Measures Matter

Using Performance Measures to Understand and Improve Local Public Health Capacity and Services

This report summarizes system-level findings and highlights 2013 data from Minnesota’s Local Public Health Act performance measures. Findings from this past reporting cycle suggest:

- the state’s public health system performs well on some measures;
- CHBs vary widely in capacity, services, and performance;
- there are signs of increasing ability to meet the standards; and
- there are more opportunities to improve.

This report is one of a series to communicate findings for local public health services provided in 2013 (from the 2014 reporting period). This series also includes a data book featuring state-level figures and tables related to each measure,¹ and CHB-specific reports that enable comparisons to CHBs of similar size and to all CHBs statewide.² The Performance Improvement Steering Committee, a standing body of the Minnesota State Community Health Services Advisory Committee (SCHSAC), reviewed the data and identified top opportunities for improvement. These opportunities are reviewed at the end of this brief, as well as on the Performance Improvement Steering Committee website (www.health.state.mn.us).

1. Assure an Adequate Public Health Infrastructure

The SCHSAC Performance Improvement Steering Committee monitors CHBs’ ability to achieve 35 national measures as an indicator of overall capacity of the state’s public health system. Ability to meet these measures has increased noticeably among Minnesota CHBs. On average, CHBs reported that they fully met just over half of these measures (51 percent) in 2013, a pronounced increase from CHBs’ collective ability to fully meet just 37 percent of these measures in 2012 (Figure 1).

Figure 1. CHB ability to meet 35 national public health measures, Minnesota, 2012-2013

- Percent of total measures fully met by CHBs
- Percent of total measures partially met by CHBs
- Percent of total measures not met by CHBs

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¹ www.health.state.mn.us
² www.health.state.mn.us
Despite this collective system wide improvement, there are considerable underlying differences between individual CHBs in ability to meet these measures. **Figure 2** shows the ability of Minnesota’s local public health system to meet 35 national measures, as reported into the Local Public Health Planning and Performance Measurement Reporting System (PPMRS) by each of Minnesota’s 50 CHBs. Each horizontal bar corresponds to an individual CHB’s responses, and the number of measures that a CHB could fully meet (green), partially meet (yellow), or not meet (red). All of the CHBs in the top two quartiles reported fully meeting a majority of the 35 national measures, whereas some CHBs in the bottom quartile reported fully meeting less than one-third of those measures.

**Figure 2. CHB ability to meet 35 national measures, by CHB, Minnesota, 2013**
Voluntary National Accreditation

In 2011, the Public Health Accreditation Board (www.phaboard.org) launched a voluntary national accreditation program. One year prior, SCHSAC recommended that the Minnesota Department of Health (MDH) and the state’s CHBs work together so that all CHBs would be prepared to apply for voluntary accreditation by 2015. By 2013, five CHBs were in the process of applying for accreditation or had achieved accreditation (Figure 3). Collectively, these five CHBs serve 33 percent of the state’s population. An additional 20 CHBs (which serve an additional 38 percent of Minnesotans) reported planning to apply for accreditation by 2016.

Just under one-half of Minnesota CHBs (24 CHBs, or 49 percent) have decided not to apply for accreditation at this time, or are undecided. These 24 CHBs were asked to identify up to two reasons for this course of action. The two reasons cited most frequently by these 24 CHBs were (1) the time and effort needed to apply for accreditation would exceed the benefits, and (2) the standards for accreditation exceed the capacity of the CHB. Notably, no Minnesota CHBs selected “The standards are not appropriate” as a reason for not applying for accreditation, contrasting with a parallel national survey, in which 28 percent of local public officials stated a leading reason not to pursue accreditation was because the standards were inappropriate.

Figure 3. CHB participation in voluntary national accreditation, Minnesota, 2013

- Achieved accreditation (1)
  Hennepin
- In process of applying (4)
  Bloomington, Meeker-McLeod-Sibley, Minneapolis, St. Paul-Ramsey
- Planning to apply (20)
  2014: Dakota, Olmsted, Stearns, Washington
  2015: Chisago, Goodhue, Kanabec-Pine, Scott
  2016 or later: Aitkin-Itasca-Koochiching, Becker, Carver, Horizon, Isanti-Mille Lacs, Kandiyohi-Renville, Morrison-Todd-Wadena, North Country, Otter Tail, Polk-Norman-Mahnomen, SWHHS, Wright
- Undecided about applying (18)
- Not applying at this time (6)

QI Maturity

A set of indicators related to organizational quality improvement (QI) maturity, below, shows evidence of progress on incorporating QI into standard practice, an important part of an effective and responsive public health system. From 2012 to 2013, QI capacity increased among Minnesota CHBs for each of the 10 QI measures noted below. The greatest gains related to QI planning, QI in job descriptions, customer satisfaction, and overall QI capacity (Figure 4). In 2013, almost all CHBs agreed that key decision makers in the CHB believe that QI is important, and most agreed that staff routinely contribute to decisions and are able to work across programs. Fewer than half of CHBs agreed that the CHB has a pervasive culture of QI within the CHB, that job descriptions included QI, that the entire CHB was covered by a QI plan, or that the CHB had high capacity for QI.
To monitor system level changes in QI maturity, the [Minnesota Public Health Research to Action Network](http://www.health.state.mn.us) developed methods to calculate an organizational QI maturity score, which corresponds to the [Roadmap to a Culture of Quality Improvement](http://qiroadmap.org) developed by the National Association of County and City Health Officials (NACCHO).\(^3\) Findings suggest the proportion of CHBs with a formalized, organizational approach to QI increased steadily from 11 percent in 2011 to 34 percent in 2013. During that same period, the percentage of CHBs in the earliest stages of integrating QI has decreased correspondingly from 28 percent to 12 percent.\(^4\)

### 2. Promote Healthy Communities and Healthy Behaviors

#### Nutrition, Physical Activity, Tobacco and Alcohol Prevention

CHBs report on a variety of health promotion activities that are underway in their communities. Activity related to nutrition and physical activity was especially widespread, with only four CHBs indicating that they hadn’t provided any of the four evidence-based strategies listed in the measures (enhance infrastructure supporting walking/biking, active school day and/or safe routes to school, community healthy food environment, and restrict availability of unhealthy foods/increase availability of healthy foods in schools). Within those four areas, CHBs largely focused activity on convening partners and engaging stakeholders. CHBs were more likely to report working in schools than in communities to develop, implement, evaluate, or maintain policy. Regardless of setting (school or community), CHBs were more likely to report developing, implementing, evaluating, or maintaining policy for nutrition, rather than for physical activity.

The vast majority of CHBs (92 percent) reported that they had conducted tobacco prevention strategies. Conducting activities around smoke-free multi-unit housing was the most common strategy in which CHBs engaged (74 percent),
followed by health education messages (68 percent). SHIP served as the key source of funding for nutrition, physical activity, and tobacco prevention, followed by local tax levy.

Eleven CHBs (20 percent) were not involved in any of ten alcohol prevention initiatives (Figure 5). Substantially more CHBs were involved in health education than policy, systems or environmental change. CHBs relied most heavily on flexible funding for alcohol prevention, namely local tax levy, and state general funds through the LPH Act.

Figure 5. CHB alcohol prevention initiatives, Minnesota, 2013

Maternal and Child Health

CHBs continue to serve as a key link in providing services to women, children, and families in Minnesota. Almost all CHBs provided activities and services to prevent infant mortality (96 percent) and to reduce pre-term birth (92 percent), activities that are above and beyond those provided through family home visiting.

Of the 45 CHBs that provide the Follow Along Program, the majority of them—96 percent—use universal eligibility guidelines, and also use both developmental and social/emotional screening components (89 percent).

The vast majority of CHBs (98 percent) provided some services related to childcare health and safety; CHBs most frequently provided education and/or training to health care providers (82 percent), and conducted screening in childcare settings least frequently (18 percent).

3. Prevent the Spread of Infectious Diseases

CHBs play a vital and visible role in preventing the spread of infectious disease in Minnesota. All CHBs provided immunizations in 2013, and the vast majority (more than 80 percent) provided community education, conducted Immunization Practices Improvement visits, and educated providers. The majority of CHBs also participated in school-based clinics (54 percent) and engaged providers to use Minnesota Immunization Information Connection, or MIIC (72 percent).

The immunization coverage rates shown in Figure 6 are based on MIIC records of children aged 24-35 months who have two or more non-influenza immunizations recorded in MIIC. The Minnesota Immunization Program estimates that 64 percent of this MIIC population statewide was up-to-date on recommended immunizations in 2013, although
coverage within Minnesota CHBs ranged from 42 percent to 86 percent. This variation in immunization coverage is depicted in **Figure 6**, below; each horizontal bar represents one CHB.⁷

**Figure 6. Children aged 24-35 months with recommended immunizations, by CHB, Minnesota, 2013**

Almost all CHBs reported significant involvement in infectious disease prevention activities (88 percent), most frequently in prevention activities related to active tuberculosis (58 percent) and pertussis (62 percent). Most CHBs focused some infectious disease prevention toward specific populations (76 percent), most frequently toward immigrant/refugee populations.

4. Protect Against Environmental Health Hazards

CHBs partner with MDH on a variety of programs and activities related to maintaining the safety and stability of the public health environment. Most CHBs provided services to private well owners (66 percent), promoted radon testing (84 percent), and supported the Minnesota Clean Indoor Air Act (96 percent). MDH often takes a lead role in enforcing the Clean Indoor Air Act, but several CHBs reported a lead enforcement role (19 percent of those that support the Act).

Mold was the leading public health nuisance complaint identified by CHBs (66 percent), followed by garbage/junk houses (54 percent), and accumulation of rubbish/junk (34 percent).

Staff from almost half of CHBs (46 percent) attended climate change training in 2013. Many CHBs also provided education (20 percent) or convened partners (20 percent) around policy change. At the same time, nearly half of CHBs (44 percent) reported that they did not consider climate change last year (**Figure 7**).
5. Prepare for and Respond to Disaster, and Assist Communities in Recovery

To help maintain the state’s emergency preparedness system, CHBs conducted more than 200 exercises from July to December 2013, with 12 CHBs conducting six or more exercises (24 percent). Most CHBs conducted one or more drills, though some also conducted more intensive functional exercises (10 percent) or full-scale exercises (6 percent). Minnesota’s Health Alert Network (HAN) enables CHBs to quickly disseminate urgent messages to hospitals, clinics, and other key partners across the state. CHBs send test messages to local partners twice per year, asking each recipient to send a confirmation response within two hours. Figure 8 shows the clinic response rate reported by Minnesota CHBs.

Figure 8. Health care clinics’ response to health alert within two hours, by CHB, Minnesota 2013 (n=49)
Ideally, the response rate from partners would be 100 percent. Minnesota’s Public Health Emergency Preparedness (PHEP) grant currently requires an 80 percent response rate from clinics, but many (32 percent) do not meet this threshold. Notably, 20 CHBs (41 percent) received a response from all clinics within the specified two-hour period, thereby exceeding grant requirements by a wide margin.

6. Assure the Quality and Accessibility of Health Services

CHBs continue to see unmet needs in their communities. Most CHBs (75 percent) reported substantial need for additional health care providers and services in the fields of mental and dental health, as seen in Figure 9. More than one-third of CHBs also reported a gap in chemical health and family planning services (38 percent and 36 percent, respectively).

Figure 9. CHB gaps in health care services, Minnesota, 2013

Using Data for Decision Making and Improvement: Next Steps

These findings indicate important strengths and areas of improvement for local public health, and also underscore that many CHBs are unable to meet some national benchmarks and standards. MDH is using this information to guide technical assistance and training, inform program planning, and illustrate the scope of public health services in Minnesota. MDH continues to refine reporting instructions and systems to help gather valid data on these measures, and encourages CHBs to consistently follow these reporting instructions.

Top Opportunities for System Improvement in Minnesota

The SCHSAC Performance Improvement Steering Committee met with content experts to discuss findings from the Local Public Health Act measures, and identified the following top opportunities for system improvement:

1. **Increase vaccination rates among 24-35 month olds**
2. **Improve Health Alert Network (HAN) response rates from clinic partners**
3. **Increase ability to meet the national standards**

To accelerate collective improvements within these three key areas, MDH is mobilizing content experts and quality improvement consultants. MDH is also working to build on and share strengths and successes within the system. However, the range in capacity and the breadth of public health services delivered continues to prove challenging. Ultimately, Minnesota’s public health system requires additional flexible funding and more intensive technical assistance to assure consistently high performance on all Local Public Health Act performance measures.
More Information
For more information, please contact the MDH Office of Performance Improvement (www.health.state.mn.us).

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Endnotes

2 Contact your CHS administrator or your regional nurse consultant for more information on the report tailored for your CHB.


4 Data for 2011 was obtained from the University of Southern Maine as part of a Multi-State Learning Collaborative (MLC) survey. The Minnesota Department of Health (MDH) was able to obtain data for 56 respondents (an 80 percent response rate), representing a mix of community health boards (CHBs) and local health departments (LHDs). Data for 2012 and 2013 was obtained from the MDH Planning and Performance Measurement Reporting System (PPMRS), and the reporting entity was the CHB. Governance changes between 2012 and 2013 reduced the number of CHBs in Minnesota from 52 to 50.


6 Immunization coverage rates are based on Minnesota Immunization Information Connection (MIIC) records of children aged 24 through 35 months who have two or more non-influenza immunizations recorded in MIIC. MIIC data may underestimate the actual percentage of children receiving vaccines because (1) health care provider participation in the state immunization registry is voluntary, (2) the registry population may include children who have moved, and (3) cross border state immunization data exchange is limited to Wisconsin.


8 Information for these measures is obtained through routine grant reporting to the MDH Office of Emergency Preparedness. Data shown here reflect grant reporting for the six months spanning July-Dec. 2013. Additional exercises conducted between Jan.-June 2013 are not included.