

Public Health Systems Development in Minnesota

REPORT TO THE LEGISLATURE

FEBRUARY 2017

Public Health Systems Development in Minnesota: Report to the Legislature

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PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

February 2017

Dear Colleague:

We are pleased to share with you *Public Health Systems Development in Minnesota: Report to the Legislature*. This report was prepared to comply with Minn. Stat. § 62Q.33, which requires an updated biennial report describing how well the state's public health system is meeting its responsibility to deliver core public health activities to the people of Minnesota. A version of this report has been published every two years since 1992.

In years past, this report has emphasized the strengths and accomplishments of Minnesota's local public health system. However, recent national research and an increasingly robust data from Minnesota's annual local public health reporting system have revealed troubling capacity disparities among local health departments in Minnesota.

Leaders in Minnesota's local public health system are worried about these disparities because they show public health needs are not being fully met in some parts of our state. Examples of some of the very real concerns of local health directors are shared throughout the report in the form of quotes on the theme, "what keeps you up at night?" We should all be troubled by statements like, "We have no capacity to manage a TB outbreak..." or "my health department does not have the capacity to respond to a measles outbreak..."

The local public health system has accomplished a great deal and overcome many challenges over the years. Working together as state and local partners—and with the continued support of policymakers at all levels—we can overcome the challenges identified in this report.

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

Sincerely,

A handwritten signature in black ink that reads "Edward P. Ehlinger".

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Executive Summary

This legislative report on the state of Minnesota’s local public health system has been published every two years since 1992. The statute¹ that requires this report calls for it to update how the state’s public health system is meeting its responsibility to deliver core public health activities to the people of Minnesota. Further, it asks that the Minnesota Department of Health (MDH) identify underperforming health departments and make recommendations on the amount of funding and assistance needed in order to elevate those health departments to an acceptable level.

Over the past 10 to 15 years, the field of public health has increased its understanding of how to ensure high-functioning health departments, and how to measure their performance. In 2012, the annual statewide reporting system for Minnesota was revamped to utilize new, standardized national public health performance measures. Minnesota’s public health system is gaining a better understanding of the staffing, financing, and performance of local health departments.

As a result, the disparities that exist in the system have been laid bare.

As of August 2016, Minnesota contains eight nationally accredited² local health departments (eight community health boards). These departments represent of the best of the best of local public health departments nationwide. All eight are large, metropolitan health departments. While they do not have unlimited

Note: The terms “local health department” and “community health board” are both used throughout this report. They are not interchangeable, but there is overlap.

Community health boards are specific to Minnesota, and are defined in state statute. Community health boards are the administrative and governance structures of Minnesota’s local public health system. A community health board may be comprised of a single county health department, or multiple local health departments working together.

The term “local health department” is used to express the jurisdiction level at which services are delivered and to compare Minnesota to national data; these departments exist at the county or city level.

In 2015, there were 48 community health boards in Minnesota.

¹ Minn. Stat. § 62Q.33.

² Accredited local health departments in Minnesota include the cities of Bloomington, Edina, Richfield, and Minneapolis, the combined city-county department of St. Paul-Ramsey, and the counties of Dakota, Hennepin, and Washington. The goal of the

capacity, they have some flexibility in responding to community needs and have the internal capacity to deal with short-term public health crises. These eight departments serve 2,427,565 Minnesotans, or about 44 percent of the state's population.

This report focuses on the 40 community health boards in Minnesota that are not accredited. They collectively serve 3,062,029 Minnesotans (the remaining 56 percent of the state's population), and are responsible for the public health of nearly 98 percent of the state's geography (in square miles)³. The communities they serve tend to be poorer, more rural, and have worse health outcomes, like heart disease deaths and strokes. There is quite a bit of variability in the capacity of these community health boards, both in terms of workforce capacity (i.e., staffing ranges from 8.80 to 111.28 FTEs) and financial capacity (i.e., annual expenditures range from \$605,855 to \$12,698,496). The range in capacity can be described as **variability**, but this range is experienced as a **disparity** by those at the lower end of the ranges.

Leaders in Minnesota's local public health system are worried about capacity disparities, because they show how community public health needs are not being fully met in some parts of the state. Where you live should not determine your opportunity to be healthy. Therefore, disparities among local health departments is an equity issue for the people of Minnesota. Moreover, Minnesota's local public health departments are part of a system. Emerging infectious diseases like Ebola, and the reemergence of old enemies, like measles and tuberculosis, have local public health leaders feeling vulnerable. Given that disease outbreaks don't respect county borders, the concept that "we are only as strong as our weakest link" has become a common refrain of local leaders when speaking about the fragility of Minnesota's local public health system.

voluntary national accreditation program is to improve and protect the health of the public by advancing the quality and performance of tribal, state, local, and territorial public health departments. More information at: www.phaboard.org.

³ The number of community health boards varies slightly from year to year. This report uses the baseline of 48 boards, because the number that existed in 2015, the most recent year for which statewide data exists. Data from 2015 are used throughout this report. The total number of community health boards in 2017 is 51.

Introduction

A strong governmental public health system is essential to maintaining Minnesota’s high quality of life. The State Community Health Services Advisory Committee (SCHSAC) described it in this way:

“Protecting the public’s health is so basic, and the consequences of not protecting the public’s health are so serious that both the state and federal constitution contain provisions to ensure this protection” (State Community Health Services Advisory Committee, 1998).

A strong local public health system is made up of local health departments that are able to maintain the capacity (staffing and finances) needed to provide core public health activities within their communities, such as:

- Protecting people from known public health threats
- Preventing health threats from occurring (whenever possible)
- Responding nimbly to a range of community health needs

This report illustrates the fragility of Minnesota’s local public health system, due to workforce and financial capacity disparities among local health departments, with the result that public health needs are not being met in all communities statewide.

Public Health Needs Not Met in All Communities

What Keeps You Up at Night?

Minnesota’s annual reporting system provides data on the financing, staffing and activities of community health boards in Minnesota. This data provides important glimpses of reality, but cannot tell the whole story. To get a clearer picture of what capacity disparities look like in different communities, the Minnesota Department of Health (MDH) asked several local public health directors from different sized departments and different parts of the state, **“what keeps you up at night?”** What is something you worry that your department will have to address now or in the future that you’re not prepared to handle? What aren’t you doing that you should be doing?

The concerns of Directors’ are highlighted throughout this report in the form of quotations. Repeatedly, directors conveyed apprehension about their departments’ lack of capacity, especially workforce capacity—*both in the number of staff and the expertise required*—and financial capacity. While not a comprehensive list, specific concerns included the lack of capacity to:

- Control and prevent infectious outbreaks (including tuberculosis)
- Respond to emergencies or disasters
- Support community needs around the opioid epidemic

Current and Emerging Public Health Threats

Tuberculosis

In 2015, there were 150 cases of active tuberculosis (TB) in Minnesota (Minnesota Department of Health, Tuberculosis Prevention and Control Program, 2015). Persons with active TB disease are sick and could potentially spread the disease to others. Persons with a more common form of TB, latent TB infection, are not sick and are not infectious.

While the rates of TB disease in Minnesota have been holding steady since 2010, there has been a geographic shift in the distribution of TB in Minnesota. The majority of TB cases in Minnesota exist in the Twin Cities Metro Area, and public health departments in the metro area are better equipped to address TB. For example, both Ramsey and Hennepin counties have TB clinics, with specially trained staff. However, the percentage of TB cases reported by greater Minnesota counties has been increasing over the past few years. From 2011 to 2015, rural Minnesota counties saw 25 percent of the state's TB cases, an increase from 20 percent in 2006-2010. It is believed that health departments in greater Minnesota are seeing more TB in their communities as a result of in-state migration, due to the availability of jobs and affordable housing compared to the metro area. This in-state migration is helpful in supporting local economies, but has changed the demands on local health departments.

“We have no capacity to manage a TB outbreak. My staff are all at or over capacity. In order to keep our community safe, I would have to pull staff from their everyday public health work—like WIC appointments or Family Home Visits. As director, I would have no choice but to provide direct patient care myself.”
– Public health director; small, rural department

Though TB is found in higher rates among people who have resided in or visited a country where TB is more common, over half of non U.S.-born TB patients from 2011 to 2015 developed active disease more than five years after arriving in the United States, with the largest proportion (36 percent) becoming sick after living in the United States for 10 or more years. Evidence suggests that the American lifestyle, which can contribute to the development of chronic conditions (like cancer and diabetes), may be part of the problem (Uretsky et al., 2007). A chronic condition can weaken a person's immune system, making a person with latent TB more susceptible to converting to active TB.

Most people with latent TB infection never develop active TB. In general, the lifetime risk of becoming sick with active disease is 5-10 percent for those who are infected (Centers for Disease Control and Prevention, 2016). Nevertheless, ongoing monitoring and support of people with latent TB infection is an important public health prevention strategy. Catching the progression of disease early protects the health of the individual and the community.

This shift in the geographic distribution of TB in Minnesota presents a challenge for health departments in greater Minnesota that don't have as much experience with TB control. This challenge is compounded by their existing workforce capacity disparities, both in total number of staff and in TB-specific expertise. Currently, only a minimal amount of funding is available to local public health in Minnesota for TB, in spite of a state requirement that local health departments do TB control activities.

What is Needed?

- Flexible support that can be used to build and sustain local capacity to control TB (e.g., staff, ongoing training, funds to support translation and interpretation, materials, and technology).

Opioid Epidemic

In 2015, at least 338 people died as a result of opioid overdoses in Minnesota, an increase from 318 in 2014. Minnesota drug overdose deaths (including but not limited to opioids) in 2015 were more than four times higher than in the year 2000, when there were 129 drug overdose deaths. In 2015, more than half of the drug-related deaths were related to prescription medications rather than illegal street drugs.

U.S. Surgeon General Dr. Vivek Murthy made the opioid epidemic one of his top priorities (U.S. Department of Health and Human Services, 2016). This epidemic affects Minnesotans of all walks of life, and in every county in our state. It also impacts government at all levels, and in many branches, including Public Safety, Corrections, Human Services, and Public Health.

The opioid epidemic has generated headlines due to the tragic numbers of overdose deaths, but there are other serious implications of the epidemic on public health in Minnesota. MDH and the Centers for Disease Control and Prevention (CDC) have concluded that Minnesota is at risk for significant increases in viral hepatitis and HIV infections due to injection drug use. MDH reported an 86 percent increase in HIV diagnosis among injection drug users between 2014 and 2015.

At the same time, acute hepatitis C infections increased 146 percent (Minnesota Department of Health, Infectious Disease Epidemiology, Prevention, & Control Division, 2016). Hepatitis C is a liver disease caused by the hepatitis C virus; it can cause both acute and chronic hepatitis infection. It is a blood borne virus, which is commonly transmitted through unsafe injection practices. A significant number of chronically infected people will develop liver cirrhosis or liver cancer.

“Preventing violence and tackling the opioid epidemic are health priorities of our community. Even though we are a ‘big’ health department, we have limited funding, staffing and time. What activities should we set aside in order to work on these issues? How will we pay for them?”

– Public health director; large, suburban department

Public health has an important role to play in preventing further tragedies, both in the short and long term. In the short term, local health departments are called upon to work to ensure that naloxone is readily accessible in their communities to combat opioid overdose.⁴ In the longer term, traditional public health prevention and health education skills are needed to stem the tide of this growing epidemic. Other roles for local public health could include working with clinics to reduce opioid prescriptions; prescription tracking and monitoring; working with schools on drug use prevention programs. While “opioids” were not specifically mentioned in the community health assessments submitted by community health boards in 2014, 19 community health boards (39.5 percent) reported that alcohol, tobacco, and other drugs (including prescription drugs, chemical health issues, drug abuse, and substance abuse) were listed as top community priorities.

What is Needed?

- Training for local health department staff on the role of public health in opioid response and prevention
- Flexible funding for local health departments to participate in or host local coalitions to create plans to reduce opioid use in their communities

Vaccine Program Stability

Current national discussions of dismantling the Affordable Care Act (ACA) may have unintended consequences for the health of local communities in Minnesota. The ACA includes the Prevention and Public Health Fund (PPHF), which helps support core public health activities at the local level. For example, the MDH Immunization Program has been a recipient of several PPHF grants from the CDC. This money is used to support several important aspects of the program, including the Minnesota Immunization Information Connection (MIIC).

MIIC is a system that makes keeping track of vaccinations easier, helping to ensure that Minnesotans get the right vaccine at the right time. MIIC helps local public health departments better see and understand the true picture of vaccination in their communities, and identify opportunities for improvement.

⁴ Naloxone, sold under the brand name Narcan (among others), is a medication used to block the effects of opioids, especially in overdose. During the 2016 Session, the Minnesota Legislature authorized pharmacists to dispense opiate antagonists, like naloxone, when acting pursuant to a written protocol with a community health board medical consultant or a practitioner designated by the commissioner of health, if requested. See Minnesota Laws 2016, chapter 124, *available at* <https://www.revisor.mn.gov/laws/?year=2016&type=0&doctype=Chapter&id=124>.

“We are at risk for a measles outbreak in my county. One of our community groups has low rates of MMR [measles, mumps, and rubella] vaccinations and is known to travel to places in the world where measles is widespread. I worry because my health department does not have the capacity to respond to a measles outbreak.” – Public health director; mid-sized department

Local health departments are a safety net for immunization and are essential to the success of vaccination programs in the United States. Changes at the federal level may impact the stability of critical vaccine programming and organization in Minnesota. This could have repercussions at the local level, making it harder for local health departments to ensure good vaccination coverage in their communities. Any changes that reduce coverage increases the risk of disease outbreaks like measles, and makes it harder to respond to outbreaks when they occur.

What is Needed?

- Flexible funding to allow local health departments to work together to create regional plans to ensure affordable access to immunizations
- Strategic identification of state and local roles in vaccination in both emergency and non-emergency situations

Emergency Preparedness Gaps

Current public health emergency preparedness and response threats facing local health departments in Minnesota include:

- Extreme weather events, like flooding or extended periods of excessive heat
- Significant increases in the transport of flammable materials carried by rail or pipelines, some located very close to towns and health care facilities
- Changing practices in the health care system, like the increasing reliance on “just in time” supplies and staffing, which challenge local public health and their partners to respond to sudden increases in the number of sick or injured people

Each of these threats have public health consequences for local communities, and require regular revisions to local emergency plans. Yet cuts to federal funding and low levels of state and local investment have reduced public health emergency preparedness capacity in Minnesota.

Public health emergency preparedness is:

“The capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities.

In 2016, as a consequence of the most recent round of federal reductions, the formula for distributing preparedness funds to local public health in Minnesota needed to be revised. The formula takes into account the population served. Smaller communities may be at lower risk than big cities, yet there is a minimal level of staffing, expertise and administration needed in order to sustain a public health emergency preparedness program, no matter how small the health department.

*Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action.”
(Nelson, Lurie, Wasserman, & Zakowski, 2007)*

Resources are so scarce that some departments in greater Minnesota are unable to employ staff dedicated to working on preparedness. There are health departments currently receiving such small grants that they are no longer able to perform the emergency preparedness duties required of them in the Local Public Health Act.⁵

Out-of-date plans, coupled with insufficient staffing and a lack of local expertise, will slow responses to the next infectious disease emergency, such as another pandemic flu like H₁N₁. Slow local responses may lead to increased illness and negative impacts to neighboring communities and the state as a whole. Living in a community that is less prepared to respond to public health emergencies is an equity issue for many Minnesotans.

What is Needed?

- Flexible support that can be used to shore up the public health emergency preparedness workforce in local health departments (e.g., funds to support staff, ongoing training, materials and technology)

⁵ Minn. Stat. § 145A.04, subd. 1a. (v): “Preparing and responding to emergencies by engaging in activities that prepare public health departments to respond to events and incidents and assist communities in recovery, such as providing leadership for public health preparedness activities with a community; developing, exercising, and periodically reviewing response plans for public health threats; and developing and maintaining a system of public health workforce readiness, deployment, and response.”

Disparities Among Local Health Departments

Financial Disparities

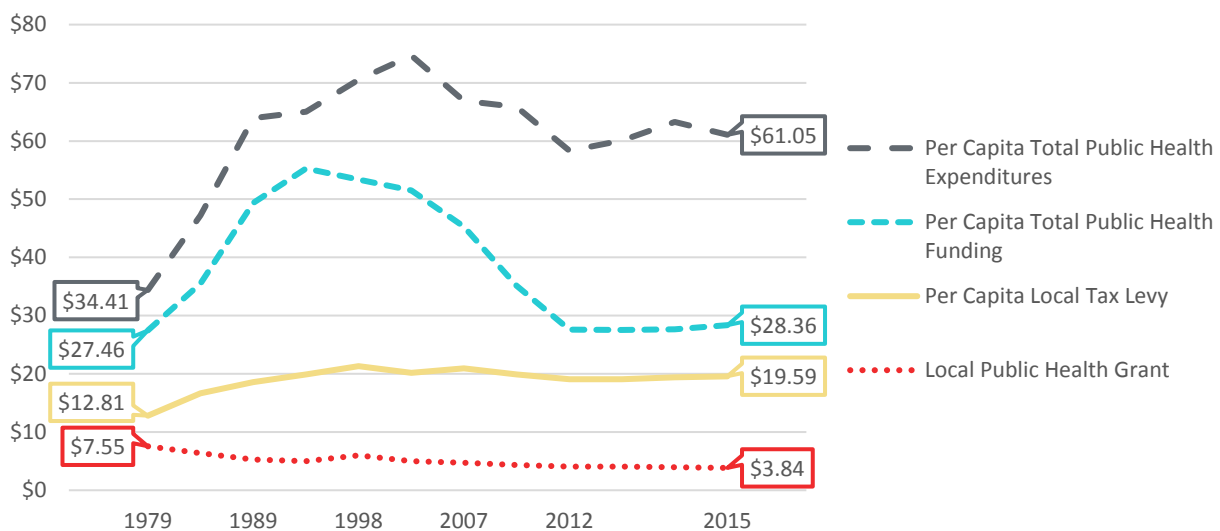
In 2015, almost half of all expenditures made by community health boards came from local sources, comprised of tax levy, reimbursements, and fees for services (Minnesota Department of Health, Center for Public Health Practice, 2015). Overall, the single largest source of funding for local public health services is local tax levy. This is because local health departments have attempted to compensate for the instability of federal and state funding that has not kept pace with rising costs, and local jurisdictions have increased their own investment (i.e., county tax dollar contributions).

This is an imperfect solution to funding local public health, because poor communities with less robust tax bases are limited in their ability to collect and allocate taxes, thereby worsening the disparities between the “haves” and the “have nots” in the local public health system. Their residents have the same basic public health needs as everyone else, which compounds the problem for local health departments serving impoverished communities.

Local governments (primarily counties) have made important investments in public health, yet the system is still heavily dependent on federal funding. This puts the overall system at risk, due to shifting federal priorities. State and local funding streams provide the opportunity for local input into how funds are used, and create a necessary flexible funding source to ensure local needs are met.

Data from 2015 shows that spending attributed to the Local Public Health Act grant comprised just 6 percent of the total community health board expenditures. In 1979, the per capita expenditures from the Local Public Health Act Grant were \$7.55 per person in Minnesota; in 2015, it was \$3.84.

Figure 1. Local per capita, inflation-adjusted expenditures, 1979-2015



While the total dollar amount of the Local Public Health Act grant has increased (\$4.75 million in 1979 vs. \$21.66 million in 2015) it has not kept pace with population growth or changing local needs and expectations. Minnesota's population has increased by nearly 1.5 million people since 1979. Additionally, the state investment has not increased enough to keep pace with inflation (Figure 1).

In 2003, the Local Public Health Act consolidated the Community Health Services Subsidy (as the LPH Act Grant was formerly known) with other grants, and then reduced overall funding. This consolidation represented a 29 percent reduction in historical local public health funding levels statewide, a setback from which the system has never fully recovered. During the 2015 session, state lawmakers took a step to address the gap in state investment of the Local Public Health Act grant, and devoted an additional \$1 million to tribal governments and greater Minnesota community health boards. Yet Minnesota's heavy reliance on federal funding continues, and when coupled with disparities in the capacity of local jurisdictions to provide adequate funding, makes it difficult to sustain the delivery of core public health activities, particularly in greater Minnesota.

A recent study examined the cost of providing core public health activities in a number of local health departments around the country. This peer reviewed report estimates that funding for core activities, like infectious disease control and emergency preparedness, should be roughly doubled (Mays, 2016). Increasing investment in Minnesota's local public health system would help address the disparities in community wealth and support the resilience of local public health departments, an idea that is backed by recent national research (Erwin, Shah, & Mays, 2014).

What Would Help?

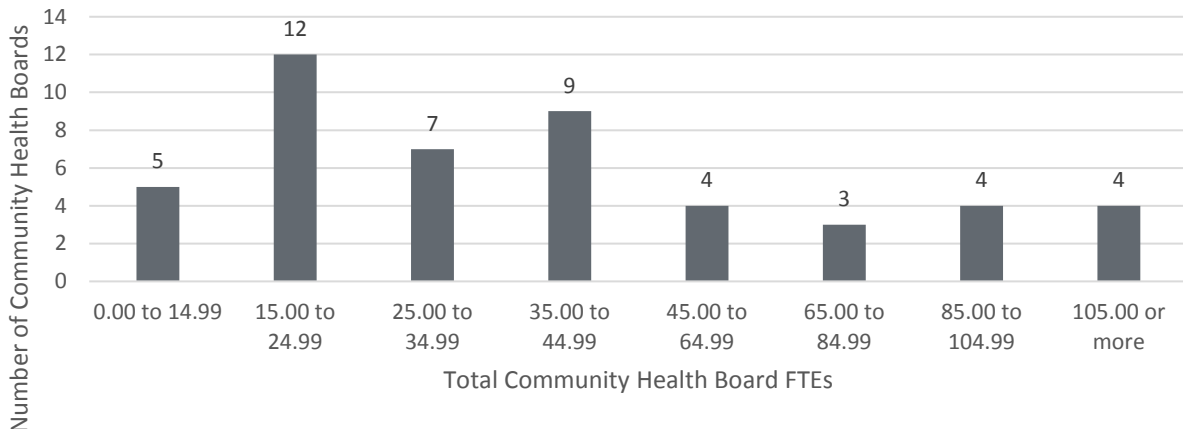
- Increased flexible funding to address locally identified needs, allowing local health departments to rapidly adapt to changing priorities
- Continued local commitment (through local tax levy) to supporting local public health needs

Workforce Disparities

Striking disparities in staffing also exist within Minnesota's local public health workforce. Figure 2, below, shows the total number of full time equivalent positions (FTEs) by community health board. In 2015, the typical local staffing compliment in Minnesota was about 35 FTEs per community health board. As always, the median is useful for understanding the system as a whole, but it masks the disparities. The range of FTEs in Minnesota community health boards—from 6 to 406 FTEs—may be more telling. Ten percent of community health boards (five boards) employed fewer than 15 total FTEs. The five most populous community health boards employed 39 percent (1,007 FTEs) of all of the FTEs in Minnesota's local public health system (Minnesota Department of Health, Center for Public Health Practice, 2015). Stated another way: Geographically, 98 percent of the rest of the state competes for about half of the public health workforce.

“Some of our neighboring counties have drastically cut back on critical public health staffing. Those counties have said that if they have an outbreak, they’re going to call us. We will help, of course, but it will be a hardship for my staff and our community.” – Public health director; mid-sized, rural department

Figure 2. Distribution of Total FTEs among community health boards, 2015



To understand why the range in staffing is important, it is helpful to know that **the expectations for community health boards are the same regardless of community size, population, or geography.** Directors in greater Minnesota have started to ask how the state can expect a local health department, with a workforce of only six FTEs, to meet expectations. Adequate staffing capacity is vital, because understaffing may pose health risks to communities. If a large infectious disease outbreak or a disaster were to occur in an understaffed jurisdiction, their neighbors and the state would be obligated to provide assistance with no guarantee of reimbursement.

A 2011 report from the National Association of City and County Health Officials (NACCHO) took steps to set benchmarks for the minimum staffing required for local health departments. Based on data collected from health departments nationwide and its knowledge of what is required in order to perform core public health activities at the local level, NACCHO developed a formula for recommending staffing levels for various sized communities (National Association of City and County Health Officials, 2011).

Because of some limitations of the data for mid- to large-sized communities this legislative report focuses on the smallest community health boards in Minnesota. For those serving small communities (38,000 or less), the report recommends a total staffing compliment of 23.64 FTEs in order to provide the full complement of core public health activities in a community.

In 2015, there were eight community health boards who served 38,000 or fewer people. Seven of the eight community health boards were in greater Minnesota; all seven were in areas designated as “medically underserved.” The medically underserved area designation is relevant because it

means that people living in that part of the state have fewer options for accessing preventive services, such as vaccinations. For 2015, 75 percent of the smallest community health boards (six of eight) did *not* meet the recommended benchmark of 23.64 FTEs; four of the eight community health boards were at least 50 percent understaffed.

“I have one staff person with the mental health expertise who can provide training and support to the schools in our district who are reeling from teen suicides and other crises. While that staff person was on an extended leave, we simply had to stop responding to requests for help.”

– Public health director; large, suburban department

Stated another way, there are at least four community health boards in Minnesota who are worryingly understaffed (in total FTEs); this number does not account for the fact that needed *expertise* may also be lacking. The true number of understaffed community health boards is likely higher when mid to large-sized communities are taken into account. In addition, because Minnesota collects data at the community health board level, these numbers are not inclusive of small county health departments who are a part of a larger, multicounty community health board arrangement. More study, specific to Minnesota’s public health system, is needed. Additionally, it should be noted that this data only looks at total FTEs, likely masking gaps within certain critical job categories, and not taking into account the need for expertise on a wide variety of ever-changing issues.

“I know we should be doing more to prevent and address adverse childhood experiences (ACEs). There’s a lot of research to show that children who experience traumatic events grow up to be sicker adults. Prevention work would pay off for us in the future.” – Public health director; small, rural department

What Would Help?

- Flexible (non-categorical) and stable funding that would allow local health departments to address persistent staffing disparities and fill gaps in expertise

Performance Disparities

Community health boards report annually to MDH on a subset of the national public health performance measures. These measures reflect the organizational capacity and skills needed to provide core public health activities within a community. In essence, the measures ask local public health leaders to reflect on three overarching questions: Are you running a good organization? Where does your department need improvement? Are community needs driving your practice? The measures reflect what is needed for a community health board to thrive and do its work most effectively.

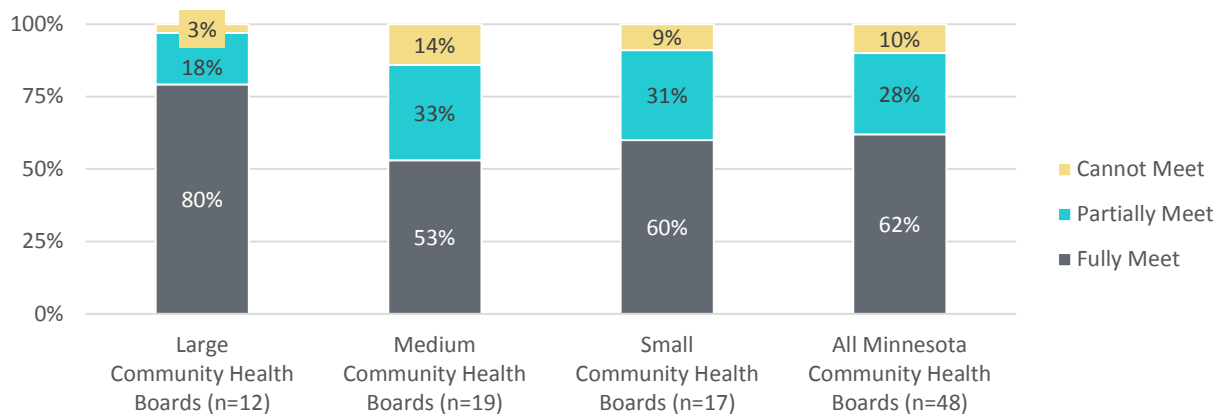
Fewer than a quarter of community health boards report that they are currently meeting all of the performance measures. The vast majority of community health boards report they are unable to

fully meet key measures (Minnesota Department of Health, Center for Public Health Practice, 2015). These unmet measures point to areas of weakness in Minnesota’s local public health system. Figure 3, below, illustrates the disparities in capacity that exist among community health boards when compared by size; large community health boards perform better on the national performance measures than small and mid-sized community health boards. The inability to meet key measures is important, because the performance measures reflect the organizational capacity and skills needed to provide core public health activities within a community.

Unfortunately, annual performance measure reporting does not tell us *why* performance is lagging. Anecdotally, directors say that the problem is a result of inadequate staffing. There are simply not enough hands to do all the work *and* continuously work to improve performance.

The Performance Improvement Committee, a workgroup of the State Community Health Services Advisory Committee (SCHSAC), recently stated in a report that it is concerned about public health capacity in Minnesota because the performance measures represent a community health boards ability to: (1) operate effectively and efficiently; (2) understand the health strengths and needs of the community; and (3) identify and implement creative solutions to difficult community problems (Performance Improvement Steering Committee, SCHSAC, 2016). Therefore, the data suggests that performance disparities exist between the Twin Cities Metro Area and greater Minnesota.

Figure 3. Comparison of community health board capacity to meet key subset of national public health measures, by population, 2015



What Would Help?

- Clarify the minimum expectations of local health departments
- Clarify roles between the state and local health departments for the areas of public health responsibility
- Develop a plan to support capacity of local health departments to meet national performance standards
- Define what is needed to create a 21st century public health system

Recommendations

Increase Investment in Core Public Health Activities at the Local Level

An increased investment in Minnesota’s local public health system would enable local health departments to better protect their communities from diseases and disasters that threaten the health of people in their communities. Enhanced investment would allow local health departments the flexibility and stability to address workforce shortages, and give them a way to maintain current public health expertise needed to provide basic public health protections in their communities, like:

- Providing vaccines to children and other high risk groups
- Preventing and controlling outbreaks of TB and other infectious diseases
- Providing data, expertise and support to communities grappling with the opioid epidemic

There is a growing body of research to support the idea that increasing investment can help address the disparities in community wealth and support the resilience of local public health departments (Erwin, Shah, & Mays, 2014; Brown, 2016).

Research points to the need to significantly increase investment in local health departments. A Minnesota study looked at local health department expenditure data from 2007 and concluded that funding gaps exist statewide, but could be closed with “a relatively modest additional investment of \$6.32 per capita” (Riley, Briggs, & McCullough, 2011). A more recent national study estimated that funding to fully implement the foundational public health services (i.e., core activities) would require more than a twofold increase in resources per capita (Mays, 2016). These findings are consistent with a 2012 Institute of Medicine report which recommended doubling the federal government’s expenditures for public health activities in order to fully fund “a minimum package of public health services” (Institute of Medicine of the National Academy of Sciences, 2012).

Minn. Stat. § 62Q.33, requires this legislative report to include “a recommended level of dedicated funding for local government public health functions.” The precise dollar figure required to ensure delivery of the core public health activities, by all local health departments in Minnesota, is not currently known. Based on the research, it is estimated that an additional, annual investment of \$20-30 million per year would stabilize local health departments statewide, thereby helping to ensure the health of all Minnesotans, no matter where in the state they live.

Undertake Additional Study

To effectively address the issues identified in this report, more information is needed to understand the extent of the capacity disparities within Minnesota’s local public health system. This will help identify solutions, in addition to increased funding for local public health in Minnesota. Some ideas include:

- Replicating the NACCHO staffing benchmark study in Minnesota;
- Undertaking studies to estimate the actual costs of fully funding core public health activities in Minnesota; and
- Using findings to identify and support the local health departments suffering the worst disparities.

Conclusion

This legislative update highlights the fragility of Minnesota’s local public health system, which is the result of longstanding, and worsening disparities in workforce and staffing, among local health departments in Minnesota. As a consequence of these disparities, public health needs are not being met in all communities statewide. This is an equity issue for the people of greater Minnesota.

Local health directors drew upon their expertise and experience to provide powerful and credible evidence of this fragility and the need for increased investment. There is truth in their stories and quotes, and more study specific to Minnesota’s unique local public health system is needed in order to fully understand the nature of these disparities, and how best to address them.

References

- Brown, T. T. (2016). Returns on investment in California county departments of public health. *Am J Public Health, 1477-1482*.
- Centers for Disease Control and Prevention. (2016, 12 16). *Tuberculosis fact sheets*. Retrieved from The Difference Between Latent TB Infection and TB Disease:
<https://www.cdc.gov/tb/publications/factsheets/general/LTBlandActiveTB.htm>
- Erwin, P. C., Shah, G. H., & Mays, G. P. (2014). Local public health departments and the 2008 recession: Characteristics of resiliency. *Am J Prev Med 46* (6), 559-68.
- Institute of Medicine of the National Academy of Sciences. (2012). *For the public's health: Investing in a healthier future*. Washington D.C.: National Academies Press.
- Mays, G. P. (2016, October 23). Estimating the Costs of Foundational Capabilities for the Nation's Public Health System. *Selected works of Glen Mays*. Lexington, KY, USA: UKnowledge.
- Minnesota Department of Health, Center for Public Health Practice. (2015). *Expenditure summary for Minnesota's community health services system*. St. Paul: MDH.
- Minnesota Department of Health, Center for Public Health Practice. (2015). *Local Public Health Act performance measures*. St. Paul: MDH.
- Minnesota Department of Health, Center for Public Health Practice. (2015). *Workforce summary for Minnesota's community health services system*. St. Paul: MDH.
- Minnesota Department of Health, IDEPC Division. (2016, September 7). Minnesota Application to CDC to Requesting Support Syringe Services. *Part B: Request for determination of need*. St. Paul, MN: MDH.
- Minnesota Department of Health, TB Prevention and Control Program. (2015). *Minnesota Electronic Disease Surveillance System (MEDSS), 2011-2015 [Data set]*. St. Paul.
- National Association of City and County Health Officials. (2011). *Local public health workforce benchmarks*. Washington D.C.: NACCHO.
- Nelson, C., Lurie, N., Wasserman, J., & Zakowski, S. (2007). Conceptualizing and defining public health emergency preparedness. *Am J Public Health, S9-S11*.
- Performance Improvement Steering Committee, SCHSAC. (2016). *From information to action: Using data to improve the public health system*. St. Paul: MDH.
- Riley, W., Briggs, J., & McCullough, M. (2011). Estimating the financial resources needed for local public health departments in Minnesota: A multimethod approach. *J Public Health Manag Pract, 413-420*.
- State Community Health Services Advisory Committee. (1998). *Governing for public health, SCHSAC Governance Workgroup*. St. Paul: MDH.
- U.S. Department of Health and Human Services. (2016, December 15). *SurgeonGeneral.gov*. Retrieved from SurgeonGeneral.GOV: <https://www.surgeongeneral.gov/>
- Uretsky, & et al. (2007). The effects of years lived in the United States on the general health status of California's foreign-born populations. *J Immigr Minor Health, 9:125-136*.