; (4) protecting against environmental health hazards; (5) preparing for and responding to emergencies; and (6) assuring the quality and accessibility of health services. The CHB provides governance and oversight to local health departments, which carry out most local public health activities.
- Seven Anishinaabe reservations and four Dakota communities carry out public health activities for their respective American Indian populations based on locally identified needs. The MDH Director of American Indian Health provides consultation and support to the tribes, and facilitates communication and collaboration between MDH, the tribes, and their partners throughout Minnesota.

[1] As of January 1, 2015.
[2] These regions correspond with those used by the State Community Health Services Advisory Committee (SCHSAC).

Complementary Roles that Build on Strengths

MDH and CHBs play complementary roles in protecting and improving health. The coordinated partnership between the state and local levels of government in Minnesota is an efficient way to make the best use of public health resources.

- MDH provides specialized scientific, technical, and program expertise, and serves the entire state. MDH also provides data that local health departments need to carry out their work, and is responsible for overall public health policy development.
- CHBs and the local health departments through which they operate have deep connections within communities, an understanding of local conditions, needs, and resources, and trained staff to carry out public health activities so that all people in Minnesota have an opportunity to be healthy regardless of where they live. For example, the Statewide Health Improvement Program (SHIP) works at the community level, and supports unique programs statewide to create sustainable, systemic changes that produce widespread, lasting results.

These roles exemplify the state-local public health partnership. Though many communities experience unique health concerns, MDH and CHBs place a high value on the statewide partnership, and recognize that each piece is part of a whole. Together, we are better able to protect and improve the health of all Minnesotans.

State Community Health Services Advisory Committee: Communication, Policy Development, and Problem-Solving

The State Community Health Services Advisory Committee (SCHSAC) is a statutory advisory body made up of one representative from each of the state's 48 CHBs. SCHSAC meets regularly with the commissioner of health and key MDH managers to develop shared goals, clarify roles, and develop agreement on how to address emerging issues in public health. The group is an integral piece of the statewide public health system, and has been since its establishment nearly four decades ago. It is the linchpin of the state-local partnership, and the vehicle through which MDH and CHBs effectively coordinate their activities.

Dedicated MDH Staff to Support Local Health Departments

MDH staff—epidemiologists, regional nurse consultants, preparedness coordinators, environmental health specialists grant managers, and many others—carry out MDH's responsibility to help community health boards develop, administer, and implement public health services and programs. Some MDH staff are assigned to regional offices, and live and work in the regions they serve, MDH staff understand local context and provide expertise that allows MDH to more effectively connect with CHBs and local health departments, ensuring statewide activities are locally relevant and effective. Other MDH employees work in partnership with local public health staff by providing technical support on complex and challenging public health concerns, from childhood trauma to emerging infectious diseases.

Working across Jurisdictional Boundaries

Since the existing Minnesota public health system was formed in 1976, local governments have been granted the authority to work across jurisdictional boundaries to address public health issues; many counties do this by joining together with neighboring counties to form multi-county CHBs. Today, almost two-thirds of Minnesota counties have partnered to create larger multi-county CHBs, and these public health jurisdictions have the potential to extend scarce resources and allow for economies of scale.

There are many other regional, multi-county, or city-based arrangements in place to share public health services across jurisdictions to address specific priorities in a cost-effective and efficient way.

Making a Difference in Communities

Every day, local public health professionals make a difference in Minnesotans' lives by protecting them from harm; providing critical health services; and promoting health by improving the policies, systems and environments in which Minnesotans live, work, and play. The regional profiles in this report document how public health activities and interventions improve the well-being of Minnesotans by responding to local emergencies; containing infectious disease; improving health care services, quality, and outcomes; preventing chronic disease; creating a healthy future for Minnesota by supporting new moms and children; and providing innumerable other benefits to local residents.

Challenges Facing the Local Public Health System

Minnesota CHBs face several persistent and pressing challenges that require attention if the local public health system is to be able to fully meet its responsibility to protect and improve health for all Minnesotans. SCHSAC members and local public health administrators have identified the following issues and challenges, which are further described in the regional summaries that follow:

- Reduced federal funding for emergency preparedness, which limits the ability of first responders to plan for and practice responding to emergency situations, and affects how quickly, effectively and efficiently first responders can respond to local needs;
- Significant and persistent health inequities between Minnesota's diverse populations;
- Extensive turnover in leadership (two-thirds of CHBs experienced a leadership change within the past three years);
- Increasing demands to be able to work effectively across the health care system and exchange electronic health information seamlessly between multiple community partners;
- Overreliance on categorical grant funding, which is often inflexible, disease-specific, unpredictable, and administratively burdensome;
- Difficulty in addressing local community health needs, due to heavy reliance on these categorical grants that do not fund emerging issues (such as mental health, for example);
- Changing community demographics, including declining and aging populations in many rural counties and sizeable increases in immigrants and refugees;
- Substantial capacity and resource disparities between a number of small and large jurisdictions; and
- Difficulty maintaining an adequate workforce.

Sustained action at every level of the public health partnership must complement local efforts to address these challenges, in order to assure that all Minnesotans have equal access to health no matter where they live. The challenges described above result from systematic, structural problems that require attention, innovation, and investment. These actions should be directed statewide toward:

- Strong local public health leadership;
- A ready and capable public health workforce;
- Advancements in health equity, so that everyone has equal opportunity to be healthy;
- Funding better aligned with public health priorities;

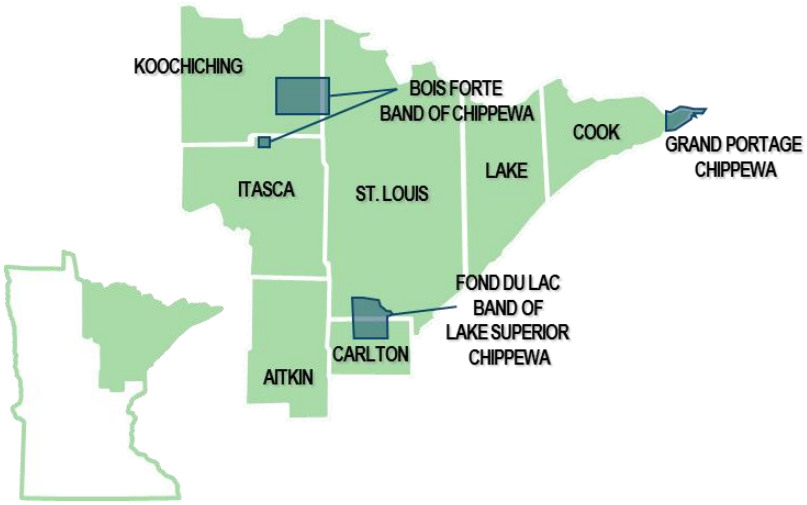
- A nimble local public health infrastructure, able to respond quickly to local needs;
- Improvements in health information technology; and
- A culture of innovation, quality improvement, and performance management.

MDH and local public health have begun to work together on a number of these fronts:

- The MDH Center for Health Equity was established in 2014 to provide state and local stakeholders with technical, practical, and data expertise related to health equity. These activities will improve the state's ability to address significant disparities in health between different populations in Minnesota.
- Representatives from local health departments, SCHSAC, MDH, and the state's public health professional organizations are taking steps to identify critical leadership skills and assure that local public health leaders are well-equipped to address a myriad of complex public health issues.
- A number of CHBs are working to improve performance on national public health accreditation standards, with support from MDH staff. For example, in 2009, Brown County had one of the lowest immunization rates in the state—just 51 percent of two-year-old children were fully immunized with recommended vaccinations. The local health department initiated quality improvement activities with local hospitals and clinics, and Brown County now has one of the highest immunization rates in the state. Today, many more children in that county are better protected from diseases that cause significant illnesses or death.
- Local health departments and health care systems are leveraging support from MDH to create new ways of doing business, work to improve population health, and bend the cost curve for health care services.

Minnesota's public health system faces a number of challenges, but is built on a solid foundation and supported by shared values of flexibility, partnership, and equal opportunity for health. Our public health system protects and improves health for all Minnesotans, and strives for continuous improvement.

Northeast Minnesota



The northeast region is the largest geographical region in Minnesota. The region's residents are concentrated around Duluth, scattered along the north shore of Lake Superior and the Iron Range, and spread throughout the rest of the region's numerous lakes and rivers. Northeast Minnesota is home to the Boundary Waters Canoe Area, the Superior Hiking Trail and Gitchi-Gami Bike Trail, and the Sawtooth Mountains—Minnesota's only mountain range.

The Iron Range stretches from the Mississippi to the North Shore, and has long served as the backbone of the economy in northern Minnesota. The region's ethnicity has been traditionally European, but today, the region is slightly more diverse—nearly 7 percent of the region's residents are people of color.

Two CHBs serve the northeast region: Carlton-Cook-Lake-St. Louis and Aitkin-Itasca-Koochiching. Six of the region's seven counties operate as combined health and human services agencies; Koochiching is the only county in the region with a standalone public health department.

The region is also home to the reservations of the Bois Forte Band of Chippewa, Grand Portage Chippewa, and Fond du Lac Band of Lake Superior Chippewa, as well as a portion of the Leech Lake Band of Ojibwe reservation.

NORTHEAST MINNESOTA DEMOGRAPHICS

Population: 326,489
Size: 18,221 square miles (largest in state)

ADMINISTRATION

Multi-County Community Health Boards (2):
Aitkin-Itasca-Koochiching, Carlton-Cook-Lake-St. Louis

PUBLIC HEALTH STAFFING

Total Staff: 169 FTEs[3]
Per Capita Staff: 52 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $12,548,426 (↑9% from 2012)
Per Capita Spending: $38.43
Local Tax Levy: $2,766,172
22% of total public health funding

Challenges and Opportunities

Public health leaders in the northeast are particularly interested in providing services in the most efficient and cost-effective way while still reaching all communities. Many public health workers in the region—particularly directors of combined health and human services departments—are examining cross-jurisdictional sharing of public health services as a way to meet the needs of the population.

[3] A full-time equivalent (FTE) of 1.0 is equivalent to one full-time worker.

One significant challenge in the northeast region is maintaining a strong public health role. Health and human services mergers may lead to greater efficiency in delivering services, but also has the potential to diminish the authority of local public health leadership. Recent leadership changes in in the region further compound this issue. Both northeast CHBs saw leadership changes in 2014, and a majority of the region's local health departments have new local public health directors or supervisors. However, while this time of transition can be stressful, it is also an opportunity to bring new energy to public health in the region.

Strengths and Accomplishments

The northeast region can be defined by its longstanding willingness to seek regional solutions. For instance, this region's counties have collaboratively leveraged multiple funding sources to create Healthy Northland, a website where northeast residents can find resources to improve their health (like nearby walking trails, or resources for tobacco cessation). Another example is the Carlton County-based TEXT4LIFE, a program allowing area youth and young adults thinking about suicide or experiencing a mental health crisis to reach out to counselors via text. The county has provided training to community members who serve as resources for youth in need, and county health educators provide outreach to schools across the region to promote the service as a resource for youth.

The Bridge to Health Survey, which collects population-based health status data on adult residents, is another example of the region's commitment to collaboration. The survey has been fielded every five years since 1995 in northeast counties, along with Pine County to the south and Douglas County in Wisconsin. The Bridge to Health Survey fills the gap left by statewide surveys, to provide a more complete picture of the region's health status. Northeast CHBs play a key role in convening partners, developing survey questions, and promoting use of the data gathered.

A Closer Look

DELIVERING HEALTHY BABIES

The Northern St. Louis County Superior Babies program identifies and serves pregnant women who use or have used alcohol or other drugs. Superior Babies aims to increase positive birth outcomes, healthy growth, and development for babies; it also helps women set goals for recovery and self-sufficiency, and coaches them to attain those goals. This free and voluntary program provides scheduled home visits by a public health nurse and a licensed alcohol and drug counselor.

An overwhelming majority of babies enrolled—96 percent—had normal birth weight, negative toxicology tests, and normal APGAR scores (a score that quickly measures a newborn's health immediately after birth). This success has prompted plans to expand the program to southern St. Louis County. In early 2013, Superior Babies received the 2013 Emerging Practices Award from the Association of Maternal and Child Health Programs, which recognizes innovative and promising programs in maternal and child health care.

INCLUDING HEALTH IN ALL POLICIES

Carlton County public health staff are leading a Health Impact Assessment (HIA) concurrent with a transportation and land use planning process conducted at the city and regional levels. An HIA gauges the potential impacts of proposed policies, plans, or programs on a population's health. The HIA will provide the community with an opportunity to consider public health and its links to transportation, land use, and public policy.

RESPONDING TO FLOODS

In June 2012, Carlton County and southern St. Louis County were devastated by flooding. Over two days, more than seven inches of heavy rain fell on already saturated ground. Hundreds of residents in Carlton were asked to evacuate

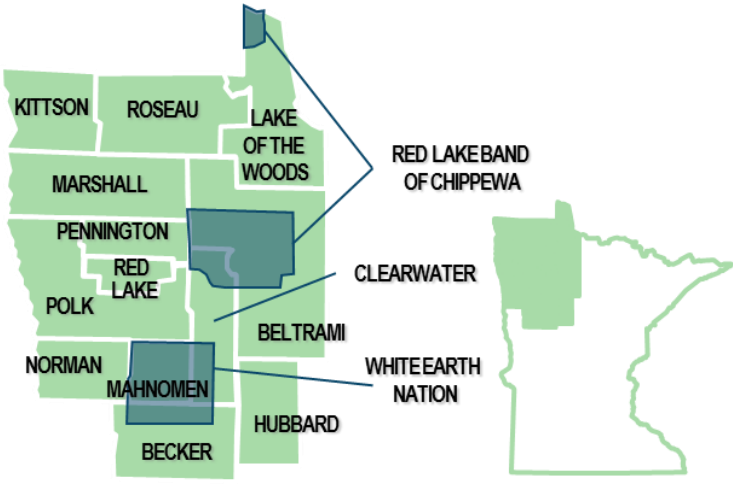
and businesses shut their doors. Substantial flooding was reported around the area, and a number of roads were closed, including Interstate 35, several highways, and local roads.

Carlton County received county and regional funding from the 2013 Legislative Special Session to aid community recovery and help build community resilience. As a result, the county has provided training for public health and other community partners in psychological first aid and compassion fatigue; has facilitated community education forums, Camp Noahs, and DRAT! (Disaster Readiness Actions for Teens!); and has provided mental services in schools, homes, and via telecommunications.

Northwest Minnesota

The northwest region of Minnesota is the second-largest geographic region in the state, and is home to the Mississippi headwaters, the Red River valley, and the Northwest Angle. The region's residents are spread across a large land area, with clusters around population centers in East Grand Forks and Bemidji. A number of the region's counties have seen populations decline since 2000, including Kittson, Lake of the Woods, Marshall, Norman, Red Lake, and Roseau counties.

The region is also home to three tribes: the Red Lake Band of Chippewa, the Leech Lake Band of Ojibwe, and the White Earth Nation, which is the most populous tribe in the state.



Four CHBs provided public health services in the northwest region in 2014; at the start of 2015, Becker County joined nearby Wilkin, Otter Tail and Clay counties to form Partnership4Health CHB (in the west central region of the state). The three remaining CHBs in the region are geographically large, multi-county CHBs: North Country (Beltrami, Clearwater, Hubbard, and Lake of the Woods counties), Polk-Norman-Mahnomen, and Quin Community Health Services (Kittson, Marshall, Pennington, Red Lake, and Roseau counties). Six counties are organized with standalone public health departments, two counties function as health and human services agencies, and the remaining five counties contract with a hospital or health organization for public health activities—an arrangement unique to this region. While the region's per capita staffing ratio is comparable to other parts of the state, staff juggle multiple roles and responsibilities, and travel considerably further and at greater expense to serve the many remote areas of their jurisdictions.

NORTHWEST MINNESOTA DEMOGRAPHICS

Population: 203,681
Size: 16,013 square miles

ADMINISTRATION

Multi-County Community Health Boards (3):
North Country, Polk-Norman-Mahnomen, Quin County

PUBLIC HEALTH STAFFING

Total Staff: 139 FTEs
Per Capita Staff: 68 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $11,306,476 (↑5% from 2012)
Per Capita Spending: $55.51
Local Tax Levy: $1,210,596
11% of total public health funding (lowest in state)

Challenges and Opportunities

The northwest region faces a number of significant and persistent challenges in providing public health services that stem from its large geographic area, the region's remoteness, and low population density. Substantial parts of the region's population live in poverty, especially in Beltrami and Mahnomen counties; this poverty contributes to and exacerbates poor health, including chronic disease and mental illness. High levels of arsenic in well water and the

region's aging population also concern public health workers, particularly in light of workforce shortages in nursing and other critical areas.

The northwest region also faces significant challenges with regard to public health infrastructure. Because only 11 percent of the region's public health funding comes from local tax levies (compared to the state average of 35 percent), local health departments rely more on categorical grants that provide limited support for basic infrastructure, strategic planning, and emerging local health priorities.

Some northwest CHBs focus a great deal of their activity on home health services and hospice care, which are staff- and resource-intensive programs. As a result, there appear to be a greater number of FTEs and funding than are actually available for population-based public health services. (For example, the thirteen health departments in this region employ a total of 58 FTEs to provide health services, compared to five FTEs in infectious disease and four FTEs in emergency preparedness/response.) Local public health leaders continue to explore cross-jurisdictional sharing of public health services to help assure high quality services are available to local residents at the best value.

Strengths and Accomplishments

In the face of the above challenges, northwest public health leadership and staff utilize a deep knowledge of their communities and longstanding local relationships to leverage meager assets. The region's public health leaders advocate for their communities, seek innovative solutions, and maximize limited resources. To this end, three northwest CHBs participated in the MDH Shared Services Learning Collaborative, in which public health workers statewide explored new ways to do business and meet local needs.

CHBs also continue to collaborate with health care systems: one CHB is advancing the use of health information technology to facilitate better decision-making based on data, and another has worked closely with nearby hospital groups on required community health needs assessments for both local public health and nonprofit hospitals. A third CHB was recently awarded funding to improve outcomes for at-risk youth, through Minnesota's Accountable Health Model-State Innovation Model Grant in partnership with Essentia Health, the Oshki Manidoo "New Spirit" Center, and other community stakeholders.

A Closer Look

MOMS, DADS, AND BABIES

During the last two years, the region's CHBs have invested considerable time and energy to implement voluntary, intensive, evidence-based home visiting services. These services reduce child abuse and involvement with child welfare systems, reduce visits to the emergency room, and support healthy development in early childhood. Public health nurses visit families before and after a new child arrives, providing education and practicing parenting skills that will help parents respond to their children's needs—critical support during a stressful period for new parents.

One Family Home Visiting supervisor recounted a story about how this work makes a difference. When a new foster mother was struggling to meet the needs of a foster child in her care, she recalled the information her home visiting nurse shared with her about trauma and its impacts, and recognized that this child had not yet developed key protective factors to cope with stress and anxiety, and had difficulty establishing trust with caregivers. She had an "a-ha" moment in which she recognized the problem and understood that she, now, was this child's "protective shield." She now has a better understanding of her foster child and how best to care for and support him. In the same CHB, other programs complement work with new mothers, by providing fathers with education and employment resources, as well as a structured, supportive environment for problem-solving and social support—helping these dads economically and

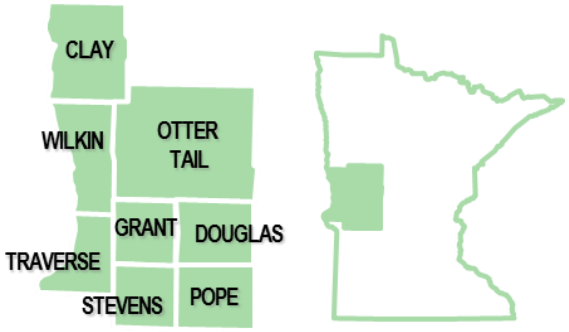
emotionally support their families. By investing in the health of individuals and families, these activities contribute to the health and vitality of the northwest region, and the state as a whole.

POVERTY AND HEALTH

Assessing a community's health and identifying priorities for health improvement are core functions of public health departments. An effective community health assessment helps direct resources, develop shared priorities with community stakeholders, and assure that public health activities reflect the needs of the community served. Minnesota statute requires CHBs to conduct community health assessments at least every five years, but many CHBs have begun to conduct assessments more frequently, and in collaboration with local nonprofit hospitals.

Northwest CHBs identified poverty and its impacts as a central theme after engaging hundreds of citizens in identifying and prioritizing local health needs in a community health assessment—representing hospitals, clinics, human services organizations, law enforcement, clergy, areas on aging, Community Action Program agencies, schools, and citizen stakeholders. One CHB has identified it as its top health priority to address during the next five years. Poverty creates exceptional stress and limits individual choices related to food, housing, and employment. People living in poverty are less able to live, work and play in safe, healthy environments, and have fewer options for buying healthy food. As a result, poverty significantly increases a child or an adult's risk for a multitude of health challenges. To successfully improve population health outcomes, CHBs in this region understand that they will need to mobilize community partners to address poverty and its consequences.

West Central Minnesota



The west central region is known for the numerous rivers and lakes within its glacially sculpted hills and valleys. A majority of its population is centered in the Fargo-Moorhead metropolitan area (which spills into North Dakota), Alexandria, and Fergus Falls. Thanks to the myriad of lakes in the region, the area is a tourist destination in both summer and winter—Otter Tail County's population nearly triples during summer's peak tourism months.

Despite the population bounce each summer, the region's population is shifting and changing. Between 2000 and 2010, six of the eight counties in the west central region lost population. Family farms are giving way to larger, more industrial farms, and rural areas are more sparsely populated as residents move toward cities and population centers.

In 2014 this region was served by three CHBs: Clay-Wilkin, Horizon (consisting of Douglas, Grant, Pope, Stevens, and Traverse Counties), and Otter Tail. As of January 1, 2015 Clay-Wilkin, Otter Tail and Becker joined together in a new CHB called Partnership4Health.

WEST CENTRAL MINNESOTA DEMOGRAPHICS

Population: 191,445 (smallest in state)
Size: 6,727 square miles

ADMINISTRATION

Single-County Community Health Boards (1): Becker

Single-County Human Services Boards (1): Otter Tail

Multi-County Community Health Boards (2): Clay-Wilkin, Horizon

PUBLIC HEALTH STAFFING

Total Staff: 173 FTEs
Per Capita Staff: 90 FTEs (highest in state)

PUBLIC HEALTH EXPENDITURES

Total Spending: $16,238,162 (↑12% from 2012)
Per Capita Spending: $84.82 (highest in state)
Local Tax Levy: $2,355,987
15% of total public health funding

Challenges and Opportunities

The west central region shares many similarities with northern and central Minnesota: an older population that is spread across a wide geographic area, an aging and deteriorating housing stock, and high levels of poverty. The region is focused primarily on preventing and reducing the burden of chronic health conditions and has seen an increase in referrals related to adverse childhood experiences—child abuse, neglect, and other childhood stressors that affect long term health and wellbeing. These trends have increased demands on local public health departments.

This region has considerable difficulty hiring and retaining staff and remaining competitive with other local employers. In one county, the entire nursing staff provides home and community-based health care services—activities that help keep people out of high-cost institutions—turns over each year as staff find salaries $10 to $30 higher per hour in other jurisdictions, costing the county nearly $30,000 per year in turnover costs. In addition, counties struggle to find individuals with the necessary experience to fill various positions, resulting in significant workforce shortages that impact local families directly. In one situation, family members consistently call the local health department to request health services for an elderly family member. Each time, their request for services is rejected due to a lack of staff and space.

There is a growing need for services for the aging population in this and many regions of the state, but a lack of workforce capacity to address these needs.

Strengths and Accomplishments

In order to maximize capacity, efficiency and effectiveness, the west central region has committed to the cross-jurisdictional sharing of public health programs and services. Innovative public health leaders in the region's counties have utilized cross-jurisdictional sharing to fill gaps in workforce skills (such as financial management), efficiently manage staff capacity (sharing staff time and supervision of employees), and jointly carry out core public health responsibilities (community health assessment, strategic planning, and preparation for public health emergencies). One multi-county CHB is creating an integrated local health department to serve its five-county region, and three CHBs have formed a new multi-county CHB beginning in 2015. To carry out these arrangements effectively, the CHBs in this region have spent considerable time studying the services provided in each county, examining each CHBs respective strengths and needs, and comparing local health priorities. This level of organizational development takes effective leadership, strong partnerships with local elected officials and other stakeholders, thorough and detailed planning, extensive communication, and considerable time.

In addition to these strengths, this region has been a leader in the adoption of health information technology and collaborating with health care systems to transform clinical care, initiatives to promote breastfeeding and early childhood development, and emergency preparedness and response.

A Closer Look

MENTAL HEALTH

Clay County public health staff is taking a lead role in improving the mental health of their community. The local health department collaborated closely with their local nonprofit hospitals and neighboring Cass County, ND to help them complete the community health needs assessments. When completed, mental health emerged as a high priority for residents in the area. As a trusted community partner, the public health department was asked to convene and organize representatives from human services, education, faith communities, and health care providers as well as families, mental health consumers, and other interested stakeholders to work together towards better mental health for the community. The initiative, called "ReThink Mental Health," is working to improve mental health and mental health care while lowering the cost of that care. Informed by performance improvement approaches (e.g., LEAN), the collaborative will improve early intervention and prevention, recovery support, mental health treatment, and crisis response.

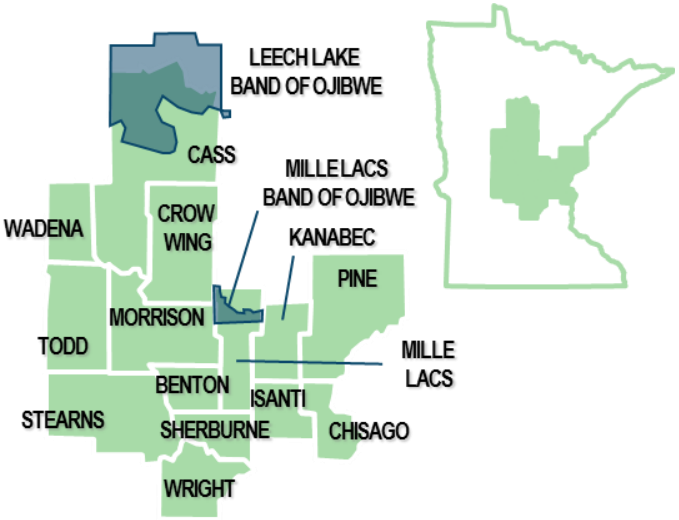
READY TO RESPOND

Horizon Public Health—serving the counties of Douglas, Pope, Stevens, Traverse, and Grant—is innovating emergency preparedness and response in its five-county region. Typically, counties have local plans developed to respond to a wide range of potential emergencies, including tornadoes, floods, medical emergencies and other disasters requiring a rapid response to protect the health of the public. Horizon has taken individual county protocols to create regional solutions and cross-trained emergency preparedness staff across the counties. Horizon now has a single regional approach for mass dispensing of medications and isolation and quarantine of individual with infectious diseases. Horizon is now in the process of consolidating and improving their protocols for handling other weather-related emergencies (like floods and extreme heat).

This behind-the-scenes coordination results in better services for the residents of the region. For example, public health leaders looked at all five counties as a region to determine the sites that make the most sense for their population to

travel to for mass dispensing of medications and created plans for how to get people to the sites most efficiently. In addition, when there is an emergency in any nearby county, staff from any of the five counties will have the skills, training and resources to be able to respond across county lines. Residents benefit from seamless, well-coordinated and prepared emergency response that meets their needs and the counties can depend on getting the best value for their investment in public health.

Central Minnesota



The central region has a diverse geography, from rural areas, to small towns, suburbs and large urban centers. Its proximity to the metro region influences its population, resources and health needs.

A large proportion of residents are located in and around the cities of St. Cloud and Brainerd, as well as in the metropolitan exurbs that spread into Chisago, Isanti, Sherburne, and Wright counties. In these semi-metro areas, population growth exceeded 25 percent during the housing boom between 2000 and 2010. This region has also become substantially more diverse in recent years; Todd, Stearns, Sherburne, Wright and Chisago counties experienced a 500 percent increase in populations of color during the same time period. Two American Indian tribes with reservation land are located in this region: the Mille Lacs Band of Ojibwe, and the Leech Lake Band of Ojibwe (which also extends into the northeast and northwest regions).

Public health services for the 14 central counties are overseen by 10 CHBs, three of which serve multiple counties (Isanti-Mille Lacs, Kanabec-Pine, and Morrison-Todd-Wadena). In addition, the St. Cloud metropolitan area touches three counties (Stearns, Benton and Sherburne), necessitating multi-county cooperation. In 2014, Isanti and Mille Lacs counties opted to terminate their partnership and will be governed separately in 2016.

CENTRAL MINNESOTA DEMOGRAPHICS

Population: 657,945
Size: 11,832 square miles

ADMINISTRATION

Single-County Community Health Boards (2):
Chisago, Sherburne

Single-County Human Services Boards (5):
Benton, Cass, Crow Wing, Stearns, Wright

Multi-County Community Health Boards (3):
Isanti-Mille Lacs, Kanabec-Pine, Morrison-Todd-Wadena

PUBLIC HEALTH STAFFING

Total Staff: 308 FTEs
Per Capita Staff: 42 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $27,030,581 (↑1% from 2012)
Per Capita Spending: $36.74 (lowest in state)
Local Tax Levy: $7,089,892
29% of total public health funding

Challenges and Opportunities

For several years now, this region has seen considerable change in leadership. In the past four years, there has been a leadership change in seven of the 10 CHBs, sometimes more than once. These changes create disruption for staff and affect the efficiency of continuous operations.

Because many of the CHBs are near the metro area, where wages are often higher, maintaining an adequate public health workforce is a persistent challenge. Further, many of the local health departments are relatively small and lack depth in workforce capacity. As a result, handling multiple complex challenges simultaneously—such as responding to tuberculosis, an ongoing health concern in this area, simultaneously with other infectious disease outbreaks—takes staff away from other important tasks and affects the CHBs ability to provide comprehensive services. The CHBs in this region also struggle with other provider shortages, particularly in regard to mental health and dental care.

Strengths and Accomplishments

The public health leaders in this region are committed to continuous learning and improvement, both personally and organizationally. They provide support and mentorship to each other in regional meetings, at which they discuss emerging and ongoing concerns, new findings from public health systems and services research, and effective public health practices that have worked in their respective jurisdictions. Experienced leaders make a concerted effort to share knowledge, skills and resources to improve public health services across the region, which is a critical support for the many new leaders in the area.

Reducing the burden of chronic disease has been one area in which the CHBs in this region focus their work together. Local health departments have worked to increase tobacco-free communities, tobacco cessation programs, and tobacco-free policies at the region's employers, apartment buildings, post-secondary schools, and even parks, beaches, and fairgrounds. Departments collectively work to promote healthy eating by increasing access to healthy foods at grocery stores and increase opportunities for physical activity through Safe Routes to Schools programs, Active Classrooms/Recess, and an increased number of sidewalks and trails to popular destinations in the area.

The central region's CHBs are also experienced in handling outbreaks to protect the public's health. A recent outbreak of pertussis (whooping cough) required coordination between multiple counties and across various service systems, including schools and medical clinics, to limit exposure to other children. Following the outbreak, the CHBs involved provided immunization education and resources throughout the area to improve protection against whooping cough.

A Closer Look

HEALTH CARE PARTNERSHIP

For several years, Stearns County has made a concerted effort to work closely with local health clinics. Public health nurses make quarterly visits to the clinic to exchange information and identify emerging health needs. As a result, public health staff can often address community health concerns quickly and collaboratively. For example:

- When flu vaccines were not readily available, the local health department pulled clinics together to identify solutions for managing supply and demand. Together, they were able to prioritize patients for the vaccine and develop a process for sharing supply of the vaccine between clinics. The local health department monitored vaccine supply and sharing between the clinics to effectively manage the response across the county.
- Stearns County has seen a significant increase in the number of refugees resettled in the county—from 300 in 2013 to nearly 500 in 2014. All primary refugees (refugees resettling in Minnesota directly from a refugee camp) are required to have a health screening within 90 days of arrival. These screenings are handled by the clinics on a rotating basis. As the number of refugees has increased, the demand on both health care and public health services has increased rapidly. The local health department was able to quickly convene their health care partners to discuss this and other refugee health issues and identify mutually beneficial solutions.

WORKING WITH LOCAL BUSINESS TO IMPROVE COMMUNITY HEALTH

The Isanti-Mille Lacs-Kanabec-Pine SHIP partnership is particularly proud of its work implementing a worksite wellness program at Isanti-based Advanced Telemetry Systems (ATS). After partnering with SHIP in 2012, ATS was able to identify a work wellness coordinator and create a wellness committee. ATS also developed a worksite wellness toolkit, pre- and post-assessments, and guidelines/examples for the wellness committee. ATS employees notice the difference. Employees enjoy friendly weight loss challenges, healthy lunch options, access to an onsite workout room, and fruit and veggie trays. Employees report that they have made positive sustainable changes to their lifestyles, and are thankful for the support provided by ATS and SHIP.

Twin Cities Metropolitan Area

Although the metro region is geographically smaller than other regions, it is by far the most populous[4] and most racially and ethnically diverse in the state. The Twin Cities is home to the largest Hmong-American, Somali, and Karen populations in the U.S., and is home to many urban American Indians from all 11 Minnesota tribal communities. The Shakopee Mdewakanton Sioux Community is also located in Scott County.

The Metro is served by six county-based community health boards (CHBs); four city CHBs in Bloomington, Edina, Minneapolis, and Richfield; and one combined city-county CHB, St. Paul-Ramsey—an arrangement not found anywhere else in the state.

TWIN CITIES METRO DEMOGRAPHICS

Population: 3,063,397 (largest in state)[5]
Size: 2,811 square miles (smallest in state)

ADMINISTRATION

Single-County/City Community Health Boards (9): Anoka, Bloomington, Carver, Edina, Hennepin, Minneapolis, Richfield, St. Paul-Ramsey, Washington

Single-County Human Services Boards (2): Dakota, Scott

PUBLIC HEALTH STAFFING

Total Staff: 1179 FTEs
Per Capita Staff: 33 FTEs (lowest in state)

PUBLIC HEALTH EXPENDITURES

Total Spending: $187,667,104 (↑4% from 2012)
Per Capita Spending: $53.24
Local Tax Levy: $70,537,783
38% of total public health funding (highest in state)

Challenges and Opportunities

This region is most obviously challenged by its large population. Public health departments place a greater emphasis on population-based approaches to improving health, using policy, systems, and environmental change to improve health outcomes. The region's diversity—a strong point in the metro—also creates challenges for communicating and delivering public health programs to groups with limited English proficiency and unique cultural backgrounds. In addition, health departments are continually pressured by economic constraints as they serve large populations with high concentrations of poverty and complex needs.

Strengths and Accomplishments

The region's public health leaders are strong advocates for their communities' health. The metro health departments have an extensive number of collaborative activities. Metro health departments often work across agencies to improve public health in their communities:

[4] Over half of the state's total population lives in the Metro region.
[5] Demographic data in this report come from 2011 American Community Survey estimates, US Census Bureau.

- Hennepin County, Minneapolis, Bloomington, Edina and Richfield health departments worked collaboratively to develop their community health improvement plans. By combining their efforts, these agencies were able to work collaboratively to assess community needs and work with health plans, hospitals and community organizations to develop a plan to address them.
- The Center for Community Health is a metro-wide effort of the local public health agencies, hospitals and health plans to coordinate community health assessment and planning processes and to identify and work together on at least one priority issue (a preventive approach to mental health is the topic that has been selected). The local public health agencies are represented on the executive committee.
- The metro Local Public Health Association held a joint sex trafficking education session for staff and leaders. The purpose of the session was to familiarize public health with new resources and learn from each other's efforts to address this issue.
- Several metro jurisdictions have passed ordinances addressing e-cigarette use and other tobacco access issues. This effort, led by local public health agencies, included Minneapolis, Bloomington and Edina.
- As with all regions of the state, the metro local health departments work collaboratively and sharing resources in a cooperative effort to prepare for an Ebola response.

A Closer Look

PROTECTING AND IMPROVING COMMUNITY HEALTH

Hennepin County has successfully recruited and trained the first-ever Medical Reserve Corps Cultural Services Unit (CSU) The CSU volunteers were immigrants or refugees now living in Hennepin County. These volunteers are recruited to help recently arrived immigrants understand and appropriately respond to local health issue. A large number of these volunteers are West African, which was particularly helpful when the local public health department conducted outreach related to the recent Ebola outbreak that originated in their home countries.

The City of Minneapolis has championed a strengthening of their Staple Foods Ordinance—which was a first in the country when originally passed in 2008. The new ordinance requires certain quantities of perishable/fresh foods in any store that accepts SNAP food assistance. Minneapolis Health Department staff will work with store owners in the first year to address issues such as procurement of produce, displaying new products and introducing customers to new options. The University of Minnesota will be helping the city evaluate the effectiveness of the ordinance.

The Bloomington, Richfield and Edina health departments have used SHIP funding to create the Tri-City Partners for Healthy Communities. The effort involves working with communities, schools, worksites and health care providers to create communities that support better health so all can live longer, healthier lives. Examples of work being done includes: working with area food shelves to provide healthy food options to go beyond preventing hunger to supporting good health; training childcare centers to encourage families to choose breastfeeding and to support breastfeeding after moms return to work; and providing information and training on a "Call it Quits Referral Program" that offers dentists and dental hygienists an easy way to refer patients for tobacco cessation counseling.

NATIONAL ACCREDITATION

The Hennepin County Public Health Department was the first in the state, and among the first 30 state and local health departments nationwide, to receive accreditation from the national Public Health Accreditation Board. Accreditation ensures that health departments provide high quality programs that promote good health and disease prevention through a review process that occurs every five years.

PREVENTING CHILD ABUSE AND RESPONDING TO TRAUMA

St. Paul-Ramsey County Public Health continued its nationally recognized work on violence prevention to combat child and domestic abuse, sexual violence, and sex trafficking. Staff and volunteers from public health's Sexual Violence Program provided 24-hour acute crisis medical intervention counseling services to approximately 200 sexual violence survivors in 2014. In addition, the department has one of the largest nurse home visiting programs in Minnesota, providing 22,260 home visits to 1,373 families in 2013. Home visiting nurses often find themselves providing services to families where child abuse and intimate partner violence have occurred. To better address these concerns, program staff partnered with MDH on a grant that will bring together nurse home visitors, domestic violence partners and advocates as part of a statewide initiative to incorporate violence prevention in home visiting. Public health nurses promote positive parenting and help parents find essential community resources using approaches that have been proven to reduce child maltreatment.

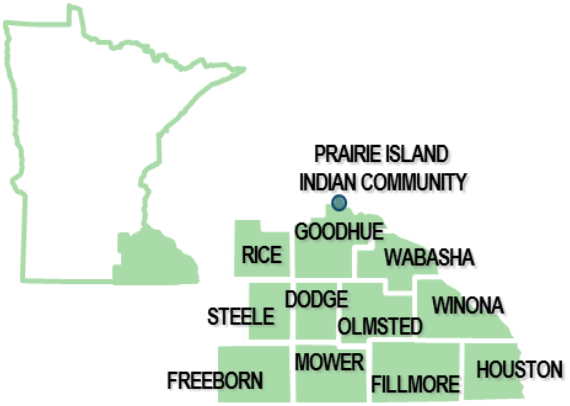
PROMOTING HEALTH IN JAIL SETTINGS

The Washington County Department of Public Health and Environment provides a variety of health care services in the county jail. These services include medical care, dental care, and coordinating psychological care from licensed professionals within the community. The health issues of inmates are becoming more complex and staff must deal with longstanding chronic conditions in people who have not often had access to care. The health department has been able to improve the health of inmates between intake and release. Some examples of the complexity of this work include conducting over 1100 TB tests (four of which were positive), identification and stabilization of multiple inmates with mental health issues, managing diabetes in several inmates, and providing lifesaving care to an inmate in cardiac arrest.

Ramsey County Public Health provides family planning and sexual health education and services to incarcerated individuals. Nurse practitioners staff weekly clinics at four correctional facilities—providing free family planning services and STI/HIV education, screening and treatment. The weekly clinics not only support incarcerated individuals in making good decisions about sexual health and reduce rates of STIs, but also promotes long-term economic benefits and better maternal and child health outcomes.

Southeast Minnesota

The southeast region is bound by the Mississippi River valley along its eastern border, and is home to a great number of riverside tourist destinations, including Winona, Red Wing, Lake City (along Lake Pepin), and Wabasha. Within its boundaries live an increasingly diverse group of residents, especially along the Interstate 35 corridor that runs along a vertical seam through Rice, Steele, and Freeborn Counties. The region is home to a substantial Amish population in Fillmore County, and has seen an increase in the populations experiencing health disparities. The region is also home to the Prairie Island Indian Community, in Goodhue County.



The regions residents are scattered across a number of small population centers in a still mostly rural region. The Rochester metropolitan area is the largest in Minnesota outside the Twin Cities, and is largely responsible for Olmsted County's steady population growth over the past 10 years. Olmsted County is home to the Mayo Clinic. The Mayo Clinic's Destination Medical Center initiative will have a significant impact on the southeast region's population and economy well into the future.

The region is served by nine community health boards (CHBs) covering 11 counties: Dodge-Steele, Fillmore-Houston, Freeborn, Goodhue, Mower, Olmsted, Rice, Wabasha, Winona.

SOUTHEAST MINNESOTA DEMOGRAPHICS

Population: 961,802
Size: 6,748 square miles

ADMINISTRATION

Single-County Community Health Boards (6):
Freeborn, Goodhue, Mower, Olmsted, Rice, Winona

Single-County Human Services Boards (1):
Wabasha

Multi-County Community Health Boards (2):
Dodge-Steele, Fillmore-Houston

Multi-County Human Services Boards (1):
Faribault-Martin

PUBLIC HEALTH STAFFING

Total Staff: 358 FTEs
Per Capita Staff: 72 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $29,468,316 (↑0.3% from 2012)
Per Capita Spending: $58.92
Local Tax Levy: $7,787,279
26% of total public health funding

Challenges and Opportunities

The Southeast region has experienced tremendous organizational change within its public health organization in recent years. Five county public health departments (Goodhue, Wabasha, Winona, Mower and Fillmore) are combined health and human services departments. Additionally, eight of the nine CHBs have had a change in public health leadership since 2011. Differences between public health and health and human services in mission and approach can make

organizational change difficult—even when done for the right reasons. However, strong leadership can help leverage the strengths of each system, and can create opportunities to improve the health and welfare of the community.

An ongoing health concern in this region is the impact of mining and transporting silica sand. While it provides economic benefit to the region, residents have also raised concerns about its impact on the environment and community health. Public health has a unique voice in community conversations and policy decisions about this issue, given its roots in epidemiology, data-driven policymaking, and community health assessment. As the sand mining industry rapidly develops, performing health impact assessments will allow policies to be informed by the best available information.

Strengths and Accomplishments

This region's CHBs function autonomously but have a history of working together on regional issues, assisted by the region's uniquely strong health care system. The health care partnerships in this area are valuable and productive, as evidenced by local efforts to prepare for Ebola and commitment to using health information exchange to reduce health care cost and improve population health.

For over 10 years, Olmsted County Public Health Services has convened a group of public health, hospital and emergency preparedness organizations to address public health emergency preparedness in Olmsted County. This long-standing group became even more valuable recently with the surge in Ebola planning taking place in Minnesota and across the country. Mayo Clinic (St. Mary's Hospital) has been identified as one of the four hospitals in Minnesota ready to care for an Ebola patient. Because these organizations were able to build on established plans and relationships, the community was able to come together to assure that and response would be well coordinated.

From 2011-2013, the 11 county public health departments in the region were involved in implementing the $12.3 million federal grant (the Beacon Project) to reduce health care costs and improve population health through innovations in electronic health records across public health, health care, and schools. In its pilot phase, the project discovered 700 more children with asthma that were not known to school personnel. That discovery made coordinated efforts to manage asthma possible for not only the 1,100 students already in the pilot project, but also an additional 700 children, resulting in reduced emergency room visits and substantial health care cost savings.

A Closer Look

BEACON PROJECT EXPANSION

The partnerships created during the initial 3-year Beacon grant resulted in a level of momentum that has allowed much of the work to be sustained and, in some instances, advanced. Agencies have continued to safely, securely and economically exchange health care documents between local public health, Mayo Clinic, and Olmsted Medical Center. Systems that alert care managers within minutes of their client's being admitted or discharged from the hospital, emergency department or from being held for observation was expanded from a pilot between Olmsted County Public Health and Mayo Clinic to now include all 11 southeast region public health departments. In 2015, this expansion will also include Olmsted Medical Center. The School Nurse Portal, which provides secure access to students' asthma action plans across the 11-county region, has continued to see growth of use and an increased number of action plans, and it recently received the first Epi-Pen action plan.

While the formal governance structure was dismantled after Beacon, the technical team continues to have monthly meetings and in December of 2014, with no external funding, Beacon 2.0 was launched and a regional governance team was reinstated. This revitalized governance structure has already secured local provider funding for the school portal and has begun coordinating the implementation of region-wide direct communication. Having broad commitment

across the region to sustain the work of Beacon after the funding ended has been a testimony to the strength of this region's partnerships and to the positive results that improve the health of the citizens in the region.

ENVIRONMENTAL HEALTH

The mining and transportation of silica sand in the southeast region is a developing concern. Each county involved in mining has taken a different approach to the management of this industry. In Houston County, local elected officials recognized early on that the public health department had a significant role to play in the development of local ordinances in this regard. The county currently has a moratorium on silica sand mining while a study group crafts a draft ordinance for the county's mining operations. The Houston County public health director has been involved to assure consideration of the health implications of silica sand mining as the ordinance moves forward. MDH provided technical information that the public health director used to educate the community on its health implications, including the impact on air quality, road safety, water quality, exhaust emissions, and silicosis. Local public health involvement in this controversial and emerging issue has strengthened and broadened their role in community-wide planning and development.

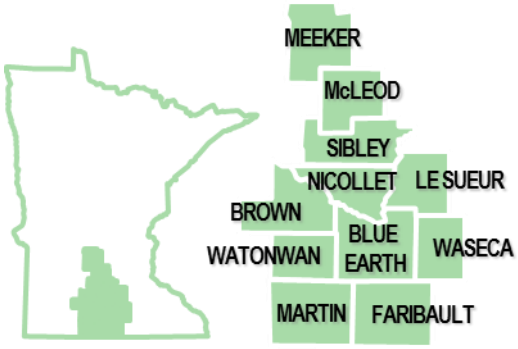
Winona County has also struggled with the significant impact of mining and transporting silica sand. While it provides economic benefit to the county and the region, residents have raised concerns about its impact on the environment and community health. The community is truly divided on this issue. Local public health departments can play an important role in convening community partners and assessing available information to protect the health of the population.

ADDRESSING HEALTH DISPARITIES

This past summer, Rice County Public Health partnered with several local groups to provide health education to Somali families with young children in the community. During an evening event that attracted over 100 Somali women and young children, public health was able to build positive cross-cultural relationships with this group. The event provided education and resources on physical activities, healthy eating and positive family relationships.

South Central Minnesota

The south central region cradles the Minnesota River valley, where it bends from heading south at the city of Mankato, and turns northward to meet the Mississippi. The region is largely rural, with population centers found in the Mankato-North Mankato metropolitan area, as well as in the smaller cities of New Ulm, Fairmont, and Hutchinson. The region's population has moved and shifted; four south central counties gained population between 2000 and 2010, while the rest experienced a loss of residents. Like most other regions, the south central region has grown more racially and ethnically diverse, especially in Le Sueur, Sibley, and Waseca counties, where the population of color grew by over 500 percent between 1990 and 2010.



In this region, public health services are administered by six CHBs, four of which represent multiple counties (Brown-Nicollet, Faribault-Martin, Le Sueur-Waseca, and Meeker-McLeod-Sibley). These governance boards provide services in each county through six standalone public health departments and five combined public health and human services agencies.

SOUTH CENTRAL MINNESOTA DEMOGRAPHICS

Population: 290,659
Size: 6,234 square miles

ADMINISTRATION

Single-County Human Services Boards (2): Blue Earth, Watonwan

Multi-County Community Health Boards (3): Brown-Nicollet, Le Sueur-Waseca, Meeker-McLeod-Sibley

PUBLIC HEALTH STAFFING

Total Staff: 178 FTEs
Per Capita Staff: 61 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $16,009,533 (↑3% from 2012)
Per Capita Spending: $55.08
Local Tax Levy: $3,695,387
23% of total public health funding

Challenges and Opportunities

The agricultural base of the local economy is in many ways, an asset both to the region and the state as a whole, but it creates unique challenges for protecting and improving the health of the population. In many areas, community providers and resources are scarce. With the exception of the Mankato area and St. Peter, specific public health services like vaccinations, breastfeeding support, or parenting education are not available to residents without an hour's drive, unless provided by the local school, human services provider, or the medical community.

Most public health departments in this region are small, with limited depth in staffing, particularly for public health services and activities not focused on home care or other direct health services, which require more staff. The result is that public health departments rely on temporary categorical grants to provide a number of services, such as health education, and when those grants disappear, the services often do as well. For example, one CHB in this region was unable to keep its only health educator after a funding source was eliminated. In addition, many employees provide

services in multiple program areas rather than specializing in one program or one type of care. As a result, there is little to no ability to take on additional responsibilities or address emerging health concerns, and there is little "bench support" to provide backup in emergency situations or when staff resign or are absent from work.

The CHBs in this region have all identified changing technology—and expectations for health information exchange—as a pressing need that will require attention in the immediate future. In addition, these CHBs report that the health needs of the population are becoming increasingly complex. The south central region may be especially challenged as its population ages, and the public health system works to match its aging client base.

Strengths and Accomplishments

The CHBs in this region are especially proud of their employees. Many have long-term employees with extensive experience and deep relationships in the communities they serve. As some staff retired, the CHBs have been able to fill positions with new employees eager to learn from colleagues. These CHBs are exemplary learning organizations, interested in and willing to try new things. One CHB, Meeker-McLeod-Sibley, is preparing for national accreditation, and would be among the first CHBs in Minnesota to achieve accreditation. This accreditation will certify that the CHB provides a broad range of high quality services that meet national standards.

Collaboration and community partnerships are a hallmark of this region. SHIP has funded a number of regional efforts, bringing together key community partners to improve population health through better nutrition, reduced obesity, and increased physical activity. The CHBs in this region have utilized SHIP to strengthen existing partnerships, build new relationships, and extend the impact of public health activities through this broad community support.

Environmental health programs are another strength of these CHBs. Four of the six CHBs have full or partial delegated agreements from MDH to license and inspect food, pools, and lodging establishments—protecting the public from illness that can result from unsanitary conditions. Nicollet County's environmental health director is seen as a leader in this region, and oversees several county programs and participates in statewide meetings to inform ongoing policy development in this area.

A Closer Look

CONTAINING INFECTIOUS DISEASE

Regardless of resources or planned public health activities, local public health departments must be able to provide local support to prevent the spread of infectious diseases, like Ebola, influenza and tuberculosis. Nicollet County provides some good examples of how local public health departments work for their residents:

- Local outbreaks of influenza are managed at the county level. After an early outbreak of Influenza-A at a local nursing home, all residents and staff were directed to take Tamiflu; resulting in a shortage across the county as flu season picked up. Responding to the needs of the local population, the health department mobilized to contact pharmacies to assess availability of the treatment, identify available solutions to manage the supply and demand, and keep the public informed through press conferences and other media.
- Containing tuberculosis (TB) requires considerable staff time and financial resources. While the vast majority of patients with active TB are located in the metro and central regions, a single case of active TB in smaller counties like these requires the ability to redirect limited resources to treat and contain the illness. Called "direct observed therapy," public health nurses provide daily treatment to an individual for six months. In Nicollet County, where they had no cases of active TB for several years, the public health department suddenly finds itself dedicating extensive staff time working with a local resident to assure compliance with treatment. This

involves navigating cultural and language differences, addressing transportation concerns, and communicating regularly with multiple parties, in addition to providing treatment. In Blue Earth County, staff provide daily treatment to a home-bound individual; requiring the public health nurse to travel to the patient's home every day. In small departments with extremely limited resources, diverting attention to unpredictable (yet urgent) health concerns draws resources away from other equally important priorities and responsibilities.

PROTECTING HEALTH THROUGH QUALITY IMPROVEMENT

CHBs in Minnesota are committed to improving the quality, efficiency and effectiveness of public health programs. In 2009, data for Brown County showed that only 51 percent of two-year-old children were fully immunized with recommended vaccinations. The local public health department engaged in a quality improvement process with local health care providers to identify causes and develop improvements, and as a result, Brown County's immunization rates have since moved from one of the lowest in the state to the highest, and many more children are protected from diseases that cause illness and even death. To do this, the public health staff used a long-standing committee to review the data and convene partners. Together, the team reviewed data collection processes to assure that the data reflected reality. Improvements related to using the Minnesota Immunization Information Connection system were made, but the immunization rate remained low. The team then looked at other ways to improve immunization rates, such as changing pre-visit protocols, providing education to families, and reaching out to families through existing program services such as family home visiting and the Women, Infants and Children nutrition program. Public health staff identified the problem and facilitated problem solving, mobilized partnerships, and conducted outreach, health education, and immunization services, while hospitals and clinics implemented changes in their protocols. In 2014, the percentage of two-year-olds with recommended immunizations was 77 percent, and the quality improvement team is still seeking ways to improve.

ADDRESSING HEALTH DISPARITIES

The Watonwan CHB—one of the smallest in the state, with just over 7 FTEs—serves a county with a large Latino population with limited English proficiency, drawn by employment opportunities at a local factory. Because of the health disparities experienced by people of color in Minnesota, local public health staff routinely develop programs and activities to improve health outcomes with this community. Recently, Watonwan staff provided a six-unit parenting class with a child development program. Twenty-nine adults and 42 children were impacted by the program, which resulted in measurable improvements in parent engagement, knowledge and empowerment. The CHB is especially proud of a recent a local event organized by two public health staff, who used personal funds to coordinate with community partners and distribute buckets with educational activities and materials for children, including items to help them learn colors, shapes, and letters. More than twenty families participated.

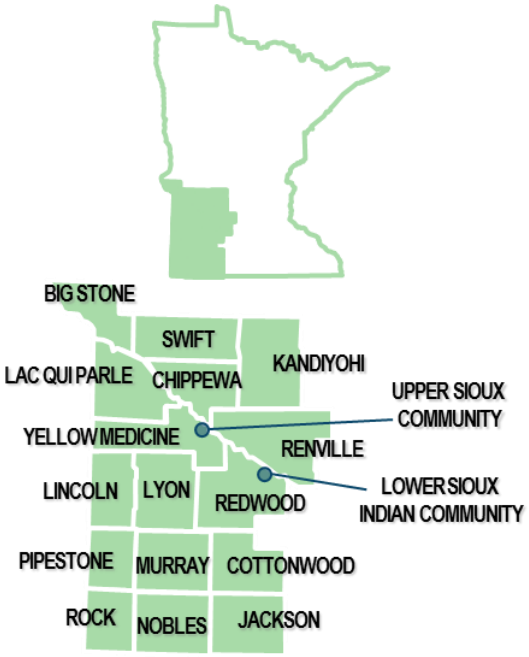
Southwest Minnesota

The southwest region is home to five CHBs serving 16 counties: Countryside (Big Stone, Swift, Lac qui Parle, Chippewa, and Yellow Medicine counties), Des Moines Valley (Cottonwood and Jackson counties), Kandiyohi-Renville, Nobles, and Southwest Health and Human Services (Lincoln, Lyon, Murray, Pipestone, Redwood, and Rock counties).

Nobles County operates as one of twelve single-county human services boards in Minnesota, having begun so after its split from Rock County in 2012.

About half of the counties are organized with standalone public health departments, and the rest are organized with social services alongside public health, as a part of a health and human services agency.

This region has some of the largest (in number of counties) CHBs in the state.



SOUTHWEST MINNESOTA DEMOGRAPHICS

Population: 297,092
Size: 10,966 square miles

ADMINISTRATION

Single-County Human Services Boards (1): Nobles

Multi-County Community Health Boards (4): Countryside, Des Moines Valley, Kandiyohi-Renville, SWHHS

PUBLIC HEALTH STAFFING

Total Staff: 132 FTEs
Per Capita Staff: 60 FTEs

PUBLIC HEALTH EXPENDITURES

Total Spending: $12,416,936 (↑1% from 2012)
Per Capita Spending: $56.60
Local Tax Levy: $3,793,096
25% of total public health funding

Challenges and Opportunities

The face of southwest Minnesota is changing rapidly. Twelve of the sixteen counties in the region lost population between 1999 and 2012. However, between 1990 and 2012, the percentage of the population of color has increased in every county except one. These new residents are drawn in part by the economic prospects offered by the agriculture and animal processing industries in the region. For example, the major processing plant in Nobles County employs 2100 people—of whom 24 percent are Asian, 20 percent African American and 39 percent Hispanic/Latino. This makes addressing the health needs of this diverse community challenging. This population change also leads to more robust and diverse communities.

Several significant CHB mergers and changes have occurred within the past few years in the region. In 2011, the CHB formerly known as Lincoln-Lyon-Murray-Pipestone combined into SWHHS (Southwest Health and Human Services), merging their public health and human services departments. Rock County joined Southwest HHS in 2011, and Redwood County joined in 2013, making SWHHS the first six-county CHB in the state. Other changes include the

formation of the Kandiyohi-Renville CHB in 2013 following the dissolution of Redwood-Renville CHB. These dramatic governance and organizational changes necessitate cross-jurisdictional work, which moves the region in the direction of creating economies of scale and efficiencies in more sparsely populated areas.

Strengths and Accomplishments

Southwest public health agencies are highly respected by the communities they serve. The region has worked collaboratively on a number of projects—not only among public health agencies, but with health care and community organizations serving the region. For example:

- Supporting Hands Nurse-Family Partnership (NFP) has been working to improve the lives of first time mothers in west central and southwest Minnesota since January 2008. In 2007, a unique agreement was made by the county commissioners and public health directors of 12 counties to implement the nationally recognized program. This partnership now involves five CHBs covering 20 counties. NFP is an evidence-based, community health program that helps improve the lives of vulnerable mothers pregnant with their first child. Each mother is partnered with a registered nurse early in her pregnancy and receives ongoing home visits that continue through her child's second birthday. Nurses work with the mothers to improve pregnancy outcomes, improve child health and development and improve the economic self-sufficiency of the family.
- Southern Prairie Community Care is a collaboration of 12 counties in the southwest region working with community partners on innovative strategies to improve the health of people in the region. The work is focused on population health, developing a regional electronic medical record to support care delivery, and implementing integrated collaborative community care practices that respond to individual patient needs to improve their health. One project will focus on diabetes care to demonstrate how public health, health care and communities can create profound change in population health. Another regional project is an upcoming survey of adult health in the region. All CHBs in the southwest region are participating. This survey will take place in 2015 and will focus on the health behaviors of adults in the region, including physical activity, nutrition, tobacco and alcohol use, mental health, and access to care. The results will be used to develop and implement collaborative prevention programs for the region. This type of assessment provides more robust, locally relevant data than state level data sources are able to provide.

A Closer Look

IMPROVING HEALTH EQUITY

Given the increasing diversity of the area, health equity has become a new focus for many CHBs in the region, and CHBs are implementing several approaches to assure that everyone has equal opportunity for health. For example, Des Moines Valley Health and Human Services (Cottonwood and Jackson counties) and Nobles County partner with a large meat processing plant to increase healthy food options in the plant cafeteria. The cafeteria began labeling items with green, yellow or red to indicate a choice that should be made often, occasionally, or in moderation. The Color Matters system was introduced to the staff at a food sampling event, where they were provided healthy snacks and shared information about the traffic light labeling.

Nobles County Community Health Services also worked with this same processing plant to assure that employees—mostly new immigrants—have access to immunizations and culturally appropriate health care. Nobles is working with Sanford Worthington Medical Center and local clinics to assist with refugee and immigrant health issues, and have built community partnerships with Our Lady of Guadalupe Free Clinic and St. Mary's Catholic Church to reach populations without insurance. The local public health department has hired its first Community Health Worker this year—a tri-

lingual outreach worker—to increase their ability to reach isolated populations and reduce health care costs through improved preventive care.

EXPANDING ACCESS TO DENTAL HEALTH SERVICES

The SWHHS dental varnishing program began in 2012. Health Services Program Aides attempt to be present whenever a resident comes in for an appointment with the Women, Infant and Children (WIC) nutrition program to offer these dental services to children. These aides focus on very young children, varnishing their teeth and providing education on good dental habits. The aides can also make a referral to a local dentist if needed, and provide a list of dentists who will take Medical Assistance. The relationship between oral disease and overall general health is significant and often overlooked; it is the role of dental public health to prevent and control dental diseases and promote dental health through organized community efforts.

IMPROVING ENVIRONMENTAL HEALTH SERVICES

Kandiyohi and Renville counties joined to form a new CHB on January 1, 2013. After this governance change was complete, they looked at their respective programs to identify opportunities to improve efficiency and effectiveness. One effort was to integrate their environmental health licensing functions to meet standards and maintain an ongoing environmental health delegation agreement with the MDH. The new CHB strongly desired to keep the licensing local and to make the environmental health program stronger and of better quality for both the citizens and licensed establishment they serve. With support from an MDH Shared Services Learning Collaborative and technical assistance from an MDH regional public health nurse consultant, the CHB undertook a quality improvement project to refine policies and procedures, assure integration of program administration and improve communication and collaboration between the two programs. The residents and establishments of Kandiyohi and Renville counties are now served by a unified environmental health program with consistent policies and procedures applied in both counties.

At a Glance: Public Health in Minnesota by the Numbers

	Northeast	**Northwest**	**West Central**	**Central**
Population	326,489	203,681	191,445[B]	657,945
Size	18,221 mi^2 [A]	16,013 mi^2	6,727 mi^2	11,832 mi^2
Counties	Aitkin Carlton Cook Itasca Koochiching Lake St. Louis	Beltrami Clearwater Hubbard Kittson Lake of the Woods Mahnomen Marshall Norman Pennington Polk Red Lake Roseau	Becker Clay Douglas Grant Otter Tail Pope Stevens Traverse Wilkin	Benton Cass Chisago Crow Wing Isanti Kanabec Mille Lacs Morrison Pine Sherburne Stearns Todd Wadena Wright
Tribes	Bois Forte Band of Chippewa Grand Portage Chippewa Fond du Lac Band of Lake Superior Chippewa [part of] Leech Lake Band of Ojibwe	Red Lake Band of Chippewa White Earth Nation [part of] Leech Lake Band of Ojibwe	None	[majority of] Leech Lake Band of Ojibwe

A Highest/Largest in Minnesota **B** Lowest/Smallest in Minnesota

At a Glance: Public Health in Minnesota by the Numbers	**Northeast**	**Northwest**	**West Central**	**Central**
Standalone Public Health Departments	Koochiching	Clearwater Intercounty[6] Norman-Mahnomen Polk	Clay Douglas Pope Otter Tail Stevens-Traverse-Grant Wilkin	Isanti Kanabec Morrison Wadena
Combined Health and Human Services Agencies	Aitkin Carlton Cook Itasca Lake St. Louis	Beltrami	Becker	Benton Cass Chisago Crow Wing Mille Lacs Pine Sherburne Stearns Todd Wright
Health Care Contracts for Public Health Activities	None	Hubbard Kittson Lake of the Woods Marshall Roseau	None	None

2013 Total Expenditures (Increase from 2012 Total)	$12,548,426 (↑8.5%)	$11,306,476 (↑5.2%)	$16,238,162 (↑11.9%)[A]	$27,030,581 (↑1.27%)
2013 Local Tax Levy (% of Total PH Funding)	$2,766,172 (22% of PH funds)	$1,210,596 (11% of PH funds)[B]	$2,355,987 (15% of PH funds)	$7,089,892 (29% of PH funds)
2013 Per Capita Expenditures	$38.43	$55.51	$84.82[A]	$36.74[B]
2013 Total Staffing	169	139	173	308
2013 Per Capita Staffing	52	68	90[A]	42

A Highest/Largest in Minnesota **B** Lowest/Smallest in Minnesota

[6] Pennington, Red Lake

At a Glance: Public Health in Minnesota by the Numbers

	Metro	**Southeast**	**South Central**	**Southwest**
Population	3,063,397[A]	961,802	290,659	297,092
Size	2,811 mi^2 [B]	6,748 mi^2	6,234 mi^2	10,966 mi^2
Counties	Anoka Carver Dakota Hennepin Ramsey Scott Washington	Dodge Fillmore Freeborn Goodhue Houston Mower Olmsted Rice Steele Wabasha Winona	Blue Earth Brown Faribault Le Sueur McLeod Martin Meeker Nicollet Sibley Waseca Watonwan	Big Stone Chippewa Cottonwood Kandiyohi Jackson Lac qui Parle Lincoln Lyon Murray Nobles Pipestone Redwood Renville Rock Swift Yellow Medicine
Tribes	Shakopee Mdewakanton Sioux Community	Prairie Island Indian Community	None	Lower Sioux Indian Community Upper Sioux Community

A Highest/Largest in Minnesota **B** Lowest/Smallest in Minnesota

At a Glance: Public Health in Minnesota by the Numbers	**Metro**	**Southeast**	**South Central**	**Southwest**
Standalone Public Health Departments	Bloomington Carver Edina Minneapolis Richfield St. Paul-Ramsey Washington	Dodge-Steele Fillmore Freeborn Houston Olmsted Rice	Brown Le Sueur Meeker McLeod Nicollet Waseca	Countryside[7] Renville
Combined Health and Human Services Agencies	Anoka Dakota Hennepin Scott	Faribault-Martin Goodhue Mower Wabasha Winona	Blue Earth Sibley Watonwan	Des Moines Valley[8] Kandiyohi Nobles SWHHS[9]
Health Care Contracts for Public Health Activities	None	None	None	None

2013 Total Expenditures (Increase from 2012 Total)	$187,667,104[A] (↑4.0%)	$29,468,316 (↑0.3%)[B]	$16,009,533 (↑3.3%)	$12,416,936[B] (↑0.9%)
2013 Local Tax Levy (% of Total PH Funding)	$70,537,783[A] (38% of PH funds)[A]	$7,787,279 (26% of PH funds)	$3,695,387 (23% of PH funds)	$3,793,096 (25% of PH funds)
2013 Per Capita Expenditures	$53.24	$58.92	$55.08	$56.60
2013 Total Staffing	1179[A]	358	178	132[B]
2013 Per Capita Staffing	33[B]	72	61	60

A Highest/Largest in Minnesota **B** Lowest/Smallest in Minnesota

[7] Big Stone, Chippewa, Lac qui Parle, Swift, Yellow Medicine
[8] Cottonwood, Jackson
[9] Lincoln, Lyon, Murray, Pipestone, Redwood, Rock