



Office of Performance Improvement  
Minnesota Department of Health  
PO Box 64975  
Saint Paul, MN 55164-0975  
651-201-3880  
[www.health.state.mn.us/divs/cfh/ophp](http://www.health.state.mn.us/divs/cfh/ophp)

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# **Building a Solid Foundation for Health**

**Minnesota Department of Health**

***2013 Report to the Minnesota Legislature on  
Public Health System Development***

**January 2013**

# **Building a Solid Foundation for Health: A Report on Public Health System Development**

2013 Report to the Minnesota Legislature

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## **For more information, contact:**

Office of Performance Improvement  
Minnesota Department of Health  
PO Box 64975  
St. Paul, MN 55164-0975

Phone: 651-201-3880  
Fax: 651-201-5099  
TTY: 651-201-5797  
Email: [health.ophp@state.mn.us](mailto:health.ophp@state.mn.us)

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*Protecting, maintaining and improving the health of all Minnesotans*

January 2013

Dear Colleague:

We are pleased to share with you ***Building a Solid Foundation: A Report on Public Health System Development for 2013***. The report was prepared to comply with Minn. Stat. § 62Q.33, which requires a biennial report on local public health system development.

Minnesota's public health system functions as a partnership between state and local governments, and is designed to ensure that the public's health and safety are protected statewide while providing local governments with the flexibility needed to identify and address local needs. Within brief regional summaries, this report highlights the strengths and accomplishments of the state's public health system, as well as the challenges and opportunities facing system partners.

In a time of constrained resources, community health boards need to continue to build capacity to address increasingly complex public health issues. Many regions use similar approaches to maximize resources, including cross-jurisdictional sharing to achieve economies of scale, increasing efficiency, focusing on quality improvement, developing the public health workforce and leadership, and emphasizing the importance of a strong public health infrastructure.

This report explores factors that threaten system advancement, and highlights local, regional, and state efforts through stories, examples, and data, to enhance agility and assure a resilient, sustainable, and successful public health system into the future.

If you have any questions about this report, please contact Debra Burns at 651-201-3880.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward P. Ehlinger". The signature is fluid and cursive, with a long horizontal stroke at the end.

Edward P. Ehlinger, MD, MSPH  
Commissioner of Health  
PO Box 64975  
St. Paul, MN 55164-0975

# Minnesota's State and Local Public Health System

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Minnesotans widely share the common goals of healthy people, health communities, and good health care, and a number of individuals and organizations play a role in moving the state toward those goals.

This report describes how the Minnesota Department of Health (MDH) and 50 locally-governed community health boards contribute to achieving these goals by working together to protect and improve health. It discusses the public health partnership's strengths, as well as issues and challenges facing the public health system. It also includes brief vignettes of each region in Minnesota,<sup>1</sup> which highlight unique attributes, successes, and challenges at the local level. The material and issues identified in these sections were developed through discussions with the State Community Health Services Advisory Committee and with local health department administrators and directors.

## 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 that the public's health and safety are protected statewide while 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 statutes also require the commissioner to provide administrative and program support to local public health.
- Community health boards (CHBs) are statutorily required to establish local public health priorities based on an assessment of community health needs and assets; to determine the mechanisms by which the CHB will address those priorities; to work to achieve statewide health outcomes developed in partnership with MDH; and to address infectious disease and certain public health nuisances.

### *Complementary Roles that Build on Strengths*

MDH and local health departments 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. It also provides data that local health departments need to carry out their work, and is responsible for overall public health policy development.
- Local health department strengths include deep connections within communities; an understanding of local conditions, needs, and resources; and trained staff to carry out public health activities so that all

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<sup>1</sup> These regions correspond with those used by the State Community Health Services Advisory Committee (SCHSAC).

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

### ***State Community Health Services Advisory Committee: Ongoing 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 50 CHBs; it 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 public health issues. After having been established nearly four decades ago, SCHSAC remains a vital and important way to ensure MDH and CHBs effectively coordinate their activities.

### ***Dedicated MDH Staff Resources to Support Local Health Departments***

MDH public health nurse consultants, epidemiologists and preparedness coordinators are deployed across the state, and provide technical assistance and support to local health departments within their assigned geographic regions. Those state employees live and work in the regions they serve, understand local context, and provide expertise that connects MDH with local health departments. These MDH employees provide service and expertise which is not otherwise practical or cost-effective for an individual local health department to maintain.

### ***Local Governments Enabled to Work across Jurisdictional Boundaries***

Since the existing state public health system was created in 1976, local governments have been granted the authority to work across jurisdictional boundaries to address public health issues, by forming multi-county CHBs. Today, almost two-thirds of Minnesota counties have partnered to create larger, multi-county CHBs—public health jurisdictions that have the potential to extend scarce resources and allow for economies of scale. Many other regional, multi-county, or city-based shared service arrangements are in place to address specific public health issues in a cost-effective and efficient way.

### ***State Block Grant to Support Local Public Health***

Approximately \$20 million in flexible state funding supports public health in communities around the state. This flexible funding can be used to fulfill public health responsibilities and support local priorities identified during community assessments.

## **Issues and Challenges Facing the Local Public Health System**

Through recent discussions, SCHSAC members and local public health administrators identified the following issues and challenges; these issues and challenges were reinforced during development of the regional summaries that follow. Some of the issues and challenges facing the state's public health system are:

- An aging public health workforce, which leads to leadership turnover
- Changing community demographics, including declining populations in many rural counties
- Organizational changes and/or reorganizations of many local health departments (e.g., creating health and human service agencies by merging public health departments with social services departments)

- Capacity and resource disparities between a number of small and large jurisdictions
- Reliance on multiple, categorical funding streams with time-consuming administrative requirements and unpredictable funding.
- Large-scale budgetary pressures, which require new strategies to preserve the public health protection and prevention currently enjoyed by state residents

Nevertheless, SCHSAC and MDH recognize opportunities within these challenges. In the 2009 edition of this report, MDH noted that the [looming] economic crisis “would force people to think in new ways; increase willingness to change; and provide opportunities for improvement.” During these challenging times, policymakers and local public health leaders have served Minnesota well in their openness to seeking new opportunities.

The public health system requires sustained action to enhance its agility and ensure its future success. These actions should be directed toward:

- Clear roles and effective communication about state and local public health responsibilities to protect and improve health
- Strong local leadership across the state
- Sufficient, stable, and flexible funding
- Streamlined administrative processes
- A ready and capable workforce from border to border
- Continued MDH support for local health departments through regional staff
- Supportive, effective, and efficient governing and organizational structures
- A culture of quality improvement and performance management
- The ability to maximize resources through cross-jurisdictional sharing, to achieve economies of scale, gain efficiency, and increase the capacity of local health departments

MDH and local public health are actively working together on a number of these fronts.

- In 2012, representatives from local health departments, SCHSAC, and MDH held two working sessions to review the Local Public Health Act. At the close of those working sessions, participants reached a consensus on several high-impact issues, and recommended pursuing a statutory course of action in 2014.
- Numerous CHBs are working to strengthen quality improvement and improve performance on national public health accreditation standards, with support from MDH regional staff.
- MDH was awarded a grant to develop a public health “Shared Services Learning Community,” and is using the funds to assist CHBs accommodating 26 counties and three cities in exploring or implementing shared services arrangements, in order to strengthen public health capacity and maximize the use of resources.
- Several CHBs are working to develop staff capacity to perform core public health competencies needed at all health departments.

Minnesota’s public health system is facing many challenges, and working actively to address them. As one participant in the working sessions noted, the action is taken in the context of the state’s solid, existing foundation for public health: “We are setting a course for the future based in the strong foundation we’ve built.”

# Northeast Region

The Northeast region is the largest in the state. The region's residents are centered around Duluth, scattered along the north shore of Lake Superior—a jewel in the state's geography—and spread throughout the rest of the region along its numerous glacially sculpted lakes and rivers. The region is home to the Boundary Waters Canoe Area (or BWCA, as its devotees affectionately call it), the Superior Hiking Trail and Gitchi-Gami Bike Trail, and the Sawtooth Mountains—Minnesota's only mountain range.

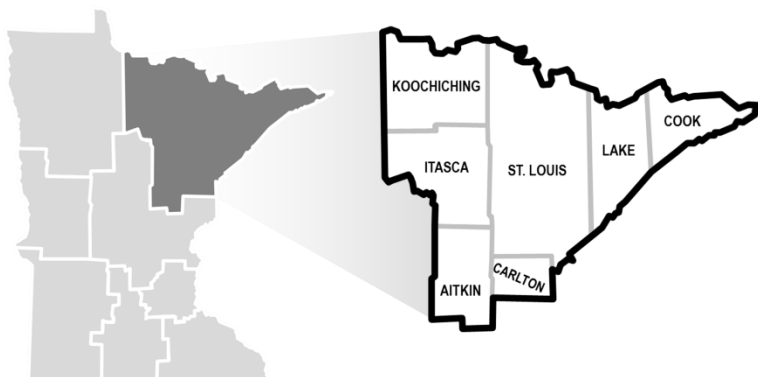
The region's ethnicity has been traditionally European, but today, the region is slightly more diverse—nearly 7 percent of the region's residents are people of color. The region's American Indian residents have coalesced into four tribes: The Fond du Lac Band of Lake Superior Chippewa, the Grand Portage Chippewa, the Bois Forte Band of Chippewa, and the Leech Lake Band of Ojibwe, which also spreads into the Central and West Central regions.

Two community health boards (CHBs) serve the Northeast region. The Carlton-Cook-Lake-St. Louis CHB employs a full-time Community Health Services (CHS) Administrator. In the Aitkin-Itasca-

Koochiching CHB, the CHS Administrator position rotates annually among the counties' three directors. Six of the region's seven counties operate as combined health and human services agencies;<sup>3</sup> Koochiching is the only county in the region with a stand-alone public health department.

## Challenges and Opportunities

Northeast residents are challenged daily by their region's geography, burdened by the time and distance required to travel from city to city for public health services in a largely rural region. Public health leaders in the Northeast are particularly interested in how to provide services in the most efficient and cost-effective way, while still



### Demographics

- 326,130 residents<sup>2</sup>
- 18,221 square miles

### Funding and Staff (2011)

- Expenditures: \$12.7 million (decrease from \$13.2 million in 2010)
- Local Tax Levy: 21 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$38.85 (statewide average: \$53.50)
- 142 public health FTEs; 44 FTEs per 100,000 residents

### By the Numbers (2011)

- 6,307 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 17 latent cases of TB monitored
- 40 children vaccinated for pertussis (whooping cough) in an isolated, rural community, in response to an outbreak

### Administration

- 7 counties
- 2 community health boards (both multi-county)

<sup>2</sup> Demographic data in this report come from 2011 American Community Survey estimates, US Census Bureau.

<sup>3</sup> Aitkin, Carlton, Cook, Itasca, Lake, St. Louis

reaching all communities. Many public health workers in the region, particularly directors of combined health and human services departments, are examining cross-jurisdictional sharing (or working across county lines) as a way to meet the needs of the population, given economic and geographic constraints.

## **Strengths and Accomplishments**

The Northeast region can be defined by its longstanding willingness to seek regional solutions. For example, beginning in 1995, Northeast counties (along with Pine County to the south and Douglas County, WI) jointly created the Bridge to Health Survey, which collects population-based health status data on adult residents, since the region's sample size in statewide surveys is too small to allow for county or community-level analysis. The Bridge to Health Survey fills the gap left by statewide surveys by augmenting existing data to provide a more complete picture of the region's current health status. The survey has repeated every five years since its inception. While the survey would not be possible without the financial support of many health care-related partners throughout the region, Northeast CHBs have played a key role in convening partners, developing survey questions, and promoting use of data gathered. This data has helped support several successful grant applications for additional funding from the State of Minnesota and the U.S. Health Services and Resources Administration, and is used across health care sectors in the region, from local health departments to health care systems and hospitals.

Northeast communities also prioritize residents' oral health. In order to create an "Oral Health Zone," public health staff from Cook and Lake Counties (with support from the Robert Wood Johnson Foundation) convened a diverse group of stakeholders, including dentists, physicians, educators, and community service organizations. Together, this group worked to better understand the region's oral health problems, identify potential solutions, and develop an action plan. The counties' public health staff then facilitated the implementation of a communications plan, the expansion of school dental hygiene services in one department, the increase of fluoride water testing, an assessment of access to dental care among county residents, and training nurse staff at a Lake County clinic to apply dental varnish (a protective cover of fluoride normally received at a dental visit). In 2012, over 200 Cook County children in Kindergarten through fifth grade received free oral health screening; during the fall of 2012, 38 more children received care at a "Free Day at the Dentist," sponsored by the Cook County Oral Health Task Force in partnership with a local dentist.

## **A Closer Look**

Early intervention programs like Help Me Grow and the Follow Along Program can make a critical difference in the life of a child and his/her family. These programs provide evidence-based tools to assess and monitor early childhood development and provide appropriate interventions to support healthy children and families.

In Aitkin County, all newborns are eligible for public health home visiting, which serves as an entry point for families to receive additional services if early signs of developmental delays are identified. For example: A woman enrolled in WIC was offered a home visit after the birth of her son, and she also enrolled him in the Follow Along Program after the visits began. Through the Follow Along Program, her son's public health nurse determined that the boy had developmental concerns in multiple domains, and referred him to Help Me Grow. He was quickly assessed by the school, and is currently enrolled in Early Childhood Special Education (ECSE) with weekly speech therapy visits in the home to help prepare him for the transition to school in early 2013, where he can access additional services. An early intervention—when the boy was two years old—will have a significant impact on his long-term health and academic success.



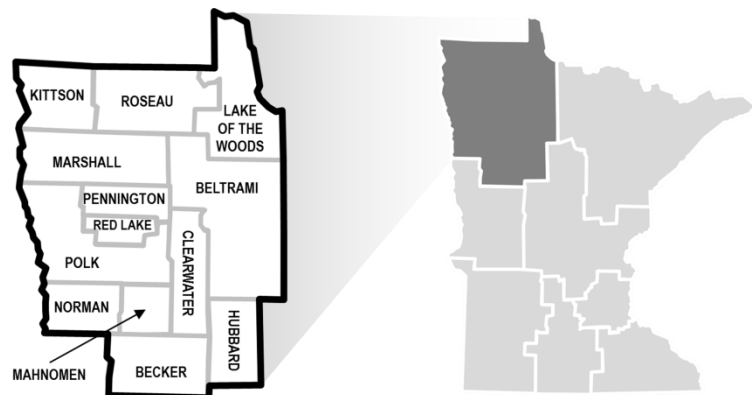
# Northwest Region

The Northwest region of Minnesota is the second-largest in the state, and is home to the Mississippi headwaters, the Red River valley, and the Northwest Angle. The region's population is widespread, and centered in the East Grand Forks and Bemidji areas. A number of the region's counties have experienced population loss since 2000: 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.

The Northwest counties are served by four community health boards (CHBs). Becker is a single-county CHB; the others 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 are organized with standalone public health departments,<sup>4</sup> two counties function as health and human services agencies,<sup>5</sup> and five counties contract with a hospital or health organization for public health activities—an arrangement unique to this region.<sup>6</sup> While the region's per capita staffing ratio is comparable to other parts of the state, staff must juggle multiple responsibilities and areas of expertise, and also travel considerably further and at greater expense to serve the many remote areas of their jurisdictions.

## 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. In addition, the



### Demographics

- 202,655 residents
- 16,013 square miles

### Funding and Staff (2011)

- Expenditures: \$10.8 million (decrease from \$11.1 million in 2010)
- Local Tax Levy: 12 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$53.30 (statewide average: \$53.50)
- 150 public health FTEs; 73 FTEs per 100,000 residents

### By the Numbers (2011)

- 2,345 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 16 latent cases of TB monitored

### Administration

- 13 counties
- 4 community health boards (3 multi-county, 1 single-county)

<sup>4</sup> Clearwater, Intercounty (Pennington, Red Lake), Norman-Mahnomen, and Polk

<sup>5</sup> Becker and Beltrami

<sup>6</sup> Hubbard, Kittson, Lake of the Woods, Marshall, and Roseau

region has sizable populations living in poverty, especially in Beltrami and Mahnommen Counties, which experience significant health disparities—particularly in the American Indian community.

Given its challenges, the region can be viewed as a “canary in the coal mine” for the rest of Minnesota’s public health system. The Northwest region faces the same challenges as other regions, but the impact of those challenges is more readily apparent in the Northwest as the region’s resources are scarce to start. The public health staff itself is aging, leading to staff and leadership turnover, difficulty in attracting and keeping new staff, difficulty finding public health nurses with prior public health experience, and difficulty in securing funding due to the existing low staff capacity. In some health departments, if one staff person is out sick, the public health director must stand in to provide direct patient services like foot care, immunizations, and home visiting. The region’s ability to address environmental health concerns is also challenged by staff capacity. Most county governments do not employ sanitarians, nor any staff in environmental health, and rely on the limited capacity and knowledge of the local public health departments.

Most local health departments and CHBs in this region also suffer from underinvestment in public health, particularly in the local tax levy, and the Northwest region includes the only counties in the state that provide no local funds toward public health. In the late 1980s, in an effort to find a creative solution to the region’s limited financial resources, several counties opted to contract with county hospitals to provide public health services. At the time, this arrangement was appealing to the region: it saved infrastructure costs, it helped to support staff, and it was convenient for their communities. Over time, however, this arrangement has led to less engagement between local health departments and county elected officials, which weakens the public health system.

## **Strengths and Accomplishments**

In the face of the above challenges, Northwest public health leadership and staff use their deep knowledge of their communities and connections to leverage meager assets. In this region, public health has learned to specialize in emergency preparedness and response, as a reaction to flooding (particularly in the Red River valley), rabies (in one particular case, from puppies), anthrax (which naturally occurs in the soil and is consumed by livestock), and evacuating and sheltering residents after fires and ice storms. Beltrami County public health staff have developed a close relationship with Bemidji State University, and in particular with the university’s emergency manager, to further coordinate emergency planning and response.

## **A Closer Look**

In October 2012, the Kittson County emergency preparedness committee was in the midst of planning a disaster response exercise when an actual disaster occurred: due to the extreme summer drought, a wildfire threatened the city of Karlstad and the surrounding rural area. The emergency preparedness committee, which included the Kittson County Public Health Director and her staff, worked with local response agencies in assisting evacuation of a nursing home, an assisted living facility, and the local school—more than 200 students were safely evacuated within 10 minutes, as children were loaded onto school buses or personally transported by staff. The department employed a system to send text messages and emails to parents, which updated the parents at every step of the evacuation process. The school nurse, a public health nurse employed by the local health department, provided communication and coordination between school and county staff. The health department also coordinated with volunteer responders from the Salvation Army, and helped to arrange a shelter in nearby Hallock for displaced fire victims.

# West Central Region

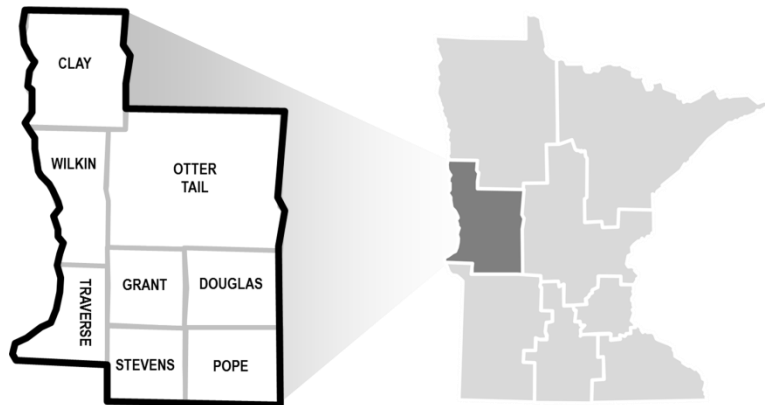
The West Central Region is known for the numerous rivers and lakes within its glacially sculpted hills and valleys. A majority of its population is centered in the Fargo-Moorhead metropolitan area (which spills into North Dakota), Alexandria, and Fergus Falls. Thanks to the myriad of lakes in the region, 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, however, the region’s population is shifting and changing. Between 2000 and 2010, six of the eight counties in the West Central region lost population.<sup>7</sup> Family farms are giving way to larger, more industrial farms, and rural areas are growing more sparsely populated as residents move toward cities and population centers.

This region is served by three community health boards (CHBs): Clay-Wilkin, Horizon (consisting of Douglas, Grant, Pope, Stevens, and Traverse Counties), and Otter Tail.

## Challenges and Opportunities

The recession of the late 2000s created significant budget constraints at the local government level, as it did at the state and federal level. In the West Central region, budget pressures have been exacerbated by population loss (noted above) in nearly every county during the previous decade, which leaves a smaller tax base to support county services. However, these constraints have led public health staff to think creatively and plan regional services to maximize funding. The region’s leadership proactively works together across jurisdictions to continue to develop a strong and sustainable public health system, which will meet community need effectively and efficiently in the present and the future.



### Demographics

- 189,879 residents
- 6,727 square miles

### Funding and Staff (2011)

- Expenditures: \$14.6 million (decrease from \$16 million in 2010)
- Local Tax Levy: 15 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$77.13 (statewide average: \$53.50)
- 171 public health FTEs; 90 FTEs per 100,000 residents (highest ratio in Minnesota)

### By the Numbers (2011)

- 2,529 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 71 latent cases of TB monitored
- Public health staff studying best practices in obesity prevention in rural areas, through a grant from the University of Minnesota

### Administration

- 8 counties
- 3 community health boards (2 multi-county, 1 single-county)

<sup>7</sup> Douglas and Otter Tail Counties did not lose population during this time period.

## Strengths and Accomplishments

The West Central region has committed to the cross-jurisdictional sharing of public health programs and services. Public health leaders in the region's counties have committed to a true regional approach to make the best use of increasingly scarce funding. This regional approach is evident in a number of programs, from Statewide Health Improvement Program (SHIP) initiatives targeting healthy lifestyle changes to evidence-based family home visiting programs that support healthy development in early childhood.

The Complete Streets initiative, which promotes policies that enable safe access for pedestrians, bicyclists, motorists, and transit riders of all ages and abilities, is flourishing in the West Central region. Over one-fourth of Minnesota's Complete Streets policies have been implemented in the West Central region. Indicative of the region's commitment to all transportation users, the city of Battle Lake in Otter Tail County—population 875—is the smallest city in the U.S. known to have a Complete Streets policy in place.

Five years ago, the West Central region implemented the Nurse-Family Partnership, a high-quality, evidence-based home visiting program. Today, 18 counties in the West Central and South Central regions participate together under single joint powers agreements or cross-jurisdictional staffing agreements, to serve clients in all of the West Central counties, in addition to the remaining participating counties in the Northwest,<sup>8</sup> Southwest,<sup>9</sup> and South Central<sup>10</sup> regions.

Public health departments in this region also work to prioritize oral health. Nearly all of the region's counties participate in the Early Childhood Dental Network, which works to increase awareness and access to dental care for the region's children, especially those without insurance; counties in the Horizon CHB are also a part of the Elderly Dental Network Collaborative. Local health departments also provide dental varnishing services to all WIC clients, and conduct outreach through MDH Child & Teen Checkup programs.

## A Closer Look

West Central counties (along with Becker County, to the north) started the Golden Start Initiative, which educates patients prenatally about the benefits of breastfeeding, and promotes timely follow-up and support for new mothers. Originating in the Otter Tail County WIC program in 2008, the initiative has been replicated in other counties, largely using SHIP funding. In that year, the Golden Start Initiative provided evidence-based education to over 300 health care providers. In addition, roughly 200 clinicians have participated in three-day trainings provided by an internationally recognized lactation education organization, and 14 nurses have participated in a five-day train-the-trainer course to implement educational opportunities in their own workplaces.

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<sup>8</sup> Becker, Mahnomen, Norman

<sup>9</sup> Big Stone, Pipestone, Redwood, Renville, Yellow Medicine

<sup>10</sup> McLeod, Meeker

# Southwest Region

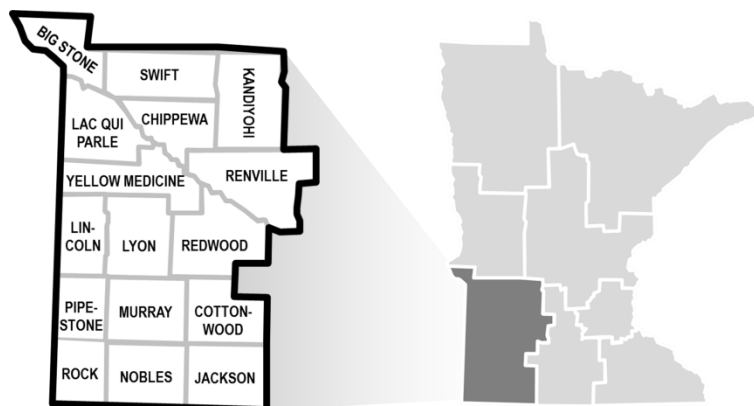
Known for its pioneer spirit, rolling prairie, and treasured pipestone, the Southwest region is home to what many loyal readers know as “The Little House on the Prairie,” where Laura Ingalls Wilder and thousands of other settlers claimed land in government-allocated parcels during the 19<sup>th</sup> century.

Today, the face of the Southwest region is changing rapidly. All but three counties in the Southwest region lost population between 2000 and 2010; Kandiyohi, Lyon, and Nobles each experienced population gains of less than 5 percent. The region’s population is concentrated in and around the cities of Marshall, Willmar, and Worthington. The Southwest region also surrounds the Upper Sioux Community and Lower Sioux Indian Community. Between 1990 and 2010, the population of color increased by over 500 percent in Chippewa, Cottonwood, Lyon, Murray, and Nobles Counties. These new residents are drawn in part by the economic prospects offered by the agriculture and animal processing industries in the region.

The Southwest region is home to five community health boards (CHBs) serving 16 counties: Cottonwood-Jackson, Countryside (Big Stone, Swift, Lac qui Parle, Chippewa, and Yellow Medicine Counties), Kandiyohi-Renville, Nobles, and Southwest Health and Human Services (Lincoln, Lyon, Murray, Pipestone, Redwood, and Rock Counties). Half of the counties are organized with stand-alone public health departments,<sup>11</sup> and half are organized with social services as a part of a health and human services agency.<sup>12</sup>

## Challenges and Opportunities

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 reformed as Southwest Health and Human Services (HHS), and merged not only their public health departments, but also their human services departments. Rock



### Demographics

- 221,248 residents
- 10,966 square miles

### Funding and Staff (2011)

- Expenditures: \$13.2 million (decrease from \$13.9 million in 2010)
- Local Tax Levy: 24 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$59.86 (statewide average: \$53.50)
- 162 public health FTEs; 73 FTEs per 100,000 residents

### By the Numbers (2011)

- 3,757 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 229 latent cases of TB monitored

### Administration

- 16 counties
- 5 community health boards (4 multi-county, 1 single-county)

<sup>11</sup> Cottonwood-Jackson, Countryside (Big Stone, Swift, Lac qui Parle, Chippewa, Yellow Medicine), Renville

<sup>12</sup> Kandiyohi, Nobles, Southwest Health and Human Services (Lincoln, Lyon, Murray, Pipestone, Redwood, Rock)

County joined Southwest HHS in 2011, and Redwood County joined in 2013, making Southwest HHS the first six-county CHB in the state. Other recent changes include the formation of the Kandiyohi-Renville CHB in 2013. 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. Public health staff and leadership understand community needs and priorities, and creatively tailor services to meet those needs. Their approach matches the frontier spirit of the area—rather than attempting to make clients “fit the system,” public health departments “meet people where they are,” and provide programs and services most appropriate for the individual. This fosters further trust in public health agencies, which spurs greater community engagement, which in turn increases the effectiveness of programs and services.

## **A Closer Look**

In Cottonwood, Jackson, and Redwood Counties, the “Start Noticing” coalition works to eliminate the harmful effects of tobacco use and exposure, particularly among youth. The coalition facilitates community engagement, educates community groups, and promotes effective policies to achieve smoke-free foster homes, day care environments, and multi-unit housing. Start Noticing secured partnerships with 22 retailers committing to voluntarily remove interior and exterior tobacco ads at or below three feet (the average eye-level of a child); led a successful campaign to pass an updated tobacco ordinance in Jackson County that included increased tobacco licensing fees; and created a comprehensive K-12 tobacco-free schools policy. Most recently, Start Noticing assisted six multi-unit (rental) housing properties to implement smoke-free policies. In 2012, the coalition assisted Cottonwood and Redwood Counties in passing 100 percent smoke-free home and car policies, and ordinances for day care and foster care in its jurisdictions. These policies and ordinances are the first of their kind in Minnesota.

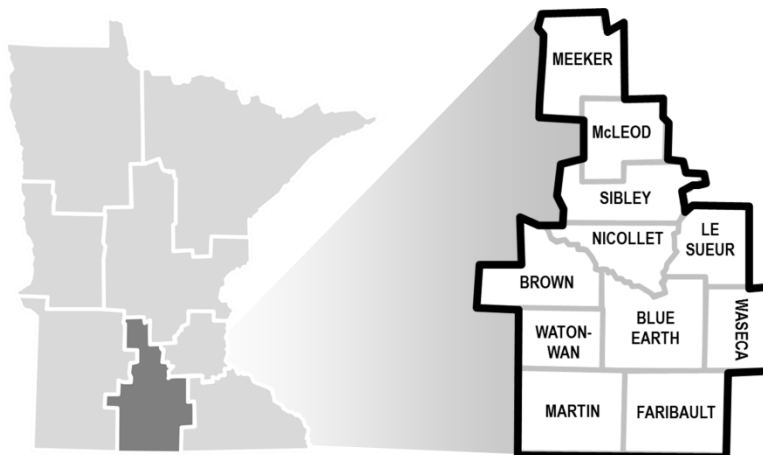
# South Central Region

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 community health boards (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 stand-alone public health departments,<sup>13</sup> and five combined public health and human services agencies.<sup>14</sup>

## Challenges and Opportunities

This region is challenged by a funding base that is primarily agriculture. This lack of economic diversity impacts county budgets, and also limits available resources outside the public sector (i.e., fewer non-profits, health systems, corporate partners) that could otherwise provide support. With the exception of the Mankato area, specific public health services like vaccinations, breastfeeding support, or parenting education are not available to residents without an hour's drive, unless they are provided by the local school, human services provider, or medical community.



### Demographics

- 291,252 residents
- 6,234 square miles

### Funding and Staff (2011)

- Expenditures: \$16.4 million (decrease from \$16.9 million in 2010)
- Local Tax Levy: 24 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$56.24 (statewide average: \$53.50)
- 198 public health FTEs; 68 FTEs per 100,000 residents

### By the Numbers (2011)

- 5,258 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 51 latent cases of TB monitored
- 859 students and family members vaccinated in Brown County, in a comprehensive vaccine program coordinated with schools and clinics—the first time a clinic of this type was offered in the county

### Administration

- 11 counties
- 9 community health boards (3 multi-county, 6 single-county)

<sup>13</sup> Brown, Le Sueur, Meeker, McLeod, Nicollet, Waseca

<sup>14</sup> Blue Earth, Faribault-Martin, Sibley, Watonwan

Staff in this region are also stretched and constrained by budgets, often providing services in multiple program areas rather than specializing in one program or one type of care. 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

Collaboration and community partnerships are a hallmark of this region, perhaps due to its rural, agricultural ethos that prompts neighbors and friends to look out for one another. The South Central region also excels at cross-sector collaborations that leverage the strengths of public health. For example, Meeker County Public Health is a key partner in the PACT for Families Collaborative (Putting All Families Together), a children's mental health and family services collaborative that has been in operation for nearly 20 years. The collaborative recently received a "Birth to 5" grant to address children's mental health, and Meeker County continues to serve as the point of intake for referrals to local clinics.

The MDH Statewide Health Improvement Program (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. In Cottonwood, Jackson, Faribault, Martin, and Watonwan Counties,<sup>15</sup> students are healthier through SHIP-funded changes to school policies and activities. In the city of Fairmont, the Safe Routes to School program has resulted in wider crosswalks, more curb cuts, extra walking guards, pedestrian and bike safety education, and a Walking Tuesday program to promote walking to school. Martin County West schools successfully built two salad bars stocked with fresh fruits and vegetables, served more fruits and vegetables at school functions than ever before, and served healthier foods in the classroom. Even county government was involved: in an effort to curb rising health care costs, Watonwan County created new health policies for its employees, establishing a low-cost healthy foods vending program, as well as a mileage rewards program to motivate employee physical activity.

The variety of organizational structures providing public health services in this area highlights the flexibility that local jurisdictions have to organize to meet the needs of their communities. Local health departments in this region have developed effective partnerships, and tend to work together through legal agreements for specific issues or programs.

## A Closer Look

The region has been especially successful in developing delegation agreements for environmental health services provided across county lines. For example: Ill food workers account for a substantial percentage of foodborne illness outbreaks in Minnesota. In 2011, Brown-Nicollet Environmental Health staff addressed this risk by incorporating additional employee health education into all regular inspections at high- and medium-risk food establishments in Brown, Cottonwood, Nicollet, and Watonwan Counties.<sup>16</sup> Based on templates created by Brown-Nicollet Environmental Health, these establishments develop and maintain Employee Illness Reporting policies, requiring employees to sign a written form pledging to report illness to their supervisor and will not work if ill with a food-transmissible disease. At each inspection in 2011, staff discussed these new policies and resources with restaurateurs, and the number of reported ill food workers nearly tripled—likely preventing foodborne illness for a large number of South Central residents.

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<sup>15</sup> Cottonwood and Jackson Counties are located in the Southwest region.

<sup>16</sup> Cottonwood County is located in the Southwest region.

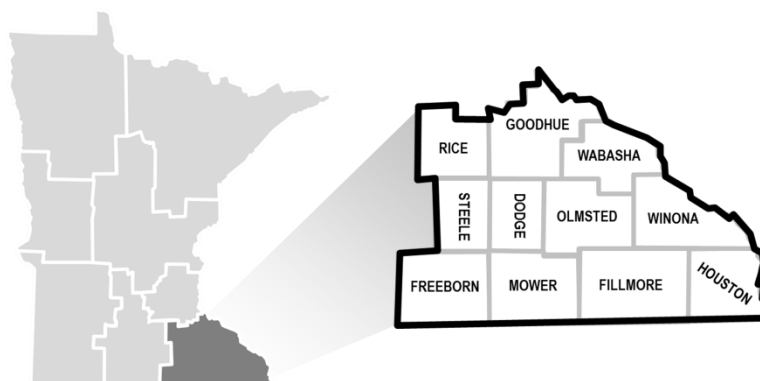


# Southeast Region

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 population of color by more than 500 percent in Mower and Rice Counties between 1990 and 2010. 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.

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



## Demographics

- 496,254 residents
- 6,748 square miles

## Funding and Staff (2011)

- Expenditures: \$32 million (increase from \$31.8 million in 2010; only expenditure increase among state regions)
- Local Tax Levy: 22 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$64.43 (statewide average: \$53.50)
- 373 public health FTEs; 75 FTEs per 100,000 residents

## By the Numbers (2011)

- 10,322 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 238 latent cases of TB monitored

## Administration

- 11 counties
- 9 community health boards (2 multi-county, 7 single-county)

## Challenges and Opportunities

The Southeast region has experienced tremendous organizational change within its public health organization in recent years. Six county public health departments (Goodhue, Wabasha, Winona, Freeborn, Mower and Fillmore) have been reorganized into health and human services departments since 2009, and seven local public health leaders in the region are new to their roles. Differences between the two systems (that is, public health and health and human services) in mission and approach can make organization 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 emerging health concern in this region is the impact of mining and transporting silica sand; it provides economic benefit to the region, but 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 grants, assisted by the region's uniquely strong health care system. For example: All 11 county public health departments in the region are involved in implementing a \$12.3 million federal grant to reduce health care costs and improve population health. To meet this goal, grant partners are working to improve electronic health records across public health, health care, and schools, with a specific emphasis on asthma and type 2 diabetes. Led by public health, the numerous partners involved in this grant form a "Community of Practice." The initiative, dubbed the Beacon grant, places the Southeast region on the cutting edge of using electronic health records as a means of improving health care and population health.

## **A Closer Look**

The Southeast region prioritizes strong public health nursing and client advocacy. Public health nurses provide support to families and children through family home visiting programs, the Women, Infants and Children (WIC) program, and other maternal and child health initiatives. These programs help prevent infant mortality, low birth weight babies (and health complications related to low birth weight), and child maltreatment, while improving economic self-sufficiency, parent-child attachment, early childhood development, and the health status of the mother and child.

The following story from Freeborn County is typical of the level of service and care provided by public health nurses in the Southeast region; this and stories like it demonstrate the positive impact these services have on caregivers and their families: In Freeborn County, there is a sizeable Karen community that has relocated to the U.S. from Myanmar. A pregnant Karen woman accessed public health services through the WIC program and was referred to the Maternal and Child Health (MCH) program for additional services. Public health connected with her health care provider, and gave her information to prepare her for childbirth in a culturally appropriate manner. The woman delivered a healthy baby, and maintained a relationship with the public health nurse following childbirth. The nurse was able to help the new mom access community supports and resources, and troubleshoot early complications with breastfeeding. The advocacy provided by public health nurses for vulnerable populations ultimately improves health, one family at a time.

# Central Region

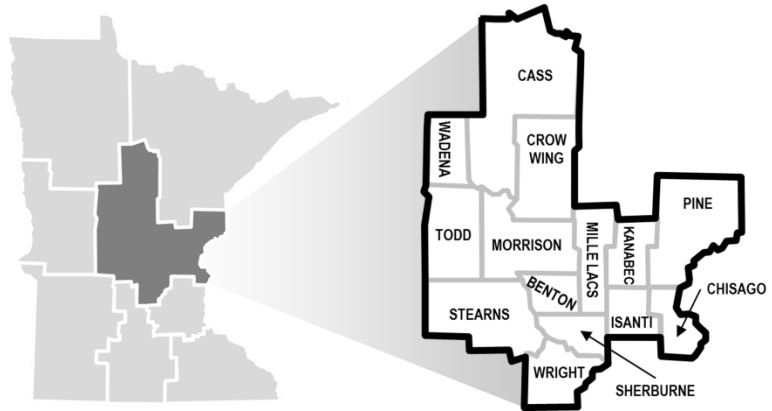
The South Central region—home of Garrison Keillor’s fictional Lake Wobegon—has a diverse geography, from rural areas, to small towns, suburbs and large urban centers. Its proximity to the Metro region influences its population, resources, and health needs.

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 over the past decade; Todd, Stearns, Sherburne, Wright and Chisago counties experienced a 500 percent increase in populations of color during the same time period. There are two American Indian tribes with reservation land 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 community health boards (CHBs), three of which serve multiple counties (Isanti-Mille-Lacs, Kanabec-Pine, and Morrison-Todd-Wadena).

## Challenges and Opportunities

The recent retirement of public health leaders has challenged this region, as have changes at the organizational level in some county public health and social services agencies. Eight of the region’s 14 counties have recently experienced leadership change, which can challenge the organization’s continuity of services. MDH regional public health nurse consultants provide technical assistance to help ensure transitions are as smooth as possible, seeing CHBs through the retirement/restructuring process and new employee orientation.



### Demographics

- 731,384 residents
- 11,832 square miles

### Funding and Staff (2011)

- Expenditures: \$29 million (decrease from \$29.8 million in 2010)
- Local Tax Levy: 30 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$39.87 (statewide average: \$53.50)
- 330 public health FTEs; 45 FTEs per 100,000 residents

### By the Numbers (2011)

- 9,715 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 156 latent cases of TB monitored
- Organized response to confirmed cases of pertussis (whooping cough) within multiple counties, requiring coordination with schools and medical clinics, communication with parents, and work to limit exposure to other children

### Administration

- 14 counties
- 10 community health boards (3 multi-county, 7 single-county)

The recession of the late 2000s significantly impacted the Central region; home foreclosure rates in Chisago, Isanti, Mille Lacs, and Sherburne counties are the highest among Minnesota counties. Foreclosures can easily impact public health funding by reducing the local tax base, in addition to creating hardships and stress for residents experiencing foreclosure, which can lead to a need among those residents for financial support for health care.

## **Strengths and Accomplishments**

The Central region's public health leaders actively foster ongoing workforce development in response to increasingly complex public health issues. For example, Stearns County is piloting a skills assessment, which will identify staff strengths and pinpoint areas where additional training is needed to meet strategic priorities.

Local public health departments are especially skilled at reaching isolated, underserved, or vulnerable populations, and coordinating with other providers on emerging health concerns that cut across service areas. In Todd County, public health provides vaccines for preventable diseases to its local Amish community. Wright County's Wellness on Wheels (WOW) program uses an easily recognizable RV to provide the community with immunizations, health screenings, and referrals.

The region also works hard to mitigate the risk of radon, a colorless, odorless, radioactive gas that can be found in one in three homes in the state and can pose a significant health risk. Morrison, Sherburne, and Wright Counties have prioritized radon education and awareness in environmental health programming—residents are provided with radon test kits, and kits are analyzed to determine whether public staff should provide a referral for remediation.

## **A Closer Look**

In the Central region, a regional data practice group meets regularly to assess population health trends; the group includes local public health staff from counties across the region, as well as MDH data experts and staff from area hospitals. The group helped CHBs and local hospitals in the region to coordinate community health assessment activities in order to meet requirements at the federal (hospitals) and state (CHBs) level while also working together to maximize resources and avoid overlapping efforts.

After the group identified a need for more comparable data across counties, they collaborated on a new survey to assess health behaviors. The data from this survey will complement statewide data gathered by MDH, and local public health staff will be able to use the data for strategic planning, programming and policy development, grant writing, and much more. As more counties move toward the cross-jurisdictional sharing of resources, this data will help identify counties' strengths and weaknesses, and pinpoint issues in which they can work together to maximize resources, improve economies of scale, and increase efficiency in public health—ultimately adding to the strength and sustainability of the public health system in the future.

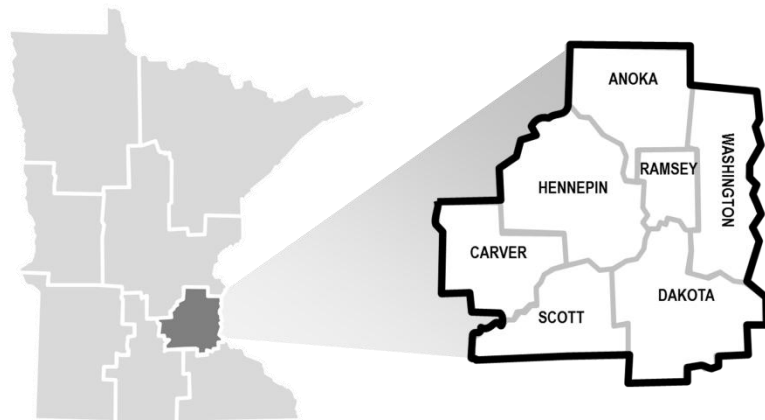
# Metropolitan Region

Although the Metro region is geographically smaller than other regions, it is by far the most populous, 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 that hail from all 11 Minnesota tribal communities; the Shakopee Mdewakanton Sioux Community is also located in the region, 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.

## 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 health needs.



### Demographics

- 2,873,444 residents<sup>17</sup>
- 2,811 square miles

### Funding and Staff (2011)

- Expenditures: \$186.1 million (decrease from \$186.6 million in 2010)
- Local Tax Levy: 35 percent (statewide average: 30 percent)
- Per Capita Expenditures: \$54.29 (statewide average: \$53.50)
- 1,138 public health FTEs
- 33 FTEs per 100,000 residents (lowest ratio in Minnesota, and a decrease from 44 per 100,000 in 2010)

### By the Numbers (2011)

- 58,425 nurse home visits to caregivers and pregnant women to promote secure attachment, early childhood development, and safety
- 1,658 latent cases of TB monitored
- 67,975 WIC services provided monthly, on average to low-income pregnant and breastfeeding mothers, infants, and young children (nutrition counseling, referrals to medical care, and nutritious foods)

### Administration

- 7 counties
- 11 community health boards (6 county-based, 4 city-based, 1 city-county partnership)

<sup>17</sup> The Metro region houses over half of the state's total population.

## Strengths and Accomplishments

The region's public health leaders are strong advocates for their communities' health. Many Metro health departments perform their own investigation and control of foodborne outbreaks, tuberculosis, and other infectious diseases; MDH plays a principal role in providing these services to Greater Minnesota.

### A Closer Look

Metro region public health departments spent a considerable amount of time in 2011-12 responding to measles, pertussis, and other infectious disease outbreaks. The departments' expertise in epidemiology and infectious disease control and prevention helped to keep several infectious diseases from spreading to a larger population.

The Dakota County public health department responded to an outbreak of measles that originated from a young county resident. County staff worked with MDH and health clinic staff to identify and track immunization status, measles susceptibility, and symptoms of persons who may have been exposed to measles at the clinic; and relayed information between relevant partners. Local healthcare providers were kept up-to-date on the situation via the Health Alert Network (HAN) and the Disease Prevention and Control Update newsletter. Staff publicized measles health education materials, and offered MMR vaccine at widespread immunization clinics, particularly to adults who had no prior record of vaccination.

Anoka County's infectious disease program is indicative of the Metro region's diverse populations. Of the 39 women with perinatal Hepatitis B who were followed by public health staff, none spoke English as their first language, and all came from varying cultural backgrounds. By utilizing translated materials, a language line, and interpreter services, providers were successful in following through with MDH recommendations for the clients and their families.

A number of Metro counties responded to pertussis outbreaks. Hennepin County conducted case investigations that included outbreaks in school, child care, and extracurricular activities; and notified parents and guardians of exposed children and associated staff. Scott County staff, after noting that a number of pertussis cases occurred in children younger than one year, implemented a vaccination program focusing on older siblings, parents, and caregivers to further protect infants. In Ramsey County, pertussis cases increased dramatically between 2009 and 2011. When an outbreak was identified in a county school, staff followed the outbreak from clinics to health care providers, notifying clinicians along the way. The county circled back to the rest of the population by developing pertussis materials in multiple languages, which were distributed to especially vulnerable populations by home visiting nurses; Women, Infants, and Children (WIC) staff; and Child & Teen Checkup staff.

In 2011 and 2012, several Metro health departments collaborated to better prepare the region for biological terrorism. Local public health staff partnered with MDH, postal volunteers, and regional police to hold the nation's first Postal Plan drill, and achieved a success rate of 99 percent for door-to-door medication distribution.

The region's focus on policy, systems, and environmental change can be seen in a number of events occurring to improve regional population health. In a unique collaboration between public health and community planning and development, Bloomington Public Health conducted a Rapid Health Impact Assessment (HIA) for the 86th Street Corridor Multi-Modal Traffic Study, with the goal of achieving safe travel along the corridor. The HIA determined the health impacts of various street designs, and community members were able to use HIA results to provide input on their greatest health concerns at an open house.

Washington County public health staff have worked with the Woodbury Health and Wellness Collaborative and South Washington County Community Education to implement the Kids International Wellness Initiative. This project combines efforts to involve youth and families in physical activity, increase fruit and vegetable consumption, reduce screen time, and provide education on global food issues like hunger. Area youth have the opportunity to do community service as part of the project. These activities have also been supported by a grant from UCare.

Hennepin County Public Health convened a Community Health Improvement Partnership with the Minneapolis Department of Health and Family Support and the Bloomington Division of Public Health, on behalf of the Boards of Health of Bloomington, Edina, and Richfield. The partnership authored a Community Health Improvement Plan (CHIP), providing action steps to address four overarching community health priorities developed in community forums and by a community health assessment. Using the CHIP as a foundation, community partners, public health, and health care organizations formed a partnership to address top priorities:

- Increase early childhood school readiness;
- Ensure regular physical activity and proper nutrition;
- Promote community and social connectedness; and
- Address health care access and social conditions that impact these issues.

In 2012, the Minneapolis Health Department expanded its nationally recognized Healthy Corner Store Program from a nine-store pilot<sup>18</sup> to an additional 28 stores, helping store owners increase the availability, affordability, and visibility of fresh produce. The city health department and its community partners survey customers about healthy food preferences, conduct store makeovers (e.g., creating produce displays, adding signage), help store owners host in-store celebrations to highlight improvements, and train owners to handle produce and track sales. In order to determine the program's impact on produce sales and consumption, the Minneapolis Health Department and the University of Minnesota are collecting data on customers and sales, and will develop an evaluation model for other corner store programs in Minnesota and across the country.

The St. Paul-Ramsey department contains one of the oldest built environment in the state, and the department is a leader in addressing elevated lead blood levels in children using primary prevention. Between 2006 and 2012, St. Paul-Ramsey Environmental Health oversaw 517 window replacement projects to reduce lead dust exposure, and partnered with MDH, the American Lung Association, and health plans to reduce childhood asthma via a healthy homes approach. In one project, the homes of over 300 children with severe asthma were evaluated for environmental asthma triggers, and Environmental Health tailored interventions to each home; the children experienced a 68 percent reduction in the number of school days missed, and a 74 percent reduction in asthma-related hospital emergency room visits.

In 2011, Carver County worked with seventeen worksites to increase employee physical activity through worksite wellness programs. In addition to these programs, eleven communities developed or enhanced plans or policies guiding future active living efforts; eight communities enhanced their trail systems; eight communities improved pedestrian and bicycle access; and two communities conducted feasibility studies to inform the construction of walking and biking paths. Carver County also developed two websites to help residents identify local trails, parks, and active living amenities.

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<sup>18</sup> Originally funded by the Statewide Health Improvement Program (SHIP)

The Minneapolis Health Department has included an Extreme Weather Annex to its Emergency Response Plan for several years, given the potential public health impact of extreme weather events on vulnerable populations—especially extreme heat. July 2012 was the second-warmest July on record in the Twin Cities; temperatures exceeded 80°F every day of the month, and reached a record high of 102°F on July 6 after hovering around 90-100°F for several days (accompanied by a relatively high dew point). The Minneapolis Health Department conducted surveillance via phone and email at least once daily with fire, police, 311,<sup>19</sup> 911, Hennepin County Medical Center, and North Memorial Medical Center Emergency Medical Services; the department also monitored news reports, social media, and email lists for problems and trends discussed by the public. Minneapolis Public Health had also previously partnered with MDH to map the city’s vulnerable populations, including elderly residents living alone, and residents living below the poverty line. By cross-referencing these maps with information on air-conditioned residential buildings, public air-conditioned spaces, multi-unit residential buildings, and child/day care, the department could ascertain which parts of the city might be disproportionately impacted by extreme heat, and could target interventions if necessary to community-based organizations most likely to interface directly with the most at-risk populations.

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<sup>19</sup> 311 serves as the City of Minneapolis’ telephone hotline for essential everyday services (e.g.; public safety; streets, traffic, and parking; snow emergencies, and business).



## Minnesota's Community Health Boards and Tribes

