Advancing Health Equity in Minnesota: Report to the Legislature

February 1, 2014

For more information, contact:
Commissioner’s Office
Minnesota Department of Health
625 Robert St. N.
P.O. Box 64975
St. Paul, MN 55164-0975

Phone: 651-201-4989

As requested by Minnesota Statute 3.197: This report cost approximately $18,859 to prepare, including staff time, printing and mailing expenses.

Upon request, this material will be made available in an alternative format such as large print, Braille or audio recording. Printed on recycled paper.
February 1, 2014

Dear Legislators:

It is a great privilege to present this report on Advancing Health Equity in Minnesota. The growing economic inequities and the persistence of health disparities in our great state are a matter of life and death for many. Communities across the state are being devastated by high rates of infant mortality, diabetes, suicide, and more. Multiple efforts have been made to try to close the significant gaps in health outcomes across populations, but essentially we have been running in place.

This report reveals that:
• Even where health outcomes have improved overall, as in infant mortality rates, the disparities in these outcomes remain unchanged: American Indian and African American babies are still dying at twice the rate of white babies.
• Inequities in social and economic factors are the key contributors to health disparities and ultimately are what need to change if health equity is to be advanced.
• Structural racism — the normalization of historical, cultural, institutional and interpersonal dynamics that routinely advantage white people while producing cumulative and chronic adverse outcomes for people of color and American Indians — is rarely talked about. Revealing where structural racism is operating and where its effects are being felt is essential for figuring out where policies and programs can make the greatest improvements.
• Improving the health of those experiencing the greatest inequities will result in improved health for all.

In the process leading to the release of this report, hundreds of critical conversations took place. Relationships were strengthened, new leaders emerged and important tensions, challenges and resistance were uncovered. Individuals and organizations from both the community and the health department made invaluable contributions to this report, sharing evidence of the devastating effects of health inequities throughout the state as well as examples of what can be done to improve health for all. Although we were not able to include every example of the health inequities or effective strategies shared with us, the passion of many for addressing health disparities and advancing health equity was evident in the process of compiling this work.

It is our hope that this report will provide a much-needed foundation for building on the work to eliminate health disparities and ultimately achieve health equity for all people in Minnesota.

Advancing Health Equity Project Co-Leads:

Melanie Peterson-Hickey, Research Scientist
Jeanne Ayers
Minnesota Center for Health Statistics
Assistant Commissioner

Executive Office • 625 Robert Street North • PO Box 64975 • St. Paul, MN, 55064-0975 • (651) 201-5810 phone
http://www.health.state.mn.us
An equal opportunity employer
A Letter from Minnesota’s State Commissioners

February 1, 2014

To all Minnesotans:

Minnesota is a great place to live, with a strong economy, beautiful parks and recreation areas, and some of the best schools in the country. But we know that not all people in Minnesota have the same opportunities to be healthy. Stark inequalities persist in some parts of our society, and these inequalities have resulted in some groups having better health outcomes than others — even after factoring in individual choices. For Minnesota to have the brightest future possible we need to eliminate these health disparities, especially those experienced by people of color and American Indians.

As commissioners, we know that the work of our agencies directly impacts the health, well-being, and quality of life for all people in Minnesota. We also recognize that disparities exist within our areas of responsibility and that our efforts to address those disparities can help reduce disparities in health.

We understand that health is created by much more than just good medical care. Optimal health for everyone requires excellent schools, economic opportunities, environmental quality, secure housing, good transportation, safe neighborhoods, and much more. There is a practical limit to the ability of one agency or even state government as a whole in providing all of this. A high quality of life requires a broad community effort and leadership from all corners of society. But, as commissioners of state agencies, we are committed to partnering with the Minnesota Department of Health to create a healthy state and advance health equity for all people in Minnesota.

Signed,

Commissioner Spencer Cronk
Minnesota Department of Administration
50 Sherburne Avenue, Suite 200
Saint Paul, MN 55155

Commissioner Mike Rothman
Minnesota Department of Commerce
85 Seventh Place East, Suite 500
Saint Paul, MN 55101

Commissioner Dr. Brenda Cassellius
Minnesota Department of Education
1500 Highway 36 West
Roseville, MN 55113

Commissioner David Frederickson
Minnesota Department of Agriculture
625 Robert Street N.
Saint Paul, MN 55155-2538

Commissioner Tom Roy
Minnesota Department of Corrections
1450 Energy Park Drive, Suite 200
Saint Paul, MN 55108

Commissioner Katie Clark Sieben
Minnesota Department of Employment and Economic Development
332 Minnesota Street, Suite E200
Saint Paul, MN 55101-1351
# Table of Contents

Foreword from Commissioner Ed Ehlinger ................................................................. 3  
Executive Summary ........................................................................................................ 5  

## Chapter One ............................................................................................................. 9  
Introduction .................................................................................................................... 10  
What is health? .................................................................................................................. 10  
What is health equity? ....................................................................................................... 11  
What creates health? ........................................................................................................ 12  
Being healthy together ..................................................................................................... 13  

### Background .............................................................................................................. 15  
Minnesota’s vision for health ............................................................................................ 16  
Health disparities and health inequities in Minnesota .................................................... 17  
Minnesota’s strengths and the challenge of advancing health equity ............................ 18  
The human and economic costs of health inequities ....................................................... 19  
The history of Minnesota’s efforts toward health equity .................................................. 21  

### Methodology .......................................................................................................... 24  
Opening with race ........................................................................................................... 24  
The health equity inquiry ................................................................................................. 26  
Identifying tensions in the process .................................................................................. 27  

## Chapter Two ............................................................................................................. 29  
Recommendations for Advancing Health Equity throughout Minnesota ....................... 30  
1: Advance health equity through a health in all policies approach across all sectors ......................................................................................................................... 30  
2: Continue investments in efforts that currently are working to advance health equity .............................................................................................................................. 35  
3: Provide statewide leadership for advancing health equity. ....................................... 36  
4: Strengthen community relationships and partnerships to advance health equity. .... 38  
5: Redesign MDH grant-making to advance health equity. .......................................... 38  
6: Make health equity an emphasis throughout MDH .................................................. 40  
7: Strengthen the collection and analysis of data to advance health equity. ................. 41  

### Next steps .................................................................................................................. 42  
Establish the Minnesota Center for Health Equity ....................................................... 43  
Implement the Advancing Health Equity recommendations ............................................ 43  
Convene and coordinate a cabinet-level health equity effort ........................................ 43  

## Chapter Three .......................................................................................................... 44  
Practices for Advancing Health Equity ........................................................................... 45  
Applying a health in all policies (HiAP) approach to advance health equity ................ 45  
Using health impact assessment (HIA) to advance health equity .................................. 45  
Making advancing health equity an integral aspect of all efforts ................................ 46  
Exemplary and emerging practices to advance health equity in Minnesota .................. 52  

## Chapter Four ............................................................................................................ 56  
Data: the Foundation for Advancing Health Equity in Minnesota ................................ 57  
The intersection of health and social determinants ....................................................... 57  
Providing adequate detail of social determinants of health ........................................ 58  
Current MDH data systems and social determinants of health ..................................... 59  
Strengthening current data capacity ............................................................................. 61  
E-health and health information technology ................................................................. 64  
Four keys to the successful use of data for addressing health inequities .................... 65  
Data challenges .............................................................................................................. 67  
Data opportunities ......................................................................................................... 68
Chapter Five ............................................................................................................................................. 70

Populations Experiencing Health Inequities .................................................................................... 71
  Children .................................................................................................................................................. 71
  American Indians .................................................................................................................................. 72
  African Americans ............................................................................................................................... 73
  Hispanic/Latinos ................................................................................................................................. 74
  Asian-Pacific Islanders ......................................................................................................................... 75
  LGBTQ persons ................................................................................................................................. 75
  Individuals and families facing mental health challenges ................................................................. 76
  Older Minnesotans ............................................................................................................................. 77
  Additional populations experiencing health inequities .................................................................... 78

Data on Health Disparities and Inequities ......................................................................................... 79
  Mortality rates by race/ethnicity and age ............................................................................................. 79
  Infant mortality by race/ethnicity of mother ..................................................................................... 80
  Breast cancer incidence and mortality ............................................................................................... 82
  Rates of HIV/AIDS ............................................................................................................................ 82
  Chlamydia ............................................................................................................................................ 83
  Stroke and COPD mortality ................................................................................................................ 84
  Oral health ........................................................................................................................................... 85
  Ninth-graders overweight/obesity ...................................................................................................... 85
  Ninth-graders suicide ........................................................................................................................ 87
  Ninth-graders changing schools ....................................................................................................... 87
  High school graduation rates ............................................................................................................ 89
  Unemployment .................................................................................................................................... 89
  Per capita income ............................................................................................................................... 90
  Children in poverty ............................................................................................................................. 90
  Home ownership ............................................................................................................................... 91
  Incarceration ....................................................................................................................................... 92
  Health insurance .............................................................................................................................. 93
  Mental health diagnosis by sexual identity and gender for postsecondary students .................... 93
  Mental illness and median age at death ........................................................................................... 95

Chapter Six ............................................................................................................................................... 96

The Advancing Health Equity Inquiry and Findings ........................................................................ 97
  Inquiry questions ............................................................................................................................... 97
  Summary of inquiry responses ......................................................................................................... 98
  Lessons learned ............................................................................................................................... 106

Appendices ................................................................................................................................................ 108

Appendix A: Laws of Minnesota 2013, Chapter 108, Article 12, Section 102 .................................. 109
Appendix B: Minnesota Department of Health Mission, Vision, and Values .................................... 110
Appendix C: Advancing Health Equity Participants .......................................................................... 111
Appendix D: Redlining and Infant Mortality in Minneapolis, Minnesota .......................................... 116
References ............................................................................................................................................... 118
Foreword from Commissioner Ed Ehlinger

On November 15, 1953, my father took me to my first Green Bay Packer football game. The game was played at the old City Stadium, which the Packers shared with the city’s high schools. The Packers lost to the Detroit Lions 14-7 but that was far from the most memorable thing that happened that day.

In those days, kids accompanied by a parent got in free but had to sit by themselves on the field in the space behind the end zone. They were also free to roam around the stadium if they got bored. Because professional football in 1953 wasn’t the overwhelming presence that it is today, I had not yet developed much interest in the game. I was more interested in wandering and witnessing the spectacle of the afternoon than in watching the actual football game so I spent more time behind the benches than on the end zone grass. It was during that wandering time that I saw Bobby Mann, an offensive end wearing number 87. He was the first African-American that I had ever seen.

On our walk home from the game, I peppered my dad with lots of questions about what I had seen. I was most curious about the football player who didn’t look like any of the rest of the players. I particularly wondered why there weren’t others like him on the team or in our city and why I didn’t see him around town like many of the other players. I remember specifically what my dad said. “He’s a Negro and he comes from Detroit. He’s allowed to live in Green Bay only during the football season. Then he has to leave. While he’s here, he has to live in a cabin behind Kroll’s (a restaurant near the edge of town).”

To me, that did not seem fair. My dad agreed but said, “That’s the way things are right now. Let’s hope that they change in the future. Maybe your generation can do that.”

Ten years later, I was a senior in high school playing football in hand-me-down Packer equipment thanks to the connections of our coach Ted Fritch, a member of the Packer Hall of Fame. At that point, nearly half of the Packers were African-American. After football practice on the day after Martin Luther King, Jr. gave his “I have a dream” speech, I shared my 1953 experience with Coach Fritch. His response was similar to that of my father ten years earlier. “We’ve made a lot of progress (in integrating our society) since then but too many people are still denied the opportunities that they deserve. A whole lot more needs to be done. I’m hoping that your generation will be able to do that.”

I thought of those two events again last year as I watched Sonia Sotomayor, a Supreme Court Justice with a Hispanic background, swear in Vice President Biden and listened to President Obama give his second inaugural address. It was evident that we had made tremendous progress; probably more than my father or Coach Fritch could have imagined.

I also thought of all those events as we began to prepare this Advancing Health Equity report. Although we have laws prohibiting the kind of treatment Bobby Mann experienced in 1953, today’s statistics tell us that we are still far from the equality envisioned by our country’s founders or dreamed about by Dr. King or even my dad or Coach Fritch. Those shortcomings are starkly evident in Minnesota where, on average, people are among the healthiest in the country, while a significant number of Minnesotans,
particularly people of color and American Indians, are not as healthy as they should be. Sadly, the disparities present in Minnesota are some of the greatest in the country.

Those inequities run counter to the image of a Minnesota where the women and men are strong and good-looking and “all the children are above average.” This discordance between our aspirations and our reality made me think of a statement by Geoffrey Vickers who said “The landmarks of political, economic and social history are the moments when some condition passed from the category of the given into the category of the intolerable. I believe that the history of public health might well be written as a record of successive re-definings of the unacceptable.”

As a grandfather watching my grandchildren growing up in an increasingly diverse society, I am hoping that we may be at one of those landmark moments of history when the disparities that have long been considered a given have become intolerable and unacceptable. As a Minnesotan who embodies some of the history, values, and dreams of our state, I am hoping that we are at a landmark moment when eliminating health disparities and achieving health equity is recognized as a necessity for the overall long-term welfare of our state. As Minnesota’s Health Commissioner who has looked at the data and travelled around the state talking with citizens about what creates health, I am hoping that we are at a landmark moment when all of us recognize disparities as a public health issue and are ready to advance a health equity effort in Minnesota.

Our knowledge about what creates health is growing. We know that health is determined not just by access to high quality health care but also by healthy social, economic, and environmental conditions — conditions that we can influence with the program and policy choices that we make. We also know that it will take a commitment from all parts of our society, not just those in the health care and public health fields, to achieve this public health goal of health equity. As the Institute of Medicine said, “public health is what we, as a society, do collectively to assure the conditions in which people can be healthy.” What we need now is a collective commitment to assure those conditions, using an equity lens.

"Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy."

Sixty years ago, my dad knew things were not right but he had hopes and dreams that they could be made better — perhaps by my generation. Fifty years ago, my coach knew much more had to be done to achieve racial equality and hoped that the kids he was coaching could help make that happen. Certainly, Martin Luther King, Jr. knew the extent and tenacity of the problems of inequity in our society but he had the courage to articulate a dream for all Americans 50 years ago that still resonates and challenges us today. I believe that we have a unique opportunity to embrace those dreams and help make them come true. And as William Butler Yeats said, “In dreams begins responsibility.”

Our work, the work of public health and the work of creating health equity, is complex, difficult, often frustrating, and will probably never be completed. There will always be challenges and unacceptable problems requiring efforts to assure health for all. But, as my mother said when she heard of our conversation on the way home from the football game in 1953, “Life can be unfair and unjust but it’s not unchangeable. If you want, you can help change what you saw today.” I share my mother’s perspective. We have been blessed with a great challenge and a great opportunity to advance health equity in Minnesota. I believe we are up to that challenge.

Dr. Ed Ehlinger, Commissioner of Health
February 1, 2014
Executive Summary

Minnesota ranks, on average, among the healthiest states in the nation. But the averages do not tell the whole story. Too many people in Minnesota are not as healthy as they could and should be, and the health disparities that exist are significant, persistent and cannot be explained by bio-genetic factors. Minnesota has these disparities in health outcomes because the opportunity to be healthy is not equally available everywhere or for everyone in the state.

The 2013, Minnesota Legislature directed the Minnesota Department of Health (MDH) to prepare a report on Advancing Health Equity in Minnesota. The purpose of this report is to provide an overview of Minnesota’s health disparities and health inequities, to identify as far as possible the inequitable conditions that produce health disparities, and to make recommendations to advance health equity in Minnesota.

To develop this report, department staff engaged in discussions with a wide range of Minnesota communities. The goal of these discussions was to identify the sources of long-standing health disparities, and to gather diverse perspectives on what changes could be made in systems, policies, and processes to better protect, maintain, and improve the health of all people in Minnesota. Over 180 conversations were held with over 1,000 participants, and nearly 100 persons filled out an online survey, generating approximately 200 single-spaced pages of comments. This legislative report provides a summary of the methods, findings, and recommendations from this process.

Health and health inequities

Health is a state of complete physical, social, and mental well-being and not merely the absence of disease or infirmity. Health is created in the community through social, economic and environmental factors as well as individual behaviors and biology. When groups face serious social, economic and environmental disadvantages, such as structural racism and a widespread lack of economic and educational opportunities, health inequities are the result.

These inequities affect many populations in Minnesota:

- African American and American Indian babies die in the first year of life at twice the rate of white babies. While infant mortality rates for all groups have declined, the disparity in rates has existed for over 20 years.
- American Indian, Hispanic/Latino, and African American youth have the highest rates of obesity.
- Intimate partner violence affects 11 to 24 percent of high school seniors, with the highest rates among American Indian, African American and Hispanic/Latino students.
- African American and Hispanic/Latino women in Minnesota are more likely to be diagnosed with later-stage breast cancer.
- Gay, lesbian and bisexual university students are more likely than their heterosexual peers to have struggles with their mental health.
- Persons with serious and persistent mental illness die, on average, 25 years earlier than the general public.

These health disparities persist and are neither random nor unpredictable. The groups that experience the greatest disparities in health outcomes also have experienced the greatest inequities in the social and economic conditions that are such strong predictors of health.
• Poverty rates for children under 18 in Minnesota are twice as high for Asian children, three times as high for Hispanic/Latino children, four times as high for American Indian children, and nearly five times as high for African American children as for white children.
• Unemployment is highest among populations of color, American Indians, and people who live in rural Minnesota.
• While 75 percent of the white population in Minnesota owns their own home, only 21 percent of African Americans, 45 percent of Hispanic/Latinos, 47 percent of American Indians, and 54 percent of Asian Pacific Islanders own their own homes.
• African Americans and Hispanic/Latinos in Minnesota have less than half the per-capital income of the white population.
• Lesbian, gay, bisexual, and transgender youth are at increased risk for bullying, teasing, harassment, physical assault, and suicide-related behaviors compared to other students.
• Low-income students are more likely to experience residential instability, as indicated by the frequency of changing schools, than their higher-income peers in every racial and ethnic category.
• American Indian, Hispanic/Latino, and African American youth have the lowest rates of on-time high school graduation.
• African Americans and American Indians are incarcerated at nine times the rate of white persons.

**Structural Racism**

A key decision made in the Advancing Health Equity effort was to be explicit about race and structural racism, especially the relationship of race to the structural inequities that contribute to health disparities. Even when outcomes related to other factors such as income, gender, sexual orientation, and geography are analyzed by race/ethnicity, greater inequities are evident for American Indians, African Americans, and persons of Hispanic/Latino and Asian descent.

Structural racism is the normalization of an array of dynamics — historical, cultural, institutional and interpersonal — that routinely advantage white people while producing cumulative and chronic adverse outcomes for people of color and American Indians. Structural racism is deeply embedded in American society and is a potent factor leading to inequities in all major indicators of success and wellness.

Structural racism is perpetuated when decisions are made without accounting for how they might benefit one population more than another, or when cultural knowledge, history and locally-generated approaches are excluded. When this happens, programs and policies can reinforce or compound existing race-based inequities.

**The Practice of Health Equity**

In addition to identifying health inequities, this report shares many ways in which health equity can be advanced, based on research, the experience of other states, analysis of the nearly 200 pages of inquiry responses and a review of existing program resources. The practical ways of advancing health equity are directed toward a broad set of partners including the Minnesota Department of Health as well as toward state and local governments, community partners, other state agencies, the health care sector, and organizations across Minnesota.
Recommendations

The recommendations emerging through this report process provide a new approach to addressing health disparities and health inequities in Minnesota. These recommendations expand the understanding and response to differences in health status from a wholly individual or programmatic response to include a broad focus on social factors and conditions (e.g., historical, social, and economic).

1: Advance health equity through a health in all policies approach across all sectors.

Moving to a policy approach to advance health equity requires thinking more broadly and working across sectors to develop healthy public policy. Policies should be examined and resources targeted where efforts will have the greatest effect on populations with the greatest need, from housing to transportation to education and more.

2: Continue investments in efforts that currently are working to advance health equity.

While it is necessary to address the social and economic factors that drive health disparities, this approach must be paired with a commitment to continue the exemplary practices that are already making a difference for the people currently experiencing the impact of these inequities and health disparities.

3: Provide statewide leadership for advancing health equity.

MDH must build statewide capacity to implement a health in all policies approach, convene leaders and include health equity as a key component of policy discussions, and engage new and existing partnerships across all sectors in a shared sense of responsibility for the health of all people in Minnesota.

4: Strengthen community relationships and partnerships to advance health equity.

MDH must expand the range and depth of relationships with multiple communities and create avenues for meaningful participation of Minnesota’s diverse communities in project governance and oversight.

5: Redesign the Minnesota Department of Health grant-making to advance health equity.

MDH must adapt grant-making procedures and practices to support a wider range of organizational capacity among MDH grantees, improving training and evaluation methods to advance health equity, and engage a diverse range of stakeholders in the grant development process.

6: Make health equity an emphasis throughout the Minnesota Department of Health.

MDH must assure that health equity and the analysis of structural inequities, including structural racism, become integral aspects of all MDH divisions and programs, and address changes needed in the MDH workforce to advance health equity.

7: Strengthen the collection, analysis and use of data to advance health equity.

MDH must strengthen coordination of data activities related to health equity across all divisions and programs, and develop a long-term plan for improving the collection, analysis, reporting, dissemination and use of health equity data.
Next Steps

Preparation of this report was part of a broader process to strengthen the efforts of the Minnesota Department of Health to advance health equity. Next steps to carry this effort forward include:

Establish the Minnesota Center for Health Equity
The Commissioner of Health established the Minnesota Center for Health Equity in December 2013 with the intent of bringing an overt and explicit focus to the efforts of the Minnesota Department of Health to advance health equity in Minnesota. It is envisioned that the Center will support both existing health department and partner efforts to advance health equity. The Center will serve as a technical resource for the agency and its state and community partners and create a solid, data-driven footing for health equity efforts. It will focus on building the capacity to collect and analyze data and community experience on health and health inequities as well as the pathways to opportunity, and will support and encourage the collection and analysis of race, ethnicity, preferred language, social and economic determinants, and LGBTQ data in relevant data sets. In addition the Center will work to increase cultural understanding and deepen working relationships across program areas and will assist in identifying promising practices with communities experiencing the greatest health disadvantage.

Convene and coordinate a cabinet-level health equity effort
The Commissioner of Health will invite state agency commissioners together in the spring of 2014 to consider how to include health equity as a key component of policy discussions. The cabinet members will consider ways to routinely incorporate health considerations and embed health equity in state government structures, processes and decision making.

Implement the Advancing Health Equity recommendations
The Minnesota Department of Health will determine where policy decisions are needed, both internal and external; develop policy recommendations in partnership with the community, tribes, and state agencies for the 2015 Minnesota legislative session; identify resource needs and develop training and communications plans for MDH; and maintain attention on operational areas noted in the recommendations, such as grant-making, data systems, and work force development.

As this work continues, the health department will be challenged to play an increasing leadership role across state agencies, community partnerships and with business and industry relationships. The department also needs to continue to educate more people and organizations about health equity, and to encourage specific and visible steps to advance health equity across all sectors of Minnesota.
Introduction

The 2013 Minnesota State Legislature passed Session Laws 2013, Chapter 108, Article 12, Section 102, directing the Minnesota Department of Health (MDH) to prepare this report on Advancing Health Equity in Minnesota. This effort was initiated because disparities in health status outcomes for certain populations are continuing unabated, including disparities based on race or ethnicity. The process used to complete this report was to engage communities in dialogue to identify the sources of longstanding health disparities, and to gather many perspectives on what needs to be done in systems, policies, and processes to protect, maintain, and improve the health of all Minnesotans. Conversations were held with over 1,000 participants from more than 180 organizations, and nearly 100 persons filled out an online survey, generating approximately 200 single-spaced pages of comments. This report to the legislative provides a summary of the methods, findings, and recommendations from this process.

Minnesota ranks, on average, among the healthiest states in the nation. But the averages do not tell the whole story. Many — too many — Minnesotans are not as healthy as they could be and should be. Minnesota has significant and persistent disparities in health outcomes for many populations because the opportunity to be healthy is not available everywhere or for everyone in the state.

The health of American Indians and African Americans; the health of people of European, Hispanic/Latino, Asian, Pacific Islander, Middle Eastern, and African descent; the health of persons with disabilities or mental illness; the health of lesbian, gay, bisexual, transgender and queer (LGBTQ) persons; the health of urban, suburban, and rural persons; the health of men and women, young and old ... all are bound together in a living, dynamic interconnectedness.

What is health?

To understand health equity it is first necessary to understand health. Health, as defined by the World Health Organization, is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.

Health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.

Ongoing research, however, also confirms that health, although typically viewed as the characteristic of a person, is actually better understood as a characteristic of communities.

Few people say they are healthy just because they had a good visit to the doctor. Rather, they recognize that health is a product of choices (eating well, exercising, not smoking), good health care, and social and economic opportunities. In fact, those social and economic opportunities (community support, quality of schooling, neighborhoods, and cleanliness of water, healthful food, clean air, and so on) have a powerful impact on the range of choices people in Minnesota have. For example, if you live in a

---

1 See Appendix A for the text of Section 102.
neighborhood with no full-service grocery store, choosing to eat healthy food is more challenging. Or if you live in an unsafe neighborhood, sending the kids out to play or choosing to taking a walk become much more difficult decisions. Even when a person makes or tries to make all the “right” decisions for their health, health disparities persist for populations facing significant inequities in social and economic conditions.

As the First International Conference on Health Promotion put it, “health is a resource for everyday life, not the objective of living” and further noted that “the fundamental conditions and resources for health are: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity.”

The fundamental conditions and resources for health are: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity.

Health is something we create as a society and as communities, not something an individual can purchase or produce alone.

What is health equity?

What research also has shown is that there are persistent, significant, and socially-determined differences in the conditions that create health and the opportunity to be healthy for certain populations in Minnesota. “Socially-determined” means that these conditions are created by decisions that affect community or society at large (e.g., policies of governments, corporate decisions, neighborhood action, media tactics, etc.). These decisions are influenced by a variety of factors, including both positive and negative social forces (e.g., a sense of community, economic pressures, and a general fear of that which is foreign or strange). When these socially-determined differences lead to disparities in health outcomes, they are health inequities. Health equity, therefore, is a state where all persons, regardless of race,

---

Health disparity: A population-based difference in health outcomes (e.g., women have more breast cancer than men).

Health inequity: A health disparity based in inequitable, socially-determined circumstances (for example, American Indians have higher rates of diabetes due to the disruption of their way of life and replacement of traditional foods with unhealthy commodity foods). Because health inequities are socially-determined, change is possible.

Health equity: When every person has the opportunity to realize their health potential — the highest level of health possible for that person — without limits imposed by structural inequities. Health equity means achieving the conditions in which all people have the opportunity to attain their highest possible level of health.

Structural inequities: Structures or systems of society — such as finance, housing, transportation, education, social opportunities, etc. — that are structured in such a way that they benefit one population unfairly (whether intended or not).

Structural racism: The normalization of an array of dynamics — historical, cultural, institutional and interpersonal — that routinely advantage white people while producing cumulative and chronic adverse outcomes for people of color and American Indians.

---


4 This distinction helps to differentiate a health inequity from a genetically-based difference in health outcomes: for example, women have more breast cancer than men; that is a population-based difference (disparity) but not an inequity. But African American men are more likely to die from prostate cancer than white men, in part for economic and social reasons, and that is unfair: that is a health inequity.
income, creed, sexual orientation, gender identification, age or gender have the opportunity to be as healthy as they can — to reach their full “health potential.”

**What creates health?**

The interconnectedness of health among all parts of the community is reflected in the way that health is created. Health is generated through the interaction of individual, social, economic, and environmental factors and in the systems, policies, and processes encountered in everyday life. These include job opportunities, wages, transportation options, the quality of housing and neighborhoods, the food supply, access to health care, the quality of public schools and opportunities for higher education, racism and discrimination, civic engagement, and the availability of networks of social support.

For example, income, not surprisingly, is strongly associated with health outcomes. People with a higher income generally enjoy better health and longer lives than people with a lower income. In other words, on average, the more money you make, the better your overall health. That income is associated with better health, however, is not only related to being able to afford health care. Income is, for most, a product of employment, and employment is dependent on opportunities for training and educational systems, on opportunities for socialization and social connections, and on the location of jobs to housing (to name just a few factors).

*Health is created, not purchased.*

If, for example, businesses do not invest in your neighborhood, and public transportation systems are not available so you can get to the work you can find, or the jobs that are available nearby pay so little that you have to work two or three jobs in order not to have to choose between rent and food, ultimately your health will suffer. The relative impacts of various factors on health are illustrated in the chart below.

**Figure 1: The Determinants of Health**

The mission of public health has been described as “fulfilling society's interest in assuring the conditions in which people can be healthy.” This is a health equity mission, which speaks to the fact that it takes

---


many factors or conditions to create health — in fact, 90 percent of health outcomes are affected by factors outside of clinical care.

Health is created in the community by people working together to create just economic, social and environmental conditions that promote health. Looking at the conditions that create or limit opportunity provides important perspectives for understanding both the nature and the sources of disparate health outcomes, and also helps point to viable and effective solutions.

Health is created in the community by people working together to create just economic, social and environmental conditions that promote health.

Health is created for the whole community when the systems and structures that were and are shaped by social forces such as structural racism are revealed, recognizing that these socially-designed structures can be transformed.

What are structural inequities?

People and organizations make decisions that influence the structures of society — decisions, for example, about where to construct a road or bridge, where to open a bank, how much interest to charge on loans, or how much funding to provide for public transit. The decisions of today are built on the decisions of the past.

When past or present decisions are made about the structures and systems of society — e.g., finance, housing, transportation, education — that benefit one population at the expense of others (intended or not) it creates a structural inequity. For example, when a freeway is built that bypasses a poor community but provides plenty of on-off ramps for wealthier communities, it sets up a structural inequity: businesses making decisions about where to locate often choose to build (and provide jobs) near the freeway exits, which then continues to benefit the wealthier community and bypass the poorer community.

The good news is that these inequities are based in policy decisions, and thus policy decisions can do much to improve the situation.

Being healthy together

In societies that have significant population-based inequities in the rates of employment, income, education, housing and more, it is not only the health of those who are disadvantaged that suffers, but the health of the more affluent is also diminished.

If we are not all healthy together, none of us is as healthy as we could be.

Research shows that assuring that everyone has the opportunity to be healthy is not only the means of eliminating health disparities but also improves health outcomes for all parts of the community.7,8

Health is not a limited good. Rather than viewing health as something scarce — a resource available

only for a few — it is far better to view health from the perspective of abundance — a resource that multiplies the more it is shared. Improving health for those who have the worst health outcomes generates better health for all. Everyone does better together.

_Nealthy equity is a feature not of persons, but of systems._

For equity in the health outcomes of persons to be possible, systems need to be in place to assure every person has:

- Access to economic, educational and political opportunity.
- The capacity to make decisions and effect change for themselves, their families and their communities.
- Social and environmental safety in the places they live, learn, work, worship and play.
- Culturally-competent and appropriate health care when the need arises.

Achieving health equity requires valuing everyone with focused and ongoing efforts to address avoidable systematic inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.

_Achieving health equity requires valuing everyone with focused and ongoing efforts to address avoidable systematic inequalities, historical and contemporary injustices, and the elimination of health and health care disparities._
Background

In 2008, the World Health Organization (WHO) Commission on Social Determinants of Health published a ground-breaking report on inequities in health, called “Closing the Gap in a Generation.” This report reflects research from around the globe on the ways in which the circumstances in which people grow, live, work, and age, with the systems put in place to deal with illness, work together to determine health outcomes. The report states that, “the conditions in which people live and die are … shaped by political, social and economic forces. Social and economic policies have a determining impact on whether a child can grow and develop to his/her full potential and live a flourishing life, or whether his/her life will be blighted.” The report further notes that “a girl born today can expect to live for more than 80 years if she is born in some countries, but less than 45 years if she is born in others. Within countries there are dramatic differences in health that are closely linked with degrees of social disadvantage.”

The findings of the WHO report are supported by numerous international studies as well as research in the U.S. In an effort to move beyond documenting disparities and providing targeted health education, Healthy People 2020 incorporated a commitment to health equity, which is reflected in one of the four overarching 2020 goals: “achieve health equity, eliminate disparities and improve the health of all groups.” This goal began an effort to move public health beyond documentation of health disparities to identifying and addressing the factors that create health and generate health disparities and inequities.

Further deepening the understanding of the impact of social and economic conditions on health, Healthy People 2020 identified social determinants of health as one of 12 leading health indicators, reinforcing the recognition of the critical role of home, school, workplace, neighborhood, and community in improving health.

The potential limits of the ability of contemporary public health practice to eliminate health disparities were indirectly acknowledged by the Director of the Centers for Disease Control and Prevention (CDC) in a foreword to the CDC Health Disparities and Inequalities Report. After summarizing key findings from the report, he observed that “(d)ifferences in health based on race, ethnicity, or economics can be reduced, but will require public awareness and understanding of which groups are most vulnerable, which disparities are most correctable through available interventions, and whether disparities are being resolved over time. These problems must be addressed with intervention strategies related both to health and social programs, and more broadly, access to economic, educational, employment, and housing opportunities.”

The WHO report, “Closing the Gap in a Generation,” (referenced above) points toward the need to support the participation of individuals and groups in decision-making processes to influence policies to

---


assure the conditions necessary for health are present for all. “A society concerned with better and more equitably distributed health is one that challenges unequal power relations through participation, ensuring all voices are heard and respected in decision-making that affects health equity. Being more inclusive requires social policies, laws, institutions, and programmes to protect human rights. It requires inclusion of individuals and groups to represent strongly and effectively their needs and interests in the development of policy. And it requires active civil society and social movements. It is clear that community or civil society action on health inequities cannot be separated from the responsibility of the state to guarantee a comprehensive set of rights and ensure the fair distribution of essential material and social goods among population groups. Top-down and bottom-up approaches are equally vital.”

The kinds of inequities in health outcomes pointed out in the WHO report and Healthy People 2020 are also evident in Minnesota. Most telling is that life expectancy within Minnesota varies by zip code: a person born in an affluent suburb of Minneapolis or St. Paul has a life expectancy of 83+ years, while a person born in an inner city neighborhood of either city has a life expectancy of only 70-75 years.

The ongoing research at both the international and national levels has been a significant influence on emerging efforts in Minnesota to understand, measure, and address the broad social and economic factors that influence health. This growing understanding is leading to an examination of the underlying understanding and narratives about health that focus on behavior change and clinical care, with a subsequent expansion of strategic approaches to health inequities — approaches that focus on policies, systems and processes and on the state’s social, economic and physical environments.

Minnesota’s vision for health

Healthy Minnesota 2020, Minnesota’s statewide health improvement framework, a collaborative effort of the Minnesota Department of Health and the Healthy Minnesota Partnership, has articulated a vision and framework for health in Minnesota. This vision and framework is provided as a basis for collective action, building toward a healthy future. The emphasis of Healthy Minnesota 2020 is on creating conditions that create the opportunity for people to be healthy, conditions that assure a healthy start, conditions that allow healthy choices, and conditions that support health throughout life.

Figure 2: Healthy Minnesota 2020 Vision: All people in Minnesota enjoy healthy lives and healthy communities

15 See life expectancy map on p. 23.
The vision and themes of Healthy Minnesota 2020 reflect the importance of those conditions, making them a perfect fit for Minnesota’s efforts to advance health equity. Health begins before birth, in the conditions that are in place to determine whether a child born in one neighborhood will thrive while a child born in another neighborhood will struggle; in the ability of individuals and communities to make decisions to shape the circumstances of their lives, and in the access that people have to the educational, economic, and social opportunities that shape the course of their life and health histories. These opportunities in Minnesota are shaped in part by race and by a history that has created systems of structural racism and other inequities, therefore this report pays close attention to these issues.

Health disparities and health inequities in Minnesota

For over 15 years, Minnesota has been tracking disparities in populations of color and American Indians, children, adolescents, immigrants and refugees, and the LGBTQ population. These data reveal that serious health inequities persist in Minnesota, despite efforts on the part of many organizations and programs to improve health:

- African American and American Indian babies die in the first year of life at twice the rate of white babies. While infant mortality rates for all groups have declined, the disparity in rates has existed for over 20 years.\(^1\)
- The rate of HIV/AIDS among African-born persons is nearly 16 times higher than among white, non-Hispanic persons.
- American Indian, Hispanic/Latino, and African American youth have the highest rates of obesity.
- African American and Hispanic/Latino women in Minnesota are more likely to be diagnosed with later-stage breast cancer.

Health disparities and inequities are not limited to racial and ethnic groups:

- Gay, lesbian and bisexual university students are more likely than their heterosexual peers to have struggles with their mental health.
- Nearly 25 percent of persons in Minnesota over 50 who live alone have no one to provide care for them if they were to become sick or disabled, compared to only five percent of those who live with others.
- Persons with serious and persistent mental illness die, on average, 25 years earlier than the general public.
- Low-income students are more likely to change schools frequently than their higher-income peers in every racial and ethnic category.
- Intimate partner violence affects 11 to 24 percent of high school seniors, with the highest rates among American Indian, African American and Hispanic/Latino students.

These health disparities have not been improving and are, unfortunately, neither random nor unpredictable. The social and economic conditions that are such strong predictors of health outcomes are not favorable for the same populations that experience health disparities:

- Unemployment is highest among populations of color, American Indians, and people who live in rural Minnesota.

While 75 percent of the white population in Minnesota owns their own home, only 21 percent of African Americans, 45 percent of Hispanic/Latinos, 47 percent of American Indians, and 54 percent of Asian Pacific Islanders own their own homes.

African Americans and Hispanic/Latinos in Minnesota have less than half the per-capital income of the white population.

American Indian, Hispanic/Latino, and African American youth in Minnesota have the lowest rates of on-time high school graduation.

African Americans and American Indians in Minnesota are incarcerated at nine times the rate of white persons.

LGBTQ young people are more likely to be victims of bullying.

Children of color and American Indian children in Minnesota are less likely to receive dental sealants to prevent caries and more likely to have untreated caries than white children.

Disparities in health outcomes are significant and persistent for some racial and ethnic groups in Minnesota. For example, over the past twenty years, while infant mortality rates have improved overall, the disparity in the rates for African American and American Indians have remained constant. African American and American Indian babies in Minnesota are twice as likely to die in their first year of life as compared to white babies.

The persistence of health inequities and disparities in social and economic conditions is the reason for this report. The data on health inequities show that to get the desired result — health for all — different tactics are needed. The solution to disparities in health outcomes is not a fragmented, programmatic approach, no matter how essential and effective those efforts are for individuals. Getting to population-based results requires a determined, collaborative, policy-level response to the crisis of health inequities in Minnesota if health equity is to be possible.

Minnesota’s strengths and the challenge of advancing health equity

The challenges of advancing health equity in Minnesota are great, but not insurmountable. Minnesota’s people bring a lot of strengths to these efforts. In preparing Minnesota’s recent statewide health assessment, *The Health of Minnesota (2012)*, the Healthy Minnesota Partnership noted that Minnesota’s strengths include the state’s people, communities, systems and the way these people and communities take on significant challenges. Notable among these strengths is the growing racial, ethnic and cultural diversity of the people of Minnesota, joining new energy and creativity to the wisdom of the people who have lived here for generations, generating economic opportunities and making significant contributions to all aspects of life in Minnesota. The commitment, energy and creativity of people in Minnesota of every racial and ethnic background, and those of different ages, genders, abilities, gender identification and sexual orientations are what inspired and made this Minnesota Department of Health report on advancing health equity possible.

---

The human and economic costs of health inequities

The World Health Organization notes that an economic rationale for policy and program interventions on the social and economic factors that contribute to health inequities can be justified on both efficiency and equity grounds, and encourages forging a closer link between these perspectives.\(^{19}\) While the goal of achieving equity is an important economic justification for public policy, it is important to acknowledge that this goal is harder to operationalize and more value-laden than a strictly efficiency-based rationale. Recognizing the disproportionate impact of inequities in the determinants of health on communities of color and American Indians, however, and the fact that Minnesota is growing increasingly diverse, it is imperative that an equity analysis is considered in the policy-making arena.

By 2024, populations of color, including Hispanic/Latinos, African Americans and Asian-Pacific Islanders, will become a majority of the U.S. population. Similarly, populations of color are projected to increase in Minnesota from 14 percent in 2005, to 25 percent in 2035.\(^{20}\) This is especially evident among Minnesota’s children: the Minnesota Department of Education notes that the percent of first graders from populations of color and American Indian, in poverty, and with limited English proficiency have continued to increase.

Figure 3: Percent change in first-grade enrollment by race/ethnicity from 2010 to 2014, Minnesota\(^{21}\)

The increasing diversity of Minnesota has important implications for businesses and communities. Currently, race is a significant predictor of an individual’s health outcomes over a lifetime: as the chapter on populations experiencing health inequities reveals (p. 71), populations of color and American Indians in Minnesota suffer inequities in the opportunities that create health and thus have poorer health outcomes. As the population and workforce become more diverse, achieving health equity becomes more urgent, because the social and financial impacts of the structural inequities that lead to poor health will grow and will demand more time, attention and resources.


In addition to the significant cost to the state from the diminished educational and economic opportunity of whole communities, employers face significant losses in human capital because population-based health inequities result in less healthy employees.

In 2011, the National Business Group on Health and the Urban Institute used Medical Expenditure Panel Survey data to answer the question of the costs unaddressed health inequities create for businesses. Their analysis showed that health disparities related to race or ethnicity cost 3.75 percent of total corporate medical expenditures for management and professional employees and 5.28 percent for non-management employees in 2011.22 Another study estimated that from 2003–2006, $230 billion in direct medical care expenditures and more than $1 trillion in indirect costs associated with illness and premature death would have been saved by eliminating health disparities for racial/ethnic populations.23 All of those costs translate to diminishing economic strength.

Employers have focused on a number of initiatives, primarily around more targeted wellness initiatives, to address those costs.24 From targeted interventions based on race and ethnicity, different outreach strategies, enhanced data analysis and gathering, and elimination of barriers to access (such as co-pays or lack of preexisting provider relationships) employers are assessing how to modify their health and wellness strategies to meet the needs of their more diverse populations. In addition to reduced medical costs, the benefits employers realize by working to reduce the burden of chronic health conditions among employees include reduced disability benefits, reduced retention costs, and reduction of stress in the overall workforce.25

All these activities, while valuable, still do not address the structural sources of health inequities and alone are insufficient to turn the tide of disparate health outcomes. As stated by the Itasca Project, an employer-led civic alliance working to address the issues that affect the economic competitiveness of the Minneapolis/St. Paul region, “Resolving complex issues — for example, addressing socio-economic disparities — is beyond the scope and capabilities of any one group and any single jurisdiction. We can make the progress we need only through active cooperation among the public, nonprofit and business sectors.”26

Resolving complex issues requires active cooperation among public, nonprofit, and business sectors.

The Itasca Project

---

The history of Minnesota’s efforts toward health equity

Minnesota was explicitly alerted to the problem of health disparities in populations of color and American Indians in a 1987 report by the Minnesota Center for Health Statistics. The Office of Minority and Multicultural Health was created in 1993 and in 1997 the first Populations of Color: Health Status Report was produced, with annual updates through 2009. These data provided an important foundation for each effort that followed, and data collection, analysis, and use continue to be critical for guiding decisions and actions to advance health equity.

In 2001, the Minnesota Health Improvement Partnership (MHIP) introduced Minnesota to the social determinants of health and the importance of public policy for health outcomes with A Call to Action. This seminal report identified the importance of policy for health outcomes and made a number of important and still relevant recommendations, including: to build and fully use a representative and culturally competent workforce; to increase civic engagement and social capital; to involve the communities that are affected in development of grants; and to strengthen assessment, evaluation and research.

Minneapolis was among the first states in the U.S. to have a legislative mandate to reduce health disparities.

Minnesota was among the first states in the U.S. to have a legislative mandate to reduce health disparities. Since 2002, recipients of the Eliminating Health Disparities Initiative (EHDI) grants have been developing community capacity and crafting effective strategies for meeting the needs of racial and ethnic populations affected by health disparities. While this initiative targets specific health disparities, and has had many positive outcomes documented in EHDI legislative reports, the EHDI experience and ongoing research show that disparities persist among racial and ethnic groups because of structural inequities.

Since 2002, recipients of the Eliminating Health Disparities Initiative grants have been developing community capacity and crafting effective strategies for meeting the needs of racial and ethnic populations affected by health disparities.

The Statewide Health Improvement Program (SHIP) was created by the Minnesota State Legislature in 2008. The emphasis of SHIP grants is to create health for the whole community, through policy, systems and environmental changes that help increase physical activity, improve nutrition, decrease obesity and reduce the number of people who use tobacco and are exposed to tobacco smoke.

---

29 Minnesota Health Improvement Partnership, Social conditions and Health Action Team (2001). A Call to Action: Advancing health for all through social and economic change. MDH.
In 2010 the *Social Connectedness* study\(^{32}\) deepened understanding in the state of how different social determinants operate by detailing the numerous ways in which social connections (and disruptions) affect health outcomes. And in 2012 the Healthy Minnesota Partnership articulated a 2020 vision for health in Minnesota, with three themes that capture the importance of health equity.

State government is not the only entity that is concerned about these issues. Local governments, academic institutions, businesses and others, have created additional reports and worked to reduce disparities and advance health equity. For example, the Itasca Project brings business and civic leaders together to build understanding, coordinate leadership, and create strong and active partnerships among the business community, colleges and universities, government, and other institutions to develop a strategic regional vision to address the social and economic issues that affect Minnesota’s economic competitiveness and quality of life, including the factors that create health.

*State government is not the only entity that is concerned about these issues. Local governments, academic institutions, businesses and others, have created additional reports and worked to reduce disparities and advance health equity.*

The Amherst Wilder Foundation also recently issued a report and update, commissioned by the Blue Cross and Blue Shield of Minnesota Foundation, on health inequities in the Twin Cities, which states: “In our region, we continue to see that neighborhood, income, education and race all matter to health.”\(^{33}\) Using data from this Wilder report, the Robert Wood Johnson Foundation created a map (Figure 4) that shows the disparities in life expectancy along the I-94 corridor in Minneapolis and St. Paul.

Time and again these efforts, as well as research across the nation and the world, have demonstrated that population-based disparities in health outcomes are primarily the result of systemic differences in socially-determined conditions and processes. These kinds of system-based factors also create health inequities for others, including women, children, the elderly, lesbian, gay, bisexual, transgender and queer (LGBTQ) persons, religious groups, persons with disabilities, people living in poverty, elderly persons with mental illness, and persons residing in different geographic areas.

This present report on advancing health equity — equity in *systems* — once again builds on and deepens understanding of the issues of what creates health and calls for dedicated efforts to address the conditions that create the opportunity for everyone to be healthy. Without addressing systems and structural inequities it is not possible to achieve equity in population-based health outcomes.

*Without addressing systems and structural inequities it is not possible to achieve equity in population-based health outcomes.*

---


Figure 4: Life expectancy disparities along I-94 in Minneapolis and St. Paul\textsuperscript{34}

Methodology

Many people in Minnesota — including, people who live in rural areas, people who live in certain urban or suburban neighborhoods, women, children, low-income households, lesbians, gay men, transgender people, people with mental illness, people with disabilities, as well as American Indians, African Americans, and persons of Hispanic/Latino, Asian, Pacific Islander, Middle Eastern or African descent — experience structural inequities. As the process of developing the report started, the decision was made to open with race as a strategy for meeting the challenge of health inequities head on. It was not intended to imply that other health inequities are not equally important, as health equity means all people in Minnesota should have the opportunity to be healthy.

Opening with race

The Statewide Health Assessment reveals that disparities by race/ethnicity in Minnesota persist across socio-economic factors, environmental conditions, health behaviors, and health outcomes; in many cases these disparities are growing. Therefore, as MDH proceeded with the Advancing Health Equity effort, the inquiry and conversations were begun by focusing on structural racism and racial inequities.

Race and racism are difficult to talk about, and it is not uncommon for these issues to get subsumed under broader conceptual terms, such as “injustice,” “discrimination” or even “equity.” Opening the current effort by being explicit about race and signaling a clear intent to talk about race and racism and the relationship of race to the structural inequities that contribute to health disparities is a necessary step toward advancing health equity in Minnesota. Race is not the only factor in structural inequities, but is a significant factor. Even when outcomes related to other factors such as income, gender, sexual orientation, and geography are analyzed by race/ethnicity, greater inequities are evident for American Indians, African Americans, and persons of Hispanic/Latino and Asian descent. A concerted effort to specifically address the issues of structural racism and to develop the language and tools to uncover and change the structures shaped by racism will be invaluable for addressing other structure-based inequities.

What is structural racism?

Structural racism is the normalization of an array of dynamics — historical, cultural, institutional and interpersonal — that routinely advantage white people while producing cumulative and chronic adverse outcomes for people of color and American Indians. Structural racism is deeply embedded in American society and is a potent factor leading to inequities in all major indicators of success and wellness.

Structural racism is the normalization of an array of dynamics — historical, cultural, institutional and interpersonal — that routinely advantage white people while producing cumulative and chronic adverse outcomes for people of color and American Indians.

Structural racism often operates without explicit intent, being built into processes and systems. Many people do not intend to be racist, considering that they do not harbor hate or actively seeking to harm people of another racial or ethnic background. Using the term structural racism makes it possible to speak of the harm of racism without attributing it to an individual or apportioning blame. Structural

racism emerges when decisions are made without considering that they might benefit one population more than another. Thus when race is not mentioned and when structural racism is not addressed it is much more difficult to identify and address structural inequities.

That being said, this report also acknowledges that much remains to be learned about how to have these difficult conversations in a constructive way, how to identify structural racism and other structural inequities, and what steps to take to remedy them and improve population health outcomes.

“We need to acknowledge in constructive dialogue the role that race and racism has played, and continues to play, in creating opportunities for some individuals while denying them for others. We need to be mindful of race when we identify dominant assumptions, define meaningful outcomes, and assign accountability to people and institutions for the decisions they make. It is not only a matter of relating to each other as people and valuing each other, but it is also important for understanding how our institutions and decisions, past and present, impact opportunities for ourselves and others, and how these impact differ for people in different neighborhoods.”

Examples of structural racism in policies, processes and systems
Because of historical racism, many policies, processes and systems in Minnesota and the U.S. continue to benefit some racial and ethnic populations more than others. The ability to identify and ameliorate these kinds of structural inequities will equip Minnesota to transform systems to advance health equity for all.

Following are several examples of structural racism at work:

- Three-fourths of the white population in Minnesota own their own homes, while less than a quarter of African Americans are home owners. This current reality was shaped by past public and private policies and practices, such as residential segregation, “redlining” by financial institutions, and employment discrimination. When programs are designed around home ownership (e.g., education about environmental health hazards targeted to home owners), it creates a built-in, race-based inequity for the larger percentage of African Americans who are renters.

- Many of the same historical policies and practices that led to inequities in home ownership have led to lower property values in localities primarily populated by African Americans or American Indians than in localities primarily populated by white Minnesotans. As a result, when school funding is based on local property taxes, race-based inequity is reinforced.

Because of historical racism, many policies, processes and systems in Minnesota and the U.S. continue to benefit some racial and ethnic populations more than others. The ability to identify and ameliorate these kinds of structural inequities will equip Minnesota to transform systems to advance health equity for all.


Oftentimes, structural racism takes the form of seemingly colorblind policies, or decision-making criteria that do not take into account disparate racial impacts.

- If the funding formula of the Federal Transit Administration had not been changed (in response to grassroots community organizing) to take into account community livability along with cost-effectiveness as criteria, the transit-dependent, racially diverse communities along the Central Corridor Light Rail line would have lost, rather than gained, access to transit through this $1 billion public investment.\(^\text{38}\)

Structural racism can also take the form of policies or decision-making criteria that exclude cultural knowledge and locally-generated approaches.

- In order to secure necessary funding, American Indian programs and initiatives, conceptualized by local Indians, find it necessary to go along with funding guidelines that have limited substantive cultural components, which, if included, could make the programs more effective. “The increasing reliance on Evidence Based Practices (EBP) leaves many Native communities at a disadvantage. Indigenous communities are faced with having to select an EBP that is rooted in non-Native contexts, and which possess no known effectiveness in the indigenous community.”\(^\text{39}\)

### The health equity inquiry

#### MDH launch

On October 22, nearly 100 employees from across MDH participated in a facilitated meeting to launch the effort to inform the *Advancing Health Equity in Minnesota* report. This event was designed to develop the organizational and individual capacity of MDH staff to engage in conversations about health equity, including structural racism, and to learn not only how these impact the opportunity Minnesotans have to be healthy but to discuss the MDH role in structural inequities. Based upon a growing understanding of the necessity of ensuring all voices are heard and respected in the decision-making that affects health equity, the participants in the launch committed to lead further conversations with MDH and stakeholder groups about advancing health equity and to gather material for the legislative report.

#### Inquiry sessions and survey

Following the October 22 project launch, these MDH employees and partners were actively engaged in organizational and community conversations about the policies, processes, and systems that contribute to structural inequities. The following questions (with variations as needed for different stakeholder groups) were used to guide these conversations and shape the survey responses:

Q.1: Describe current efforts that are working well to advance health equity in Minnesota.

Q.2: Based on your experience what are some specific practices, policies or processes that create health inequities in Minnesota?

---


Q.3: Where else do policies, processes and systems exist that have an impact on health equity, beyond MDH and its programs?

Q.4: What kind of leadership is needed to advance health equity and address structural racism in Minnesota? What would that kind of leadership look like? What prevents this from happening?

Q.5: Please include other information or ideas for how health equity can be advanced in Minnesota.

Q.6: How can data be better used to document, monitor and better understand health disparities? How can data be better used to evaluate efforts to advance health equity?

**Inquiry survey findings**

Conversations were held with over 1,000 participants from over 180 organizations. Nearly 100 persons filled out the online survey from these conversations, generating approximately 200 single-spaced pages of comments. A review and summary of the inquiry responses begins on page 98.

The inquiry conversations and survey yielded a very large amount of qualitative data to guide the development of this report and the recommendations.

**Identifying tensions in the process**

During the inquiry process and throughout the development of the report, a number of tensions emerged. These “tensions” are positions or ideas that appear to be in opposition to each other, yet which both have value. The value of intentionally recognizing and naming these tensions is that trying to hold differences in balance can lead to greater creativity. Identifying these tensions is not about not trying to eliminate the push-and-pull these differences create, or choosing one over the other, but about capturing the creative potential of what otherwise might only result in conflicts or worse, inaction.

**Whole + parts**

The tension of balancing the whole and parts is about maintaining a sense of wholeness (Minnesota as a “whole community”), while collecting data and talking separately about different parts of the community (American Indian, LGBTQ, etc.). Trying or pretending to be a “melting pot” is an attempt to avoid this tension. Living with the tension means valuing difference, recognizing that differences makes Minnesota stronger, and learning to appreciate and celebrate what is shared and what is unique about both individuals and communities. This tension emerges when opening with a conversation about a “part” (race and structural racism) and trying hard not to make it seem that the barriers faced by others are less important. This tension also is about not inadvertently communicating that the health of the white/European population is unimportant while focusing on disparities present in populations of color.

**Past + future**

To understand current inequities and make the changes necessary to assure equity in the future, it is necessary to revisit the past. Talking about historical trauma for American Indians and African Americans is not intended to make those of European ancestry uncomfortable. Events of the past have shaped everyone alive now, not just those who suffered the greatest trauma (this is also part of the tension of “whole + parts” — we share a history). Understanding where current circumstances have their origin is a critical step in changing the trajectory of future outcomes. This tension of past + future is also about valuing the good things of the past while embracing change and new people, new ideas. Public health has faced paradigm shifts before and needs to reimagine the future — again.
“I believe that the history of public health might well be written as a record of successive redefinings of the unacceptable.”

Terms + concepts
This report on health equity is full of terminology used to reflect a range of complex conceptual ideas: health, equity, inequity, disparity, systems, structural racism, socially-determined, factors that create health, and so on. (Even the terminology used to describe various racial and ethnic groups is not settled: should we use racial constructs such as “black” or “white” or focus on geographies of origin such as Africa and Europe? What does the great diversity of Asian countries of origin mean for the racial category of “Asian”?) As a developing field in public health, the terminology of health equity is still in a fluid state: different authors, different programs, and different research projects use similar yet slightly different definitions as everyone tries to wrestle the concepts into more readily understood forms. Each definition might come at the idea from a slightly different angle, or with a slightly different perspective. The emphasis for now needs to be on understanding the concepts that are at stake and being patient about variations in terminology.

Good + bad
Sometimes it is necessary to come at issues from a problem perspective, identifying what’s wrong in order to identify what is needed. But focusing on the “bad” does not replace the need to identify and celebrate all the things that are “right” in Minnesota. When focusing on what’s wrong, especially when identifying a specific population, it can be easy to slip into a blaming mentality — i.e., finding fault through unquestioned assumptions about that population. So it is essential to also remember to recognize the strengths and contributions of every person and community in Minnesota.

Accountability + innovation
This tension is about the systems that are in place to protect the public investment, systems that also tend to ensure that we preserve the familiar. But continuing to do the same things does not necessarily advance health equity. Current systems of accountability, for example, favor established organizations, which have roots in white privilege. Innovation, however, risks both great success and failure. Innovation is often viewed with skepticism by established entities, especially when it comes from less known, less well-established, and culturally different organizations, yet these are precisely the organizations that reflect the communities experiencing the greatest health disparities and inequities. Innovation is the source of creative potential, and needs to be embraced without abandoning responsibility for the use of public funding.

Best practice + paradigm shift
This creative tension is about valuing what we know while expanding the understanding and embracing ever-changing practices. Culturally and linguistically appropriate services, for example, address an important way to reduce health disparities at the individual level, while health equity focuses on policy change in organizations and systems to address factors such as structural racism and inequities throughout society. Meeting the immediate needs of individuals and families is still important even as broad social issues gain attention.

---

The recommendations that have resulted from the process of engaging with the community and developing this report provide a new narrative and a new approach to addressing health disparities and health inequities in Minnesota. The factors that create health are interconnected and interrelated in numerous ways. These recommendations expand the understanding and response to differences in health status from an individual or programmatic response to include a broad focus on social factors and conditions (e.g., historical, social, and economic). For example:

- Having a safe, stable place to live is as essential as nutritious food for protecting and maintaining health.
- Transportation supports opportunity and affects health by creating the means to get to schools and to jobs, by developing or disrupting neighborhoods, by providing access to recreation, and by influencing the environment.
- Education is a major predictor of lifetime health outcomes, the educational experience being part of a child’s earliest life experiences and key preparation for future earnings potential.
- Income creates access to economic resources, which in turn influence the opportunities people have to choose where to live, to purchase nutritious food, to have leisure time, and to participate in physical activity.

This shift in thinking is also a shift from focusing solely on individual behavior change or on the health care system to examining and suggesting changes in the network of social structures and systems in which people live, learn, work, worship and play. Recommendations that move toward this approach to health equity also affirm the message that addressing systemic inequities to improve health is possible.

These recommendations for advancing health equity form an invitation for the state as a whole to consider how policy influences health, and an invitation to take collaborative action on public policy that advances health and health equity. Health equity can only be advanced by action in multiple policy areas.

**Recommendation 1: Advance health equity through a health in all policies approach across all sectors.**

As stated throughout this report, it is not possible to advance health equity without looking closely at the systems across Minnesota that create the opportunities to be healthy, identifying where there are structural inequities, and addressing structural racism. Policies should be examined and resources targeted where efforts will have the greatest positive effect on populations with the greatest need.

Health in all policies is a collaborative approach that integrates and articulates health considerations into policy making across sectors, and at all levels, to improve the health of all communities and people.\(^{42}\)

\(^{41}\) Herophilus of Chalcedon, 335-280 B.C. Physician to Alexander the Great.

\(^{42}\) Health in all policies is a collaborative approach that integrates and articulates health considerations into policy making across sectors, and at all levels, to improve the health of all communities and people.
Health in all policies focuses on changes in the systems that determine how policy decisions are made and implemented by local, state, and federal government, to ensure that policy decisions have neutral or beneficial impacts on the determinants of health. Health in all policies emphasizes the need to collaborate across sectors to achieve common health goals, and is an innovative approach to the processes through which policies are created and implemented. Examples are provided below to make clearer the connections among several policy sectors and health equity.

Because this legislative report on advancing health equity MDH is “opening with race” (see p. 24), a structural racism perspective is applied to each sector to further explore these issues and their impact on health inequities. Other structural inequities, such as those related to mental health, disability, gender identity, sexual orientation, gender, age, geography, etc., also could and should be examined to fully understand the impact of different policies on health.

**Housing sector**

Housing is essential for health. Having a safe, stable place to live is as important as nutritious food for protecting and maintaining health.

**Housing through a structural racism lens**

Over the course of the 20th century, practices that were clearly discriminatory (such as redlining and racial steering by realtors) have led not only to significant segregation in Minnesota’s neighborhoods but also to extreme disparities in home ownership rates by race: in Minnesota, over 75 percent of whites are home owners, compared to only 25 percent of African Americans (see p. 73). Predatory lending and subprime mortgages targeted at people of color and American Indians set the stage for the recent epidemic of foreclosures among lower-income families and households of color. Nearly twice the number of African American and Latino families lost their homes to foreclosure than white families. Policy development for housing and home ownership needs to explore and expose the structural racism that continues to perpetuate disparities in home ownership and neighborhood development based on race.

---


Transportation sector

Transportation systems are more than a means to get from one place to another. Transportation affects health by connecting people to schools and to jobs, by developing or disrupting neighborhoods, by providing access to recreation, and by influencing the environment (through, for example, concentrations of emissions from cars in congested areas). Transportation policy includes decisions regarding the location of freeway exits and transit stops; decisions about public transportation options in rural areas; decisions about where to locate new roads, and design decisions that affect traffic congestion and thus air quality.

In addition, over the past 30 years the degree of economic segregation between relatively wealthy and poorer neighborhoods has risen steadily and most neighborhoods have become increasingly less diverse both economically and demographically. As this has occurred both the opportunity and the likelihood for those living in a poorer neighborhood to move up the economic ladder has declined, leading to a loss of economic mobility.

Designing transportation policy with health equity considerations can promote health, education and economic mobility.

Transportation through a structural racism lens

Decisions about transportation can reinforce structural racism by neglecting to consider the impact of policy decisions on the community, especially communities that have historically been disadvantaged and cannot compete on the same financial level as large corporations to influence policy decisions.

The Central Corridor Light Rail line was planned to extend through several racially-diverse neighborhoods in St. Paul: neighborhoods that had previously been uprooted and neglected in the development of the I-94 freeway corridor. As a result, multiple coalitions emerged to ensure that the residents most affected were a part of the light rail planning and development. In January of 2011 community activists, including the St. Paul NAACP, business owners, and residents received a favorable ruling from a federal judge on the lawsuit they had filed to challenge the planning process. The judge ruled that planners failed to analyze how construction of the 11-mile transit line would affect businesses in the corridor. Another coalition received a grant funded by a joint initiative of Pew Trust and Robert Wood Johnson Foundation to conduct a health impact assessment (HIA) to make sure that the project and decisions about the way in which the project would be implemented would have positive impacts on residents’ health. The HIA was led and constructed by a 22-member steering committee that studied the health impacts of the transit line with an emphasis on resident stability, access to transportation, and employment. The steering committee was composed of residents, clergy, union members, small businesses owners, and disability activists. They used the results

An example of a regional approach to transportation and more is the Sacramento area Metropolitan Transportation Plan/Sustainable Communities Strategy, adopted in 2012.

As the Sacramento region of California grows, local governments across six counties are working with the Sacramento Area Council of Government to ensure the region creates access for all residents to health care facilities, schools, and jobs.

In Minnesota, the Metropolitan Council’s Thrive MSP 2040 regional plan links regional housing, transportation, recreation and water resource plans to reach positive outcomes around stewardship, prosperity, equity, livability and sustainability.

of the study to advocate for stable and affordable housing and influence the planning process. MDH provided consultation on this project.48

Education sector

Education is as key a predictor of health outcomes as income. Education is uniquely tied to a child’s earliest experiences within their families and communities. Safe, stable, nurturing early relationships promote environments that encourage positive and healthy child development. These types of relationships have been shown to stimulate brain development and are the building blocks of early conversation and literacy, which are key measurements of school readiness and future educational success, including high school graduation and college attendance. A parent’s capacity to build these types of relationships is greatly influenced by their own life experience and cultural history. Education policy therefore includes investments in supporting early relationships which promote healthy development, school readiness, and the overall educational success of a child.

Research from a growing number of studies suggest that greater educational outcomes and health impacts might also be achieved by enhancing protective factors that help parents, children and adolescents avoid the behaviors that place them at risk for adverse health and educational outcomes. For example, when young people feel connected to their school and believe that adults and peers in the school care not only about academics but about them as individuals, they are less likely to engage in many risk behaviors, including early sexual initiation, alcohol, tobacco, and marijuana.

The Northside Achievement Zone uses a multigenerational, community approach to develop trusted relationships among families and individuals (connectors) within the community. Through these trusted relationships, connectors work to inspire a new commitment from parents and solidify the belief that their children will graduate from high school and college. Connectors work with parents to identify needs and barriers, set family goals, encourage behaviors that support academic outcomes, and connect them with promising and proven strategies to support success — strategies such as the Family Academy (targeted to families with children birth to five), a 12-week program that supports parents in building positive relationships with their young children through peer support, parent education and a culturally-relevant curriculum.

St. Louis Park schools increased developmental assets, including school connectedness, for its 9th graders, in their efforts called, “Putting Children First.”49 This program’s impact included increased academic success and decreased use rates of alcohol, tobacco, and marijuana.

Safe and Supportive Minnesota Schools (the Prevention of School Bullying Task Force 2012 report) recommended the creation of a School Climate Center within the Minnesota Department of Education that will provide information and technical assistance to school districts for implementing strategies, techniques, and programs that remove social-emotional impediments to learning; improve positive, safe, and supportive whole-school learning environments for students; and increase restorative practices and discipline which focuses on remediation whenever incidents of bullying, harassment, and intimidation occur.50

and other drug use, and violence and gang involvement. Students who feel connected to their school are also more likely to have better academic achievement, including higher grades and test scores, have better school attendance, and stay in school longer. Education policy, therefore, includes investments to improve protective factors for families to prevent gaps in opportunity and achievement, and investments in school climate to promote school success. This range of investments support relationships between and among families and communities, and promote healthy development, school readiness, and a successful trajectory for children as they move through the school system.

**Education through a structural racism lens**

Statistics show that young people of color face harsher consequences for the same misconduct than white teenagers in schools, being suspended, expelled or even arrested for minor offenses (often referred to as the “school to prison pipeline”). A 2009 study by the Minnesota Department of Education found the same pattern. Research suggests that policies such as “zero tolerance” disproportionately target students of color and those with a history of abuse, neglect, poverty or learning disabilities. The practice of giving harsher consequences to students of color create a negative learning environment for all students of color, contributes to less success in school, which diminishes prospects for future education, which in turn affects lifetime health outcomes and creates health inequities. Policy development for education needs to explore and expose the structural racism in school policies and in actual practices.

Education policy has historically been based in the formal confines of the K-12 structure. Even as public policy races to keep up with growing research around early brain development, it continues to operate primarily in and for formal structures such as schools, child care centers and preschools, while paying less attention to informal structures such as Family, Friend and Neighbor (FFN) care (also known as kith and kin care). Caring for young children in the home with a trusted relative or friend is the first choice for many parents including those in poverty and culturally diverse communities. Large-scale quality improvement efforts — such as Race to the Top: Early Learning Challenge — are positive and highly important steps in improving outcomes for children and families as they work to build a highly educated and professional workforce and provide more access to high-quality care through evidence-based practice, but are focused solely on licensed child care. National experts recognize the need for a both/and approach to policies supporting the care of young children in that both types of care may benefit from quality improvement efforts.

---


Without such an approach, early education policies will continue to disproportionately positively affect white families and caregivers and may increase the gap in opportunity and achievement for children of color.

**Economic sector**

Income creates access to economic resources which in turn influence the opportunities people have to choose where to live, to purchase nutritious food, to have leisure time, and to participate in physical activities, especially those that require fees or special equipment. Economic mobility refers to the opportunity for an individual, family or a group to improve their economic status.

**Economic mobility through a structural racism lens**

Minnesota has a nine-to-one ratio of African Americans incarcerated compared to whites — one of the highest in the nation. The process of reentering Minnesota communities after a sentence is completed is obstructed by lack of access to housing and jobs. The disproportionate rates of incarceration in African American and American Indian communities, compounded by the long-term impact on employment and housing, institutionalize poor health outcomes for families and communities of color in Minnesota. One approach would be to consider changes in school policies, policing practices, sentencing guidelines, and other areas that contribute to the extreme race/ethnicity-based inequities in incarceration rates in Minnesota.

The low homeownership rates for African American, American Indian, Hispanic/Latino and Asian-Pacific populations in Minnesota reduce overall wealth and along with it access to traditional forms of credit that provide avenues for increased economic mobility.

Educational and training pathways should be examined for structural inequities, including structural racism, and other barriers that serve as barriers to populations of color and American Indians entering certain professions. For example, create bridges to employment for students who need non-traditional programs that will enable them to overcome the challenges they experience as members of disadvantaged populations; and support emerging occupations such as community health workers. Community health workers provide culturally competent care and this training and experience can serve as a pathway to employment in other health occupations.

Worksite policies that support all families — including those from various cultures and faith traditions, non-traditional families, breastfeeding mothers, immigrant families, and multi-generational families — should be encouraged as another way to advance health equity.

**Recommendation 2: Continue investments in efforts that currently are working to advance health equity.**

Many individuals, organizations and communities have been engaged in best practices that advance health equity, including working in partnership with the community, developing cultural and linguistic competency, and making significant advances to reach all communities of Minnesota with needed health care and other services. While it is necessary to address the social and economic factors that drive health...
disparities, this approach must be paired with a commitment to continue the exemplary practices that are already making a difference for the health of people currently experiencing the impact of these inequities and health disparities.

2.1 Identify and expand existing programs and policies that address health disparities and advance health equity.

Minnesota communities have been working to address health disparities since 1987. Many efforts have followed exemplary practices and have been successful in making a difference for the people they serve. Promising practices that were developed for a specific cultural community should be considered and adapted for other populations — including majority populations — where possible. Actions include:

a. Develop measurement and evaluation tools to evaluate emerging practice.
b. Share and replicate successful programs and policies.
c. Identify successful pilot projects and support funding for these at full scale.

Recommendation 3: Provide statewide leadership for advancing health equity.

While a broad multi-sectoral approach is necessary to advance health equity, there are particular roles that MDH must play to assure that health equity becomes a reality in Minnesota. The first of these is leadership.

MDH must take a strong leadership role in building public understanding of what creates health and health inequities, and facilitate collaborative interagency, interdisciplinary, and cross-cultural efforts to guide policy development. These efforts should be focused on actions that advance health equity across all sectors, including planning, housing, transportation, energy, education, environmental regulation, agriculture, business associations, labor organizations, health and public health. Actions within this recommendation include:

3.1 Build statewide capacity to implement a health in all policies (HiAP) approach. Engage state, tribal, and local governments and encourage all state agencies to adopt the HiAP approach.

MDH should be a leader in the effort to advance health equity through policy and system change across sectors. This leadership role involves building capacity for analyzing health in all policies, assuring that multiple stakeholders are engaged, and contributing data and analyses that point toward opportunities to increase positive health outcomes. MDH should also ensure that candid discussions and actions to address inequities, such as structural racism, are included in policy discussions.

3.2 Work with the Governor to convene and coordinate a cabinet-level team to include health equity as a key component of policy discussions.

The Commissioner of Health should invite other cabinet members to work collaboratively across state agencies to create support and accountability structures for advancing health equity. This will need to include identifying ways to routinely incorporate health considerations and embed health equity in state government structures, processes and decision making. The resources needed to
support these efforts (e.g., executive action, personnel, roles, data collection, data sharing, analysis, training, etc.) will also need to be identified.

3.3 Engage existing partnerships led by MDH to create a new and shared sense of responsibility and accountability for the health of all people in Minnesota across all sectors.

Aligning efforts towards a common goal of health for all people in Minnesota is needed if health equity is to be advanced. MDH must engage its multiple advisory committees and stakeholder groups to increase understanding of health equity, advise MDH on how it can advance health equity, and invite the participating organizations or communities to contribute to health equity efforts.

3.4 Consider methods to strengthen communities to create their own healthy futures.

MDH has a long history of working closely with local health departments and stakeholders in health care and community organizations. The Department should build upon this rich experience and broaden the sets of relationships to include organizations that represent and are working with the communities experiencing the greatest health inequities. In recognition of the fact that the opportunities for health are created across a broad set of sectors, these relationships should encompass organizations that work intentionally to influence decisions in these arenas. Actions may include:

a. Review of the membership of advisory committees and investments in training and capacity building of community leaders both within MDH and with partners.

b. Identification of strategies to increase the capacity of communities to participate in a health in all policies approach including training and education, technical support on use and analysis of data, and health impact assessments.

c. Exploring the establishment of a community-driven health impact assessment process.

3.5 MDH should use its leverage as the lead public health agency to encourage all health professions to build workforces that will advance health equity.

MDH should work with health professions, educators, health profession associations, boards and other agencies about health equity and cultural competence — in curriculum development, accreditation standards, licensing policy and standards, and professional practice. For example, licensure statutes should be examined and amended to incorporate demographic analysis of populations seeking licensure, as a way to determine if there are structural barriers that limit access to these occupations.

MDH should also support the development and reimbursement of emerging and non-traditional, culturally-based health practitioners, such as community health workers and doulas.

3.6 MDH should work to build public understanding and awareness of the factors necessary for health, health disparities and health equity. This includes developing a plan to share and disseminate the Advancing Health Equity Report.
Recommendation 4: Strengthen community relationships and partnerships to advance health equity.

MDH has a commitment to and a long history of working in partnership with local health departments and local elected officials to promote population health. Over time, this state-local partnership for public health has led to mutual accountability and ultimately to better health for the people of Minnesota. MDH has many additional formal working relationships (e.g., the American Indian Tribal Health Directors and the Office of Minority and Multicultural Health Advisory Committee) as well as numerous informal connections with community members and professionals in various areas. To advance health equity, however, MDH must broaden the scope of their partnerships to develop stronger connections with Minnesota’s diverse communities. Actions within this recommendation include:

4.1 Expand the range and depth of MDH relationships with multiple communities.

A first step in expanding relationships in the community is for all MDH programs to identify the populations that are affected by health inequities in their areas, and for MDH staff to intentionally develop working relationships with people in these populations. Developing meaningful and effective working relationships takes significant commitments of time and resources, but building relationships in the community is a necessary and important step toward sharing decision making.

4.2 Create avenues for meaningful participation of Minnesota’s diverse communities in project governance and oversight, assuring that the people who are affected by various decisions are involved in the decision-making process.

Despite the challenge of considering multiple opinions and conflicting points of view, the community’s voices and wisdom have an essential place in the decision-making processes of MDH, particularly when policies are being considered and grants are being provided. Strategies are needed for MDH to solicit input, sort through and weigh conflicting advice, assure that those most affected are included, and use input to make decisions that improve health equity.

MDH should seek opportunities to share decision making with affected populations as a means to making stronger decisions that will ultimately advance health equity.

As MDH works to strengthen community relationships, opportunities also are needed for mutual capacity building: MDH has much to learn from the community as well as resources to offer. The “science” of public health should be combined with lived experience and community wisdom to advance health equity.

Recommendation 5: Redesign MDH grant-making to advance health equity.

Grant-making is one of the most significant ways MDH connects with communities to strengthen their capacity to create their own healthy futures. MDH must design grant requirements and processes that match the needs of communities, as well as identify outcomes for grants that are meaningful to those communities. This effort is geared not only toward better results but toward supporting a more active
role of stakeholders in strengthening their own communities. One important way that MDH can improve grant requirements and the quality of outcomes among grantees is by engaging stakeholders at every step in the grant development process. Stakeholders representing the populations to be served need to have their voices heard in order to make progress on health equity through the MDH grant-making processes. These stakeholders can offer knowledge and experience about the social, political and economic issues their communities face. Actions within this recommendation include:

5.1 Change grant-making procedures and practices to support a wider range of organizational capacity among MDH grantees.
   a. Identify the kinds of technical assistance MDH staff and grantees need to strengthen the health equity focus of grants.
   b. Identify and improve sharing of best practices; seek additional input from existing and past grantees and test new approaches to grantee monitoring and reporting.
   c. Strengthen grantee capacity to meet community health needs by:
      i. Building capacity of MDH grantees through strategic partnerships with community organizations that support nonprofits through training, financial advice, consulting and other resources.
      ii. Ensuring MDH grantees understand the grant process and can meet grant requirements by providing additional training, technical assistance and/or increased support of fiscal agents or accounting services as part of the grant award.
   d. Consider blending grants across program sectors within MDH and other agencies and organizations in response to the growing understanding of the complex and interrelated factors that affect health.
   e. Look for opportunities to promote efforts to advance health equity through state contracting across agencies.

5.2 Improve training and evaluation methods to advance health equity.
   a. Develop culturally relevant training in partnership with the Department of Administration’s Office of Grants Management to promote increased access to the state granting process for prospective grantees.
   b. Identify sources of training for grantees to develop skills such as cultural competency, coalition building, community organizing, media engagement, and influencing decisions that impact their communities.
   c. Improve program evaluation methods and measures to ensure grant funds are used most effectively and applied to areas of greatest need.
      i. Research, evaluate and implement measures to track grants by grantee organization size, communities served, and/or geographic area in order to monitor access to MDH grant funds and if grant funds are being used in areas of greatest need or impact to improve health.
      ii. Apply a set of health equity inquiry questions during the review and creation of MDH and statewide grant policies and actively suggest modifications to the Department of Administration’s Office of Grants Management.
   d. Analyze opportunities in grant-writing and budget initiatives to propose health equity actions and projects that can further enhance MDH and grantee efforts to expand the opportunities and initiatives supporting health equity.

5.3 Engage a diverse range of stakeholders in the grant development process.
a. MDH will engage tribal governments and urban Indian stakeholders in a process to shape the Statewide Health Improvement Program and Tobacco Prevention and Control grants for these communities.
b. MDH will be releasing a new Request for Proposal (RFP) for the Eliminating Health Disparities Initiative (EHDI) Grant program in January 2015. Starting in February of 2014, MDH will work to incorporate the findings and recommendations of the legislative report on health equity and engage current and past EHDI grantees as well as other interested parties to inform the design of the EHDI grant program and 2015 RFP.

Recommendation 6: Make health equity an emphasis throughout MDH.

Just as it is essential to consider the health impact of decisions across policy sectors, it is also essential for programs across MDH to recognize that decisions in their areas also may have an uneven, unintended impact on populations within Minnesota. Many employees have expressed a deep commitment to health equity yet, as noted in the inquiry responses, the majority work within systems and structures that were not necessarily designed with health equity in mind. They often do not know what questions to ask or how to examine the procedures and processes they use to uncover inequities. Making health equity an emphasis throughout the department is critical for assuring that MDH can advance health equity. Actions within this recommendation include:

6.1 Create the Minnesota Center for Health Equity.

MDH will establish the Minnesota Center for Health Equity. The Center's mission is to lead a department-wide initiative to bring a health equity analysis and intention to the efforts and partnerships. The Center brings together the expertise of the Minnesota Center for Health Statistics, the Office of Minority and Multicultural Health, and the learning and experience of the Eliminating Health Disparities Grant Initiative. The Center will be developing a more explicit cultural liaison function with communities experiencing health disparities.

6.2 Assure that health equity and the analysis of structural inequities, including structural racism, become integral aspects of all MDH divisions and programs.

When looking at policies, systems and programs of the department, MDH should consider who is involved in the decision, what values and assumptions were used to inform the policy, who benefits from the policy, and what the unintended effects of the policy may be. Actions include:

a. Amend the MDH statutory mission to include health equity.
b. Add responsibilities for health equity in agency position descriptions, as appropriate.
c. Encourage that different perspectives (health equity, structural inequity — including structural racism and class) be applied in the design and evaluation of all programs and activities.
d. Train MDH staff on the national standards for Culturally and Linguistically Appropriate Services (CLAS)\(^57\) to improve the MDH working climate and the way MDH staff engage with the communities their programs serve.

e. Offer training in health equity and structural inequities, including structural racism.

6.3 Identify and address changes needed in the MDH workforce to advance health equity.

a. Commit and invest additional agency resources to support recruitment and retention efforts aimed at improving workplace equity.

b. Review the MDH minimum qualifications for positions to enhance workforce diversity, looking at who is being excluded and what needs to be done to remove barriers to employment at MDH.

c. Review and set agency hiring expectations for recruiting people with cultural competence skills, and health equity awareness. Increase awareness and practice of health equity among hiring managers and supervisors.

d. Establish a policy for the appropriate and necessary use of background checks on applicants, e.g., criminal background checks should be reserved for job finalists as doing a background check too early may eliminate certain minorities from the applicant pool.58

e. Strengthen employee orientation and training to introduce new staff to public health concepts and principles, including health equity.

f. Create a formal program to recruit and encourage high school students of color to consider jobs in the field of public health, including summer employment opportunities. MDH can make connections with and help shape the diverse workers of the future through a stronger program to reach students considering their future career choices.

g. Develop a community engagement program for recruitment. Look to other state agencies and organizations that have used successful models.

Recommendation 7: Strengthen the collection and analysis of data to advance health equity.

The ability to collect and analyze health data by population groups has been essential in the history of Minnesota’s efforts to advance health equity by making it possible to identify health disparities. Even with the advances in data collection for populations of color and American Indians many data challenges remain, including the diversity within population groups, the lack of LBGTQ data elements, and the need to connect demographic information with data on the social and economic factors that create health.

Actions within this recommendation include:

7.1 Strengthen the coordination of MDH data activities related to health equity across all divisions and programs.

Within the Minnesota Center for Health Equity, over time and within legislatively provided authority, the Minnesota Center for Health Statistics will be responsible for the oversight and coordination of health equity data activities within MDH. For example:

a. Assess the skills and resources of MDH, local public health and community researchers to collect, manage, analyze, interpret, disseminate and apply health equity data, and make

recommendations for improvement, including training, expanding workforce and improving technology.

b. Facilitate the sharing of health equity data between units within MDH and between MDH and its outside partners. To improve sharing, specific barriers must be addressed, including: legislatively granted authority, data privacy and security, data compatibility, limited staff and resources, and lack of coordination between MDH divisions.

c. Partner with other state agencies, local health departments and communities to explore the use of non-MDH data in the study of health equity, encourage data sharing and linking, and improve dissemination, while ensuring data privacy. Health equity data, tools for collection, analysis and interpretation and education and training materials would be housed within the Minnesota Center for Health Statistics.

7.2 Develop a long-term plan for improving the collection, analysis, reporting, dissemination and use of health equity data.

The Minnesota Center for Health Equity, in partnership with stakeholders (including MDH, other state agency, tribal, local public health and community agency staff) should develop a data plan. Steps to be considered include:

a. Address the major data gaps in health equity data:
   i. Implement a race/ethnicity/language (REL) data collection standard in MDH with emphasis on adding granular ethnicity, language and birthplace data to the current data collection standard.
   ii. Develop a standard set of social and economic determinants of health for MDH datasets, such as geography of residence, gender identity, sexual orientation, acculturation (length of time in the U.S.), educational attainment, socioeconomic position (personal/household income), occupation, and employment status.
   iii. Develop a list of key health equity indicators and determine a plan for annually monitoring these indicators.
   iv. Consider a variety of approaches, such as oversampling and local population health surveys, to improve the ability to report results for smaller populations or geographies.
   v. Identify strategies for incorporating community perspectives, wisdom, and stories into analysis of quantitative data.
   vi. Consider and address the education and training needs of state and local health department, tribal and community agency staff to collect, interpret, analyze and apply health equity data, both qualitative and quantitative.
   vii. Identify the resources (i.e., funding, staff and technology) and legal authorities needed for improved data collection and sharing across entities to carry out this work.

Next steps

Preparation of this report has been part of a broader process to strengthen the efforts of the Minnesota Department of Health to advance health equity. The legislative requirement for this report provided a focal point for many discussions within MDH and with community partners to move the work of advancing health equity in Minnesota forward. But these conversations are only beginning. While dozens of discussions were held, hundreds of comments were entered in the inquiry survey, and many issues have been identified so far, more conversations and relationship-building with communities, stakeholders, and decision-makers are needed to continue to carry this effort forward.
Establish the Minnesota Center for Health Equity

The Commissioner of Health established the Minnesota Center for Health Equity in December 2013 with the intent of bringing an overt and explicit focus to the efforts of MDH to advance health equity in Minnesota. It is envisioned that the Center will support both existing MDH and partner efforts to advance health equity. While the Center is in its early stages of development, it currently includes three existing areas: the Center for Health Statistics, the Office of Minority and Multi-Cultural Health, and the Eliminating Health Disparities Initiative.

The Center will serve as a technical resource for the agency and its state and community partners. It will create a solid, data-driven footing for health equity efforts, including support for the development of measurable health equity outcomes and measures for evaluation. The Center will focus on building the capacity to collect and analyze data and community experience on health and health inequities and pathways to opportunity. The Center will support and encourage the collection and analysis of race, ethnicity, preferred language, social and economic determinants, and LGBTQ data in relevant data sets. In addition the Center will work to increase cultural understanding and deepen working relationships across program areas and will assist in identifying promising practices with communities experiencing the greatest health disadvantage.

Implement the Advancing Health Equity recommendations

After this report is submitted to the Minnesota State Legislature, MDH will begin the process of implementing the recommendations for advancing health equity in Minnesota. This will involve developing more detail where it is needed (e.g., identifying the responsible work units, assigning tasks, developing timelines and performance measures) and monitoring progress. MDH will also review the recommendations to determine where policy decisions are needed, both internal and external; develop policy recommendations in partnership with the community, tribes, and state agencies for the 2015 Minnesota legislative session; identify resource needs and develop training and communications plans for MDH; and maintain attention on operational areas noted in the recommendations, such as grant-making, data systems, and workforce development.

As this work continues, MDH will be challenged to play an increasing leadership role across state agencies, community partnerships and with business and industry relationships. MDH also needs to continue to educate more people and organizations about health equity, and to encourage specific and visible steps to advance health equity across all sectors of Minnesota.

Convene and coordinate a cabinet-level health equity effort

The Commissioner of Health will invite state agency commissioners together in the spring of 2014 to consider how to include health equity as a key component of policy discussions. The cabinet members will consider ways to routinely incorporate health considerations and embed health equity in state government structures, processes and decision making.
Practices for Advancing Health Equity

Review of the research, analysis of nearly 200 pages of inquiry responses and a review of existing program resources have yielded a number of practices for advancing health equity in Minnesota. The ideas that surfaced in the inquiry and encompassed in these practices are directed toward a broad set of partners including MDH as well as toward state and local governments, community partners, other state agencies, the health care sector, and organizations across Minnesota.

Applying a health in all policies (HiAP) approach to advance health equity

Applying a health in all policies (HiAP) approach to advance health equity is essential in advancing health equity efforts. Health in all policies “is a collaborative approach that integrates and articulates health considerations into policy making across sectors, and at all levels, to improve the health of all communities and people.” Health in all policies focuses on changes in the systems that determine how policy decisions are made and implemented by local, state, and federal government, to ensure that policy decisions have neutral or beneficial impacts on the determinants of health. Health in all policies emphasizes the need to collaborate across sectors to achieve common health goals, and is an innovative approach to the processes through which policies are created and implemented.

The inquiry responses indicated that health equity could not be advanced without a deliberate and concerted effort toward developing public policies that support health equity and address the structural inequities, including structural racism, evident in many arenas. Examples included land use, transportation planning, education, health care, and the environment. Suggestions included establishing criteria and routinely conducting health equity impact assessments for policy, systems, and environmental decisions, when deemed appropriate. Emphasis was also placed on the need to make an analysis of structural racism and other structural inequities key elements of health policy and health equity discussions.

Using health impact assessment (HIA) to advance health equity

Health impact assessment (HIA) is a tool or process to assess the potential impacts of proposed policies, plans or programs on the health of populations. Two of the five core values of HIA are democracy and equity. Practitioners support democracy by ensuring that everyone has a voice in decisions, and especially those that are impacted by the decision. Also, it is the responsibility of HIA practitioners to advance equity.

HIA can be used to promote health equity in a number of ways: 1) by selecting policies, programs or projects that improve the health of the most vulnerable or disadvantaged populations; 2) by engaging community members in decisions that affect their health and well-being; 3) by increasing the
transparency of the evidence and the decision-making process; and 4) by creating recommendations that advance health equity and eliminate disparities.

HIAs are an important tool to promote health equity in policies, plans and programs. Many more examples of areas where a health equity approach is and can be applied may be found in the findings from the Advancing Health Equity inquiry sessions.

**Making advancing health equity an integral aspect of all efforts**

Comments made in the inquiry responses noted that if health equity is to be advanced, it has to become the responsibility of everyone within an institution. In MDH this includes all parts of the department (similar to the idea of interagency or cross-sector work). Using MDH as an example, some people both inside and outside of the organization have assumed that eliminating health disparities and advancing health equity are the sole responsibility of the Office of Minority and Multicultural Health. This narrow view of health equity needs to be overcome by explicit efforts to institutionalize the concept and activities throughout MDH and other organizations. Responsibility cannot be assigned to one unit, office or individual.

While this report focuses primarily on public institutions, the responsibility for advancing health equity needs to be assumed by many institutions beyond the public sector, for example unions, employers, corporations, and faith communities.

**Advancing health equity through strong community relationships and shared decision-making**

Our process indicated that strong community relationships and shared decision-making are important for advancing health equity in Minnesota. To create an environment where institutions and communities are engaged in strong relationships and are sharing decision-making institutions must seek community input at the very beginning of the process. They must assure adequate representation of the communities that will be most affected by the initiative or program on the task forces and work groups considering solutions, policy development, or decisions. Building relationships in the community is the first step toward sharing decision-making responsibility.

Inquiry respondents frequently noted that the leadership in many public institutions, health care entities, as well as MDH and local public health departments, are primarily white, of European heritage, and that most advisory councils for these groups also are primarily composed of white practitioners (with the

---

exception of the OMMH Advisory Council). Concern was expressed that there are unrealistic expectations for the few persons of color present on these councils to speak for entire racial/ethnic communities, and that communities of color and American Indians often have been used as a means to an end (e.g., to gather research data), rather than as entities with their own ideas and solutions. Respondents recommended that, in addition to addressing disparities in the workforce, institutions must take the time needed to develop stronger relationships with the American Indian, African American, Hispanic/Latino, Asian-Pacific Islander, and other racial/ethnic/cultural communities, including new immigrants and refugees. One concrete suggestion was to provide payment as a means of facilitating participation of community members, as not everyone is paid by their employers to attend meetings.

Advancing health equity through local and community-led efforts

Lifting up and prioritizing local and community-led efforts is a critical component of advancing health equity in Minnesota. Local and community-led efforts means that the organizations rooted in communities that are most affected by inequities take the lead in the design, development, implementation, and evaluation of the efforts.

Frequent reference was made in the inquiry responses to the need for institutions, including MDH, to understand and respond to the differing capacities of community organizations who seek any competitive grants. A number of structural issues, such as financial requirements for grantees, result in advantages being given to larger, established and well-resourced organizations rather than emerging organizations from the communities most affected by health disparities. Throughout the inquiry responses, comments were made about the importance of early and meaningful engagement of stakeholders in decisions that affect them.

There are many instances of local and community-led leadership around health equity. Local health departments, for example, conduct community health assessments and planning processes to identify groups that experience health disparities and health inequities. Many local health departments are leaders in the collection of community level data to document health inequities.

The National Diabetes Prevention Program (NDPP) is a proven diabetes prevention program that reduces risk for type 2 diabetes. Tested in a randomized intervention trial (or research study) by the National Institutes of Health, the Diabetes Prevention Program prevented or delayed type 2 diabetes by 58 percent over a three-year period among people at high risk for the disease. The program supports people with prediabetes to make simple changes to increase physical activity and lose a modest amount of weight. This program is being delivered across Minnesota by community based organizations, including some YMCA’s, faith based organizations, health systems and in work sites. Success of these programs depends on community involvement throughout the program delivery process — from creating awareness about prediabetes and the NDPP among the public and health professionals, working with clinical settings to identify and refer people at risk and offering the program in community settings, to evaluating the results.

Over the last several years, the Eliminating Health Disparities Initiative funding for community based initiatives to improve health status among persons of color and American Indians has also served as a mechanism to train and foster the growth of community advocates and leaders that are offering pragmatic ways to improve the social, economic, and physical environments in which they live and work. In a wide variety of community, governmental and health-related projects, more community representatives are at the table promoting actions that build upon existing community strengths and assets, and address the core issues from the community’s point of view.
While MDH has well-established partnerships with local health care organizations, local public health and human services departments, and with many community-based organizations, broadening and strengthening community relationships is recognized as important and an ongoing challenge. Advancing health equity will require MDH also to engage new partners such as faith based institutions and representatives from recently arrived immigrant populations.

Supporting community stakeholders in leadership roles is an additional challenge and requires institutions and professionals to yield power and stakeholders to step forward to take on this role. For example, programs such as the Eliminating Health Disparities Initiative (EHDI) and the Statewide Health Improvement Program (SHIP) at MDH are working with grantees to reduce health disparities and advance health equity by targeting significant efforts to improve the health of populations experiencing disparities. Grantees identify and address policy, environmental and system barriers faced by these populations in order to improve overall health. Encouraging stakeholders to take on a role of leadership and engage in an authentic role in this process is a continuing priority.

Advancing health equity through collaboration

In the inquiry responses, frequent references were made to the importance of bringing a variety of sectors and actors to the discussion table to expand understanding among decision makers and get health equity to a central place in policy development. While particular emphasis was given to the role of the commissioner of MDH in convening cabinet-level discussions and decisions to advance health equity, collaborations at every level are important for advancing health equity.

As many as 70 percent of youth within the juvenile justice system are affected by a mental disorder that in many cases, if left untreated, impairs their ability to function as a young adult and inhibits their capacity to grow into a responsible adult. The juvenile justice system is often ill-equipped to assist them. Even if released, this is often done without connecting youth to needed resources in the community, such that the child’s behavior often continues to include delinquency and eventually adult criminality, severely limiting future opportunities and inflating into a lifetime of health inequities. In response, a growing number of juvenile justice systems are working in concert with the mental health system and the larger safety network of a community in arrangements that allow each agency to understand and respect the others’ purpose and together provide more effective and appropriate services. One program, Wraparound Milwaukee, is recognized as a model for this type of collaboration. It has effectively integrated mental health, juvenile justice, child welfare and education systems in the provision of appropriate and needed services to youth. Through an integrated, multi-service approach Wraparound Milwaukee is able to provide a service and treatment program that includes a focus on the family’s strengths and culture and of the surrounding neighborhood or community tailored to the individual needs of each child. Within its first few years of operation, Wraparound Milwaukee was able to show a 60 percent decline in use of residential treatment and an 80 percent decline in inpatient psychiatric hospitalization. The average overall cost of care per child declined from $5,000 to $3,300 per month. Active partnerships such as this, by linking together the social safety network of a community, can provide better, more appropriate care to individuals and help address the health inequities in a community, helping to eliminate some inequities and repairing the damage done to individuals by those inequities that remain.

---

64 Statewide Health Improvement Program at MDH, http://www.health.state.mn.us/ship/.
Advancing health equity through relationships with people and groups committed to having an impact on policy decisions

In 2008, the World Health Organization (WHO) Commission on Social Determinants of Health states that, “the conditions in which people live and die are ... shaped by political, social and economic forces.” The report emphasizes the need to support the capacity of individuals and groups to participate in decision-making processes and challenge unequal power relations in order to influence those policies that affect health equity. This requires being more inclusive and examining social and organizational policies and processes to be sure all voices are heard and respected in decision-making.

Public health and health care leaders recognize that the work to decrease disparities must go beyond the emphasis on treating or repairing harm, or the current focus on changing individual risk factors and behaviors, in order to make a sustainable impact. The organization Grantmakers in Health recommends strategies that build the capacity of communities and community-based organizations to participate in decision-making and influence institutional and socially determined policies and practices. This capacity requires encouraging active civic participation and supporting multi-sector alliances and includes engaging individuals in collective efforts focused on change and on interventions targeting the conditions of communities, rather than on programs or services.

Public health and health care leaders recognize that the work to decrease disparities must go beyond the emphasis on treating or repairing harm, or the current focus on changing individual risk factors and behaviors, in order to make a sustainable impact.

Advancing health equity in the health care system

Many individual health care entities are taking steps to advance health equity within their own systems. National and state health care reform initiatives provide an emerging opportunity to apply a health equity lens to clinical and preventive services and the relationship between the community and health care providers. Examples include the Community Transformation Grant programs and investments and opportunities to expand access to preventive care. A developing opportunity is the implementation of the State Innovation Model (SIM) project by MDH and the Department of Human Services (DHS) which will test the model of Accountable Communities for Health (ACH). ACHs may serve as an opportunity for community members from populations experiencing adverse health outcomes to work collaboratively with clinical care providers to craft strategies to address the most significant health care challenges.

Another example of health system changes to advance health equity is promotion, hiring and use of Community Health Workers (CHW) in the health care system. There is growing evidence of the effectiveness of CHW to improve preventative and clinical care services. In addition, community health workers create more pathways to improve diversity of the workforce, build trust in communities, create and build partnerships, and improve the cultural competency of the workforce.

The Patient Protection and Affordable Care Act, enacted in 2010, contains new requirements for tax-exempt hospitals to conduct community health needs assessments and to adopt implementation strategies to meet the health needs identified through the assessments. This emerging effort provides a...
key opportunity for the health care system to promote community collaboration and shared decision-making, improve community-based prevention efforts, and address the disproportionate needs of some communities and populations.67

Some hospitals in Minnesota have begun to implement important steps to advance health equity by increasing breastfeeding rates. Some hospitals in Minnesota have begun to implement important steps to advance health equity by increasing breastfeeding rates. “Ten Steps to Successful Breastfeeding,” the foundation of the WHO Baby Friendly Hospital Initiative,68 are evidence-based practices for hospitals, shown to reduce the disparities in breastfeeding rates regardless of where the hospital is located or what population they serve.69 Peer Breastfeeding Support Counselors are another means of supporting breastfeeding in every population. These are women who have successfully breastfed, speak the language and are of the culture being served. Peer Counselors (who may also be Community Health Workers), can serve an important role when hired by hospitals to serve new mothers soon after birth.

Strengthening the collection, analysis, and use of data for health equity

Responses in the inquiry to questions about data for health equity included:

- Data should be disaggregated into more racial, ethnic and linguistic groups to more accurately reveal what is happening (e.g., broad categories of race do not advance understanding of the significant differences among ethnic subgroups).
- More data and greater expertise in analysis are needed on sexual orientation and gender identity (including statewide demographic data as well as provider data).
- The community needs to be involved in the planning and the actual processes of data collection and analysis.

Seventeen comprehensive, early childhood development programs conducted within a public school or childhood development center and designed to improve the cognitive and social development of children, aged three to five years and at risk because of family poverty, were included in a systematic review.70 Programs reviewed included Head Start and other early childhood programs serving disadvantaged families. Based on this review the Community Preventive Services Task Force recommends such early childhood development programs for low income children because of strong evidence of their effectiveness in preventing delay of cognitive development and increasing readiness to learn, as assessed by reductions in grade retention and placement in special education classes.71

• Data need to be analyzed from community perspectives (i.e., not just MDH professionals), and those who will be analyzing the data need to be culturally competent.
• Recognizing the value and use of qualitative data and collecting stories from the community to help understand the quantitative data.

Advancing health equity through health information technology

Electronic technology used to support health care practice (also known as e-health) holds promise for advancing health equity. Minnesota has been a leader in achieving widespread adoption and effective use of electronic health records and health information exchange, although much remains to be done, especially to bring this technology to providers and systems that serve populations of color and American Indians.

E-health can enhance patient care, reduce costs, and create better outcomes. But e-health also holds potential for advancing health equity as data systems become more comprehensive and dynamic, making it possible to look at population health data in new ways and providing needed information to decision-makers and others. New opportunities for leveraging electronic health records for quality improvement are developing, leading to a need for additional support to assist providers in understanding how to use e-health effectively. Optimizing e-health to improve population health requires an infrastructure of standards and protocols to ensure that exchange of health information occurs seamlessly through the continuum of care.

Advancing health equity through the workforce

Workforce issues include the diversity of the workforce, workplace climate, and pathways to employment and promotion. For example, a number of health-related occupations, such as dieticians, nutritionists, dental hygienists, and more are primarily female and white. The values and expectations that professionals and para-professionals in any field bring to their practice reflect the culture and values of the professionals themselves, and affect the working environment of the profession, the standards they develop, and the ways in which each profession interacts with communities it serves. It also affects who is attracted to these professions, learns about them or has the opportunity to see them at work, or views these professions as valuable and relevant to their communities’ needs.

The values and expectations that professionals in any field bring to their practice reflect the culture and values of the professionals themselves, and affect the working environment of the profession, the standards they develop, and the ways in which each profession interacts with communities it serves.

Advancing health equity through the workforce will require an examination of the demographic profile of professions to identify those that are not representative of the population. Steps must be taken to identify and address barriers in educational pathways, hiring processes, and promotional systems to creating broader opportunities for entry into the professional workforce. For example, organizations can develop internal metrics to track retention for people of color and take steps to reduce the retention gap between white employees and employees of color/American Indians.

Workforce leadership is another key issue, as the promotional pathways to leadership can present many barriers to persons of color and American Indians, women, LGBTQ persons, and persons with disabilities. Providing opportunities for training, cultivating those with leadership potential, and assuring that decisions about promotions do not favor one group over another are essential steps for developing diversity in leadership and the workforce.
Exemplary and emerging practices to advance health equity in Minnesota

Inquiry responses indicate that much is being tried and is being successful to address health disparities. What is working to advance health equity is directly related to the use of exemplary program practices to address health disparities. The term “exemplary” (sometimes also referred to as “best” or “promising”) practices refers to public health programs, activities, policies, or ways of doing things that have been tested, evaluated, and shown to work. These exemplary practices are able to be done by others who should expect to see the same outcomes as the people that did the work previously. In Minnesota a great deal of work has been done to develop and implement exemplary practices in many areas of health.

Minnesota’s Eliminating Health Disparities Initiative (EHDI) funds local nonprofit organizations and American Indian tribes to develop and implement culturally specific, community-driven health improvement strategies. In their initial work, Minnesota’s EHDI and Rainbow Research documented what was described as the “exemplary program practices” used by Minnesota’s EHDI grantees in their efforts to eliminate health disparities.

Exemplary program practices

1. The community is involved in authentic ways.
2. Programming is data-driven.
3. A comprehensive approach is utilized in developing and implementing programming.
4. Participants are recruited from/services are delivered in community settings in which community members feel comfortable.
5. Trust is established as the foundation for effective services.
6. Programming builds upon cultural assets and strengths of community.
7. Services/information are culturally/linguistically accessible and appropriate for the participants.
8. Staff reflect the community being served; cultural competence is ensured among those who are delivering services.
9. Program model or components are innovative.
10. Program is able to document strong outcomes or results.
11. Leadership and commitment by staff are in evidence.
12. Partnerships are essential to support effective programming.
13. Funding and resources are available and leveraged to sustain the efforts.
14. Training and technical assistance are available for capacity building.
15. Capacities are built in the organization and/or community (other than evaluation).
16. Challenges are confronted.
17. Systems change is undertaken.

Responses from the inquiry revealed many instances of these exemplary practices.

---

72 One reason for using “exemplary” rather than “best” is because a best practice in one context may not be effective in another. Exemplary better captures the sense that the practice is a good example to follow, but adaptations may be needed depending on the unique circumstances of each community.

Examples of ways the community is involved

• Many Eliminating Health Disparities Initiative (EHDI) and other programs are working effectively with communities: African American Babies Coalition; WIC programs with tribes; Pacer Center works with community connectors; perinatal Hepatitis B program; Safe Harbor; National Alliance on Mental Illness (NAMI) program that focuses on school based mental health grants; Stairstep Foundation that works with churches on health issues; community-based participatory research program.
• A program in health disparities research at the University of Minnesota is working to shift the research paradigm: have the community post the questions and then the university finds researchers to work on it.
• HealthPartners collects race/ethnicity/language at point of service such as at the clinic, hospital, member services.
• Statewide Health Improvement Program (SHIP) has an emphasis on community engagement.
• There are more student-led efforts to increase awareness of health and health care issues of the lesbian/gay/bisexual/transgender/queer (LGBTQ) communities.
• Many organizations, including health plans, obtain community input in a number of ways, such as actively recruiting representatives on the board of directors and various stakeholder committees.
• Many organizations also obtain diverse perspectives through focus groups, surveys and member input forums.

“The MDH policy of using external and diverse community reviewers for reviewing grant proposals ensures that grant proposals are reviewed by people who understand the designs and implementation of the programs.”

Examples of comprehensive, innovative, data-driven programs

• More food programs focus on healthy food, growing food, better access to healthy food through the food assistance program, healthy corner store programs, and healthy food at medical clinics or hospitals.
• Minneapolis Public Schools adopted a bus-stop-walk program at two schools, whereby one day a week, the bus stops six blocks from the school and students walk the remaining distance together. This investment in exercise and companionship has amounted to “miracle-grow for the brain” because students get some exercise and stimulation so they’re ready to learn when they reach the classroom.
• The Doula bill was passed last year, providing continuous support before, during, and after the birth. The Minnesota Department of Human Services is working with Medicaid to have the service paid for, and more doulas will be working in hospital settings. Doulas were providing unpaid assistance, and compensation is a great step forward.

“The Doula bill was passed last year, providing continuous support before, during, and after the birth...Doulas were providing unpaid assistance, and compensation is a great step forward.”

• NAMI school-linked mental health grants are beginning to make inroads in reducing disparities among children and youth.
• Hennepin County Medical Center, providing prescriptions for food and food shelf on-site.
Rainbow Health Initiative, MN Transgender Health Coalition and Training to Serve Coalition train health care providers to work with transgender and gender-nonconforming people. This coalition helps to bring real life examples of the LGBTQ communities to policy makers.

Health care coordination in hospitals; growing hospital emphasis on health and wellness; hospital community health needs assessments to look at entire population not just patients.

After nearly ten years, the EHDI program has developed programs and relationships to address eight areas of health disparities. Those efforts have made it clear that a holistic approach is superior to focusing on health alone.

Blue Cross, after looking at their claims data, revised their contracting and payment incentives to, among other things, focus on reducing the disparity in colorectal cancer among enrollees.

Examples of leadership and commitment of staff
- The Commissioner’s commitment to health equity by undertaking this project and creating a Minnesota Center for Health Equity is a very positive step.
- Minnesota is talking about health equity! Leaders outside of Minnesota are astounded by this, and have said that they are not politically free to raise such politically and socially charged issues as racism.
- Minnesota has directed resources at eliminating health disparities.
- Minnesota created a tribal liaison position for American Indian health in the Commissioner’s Office.

Examples of cultural competence, staff reflecting the community being served, and services provided by and in community settings
- Community health workers are addressing disparities, though resources are limited. Health care facilities are hiring members of the communities experiencing the disparities. Community health workers can help as health navigators and assisting with issues such as transportation, access to electricity, and correct medication dosage.
- MDH student workers are more culturally diverse, creating an opportunity to increase diversity at MDH.
- Somali doulas are working at Amplatz Children’s Hospital to provide peer-to-peer education and service involvement.
- Blue Cross is a founding member of the Multilingual Health Resource Exchange, one of the largest warehouses for translated health education materials in the country.
- EBAN Project, cultural humility/competency training being offered at HealthPartners, is an effort to learn more about barriers of access, patient care, etc. This project has helped unveil peoples’ (staff) raw feelings about how folks interact with the system and provided an opportunity to learn from/about different cultures.
- Any program or training that addresses historical trauma is important, such as the Center for Victims of Torture.
- More programs have culturally appropriate staff, e.g., Hennepin County Office of Multicultural Services, and African American public health nurse programs.
- Aqui Para Ti, a family-centered holistic approach to meeting the teen health needs of Latinas who are at risk for pregnancy; works in part because parents and teens’ health needs are addressed together — family centered and culture-specific.

Aqui Para Ti, a family-centered holistic approach to meeting the teen health needs of Latinas who are at risk for pregnancy; works in part because parents and teens’ health needs are addressed together — family centered and culture-specific.
• Annex REACH program: in the community where STIs/teen pregnancy is high; culturally specific.
• Minnesota Immunization Network Initiative (MINI) reaches out to different race/ethnicities and religious communities in Minnesota.
• Medica was the first health plan to have dedicated telephone lines for Hmong, Russian, Somali, Spanish and Vietnamese.
• UCare and Stratis Health developed an online learning and resource center called Culture Care Connection, aimed at supporting the provision of culturally competent care by providers.
• Stairstep Foundation utilizes an established network of American Churches to combat diabetes. Trained congregational members deliver the Centers for Disease Control and Prevention curriculum, “I CAN Prevent Diabetes.” The partnership with these churches allows health information to be delivered in a familiar setting by familiar people.
Chapter Four

Data: The Foundation for Advancing Health Equity
One primary function of public health is to assess and monitor the health of populations at risk to identify health problems and priorities. The collection and use of data is a critical component to advancing health equity in Minnesota.

The Minnesota Department of Health (MDH) and local health departments in Minnesota play key roles in data collection and the assessment of population-based health status and health status trends. While health assessments have been conducted over decades using available state and local population data, the assessment process for identifying and addressing health inequities requires a different approach. Assessment with a health equity perspective identifies health status and trends, but it also indicates where health differences that are the result of differences in the opportunity for health exist between population groups. This adjustment in the assessment process can disclose health differences between population groups that could be addressed through changes in policy, programs, or practices.74

The collection and use of data is a critical component to advancing health equity in Minnesota.

Currently, identification of health inequities is done by comparing differences in health status among population groups, e.g., racial and ethnic populations in Minnesota. The potential exists for comparing the health status of various populations by the many factors that contribute to health. The challenge, however, is that neither population group indicators nor social and economic indicators are consistently collected among the many datasets that also measure health status. Expanded data collection, analysis, interpretation and dissemination are needed, in addition to new tools and skills to support promotion of effective strategies to advance health equity.

The persistence of health inequities in Minnesota has compelled MDH and its local partners to reassess the assessment process, data collection, and use of data to address health inequities and as a result consider the development of stronger policies and programming around data. A key to building this critical capacity is to invest in the collection, analysis, interpretation and dissemination of data that document and provide insight on health differences among population groups.

Monitoring health inequity through enhanced data systems will improve public health practice by identifying and tracking health differences between subgroups, providing evidence and feedback to strengthen policies, programs and practices. This in turn will foster accountability and continuous improvement among public health agencies.

The intersection of health and social determinants

Data that distinguish population groups and are useful in monitoring health inequity — such as race, ethnicity, language, and gender — have been systematically collected and used by public health for a long time. But identifying and monitoring health inequities by population groups requires two types of

intersecting data elements that document the systemic differences between more or less socially advantaged groups: 1) measures of health; and 2) measures of social position or advantage, also known as social determinants of health.75

A key to building data capacity for health equity is to invest in the collection, analysis, interpretation and dissemination of data that document and provide insight on health differences among population groups.

Measures of health most often include health status and health care indicators, including death and cause of death, incidence of disease and injury and quality of life. Health care indicators often include access and utilization of health care facilities and services.

Social determinants of health include living and working conditions that influence individual and population health, e.g., place of residence, occupation, religion, education, income and health insurance status. Inequities in these social conditions in the population lead to population-based differences in health outcomes (i.e., health inequities). Accounting for social determinants in the analysis of health data provides a more complete picture of the health of population groups and can yield policy-relevant information that also reveals a basic injustice in society.76

Using a health equity analysis to conduct assessment including the collection and use of data requires combining health measures and social determinant measures to reveal inequalities in the social and economic factors that contribute to differences in health outcomes. For example, infants born to women with different educational levels experience different birth outcomes as demonstrated in Figure 9 on page 81.

**Providing adequate detail of social determinants of health**

Assessment with a health inequity approach also requires adequate detail of the available data to identify and understand inequities that exist. For example, Figures 5 and 6 demonstrate the value of measuring and reporting detailed data elements for infant mortality among African Americans and Whites. Figure 5 shows the disparity in the infant mortality rate between African Americans and Whites. The data indicate that infants born to African American women are twice as likely to die before their first birthday as infants born to White women. Figure 6 provides greater detail of the African American data by including the infant mortality rates by mother’s birthplace. These data indicate that within the African American race category, infant mortality rates vary widely. The infant mortality rate for Ethiopians is very close to Minnesota’s White rate, while the U.S. born African American rate is three times the White rate. The detailed race data provides more insight into the population subgroups that are most affected by infant mortality, providing data users with even more evidence to strengthen equity-oriented policies, programs and practices.

---


Current MDH data systems and social determinants of health

In 2010, the Minnesota Center for Health Statistics conducted a department-wide data inventory that focused on determining the degree to which datasets on individuals collected data related to race and ethnicity. The results of the inventory indicated inconsistency in the collection of race and ethnicity data and in the degree of detail for race and ethnicity collected. Of the 91 datasets included, 55 (60.4 percent) collected data on race and ethnicity. Of those 55 datasets, one-third provided detail on the race/ethnicity data elements for racial/ethnic subgroups (e.g., Hmong, Somali). The inventory also documented inconsistency in the collection of social and economic determinants data with geographic location, country of origin and level of education the most commonly collected elements in those datasets as of 2010. Length of time in the U.S. and income were rarely collected. While these results were from an inventory of data systems within MDH, the literature indicates that there is a great need to strengthen the potential of data systems to support health equity efforts.77

In the process of conducting the inventory of MDH data, the challenges related to developing and evaluating programs to address and eliminate health disparities through a health equity lens were also being expressed at the Minnesota legislature. Recognizing a lack of data on many of the contributing factors/social determinants, and even on health status itself, for many communities, the 2010 Minnesota Legislature directed the commissioners of the Minnesota Department of Health (MDH) and the Minnesota Department of Human Services (DHS) to conduct an inventory of health-related data collected by their two agencies. The 2010 legislation was initiated by a coalition of racial and ethnic communities led by the Alliance for Racial and Cultural Health Equity (ARCHE). MDH was able to respond to this legislative directive in the inventory planning process and to incorporate social and economic indicators into their ongoing inventory.

The commissioners were also directed to consult with individuals and organizations representing a broad range of stakeholders to assess the thoroughness of racial/ethnic data collection and the usability of the current data for the purposes of identifying and addressing health disparities, and to develop recommendations to improve data collection efforts to ensure that data are sufficient for creating measurable program outcomes and facilitating public policy decisions regarding the elimination of health disparities.

The Race/Ethnicity and Language (REL) workgroup, a joint workgroup of the Minnesota Departments of Health and Human Services included more than 40 individuals representing community-based organizations, hospitals, health plans, local health departments, tribal governments, and other stakeholders. A summary of findings and recommendations from this group include the following:

- Existing data collection categories for race, ethnicity and language are inadequate for many of the purposes for which community organizations need data. More detailed categories of race and ethnicity data should be used so that the data is more useful in understanding health issues and needs for particular groups of patients.
- The state agencies and organizations that collect and use health data should be regularly engaged with diverse communities in order to promote full understanding of how race, ethnicity, language and culture affect health care quality, access, wellness and cost.
- Data collected by state agencies and health care organizations should be as accessible to communities as possible. The criteria and process for obtaining access to data should be provided to and discussed with the communities, and agencies should take steps to ensure that information about relevant datasets is easily available online. A process should also be established so that communities can identify their priorities for obtaining reports useful to their communities from agencies and health care organizations that are collecting and analyzing data.
- This workgroup or a similar group should continue on an ongoing basis so that communities, health care stakeholders and government agencies can partner together to improve data collection policies and practices and, using the data, eliminate health disparities.
- A uniform data “construct” should be developed so that all health data collected uses the same categories for race, ethnicity and language. The uniform construct should be used not just by MDH and DHS, but also by licensing boards, other governmental agencies, health plans, hospitals, clinics, nonprofit agencies, quality and performance measurement programs, and others who collect, analyze and report health data so that disease burden, risk and protective factors, access to care, and quality of care can be measured and communicated for smaller

---

populations within an overall population. The uniform construct should build on existing frameworks for data collection, to eliminate duplication of effort.

- The data construct should be flexible so that the categories can be changed in the future as needed. A process should be developed for assessing changes in racial/ethnic populations in Minnesota and determining when populations are of a sufficient size to be reported as a separate category.
- Programs that rely on survey data should consider oversampling or mixed mode approaches in order to obtain larger numbers for communities of color.

The REL workgroup concluded this phase of its work by recommending an expanded set of questions for capturing race, ethnicity and language to the Governor’s Health Care Reform Task Force and Minnesota’s Health Reform Initiative.

Attention to the strengthening of data systems around social determinants of health can greatly enhance efforts to design and implement programming and strategies that can even more effectively address the root causes of health disparities.

While the driving factor for which social and economic data elements currently collected are a result of existing programmatic needs and requirements, it is evident that attention to the strengthening of data systems around social determinants of health can greatly enhance efforts to design and implement programming and strategies that can even more effectively address the root causes of health disparities.

**Strengthening current data capacity**

**Linking MDH surveillance systems**

One approach to strengthening data systems to develop data capacity around health equity is to make greater use of existing data within MDH and with other agencies. While inclusion of consistently measured social and economic data elements within a health surveillance system is the ideal for monitoring health equity issues, inventories of data indicate some inconsistency in the collection of key data elements. In some cases social and economic indicators are absent from the data collection process. To get a more complete picture of existing health inequities, an approach involving linking data systems could enhance existing data sources.

Data linkage adds data from one database to another database. This method can be used to add social and economic indicators to a health dataset that does not currently contain them. This method can be resource intensive as it requires technical and legal coordination as well as additional resources to link the data. Nolen (2005) clarifies how data linking occurs by matching unique identity numbers for individuals or identifiers for small areas (e.g., census tract). Because of the complexity of legal and ethical issues related to confidentiality.

For the 2013 St. Louis County Public Health and Human Services research report: “Health is More than Health Care,” the county first calculated life expectancy and mortality rates for each zip code and “zone” (a measure defined by the county) using MDH death certificate data, then grouped these areas according to each area’s median household income (information obtained from the U.S. Census) to see how socioeconomic status impacts health in St. Louis County (see Figure 7). Linking these data together allowed the county to show life expectancy rates by zip code/zone income level; this analysis could not have been done with the death data alone.
of data, incorporating small-area identifiers into all data systems is recommended in the short term. In the longer term, legal frameworks to incorporate unique identifiers and sharing information while preserving anonymity and privacy are recommended.

Mapping
Mapping is another way to link two datasets to enhance use of existing data to identify where health inequities exist. Mapping requires the use of Geographic Information Systems (GIS) data in conjunction with health data.

A geographic information system (GIS) is a powerful tool used to understand, interpret, analyze, and visualize spatial relationships between diseases, risk factors, and social determinants of health. GIS is most known for its visual products — maps. Maps can be used to analyze spatial patterns of disease along with health inequities including: poverty and income, race and ethnicity, age, access to healthcare, and environmental health hazards.

Maps provide valuable information to the public to prevent disease and identify vulnerable populations. For example, the St. Louis Regional Health Commission evaluated health inequities by geography in the report; “Decade Review of Health Status for St. Louis City and County (2000–2010)”79 The report identifies areas of high impact by zip code using a variety of health and demographic data. The report illustrates how maps can provide valuable information to inform local initiatives addressing health inequities.

The use of maps in public health requires a skilled workforce with expertise in data analysis, interpretation, and visualization and often involves data from a variety of sources. Strengthening state and local capacity in GIS ensures that public health data provide useful, meaningful, and accurate information and maps. A key challenge that remains in GIS is protecting data privacy — particularly for maps that display public health data at fine spatial scales (e.g., zip code). MDH works with the CDC and other agencies to examine how GIS and other data visualization tools and techniques may be used to inform state and local actions to address health inequities and design effective solutions.

Strengthening state and local capacity in GIS ensures that public health data provide useful, meaningful, and accurate information and maps.

Health impact assessments

Enhancement of current analytic capacity and use of data includes expanded use of health impact assessments as a tool to inform MDH programs and policy. Health Impact Assessment (HIA) is a tool or process to assess the potential impacts of proposed policies, plans or programs on the health of populations. Two of the five core values of HIA are democracy and equity. Practitioners support democracy by ensuring that everyone has a voice in decisions, and especially those that are impacted by the decision. Also, it is the responsibility of HIA practitioners to advance equity. HIA can be used to promote health equity in a number of ways: 1) by selecting policies, programs or projects that improve the health of the most vulnerable or disadvantaged populations; 2) by engaging community members in decisions that affect their health and well-being; 3) by increasing the transparency of the evidence and the decision-making process; and 4) by creating recommendations that advance health equity and eliminate disparities. MDH supports the use of HIA to promote health equity in policies, plans and programs.

Health Impact Assessment (HIA) is a tool or process to assess the potential impacts of proposed policies, plans or programs on the health of populations.

80 Source: St. Louis County Health Status Report, 2013, St. Louis County Public Health and Human Services
Data for local public health
Vital records data are among the few MDH datasets where analysis and reporting of health inequity issues have occurred at county level. Data are infrequently reported below the state level because of county variations in population size and demographic composition. In 2011, total county population ranged from 1,168,431 for Hennepin County to just 3,523 for Traverse County; in fact, 68 of Minnesota’s 87 counties have fewer than 50,000 residents. There is also wide variation in county populations by race/ethnicity. For example, African American population estimates ranged from 140,704 for Hennepin County to 8 for Lincoln County in 2011, with 70 counties having fewer than 1,000 African American residents.

As indicated previously, the documentation of health inequities involves collecting and reporting health data by social and economic factors (e.g., race, age, gender, education). This dividing of health data by social and economic indicators, though, may result in a small number of cases on a particular health measure for counties with small populations (fewer than 50,000). When small numbers occur, the incidence or prevalence rate may be unstable because it is based on a small number of cases (e.g., fewer than 20). In 2011, 60 out of 87 Minnesota counties had five or fewer births to African American or American Indian women. This means that an analysis of African American and American Indian births is not possible for almost 70 percent of Minnesota’s counties.

Statewide surveys are usually unable to present results at the county level because state level sample sizes are not large enough to allow county-level estimates. To address this issue, over the last 20 years many local health departments in Minnesota have conducted their own population health surveys. These surveys will be increasingly valuable for the identification of health inequities at the local level (although small numbers problems for some social determinants such as race/ethnicity will still occur). These surveys are conceived and carried out by local health departments, often in conjunction with other health organizations such as hospitals. Technical assistance is provided by the Minnesota Center for Health Statistics to ensure that these surveys are scientifically rigorous and provide high quality data.

Over the last 20 years many local health departments in Minnesota have conducted their own population health surveys. These surveys will be increasingly valuable for the identification of health inequities at the local level.

Currently, MDH and its local public health partners are making small strides to improve the availability of data for the study of health inequity. MDH is beginning the process to increase the number of surveillance systems that include social and economic indicators as well as standardizing these data elements. Local health departments also are increasingly implementing local health and health behavior surveys. However, health inequity data would be rendered useless if analysis, interpretation and application are ineffective or insufficient.

E-health and health information technology
E-health is the adoption and effective use of electronic health record (EHR) systems, other health information technology (HIT) and electronic exchange of health information to improve the delivery of health care. But e-health also is a critical tool for the assessment of health equity in the public health system.

At the state level, e-health will advance how MDH collects, securely shares and acts on health data to uncover health differences between populations. For example, an electronic link between public health departments and health records systems could assist with the identification of population-wide trends.
Access to aggregated health data stratified by race, ethnicity, primary language, and other demographic variables would enable public health professionals not only to identify inequities but also alert health departments to the need for a focused public or community health response. California, for example, identified a sharp increase in rates of chlamydia and gonorrhea (seven percent more cases in 2010 than 2009), which prompted schools and health departments to implement a new computer sex education program that has proven to delay sexual activity. The San Francisco Department of Public Health has begun a text messaging service to combat sexually transmitted infections (STI), with over 3,000 subscribers, and Los Angeles County is targeting women ages 12 to 25 with an online site for ordering STI testing kits. These are a few examples of how a link between health records systems and public health departments can lead to innovative strategies to improve health.

Electronic health records (EHR) provide a tool for secure electronic exchange of data, allowing providers to send timely data to MDH to assist in monitoring the health status of populations. Several federal and state initiatives are supporting the adoption of EHR that collect standardized demographic data including race, ethnicity, and preferred language. These initiatives have led to high EHR adoption rates and common capture of comprehensive demographic information from patients and health care providers. When legally authorized, the EHR data can be shared securely with other MDH programs or local health departments to provide a more comprehensive understanding of health inequities.

**E-health will allow efficient and accurate information sharing to decrease these and other inefficiencies inherent with coordinating services across multiple health and social service programs.**

The use of standard terminology and data structure supports interoperability across public health information systems, assuring the data can be shared across programs and organizations. For example, staff of the Women, Infants and Children (WIC) supplemental nutrition program at local health departments currently are not readily able to see if a child is up-to-date on immunizations or screenings. E-health will allow efficient and accurate information sharing to decrease these and other inefficiencies inherent with coordinating services across multiple health and social service programs. E-health will also support providers who depend on timely and accurate sharing of data from public health systems (e.g., immunizations, lead screening results) to ensure patients get the care they need.

**Four keys to the successful use of data for addressing health inequities**

**Making the data useful: analysis, interpretation and application**

A variety of techniques to collect, analyze, and report health equity data should be employed to make the data useful to all stakeholders. Efforts to focus on increasing the amount of data to identify and monitor health inequities and making better use of existing data will support efforts to advance health equity.

Techniques to improve the use of existing data that include the analysis of health equity issues range from simple to very complex. Health inequities can be identified by analyzing one health indicator and one social determinant together, using a technique such as cross-tabulation. Cross-tabulation is a method that summarizes categorical data (e.g., race, health status) to provide a basic picture of the relationship between variables. However, to go beyond a simple identification of health inequities and begin to explain these relationships, more sophisticated analytic techniques are necessary, such as higher order
cross-tabulation or multiple regression. The use of these types of analyses must be considered carefully, as their results can be difficult to communicate to policymakers and to the general public.

Health impact assessments (HIA) are also a practical and useful tool or process for advancing health equity. The HIA broadens the analysis of data to include an assessment of the potential impacts of proposed policies, plans or programs on the health of populations.81

**Dissemination of results**

Health inequity data are unlikely to result in policy change unless findings are disseminated to key stakeholders such as policy makers, community leaders and health care organizations. Results can be disseminated through various types of data products such as static reports, interactive queries and the sharing of data via websites, newsletters, emails and community forums.

One way MDH is working to expand access to public health data to advance health equity is by enhancing the department’s web site. In 2011 MDH launched the Minnesota Public Health Data Access Portal that provides public access to interactive charts, maps, and queries, including state and county level data.82 Currently, data are available on over 19 health and environment topics, such as poverty and income, health insurance coverage, asthma, cancer, lead poisoning, and chronic obstructive pulmonary disease. Health inequity data on the portal are created by linking census data (e.g., poverty) with health data (e.g., blood lead levels).

*The Minnesota Public Health Data Access Portal provides public access to data on over 19 health and environment topics, such as poverty and income, health insurance coverage, asthma, cancer, lead poisoning, and chronic obstructive pulmonary disease.*

MDH is evaluating how to sustain the portal with uncertainties in federal funding in 2013-14, through the CDC National Tracking Network. Making data available through this portal has high potential for adding new data topics, as well as using GIS and other interactive features to highlight health inequities.

Currently, the majority of health inequity dissemination tools provide state level results. MDH is able to provide very little *health inequity* data for counties, with a few exceptions such as the Minnesota Vital Statistics Interactive Queries website. MDH does provide a wealth of information on social determinants of health by county through static reports such as the Minnesota County Health Tables83 and Minnesota Vital Statistics Trend Reports.84 However, social and economic indicators in these documents are reported alone, not in conjunction with a disease or behavior. Because limited *health inequity* data are available at the county level on the MDH website, data users may need to contact the data stewards of each surveillance system to request data specific to their needs.

**Community engagement**

As indicated in other sections of this report, the involvement of the community is essential to successfully achieving health equity. With regard to the collection, analytical efforts, and dissemination

---

82 Minnesota Public Health Data Access Website. Retrieved from: [https://apps.health.state.mn.us/mndata/](https://apps.health.state.mn.us/mndata/).
of data, the local community needs to be involved in all aspects of health inequity monitoring, including determining what data need to be collected and in planning and conducting the analysis, interpretation and application of that data. However, many communities currently lack both the tools and the expertise for this; ways must be found to equip them to become fully engaged. Community involvement in monitoring health inequities will increase awareness of health inequities, ensure that health inequity data are responsive to the needs of communities, create a sense of ownership of the data and facilitate a collaborative, equitable partnership in creating health equity policies, programs and practices.

Communities need to be involved in all aspects of health inequity monitoring, including determining what data need to be collected and planning and conducting the analysis, interpretation and application of that data.

Skilled workforce

An element essential to successfully monitoring health equity is an educated, knowledgeable and skilled surveillance workforce that has the necessary tools. MDH and local health department staff expertise varies from PhD level research scientists to those who are very uncomfortable with data. When state and local public health staff do have the expertise to analyze and interpret data, other responsibilities may limit the time, tools or resources to do so.

The public health surveillance workforce needs to be well-trained in the concepts of health equity as well as the methods to collect, analyze, interpret and apply health inequity data. Strengthening the public health workforce requires commitment of resources and creative solutions to extend the skills and reach of the workforce. Vital to improving the state’s health inequity surveillance capacity is to establish a framework for continuous learning and training to ensure that current and future workers are prepared to meet the challenges ahead. The framework should address not only the opportunities for continuous learning and training but also all the challenges of time and resources necessary to apply the training to real world situations.

Data challenges

In the process of developing the Advancing Health Equity report, a number of challenges were identified for building and strengthening current health equity data capacity. For example, changes in systems and processes for the collection, analysis, and dissemination of health equity data will be time consuming, labor intensive, and require an investment of resources. This process of transformation would involve including development of consistent and meaningful social and economic indicators; difficulties encountered when changes in data collection occur (e.g., tracking trends); small numbers phenomena when breaking data down by social determinants with already small populations; sharing agreements and contracts with researchers and public health partners to link datasets; and ensuring usability and accessibility to key stakeholder groups.

Changes in systems and processes for the collection, analysis, and dissemination of health equity data will be time consuming, labor intensive, and require an investment of resources.

---

Protecting data privacy per the Minnesota Government Data Practices Act is another important consideration. Access to protected or sensitive data requires the development of data use agreements and authorizations, and the processes required for sharing data (even within MDH) present several legal and information security barriers. To protect data privacy, MDH suppresses nonpublic data, such as data in areas of the state where there are low counts for certain diseases. Maintaining data privacy can also present challenges for accessibility and dissemination of health equity data that may include stratifying data by age, race/ethnicity, and gender. Protecting data privacy is important, particularly in greater Minnesota where some racial and ethnic groups are small in number, and also when analyzing finer levels of data including geography (e.g., zip code, census tract/block).

*The challenges to the collection, analysis and use of data to advance health equity need careful consideration.*

While these challenges are not insurmountable, the ramifications of methodological challenges and transformations in the way in which data are collected, analyzed, and disseminated to increase data capacity for health equity will need careful consideration.

**Data opportunities**

**Stratified data from hospitals and clinics**

Identification and monitoring of population-wide trends could be greatly enhanced if clinics and hospitals could provide MDH with aggregated, stratified health data drawn from the electronic health records system. Since data would be summarized, no personal health information would be involved. Access to aggregated health data stratified by race, ethnicity, primary language, gender identity, sexual orientation and other variables will enable public health professionals not only to identify any disparities but also the need for a focused public or community health response.⁸⁶

**Increasing role of e-health**

E-health is changing how MDH collects health data and will continue to evolve as the gold standard for data collection. E-health is the adoption and effective use of electronic health record (EHR) systems, other HIT and electronic exchange of health information. MDH programs are beginning to use EHRs as the source of standardized data to monitor health. EHRs provide a tool for secure electronic exchange, allowing providers to send data to MDH that can provide timely data to assist in monitoring health status of populations. Once the data is collected by MDH, e-health also improves how it is used. When legally authorized, the data can be shared securely with other MDH programs or local health departments to provide a more comprehensive understanding of health inequities. E-health is a critical tool for the assessment of health equity in the public health system. At the state level, e-health will advance how MDH collects, securely shares and acts on health data to uncover health differences between populations.

**New and evolving methods of data collection**

MDH could explore new and evolving methods of data collection such as: respondent driven sampling (RDS), a sampling method used to draw probability samples of hard-to-reach populations; qualitative

---

methods for collecting data for small populations, including interviews, focus groups, talking circles, observation, etc.; and additional methods for conducting surveys, including online surveys.

**State-of-the-art resources for data analysis**
Geographic information science (GIS) technology and data linking are state-of-the-art resources that improve the analysis of health data. GIS technology, data linkage and other newer methods of analysis could be utilized more widely for the use in understanding health inequities.

**Interactive data systems**
Interactive data systems allow users to create ad-hoc data queries based on their unique needs. It is one the best ways to provide health inequity data to a wide audience.
Populations Experiencing Health Inequities

A number of populations in Minnesota experience inequities in the social and economic opportunities that create health, and the health disparities that result. The following descriptions were developed to help understand how health inequities are affecting some of these populations. These short pieces, however, should not be viewed as telling the whole story of any group. The experiences and perspectives summarized here in brief are actually complex and multidimensional. All of the populations affected by inequities in health have their own stories to tell, in their own voices. Building relationships and sharing these stories to further understanding and make progress must be a continued emphasis in the process of advancing health equity.

Health disparities — population-based, persistent differences in health outcomes — are determined by looking at one population in relation to another. The term “disparities” has come generally in Minnesota to be understood as referring to racial/ethnic-based disparities, where the reference group is usually white (European heritage). Other populations, however, also are affected by persistent, socially-based inequities: for the LGBTQ population the reference group is heterosexual; for people in poverty the reference is to other economic groups, and so on.

Before describing the challenges faced by some of these populations, it is also important to acknowledge some of the limitations of describing health inequities through categories of people. For example, each person is unique and multi-dimensional, even if they identify with a particular community (or two or three). Broad racial/ethnic categories do not adequately account for persons of mixed-race/mixed ancestry or multiple ethnicities or the role of class, generation, culture, and experience in moderating health inequities. Speaking only about inequities does not give enough attention to the strengths and resources of different communities of people throughout Minnesota. The short descriptions here are of necessity simplified, even though the issues are complex and multi-faceted. Nor do the challenges identified “belong” to these communities alone, as every person in Minnesota is affected by the health inequities that disproportionately affect a few.

Children

The effect of early childhood on lifelong health is tremendously important. Of course a healthy start — good nutrition, a safe physical environment, proper care of teeth, and stable, positive interactions with family and friends — is great for children, but it turns out that this healthy start also has a powerful impact on health in adulthood. For example, traumatic experiences during childhood contribute, decades later, to poor adult health status and early death. Adverse experiences in early childhood create changes in the architecture of the brain that affect everything from physical growth to emotional development to the capacity to make healthy decisions as adults, and increases the risk of alcoholism, depression, heart disease, liver disease, intimate partner violence, sexually transmitted infections,

87 The populations briefly presented here are children, American Indians, African Americans, Hispanic/Latinos, Asian, LGBTQ persons and persons with mental illness. Other populations that experience disparities include adolescents, rural communities, the elderly, and persons with disabilities. As MDH continues to work to advance health equity, all populations facing inequities in health outcomes should be identified and the issues addressed.


smoking, and suicide. Children who grow up in safe, stable and nurturing environments, on the other hand, are better able to become strong, healthy, successful adults.

Children who grow up in safe, stable and nurturing environments are better able to become strong, healthy, successful adults.

A healthy start in life is more likely to be assured when parents of young children have positive family and social supports and access to affordable, safe and nurturing child care; when children are breastfed; when children are surrounded with emotionally healthy relationships; when parents have access to nutritious foods for their families; and when mothers receive preconception and prenatal care.

These healthy factors, however, are not evenly distributed among families in Minnesota. The share of mothers from populations of color and American Indians with adequate or better prenatal care, for example is 12 to 37 percentage points lower than for white mothers, with American Indians having the lowest percentage, 46 percent.

Minnesota’s child population is becoming more racial and ethnically diverse. Children of color and American Indians now make up about 30 percent of the 420,000 children under age six, and they suffer many disparities in indicators of educational, health, and social well-being. The youngest Minnesotans are also the poorest, and this is especially true for children of color: while nearly one in five children under age six lives in poverty, over 60 percent of children under age six living in poverty are children of color/American Indian. Poverty is a significant childhood stressor, thus to the extent poverty is far more prevalent in populations of color and American Indians, children from these populations are assured to maintain current population-based disparities in health status. These children face disruption in their housing, education, and family support systems.

American Indians

American Indians, the first populations of Minnesota, are comprised of 11 distinct, federally recognized tribes with different governments and traditions: seven Anishinaabe (Chippewa, Ojibwe) reservations and four Dakota (Sioux) communities, as well as a large number of American Indian people living in urban areas in Minnesota, from these 11 and other American Indian tribes.

American Indian tribes are officially recognized by the U.S. federal government as sovereign nations. Sovereignty means these nations have the right to govern themselves and have authority over their own internal affairs, citizens, economy and military. They have the right to establish tribal membership, create their own governments, create and enforce their own laws, try court cases on tribal land and levy taxes within their own borders. The federal government is responsible for protecting Indian land, treaty rights, resources and assets. As sovereign nations, tribes are not equivalent to cities or counties, which are local jurisdictions; nor should the needs and interests of Minnesota’s tribes be assumed to be the same as cities or counties.

90 Wilder, School Readiness Report Card. Retrieved from:  

The displacement of American Indians from the land brought about a loss of traditional ways of making a living, of providing food for the table, and of being in relationship with one another.

Causes of health inequities in American Indian communities are directly linked to determined and deliberate efforts of American federal, state and local governments to uproot the American Indian people from their land, eradicate their languages and destroy their way of life. First among these is the uprooting of the people from their traditional lands, a major factor that scientists recognize creates psychological and health impacts for generations.\textsuperscript{92} Displacement brought about a loss of traditional ways of making a living, of providing food for the table, and of being in relationship with one another. To replace these losses the American government provided “commodity” foods: bleached white flour instead of whole grain wild rice; processed pasta and cheese instead of lean protein. Diabetes rates are now endemic among American Indians throughout the U.S., including Minnesota, and the rise of these rates can be directly related to the introduction of foodstuffs with poor nutritional value.\textsuperscript{93} The loss of a way of life also has led to unemployment, poverty, and the high-risk behaviors that accompany the loss of hope and meaning: these are some of the systemic, socially-determined health inequities that need to be overcome to achieve health equity for American Indians in Minnesota.

Health for indigenous peoples needs to include mental, spiritual, emotional and physical health, focused on the whole person. Many of the current efforts to reclaim the language and traditions of the American Indian people are aimed at restoring the health of the community, and on sharing those healthy ways of being with other people in Minnesota as well.

**African Americans**

The Census category of “African American” can be both confusing and misleading. This category (sometimes called “Black”) combines people who are descended from slaves brought to the U.S. hundreds of years ago from different parts of Africa, with recent arrivals (immigrants and refugees) from a number of different nations. With the significant increase in immigrants and refugees to Minnesota from Africa, especially Somalia, this broad category creates challenges for the identification and resolution of the unique challenges of these very different populations.

African Americans in Minnesota experience persistent disparities in health outcomes, many with roots in inequities created by racism. Slavery dehumanized people with greater amounts of melanin in their skin. After the official end of slavery, and despite progress on many fronts, racism continued to limit opportunity for African Americans in the form of Jim Crow “separate but equal” laws (outlawed in 1965), segregation, unemployment, social exclusions, and harsh punishment for social infractions.

\textit{The advantages of the white middle class today are in part due to the wealth built by their parents and grandparents through economic opportunities of the mid-20th century that were systematically denied to African Americans.}


Data show that time and again African Americans have lower educational opportunities, higher unemployment rates, and suffer from poorer health outcomes. In 2012, rates of home ownership in Minnesota among African Americans are half that of other racial/ethnic groups and one-quarter of the rate of white home ownership. This disparity is a consequence of discrimination against African Americans, both historical and current, including redlining (identifying and then excluding predominately black neighborhoods from infrastructure investments and mortgage loans) and predatory lending leading to foreclosures. In addition, although returning black servicemen were eligible for benefits under the G1 bill after WWII, a number of factors related to poverty and discrimination made it difficult to take advantage of those benefits. The advantages of the white middle class today are in part due to the wealth built by their parents and grandparents through real estate investments (home ownership) and a college education and subsequent economic mobility — all the elements of the opportunity to become economically established during the mid-20th century that were systematically denied to African Americans.

**African-born population**

Currently, the largest African-born population in Minnesota is from Somalia. (Some of the other countries of origin of African-born people in Minnesota include Ethiopia, Liberia, Kenya, Sierra Leone, Nigeria, and Sudan.) Minnesota is, in fact, home to the largest Somali population in the U.S., estimated to be over 60,000 in 2010. Somalis face multiple challenges as refugees, including learning a new language and coming from a very different culture (especially as a primarily Muslim population, a religious minority in Minnesota). Many experienced the trauma of war and/or spent years in refugee camps before being relocated to Minnesota, sometimes without family – even their children – thus mental health is a very critical issue for the Somali community.

African-born persons bring different strengths, perspectives, life histories, and health concerns to Minnesota, including infectious diseases such as tuberculosis and HIV/AIDS. This population also encounters some of the same racism and racially-charged institutions and structures as American-born blacks. Advancing health equity for African Americans, whether those who are many-generation American-born, or newer arrivals from Africa, will require confronting and dismantling the systems that unfairly advantage those of European heritage and creating systems that provide opportunity and hope.

**Hispanic/Latinos**

The 2010 Census defines “Hispanic or Latino” as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. Like populations of African or Asian heritage, “Latino” encompasses a very broad array of countries and cultures; many but not all have the Spanish language as a common denominator. Hispanic or Latino persons also may be of any race.

The population of Latinos in Minnesota has grown rapidly over the last decade, and is expected to continue to increase at a rapid pace. Some Minnesota communities that had few people of color have

---

been transformed by a large influx of persons of Hispanic/Latino descent coming to work as agricultural labors or in large processing plants.  

*The population of Latinos in Minnesota is expected to continue to increase at a rapid pace.*

Health equity issues for the Latino population in Minnesota vary by subgroup. For new immigrants, access to health care is a significant concern, along with the need for culturally competent care, preventive health information (e.g., diet, immunizations), and education to overcome a cultural tendency to avoid seeking medical assistance. Working conditions are also an area of vulnerability and potential inequities leading to health disparities. The level of concern over these issues has grown in proportion to the rapid increase of this population.

**Asian-Pacific Islanders**

The Asian-Pacific Islander category of persons in Minnesota is an extremely diverse group, with many different countries of origin, languages and distinctly different cultures. Asian people in Minnesota who are in this category may be from China, Hong Kong, Taiwan, Korea, the Philippines, Myanmar/Burma, Thailand, Japan, Indonesia, China, Vietnam, Laos, Cambodia, India, Pakistan, Sri Lanka, Bangladesh, Bhutan, or Malaysia, with very different national backgrounds, immigration histories, faith traditions, and experiences in Minnesota. Over half of Minnesota’s Asian population identifies as Southeast Asian (compared to 21 percent nationally). The Hmong population, at 27 percent of all Asian Minnesotans, is the largest of these populations in Minnesota. The foreign-born Asian population accounts for nearly two-thirds of the total Asian population in Minnesota, a higher proportion than in any other racial/ethnic group.  

*Culturally-competent health care, therefore, is a very large concern for this population.*

Asian-Pacific Islanders in Minnesota have very different national backgrounds, immigration histories, faith traditions, and experiences in Minnesota.

Health issues and health inequities likewise vary greatly for this group, but it is difficult to get an accurate picture because data on health outcomes almost always combine all Asian populations. Yet there can be very different health issues for refugees and recent arrivals than for highly skilled workers, for Asian persons who immigrated to receive a higher education, or for second, third and fourth generation Asian Americans. On some measures average Asian health is better than the average for the European population, but because data are not available to take a closer look it is hard to get a clear picture of what this means. Similarly, it is difficult to identify where differences in outcomes are the results of structural inequities/racism that affect the opportunity to be healthy, different patterns of behavior, or other causes.

**LGBTQ persons**

Persons who are lesbian, gay, bisexual, transgender or queer (LGBTQ) include people of all races and ethnicities, all ages, and all socioeconomic statuses. The LGBTQ population experiences a number of health disparities, including a disproportionate rate of infection with HIV/AIDS. A significant structural
inequity facing the LGBTQ population in Minnesota is a lack of consistent data on their health needs and concerns. A national study concluded that research has not been conducted evenly on sexual and gender minority populations and has focused more on gay men and lesbians than on bisexual and transgender people, and on adults 18-65, rather than elders or adolescents. Nor has research adequately examined subpopulations, particularly racial and ethnic groups. The social stigma associated with being a sexual minority also threatens the quality of research as persons avoid answering questions that they feel might lead to discrimination.

_A significant structural inequity facing the LGBTQ population in Minnesota is a lack of consistent data on their health needs and concerns._

This lack of research is problematic because the available evidence points to a number of significant issues, such as a greater frequency of negative school experiences for LGBTQ adolescents. The Centers for Disease Prevention and Control note that several studies have documented an increased risk for LGBTQ youth for bullying, teasing, harassment and physical assault, compared to other students. These negative experiences, harmful on their own, also diminish educational success, lead to elevated risks of depression and suicide for LGBTQ youth, and affect lifetime health status. Other serious concerns for this population include higher rates of substance use, reduced or delayed seeking of health care due to fear of discrimination for LGBTQ persons of all ages — including the elderly — and poorer outcomes from encounters with the health care system due to a lack of providers who are knowledgeable about LGBTQ health needs. In addition, being a LGBTQ person of color, or having a disability, or living in poverty, means facing multiple forms of structural inequities.

**Individuals and families facing mental health challenges**

Mental health and mental illness challenges affect many Minnesotans. The structural inequities related to mental health and mental illness include lack of adequate screening services, especially for children, limits on the number of times that an outpatient is able to see a mental health counselor, significant copayments, lengthy wait times (30 to 45 days or more in some cases) to see a mental health professional, and widespread stigma in society that prevents persons struggling with mental health concerns or mental illness from seeking help. Mental health is increasingly identified as a top priority concern of local health departments. In addition, data reveal that persons with serious and persistent mental illnesses die on average 25 years younger than the general population.

_Persons with serious and persistent mental illnesses die on average 25 years younger than the general population._

Certain populations are more subject to the structural inequities of mental health services. People who are incarcerated often have mental health issues. Sometimes those mental health or mental illness struggles are the factors that led to the encounter with the criminal justice system, and incarceration becomes the de facto “treatment.” Women are particularly at risk: one study indicated that nearly three-fourths of women in state prisons have mental health concerns, compared to 55 percent of men, often

---


because of sexual and physical abuse starting as children and continuing into adulthood\(^\text{101}\) and in prison many do not receive the mental health services they need. Compound these factors with the fact that African American and American Indian persons are more than ten times more likely to be incarcerated than white persons, and the structural inequities can be even better understood as race-based inequities.

Refugees are also a population that experience critical mental health concerns, sometimes because of the trauma that led to their displacement, sometimes because of their marginalization in the U.S. One community clinic has estimated that six out of 10 Somali patients need mental health services. The problem is compounded by cultural stigma, a lack of adequate access to mental health professional services, and a lack of culturally competent care.

People who identify as LGBTQ and have mental health concerns face double stigma; being unable to open up in treatment or support group settings negatively impacts the therapeutic experience and recovery.\(^\text{102}\)

American-born people of color and American Indians also face life-threatening disparities in access to mental health care. The Surgeon General’s Report on Cultural, Race and Ethnicity (2001) noted that racial and ethnic populations have less access to mental health services than do whites, are less likely to receive needed care, and when they receive care, it is more likely to be poor in quality.\(^\text{103}\)

In fact, health care in general is a concern for all populations of color and American Indians. The Institute of Medicine’s 2003 report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care\(^\text{104}\) draws attention to significant disparities in the experience of health care in the U.S. The study reveals that a consistent body of research demonstrates significant variation in the rates of medical procedures by race, even when insurance status, income, age, and severity of conditions are comparable. This research indicates that U.S. racial and ethnic minorities are less likely to receive even routine medical procedures and experience a lower quality of health services.

Older Minnesotans

Disparities by race/ethnicity, sexual orientation, mental illness, and more continue through the lifespan, and can be exacerbated by the additional challenges that come with aging. Disparities created by structural racism, for example, have implications for seniors: many older people use reverse mortgages to pay for increased care needs, or children use the funds from the sale of a home to help pay nursing home costs for their parents. The huge disparities in home ownership rates between whites and populations of color and American Indians — especially African Americans — contribute greatly to the disadvantages faced by older persons of color and older American Indians when it comes to resources for assistance in old age. The disruption of community that has taken place over the years, through the destruction of African American neighborhoods and American Indian displacement also plays out in many negative ways as people approach the end of life and need the support of others even more.


LGBTQ elders can face increasing challenges in the community as they age. Issues such as abuse and mistreatment in nursing homes, fear of discrimination by health care providers, and increasing isolation at a time when a person is becoming more vulnerable make the experience of aging more difficult for lesbians, gays, bisexuals, and transgender persons. These issues are compounded when structural racism is added to the mix of challenges being faced.

Disparities by race/ethnicity, sexual orientation, mental illness, and more continue through the lifespan, and can be exacerbated by the additional challenges that come with aging.

Elderly immigrants experience also face challenges in addition to aging, including: limited English proficiency and difficulty learning a new language; unfamiliarity with the culture and the stress of navigating a new environment (including simple things such as being able to go shopping on their own to meet basic needs); being uncomfortable with Western medical practices and struggling to communicate their health concerns; and not having access to health care (e.g., being ineligible for Medicare). 105 While many older immigrants live with children or family members to buffer these concerns, the acculturation of younger generations can contribute to elders’ sense of confusion, displacement and isolation.

Additional populations experiencing health inequities

There are additional populations who experience disparities in health outcomes due to structural inequities, including (not limited to) adolescents, women, persons with disabilities, persons living in poverty, people with limited education, persons with inadequate housing/homeless, persons who are chemically dependent, rural/urban populations, and neighborhoods within urban areas. As MDH continues to work on advancing health equity, these sub-populations and others must be identified and the issues affecting them must also be explored and addressed.

Data on Health Disparities and Inequities

This section of the *Advancing Health Equity Report* describes just a few of the disparities in health status outcomes and inequities in the factors that create health for various Minnesota populations. These are intended as examples of health disparities and inequities in Minnesota, not a comprehensive reporting of all health disparities or inequities that exist. Many more indicators are available in the Statewide Health Assessment, Populations of Color Health Status Reports, and the MDH website.

**Mortality rates by race/ethnicity and age**

The persistent inequities in Minnesota (in the environment, opportunity and healthy living) are illustrated most starkly in a comparison of mortality rates by race and ethnicity. As illustrated in the chart and accompanying table, the rate of death in the American Indian population, Minnesota’s most historically established population, is much higher than in the state’s White population across all age groups except the elderly, and death rates in the African American population in Minnesota are consistently much higher than the state’s White population, apart from the elderly.

*American Indian and African-Americans in Minnesota experience substantially higher mortality rates at earlier ages.*

Table 1: Mortality rates per 100,000 by race/ethnicity and age, Minnesota 2007–2011

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Age at Death</th>
<th>1–14</th>
<th>15–24</th>
<th>25–44</th>
<th>45–64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td></td>
<td>23.8</td>
<td>82.2</td>
<td>144.4</td>
<td>771.6</td>
<td>3,670.0</td>
</tr>
<tr>
<td>American Indian</td>
<td></td>
<td>28.6</td>
<td>155.4</td>
<td>329.0</td>
<td>1,063.1</td>
<td>4,367.2</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>15.7</td>
<td>43.3</td>
<td>53.4</td>
<td>325.4</td>
<td>2,589.5</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td>13.5</td>
<td>47.7</td>
<td>89.4</td>
<td>433.7</td>
<td>4,473.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>17.2</td>
<td>46.1</td>
<td>69.2</td>
<td>302.4</td>
<td>1,988.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15.5</td>
<td>53.2</td>
<td>96.2</td>
<td>450.8</td>
<td>4,440.4</td>
</tr>
</tbody>
</table>

---

108 Minnesota Department of Health website, [www.health.state.mn.us](http://www.health.state.mn.us).
109 Source: MDH, Center for Health Statistics.
110 Hispanic can be any race.
Infant mortality by race/ethnicity of mother

Minnesota consistently ranks among the states with the lowest infant mortality rates. In fact, infant mortality rates have declined for all racial and ethnic populations in Minnesota over the last 20 years. Nonetheless, significant disparities persist in the mortality rates of African-American and American Indians infants, compared to all other population groups.

The causes of infant mortality vary by population: sleep-related causes, such as SIDS (sudden infant death syndrome), are a primary source of infant deaths in the American Indian community, while prematurity is the leading cause of death among African-Americans. Birth defects are the main source of infant deaths in the Asian, Hispanic, and White populations. Chronic stress, poverty, substance abuse, a lack of prenatal care, and lack of access to health care all contribute to infant mortality.

Table 2: Infant mortality per 1,000 births by race/ethnicity of mother, Minnesota 2006–2010 (birth year)

<table>
<thead>
<tr>
<th>Race/Ethnicity of Mother</th>
<th>Black or African American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic*</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>9.8</td>
<td>9.1</td>
<td>4.9</td>
<td>4.8</td>
<td>4.4</td>
<td>5.1</td>
</tr>
<tr>
<td>Disparity Ratio</td>
<td>2.2</td>
<td>2.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

* Can be any race

The table below demonstrates that even when controlling for the education of the mother, infant mortality rates are still higher for American Indian and African American mothers, at a ratio of nearly two to one.

111 Mortality disparity ratio is calculated by dividing the rate for a given population by the White rate. Source: MDH, Center for Health Statistics.
Table 3: Infant mortality per 1,000 births by race/ethnicity and education of mother, Minnesota 2006–2010 (birth year)

<table>
<thead>
<tr>
<th>Race/Ethnicity of Mother</th>
<th>Black or African American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>9.4</td>
<td>9.5</td>
<td>*</td>
<td>5.0</td>
<td>5.7</td>
<td>6.5</td>
</tr>
<tr>
<td>High School</td>
<td>10.8</td>
<td>11.6</td>
<td>5.5</td>
<td>4.4</td>
<td>5.9</td>
<td>6.8</td>
</tr>
<tr>
<td>Greater than High School</td>
<td>7.7</td>
<td>*</td>
<td>4.1</td>
<td>4.4</td>
<td>3.6</td>
<td>3.8</td>
</tr>
</tbody>
</table>

* Less than 20 events

Table 4: Infant mortality disparity ratios by race/ethnicity and education of mother, Minnesota 2006–2010 (birth year)

<table>
<thead>
<tr>
<th>Race/Ethnicity of Mother</th>
<th>Black or African American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>1.7</td>
<td>1.7</td>
<td>*</td>
<td>0.9</td>
</tr>
<tr>
<td>High School</td>
<td>1.8</td>
<td>2.0</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Greater than High School</td>
<td>2.1</td>
<td>*</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

*Less than 20 events.

Figure 9: Infant mortality rates and disparity ratios by education of Black or African American mothers, Minnesota 2006-2010 (birth year) 112

* Disparity ratio is calculated by dividing the rate for a given population (Black or African American) by the White rate.

112 Source: MDH, Center for Health Statistics, Linked birth/infant death records.
Breast cancer incidence and mortality

Breast cancer is the most common form of cancer and the second leading cause of cancer deaths among Minnesota women. Surviving breast cancer is directly related to the stage of the disease at the time of diagnosis. African-American and Hispanic women in Minnesota are more likely to be diagnosed with later-stage breast cancer than women of European heritage.

As in the rest of the U.S., Minnesota’s women of color are slightly less likely than white women to be diagnosed with breast cancer, but African-American women are at the greatest risk of dying from the disease. In fact, breast cancer mortality among African-American women is 24 percent higher than white women, despite the incidence of breast cancer among African-American women being 18 percent lower. This population’s higher rate of mortality can clearly be partially attributed to later stage diagnosis.

Table 5: Breast cancer incidence and mortality rates per 100,000 by race/ethnicity, females, Minnesota 2005–2009

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Black or African American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Non-Hispanic White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td>109.8</td>
<td>88.1</td>
<td>62.3</td>
<td>84.9</td>
<td>129.5</td>
</tr>
<tr>
<td>Mortality</td>
<td>27.6</td>
<td>12.1</td>
<td>14.3</td>
<td>8.6</td>
<td>21.4</td>
</tr>
</tbody>
</table>

Rates of HIV/AIDS

The number of persons assumed to be living with HIV (human immunodeficiency virus) and AIDS (acquired immune deficiency syndrome) in Minnesota has been steadily increasing during the past 30 years. As of 2012, over 7,500 persons were known to be living with HIV/AIDS in Minnesota, a 5 percent increase from the year prior.

In Minnesota, the HIV/AIDS epidemic affects populations of color and American Indians disproportionately. While white, non-Hispanic persons account for the majority of people living with HIV/AIDS, the rate of white people living with HIV in Minnesota is 87.4 per 100,000 persons, which is much lower than the rates of other racial/ethnic groups. For example, African-Americans have a rate of people living with HIV/AIDS of 838.9 per 100,000 persons (nearly 10 times higher than rate among white, non-Hispanic persons) while African-born persons have a rate of nearly 1,378 per 100,000 persons (nearly 16 times higher than rate among white, non-Hispanic persons). Hispanic persons and American Indians also have more than twice the rate of people living with HIV than white, non-Hispanic persons at 256.5 and 238.2 per 100,000 persons, respectively.

---

113 All analyses were conducted by the Minnesota Cancer Surveillance System (MCSS). Cases were microscopically confirmed (1988+) or Death Certificate Only (1995+). In situ cases were excluded. Deaths include all deaths with breast cancer as the underlying cause of death during the time period, regardless of the year of diagnosis. Hispanic includes persons of any race, including unknown and other race. Rates are per 100,000 persons and are age-adjusted to the 2000 US standard population (19 age groups). Source: Cancer in Minnesota, 1998-2008, Minnesota Cancer Surveillance System, MDH. Retrieved from: http://www.health.state.mn.us/divs/hpcd/cede/mcss/documents/cancerinmndec2012.pdf. Data sources: MCSS December 2011 (incidence) and Minnesota Center for Health Statistics (mortality) with Vintage 2009 population estimates.
Chlamydia

Chlamydia is the most frequently reported infectious disease in Minnesota (and the U.S.) with slightly over 18,000 cases in 2012 (at least one in every county in MN). This compares to 315 new cases of HIV, no cases of measles, 1,034 cases of pertussis, and 79 cases of West Nile in 39 counties during 2012.

Figure 11: Chlamydia rates by race/ethnicity Minnesota, 2002–2012\textsuperscript{115}

\begin{table}[h]
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
Year & White & Black & American Indian & Hispanic & Asian/PI & Other \\
\hline
2002 & 504 & 253 & 253 & 504 & 253 & \textit{N/A} \\
2003 & 457 & 274 & 274 & 457 & 274 & \textit{N/A} \\
2004 & 460 & 254 & 254 & 460 & 254 & \textit{N/A} \\
2005 & 465 & 269 & 269 & 465 & 269 & \textit{N/A} \\
2006 & 480 & 273 & 273 & 480 & 273 & \textit{N/A} \\
2007 & 424 & 263 & 263 & 424 & 263 & \textit{N/A} \\
2008 & 458 & 284 & 284 & 458 & 284 & \textit{N/A} \\
2009 & 383 & 313 & 313 & 383 & 313 & \textit{N/A} \\
2010 & 405 & 284 & 284 & 405 & 284 & \textit{N/A} \\
2011 & 434 & 284 & 284 & 434 & 284 & \textit{N/A} \\
2012 & 376 & 284 & 284 & 376 & 284 & \textit{N/A} \\
\hline
\end{tabular}
\end{table}

\textit{*Persons of Hispanic ethnicity can be of any race.}

\textsuperscript{114} Census 2010 data. The population estimate for African-born persons was calculated by the Minnesota State Demographic Center. African-born Blacks are reported separately from other Blacks (born in the U.S. or elsewhere). "Other" includes multi-racial persons and persons with unknown race. Rates calculated using U.S. The population estimate for Black, African-American persons (196,211) was calculated by subtracting the U.S. Census estimate for African-born persons (72,390) from the total Black population (269,414). Note that this assumes that all African-born persons are Black (as opposed to another race). Rates not calculated for populations of unknown size. Data Source: Minnesota HIV/AIDS Surveillance System.

\textsuperscript{115} Minnesota STD Surveillance System. STDs in Minnesota: Annual Review
Disparities in rates of chlamydia are very high. In 2012, rates in African Americans were 11 times higher than in whites, American Indians five times higher, Asian-Pacific Islander two times higher, and Hispanic/Latinos three times higher. While the rates of chlamydia in all ages and races in Minnesota are low compared to other states, the rates in populations of color and American Indians remain high.

In addition, there are great disparities in chlamydia rates by age and gender: 75 percent of cases are in young women under the age of 25, and 75-85 percent of cases in females have no symptoms, meaning many people do not know they have it. Untreated chlamydia infection can lead to infertility and pelvic pain, both chronic health conditions.

Table 6: Chlamydia rates compared with Whites, 2012

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate compared to Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>11x higher</td>
</tr>
<tr>
<td>American Indian</td>
<td>5x higher</td>
</tr>
<tr>
<td>Asian/PI</td>
<td>2x higher</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3x higher</td>
</tr>
</tbody>
</table>

**Stroke and COPD mortality**

Stroke is a major cause of death in Minnesota. Compared to the non-Hispanic white population, mortality due to stroke is significantly higher for the African-American, American Indian and Asian populations in Minnesota.

Table 7: Stroke mortality rates per 100,000 and disparity ratios, Minnesota 2007–2011

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number</th>
<th>Age Adjusted Rate</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>235</td>
<td>46.2</td>
<td>1.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>63</td>
<td>35.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Asian</td>
<td>186</td>
<td>44.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>90</td>
<td>29.6</td>
<td>0.9</td>
</tr>
<tr>
<td>White</td>
<td>9,947</td>
<td>34.5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* Can be any race.

Table 8: COPD mortality rates per 100,000 and disparity ratios, Minnesota 2007–2011

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number</th>
<th>Age Adjusted Rate</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>156</td>
<td>30.5</td>
<td>0.9</td>
</tr>
<tr>
<td>American Indian</td>
<td>98</td>
<td>54.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Asian</td>
<td>64</td>
<td>17.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>33</td>
<td>12.6</td>
<td>0.4</td>
</tr>
<tr>
<td>White</td>
<td>9,618</td>
<td>35.4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* Can be any race

116 Age adjusted rates are adjusted to the 2000 U.S. standard population. Disparity ratio is calculated by dividing the age adjusted rate for a given population by the White age adjusted rate. Source: MDH, Center for Health Statistics.

117 COPD — chronic obstructive pulmonary disease. Age adjusted rates are adjusted to the 2000 U.S. standard population. Disparity ratio is calculated by dividing the age adjusted rate for a given population by the White age adjusted rate. Source: MDH, Center for Health Statistics.
Oral health

Lack of oral health care can lead to caries (cavities) and gum disease, which can in turn contribute to other diseases or conditions. Chronic conditions can also lead to a decline in dental health: e.g., osteoporosis can lead to tooth loss, and persons with diabetes and immune system disorders are more susceptible to gum and bone infections. Gum disease is associated with endocarditis (an infection of the inner lining of the heart), cardiovascular disease, premature birth, and low birth weight. Poor oral health can also affect self-esteem, reduce employment opportunities, and increase absenteeism.

Persistent disparities in oral health are seen in among populations of color. In Minnesota, children of color are less likely to receive dental sealants to prevent caries, and more likely to have untreated caries. Among adults, American Indian and African American men have the highest rates of oral cavity and pharyngeal cancers.\(^{118}\)

Figure 12: Caries and untreated caries in students in third-grade by race, Minnesota 2010\(^{119}\)

[Bar chart showing caries and untreated caries by race in third-grade students in Minnesota 2010]

In Minnesota, children of color are less likely to receive dental sealants to prevent caries, and more likely to have untreated caries.

Ninth-graders overweight/obesity

The rate of obesity continues to rise in every racial and ethnic population in Minnesota, as well as among children, adolescents, and adults, and among both males and females. Minnesota is neither the most obese state in the nation nor is it the slimmest. Minnesota is ranked the 32nd most obese state in the nation.

Obesity puts people at much greater risk for the development and early onset of a wide variety of chronic diseases and health conditions, including hypertension, diabetes, coronary heart disease and stroke, gallbladder disease, depression, osteoarthritis, sleep apnea, and some cancers. Obesity often has


social consequences, as well: children and adolescents who are overweight or obese may be teased or ostracized, and obese adults can face discrimination in the workplace.

Because of its link to so many serious health conditions, obesity significantly raises health care costs. According to a recently published study, in 2009 Minnesota paid an estimated $2.8 billion in state funds for obesity-related Medical Assistance (Medicaid) and Medicare costs. The report estimated that expenditures for these programs would be about 9 percent lower if all obese Minnesotans were normal weight.

Rates of obesity are highest among American Indian, Hispanic/Latino, and African American 9th graders, especially those eligible for free and reduced lunch, and lowest among white and Asian 9th graders.

Table 9: Percent of ninth-grade students who are overweight or obese according to self-reported height and weight, by receipt of free or reduced-price lunch at school, Minnesota 2013

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>All</th>
<th>Free or reduced-price lunch at school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>30.7</td>
<td>31.5</td>
</tr>
<tr>
<td>American Indian</td>
<td>31.6</td>
<td>35.1</td>
</tr>
<tr>
<td>Asian</td>
<td>23.3</td>
<td>27.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>31.3</td>
<td>35.0</td>
</tr>
<tr>
<td>White</td>
<td>21.5</td>
<td>29.5</td>
</tr>
</tbody>
</table>

Figure 13: Percent of ninth-grade students who are overweight or obese according to self-reported height and weight, by receipt of free or reduced-price lunch at school, Minnesota 2013

120 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.

121 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.
Ninth-graders suicide

Among adolescents, girls are much more likely to have thought about killing themselves than boys, and students of color are more likely to report both thinking about suicide and attempting suicide. American Indian students have the highest rate of attempted suicide among ninth-graders and the highest rate of death by suicide in Minnesota among all age groups.

Table 10: Percent of ninth-grade students who thought about killing themselves during the last year, by receipt of free or reduced-price lunch at school, Minnesota 2013

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>All</th>
<th>Free or reduced-price lunch at school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Black or African American</td>
<td>15.2</td>
<td>15.2</td>
</tr>
<tr>
<td>American Indian</td>
<td>20.4</td>
<td>18.7</td>
</tr>
<tr>
<td>Asian</td>
<td>12.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17.3</td>
<td>16.5</td>
</tr>
<tr>
<td>White</td>
<td>11.9</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Figure 14: Percent of ninth-grade students who thought about killing themselves during the last year, by receipt of free or reduced-price lunch at school, Minnesota 2013

Ninth-graders changing schools

When families move their primary residence, children may change schools. Frequent moving during the school year can disrupt the flow of learning, weaken parent-student-teacher bonds, and make it more difficult for the child to form attachments at school. The residential mobility reflected in school moves

---

122 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.

123 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.
also has implications for social connectedness within the neighborhood, for both children and parents. Reasons for moving may include instability.

Among ninth-graders, Asian, Hispanic, American Indian and African-American students were three to four times more likely than white students to have changed schools at least once during the school year.

Table 11: Percent of ninth-grade students who have changed schools at least once since the beginning of the school year, by receipt of free or reduced-price lunch at school, Minnesota 2013

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>All</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>12.4</td>
<td>14.2</td>
<td>9.4</td>
</tr>
<tr>
<td>American Indian</td>
<td>10.4</td>
<td>13.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Asian</td>
<td>9.1</td>
<td>12.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.8</td>
<td>11.8</td>
<td>9.4</td>
</tr>
<tr>
<td>White</td>
<td>3.9</td>
<td>8.0</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Figure 15: Percent of 9th grade students who have changed schools at least once since the beginning of the school year, by receipt of free or reduced-price lunch at school, Minnesota 2013

124 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.

125 Students can mark more than one race. Results for each race group are based on all students who marked that group, even if they also marked one or more other groups. Source: 2013 Minnesota Student Survey.
High school graduation rates

Health and learning are closely connected. Education is an important predictor of health because it both shapes and reflects multiple factors that affect people’s life chances. Investing in education can be the single most effective intervention to improve health outcomes and tackle inequities.

Health affects learning at all ages, from early childhood through adolescence, to adulthood. Early reading and literacy stimulate brain development in young learners, help develop their analytical and communication skills, and influence their intellect and behavioral patterns. These in turn shape future opportunities and achievement.

Certain health behaviors, too, are strongly associated with education. For example, 22 percent of Minnesotans with less than a high school degree smoke, compared with 20 percent of those with some college education, and 5 percent of college graduates.126

High school graduation rates are a consistent marker of educational opportunity among Minnesota’s various populations. In 2010, the four-year rate of high school graduation was highest for the white/non-Hispanic and Asian populations and lowest for American Indian, African-American and Hispanic/Latino populations.

Table 12: High school students graduating on time by racial and ethnic group, Minnesota 2012127

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>51.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>45.5</td>
</tr>
<tr>
<td>Asian</td>
<td>74.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>53.0</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>83.9</td>
</tr>
</tbody>
</table>

Unemployment

Stable and secure employment influences health not only by being a source of income, but by providing access to health insurance. Significant disparities in employment by race/ethnicity persist in Minnesota.

Table 13: Adults (civilian only) in the labor force by race/ethnicity, Minnesota 2012128

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>16–64 in labor force</th>
<th>16–64 working</th>
<th>Percent working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>131,476</td>
<td>108,087</td>
<td>82.2</td>
</tr>
<tr>
<td>American Indian</td>
<td>23,725</td>
<td>19,078</td>
<td>80.4</td>
</tr>
<tr>
<td>Asian</td>
<td>115,597</td>
<td>107,706</td>
<td>93.2</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>122,267</td>
<td>108,847</td>
<td>89.0</td>
</tr>
<tr>
<td>White</td>
<td>2,493,618</td>
<td>2,357,433</td>
<td>94.5</td>
</tr>
</tbody>
</table>

* Can be any race.

128 Source: 2012 Census ACS 1 year, C23002 (race alone).
**Per capita income**

Employment is important, yet income involves more than money earned from a job. It also includes assets (like a bank account or equity in an owned home) and access to a variety of economic resources. Income influences the opportunity people have to choose where to live, to purchase nutritious food, to participate in a wide variety of physical activities, especially those that require fees or special equipment, and to have leisure time. Nonetheless, jobs and job-related income remain steady markers of one aspect of a household’s wealth. In Minnesota, African-American, American Indian and Hispanic/Latino populations have household incomes that are almost half that of Asian and white populations. Again, however, it should be noted that the category of “Asian” is in reality quite diverse, and the average likely does not accurately reflect the income disparities within that population.

**Figure 16: Per capita income in the past 12 months, Minnesota 2012**\(^{129}\)

![Per capita income chart](image)

\(^{129}\) Source: 2012 Census ACS 1 year, B19301 (race alone).

**Children in poverty**

Poverty is linked to health in many ways. Poverty limits choices: in education, in employment, and in living conditions, among others. Poverty limits access to safe places to live, work, and play, and places to buy healthy food. Poverty can foster obesity by forcing people and families to rely on cheap sources of food, which tend to be plentiful but high in calories and low in nutritional value.

**Figure 17: Percent of children (under 18 years) below poverty in the past 12 months, Minnesota 2012**\(^{130}\)

![Children in poverty chart](image)

\(^{130}\) Disparity ratio is calculated by dividing the percent for a given population by the White percent.
Poverty also is deepened by a lack of assets. Nearly two-thirds of African-American Minneapolis-St. Paul residents, compared with about one-fourth of the cities’ white residents, live in ‘asset poverty,’ meaning they do not have enough assets to live above the poverty level for three months if they lose their main source of income.

A growing body of research is demonstrating that children who are raised in families experiencing chronic stress created by long-term poverty (<100% of the Federal Poverty Level) are at much greater risk of significant and long-term deficits in health. Poverty among Minnesota’s children is not evenly distributed: a far-greater percentage of children of color live in poverty than white children. And children who grow up in poverty are very likely to remain in poverty as adults.

**Home ownership**

As part of the built environment, housing is a key factor for health. Older housing in particular can present multiple threats to health, including lead-based paint, lead solder in plumbing and in the soil, mold, and asbestos. Because of affordability, Minnesota’s low-income families often live in older housing, both as renters and as owners.

Home ownership itself has multiple benefits: it gives the occupants more control over their living environment, and can be a source of financial stability as an asset (home equity) that can be called on in a time of need. Home ownership also confers benefits on the community. Homeowners participate more in the civic and social life of their communities, help prevent and report crime, are more environmentally aware, and are more empowered to address environmental concerns in their homes and neighborhoods. Children benefit from residential stability when living in a permanent home, perform better in school, and have better health outcomes.

*In 2012, more than 75 percent of the white population in Minnesota owned a home, but only 21 percent of African Americans in Minnesota were homeowners.*

The disparities in homeownership actually worsened with the economic downturn the last few years, as predatory lending targeted populations of color and put them at great risk of losing their homes.

**Figure 18: Percent of housing units that are owner occupied by race/ethnicity, Minnesota 2012**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>21.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>47.1</td>
</tr>
<tr>
<td>Asian</td>
<td>53.5</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>45.1</td>
</tr>
<tr>
<td>White</td>
<td>75.5</td>
</tr>
</tbody>
</table>

Source: 2012 Census ACS 1 year, B25003 (race alone).
Incarceration poses a number of individual and community health concerns. Incarcerated individuals are exposed to violence and infectious diseases in close quarters, including tuberculosis. For those outside, incarceration weakens family ties, and increases community instability as members enter and are discharged—often repeatedly—from prison. This is especially true when a community has a disproportionally high number of individuals who are incarcerated. Incarceration also changes individual and population patterns of employment, income, and marital status, all of which ultimately have an impact on health status.

The rate of incarceration in Minnesota is relatively low compared with other states, for example Louisiana or Wisconsin. However, Minnesota (along with Wisconsin) has one of the highest relative disparities of incarceration rates among its American Indian, African-American and white populations.

**Table 14: Number and rate of adults incarcerated in the Minnesota Department of Corrections Prison System as of July 1, 2013**

<table>
<thead>
<tr>
<th></th>
<th>Incarcerated</th>
<th>Population</th>
<th>Rate</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>3,384</td>
<td>287,165</td>
<td>1,178.4</td>
<td>10.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>860</td>
<td>56,230</td>
<td>1,529.4</td>
<td>13.4</td>
</tr>
<tr>
<td>Asian</td>
<td>265</td>
<td>229,238</td>
<td>115.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>695</td>
<td>264,025</td>
<td>263.2</td>
<td>2.3</td>
</tr>
<tr>
<td>White</td>
<td>5,260</td>
<td>4,596,694</td>
<td>114.4</td>
<td>--</td>
</tr>
<tr>
<td>Total†</td>
<td>9,772</td>
<td>5,379,139</td>
<td>181.7</td>
<td>--</td>
</tr>
</tbody>
</table>

* Can be any race.
† Includes unknown or other race.

**Figure 19: Incarceration rate disparity ratio, Minnesota as of July 1, 2013**


Population: 2012 ACS 1 year population estimates (one race)
Rate: The rate is per 100,000 total population
Disparity ratio: The ratio is calculated by dividing the rate for a given population by the White rate.

133 Disparity ratio is calculated by dividing the rate for a given population by the White rate. Source: Minnesota Department of Corrections, adult inmates as of 07/01/2013. Retrieved from: [http://www.doc.state.mn.us/PAGES/](http://www.doc.state.mn.us/PAGES/).
The disparity ratios for African-American and American Indian population in Minnesota are 10.3 and 13.4, meaning that more than ten times the number of African Americans and 13 times the number of American Indians in Minnesota are incarcerated than white persons.

**Health insurance**

People who are uninsured or underinsured (i.e., their insurance does not cover all necessary procedures) receive less medical care than their insured counterparts. When they do receive care, it has often been significantly delayed, often due to concerns about cost, and their condition and final outcome is frequently worse than if they had received care right away. Lack of health insurance creates a financial risk and a burden when care eventually is received. Hospital-based charity care helps uninsured and underinsured Minnesotans, but does not compensate for gaps in health insurance coverage.

Hispanic/Latinos, African Americans, and American Indians in Minnesota are two and three times more likely to be uninsured than white persons.

**Table 15: Percent uninsured by race/ethnicity, Minnesota 2011**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>17.9</td>
<td>2.4</td>
</tr>
<tr>
<td>American Indian</td>
<td>14.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Asian</td>
<td>11.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>26.0</td>
<td>3.4</td>
</tr>
<tr>
<td>White</td>
<td>7.6</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Mental health diagnosis by sexual identity and gender for postsecondary students**

A report from the Institute of Medicine notes that research has not been conducted even across sexual and gender minority populations and subpopulations, including racial and ethnic groups.

**Disparities in mental health for the LGBTQ population are among the most persistent and severe.**

In Minnesota, two recent studies of the health of the LGBTQ population have been conducted: a survey of the LGBTQ population in Minnesota by Rainbow Health Initiative, and a survey of University of Minnesota students by the Boynton Health Service. Both found consistent disparities in a variety of

---

134 Includes individuals who report their race/ethnicity alone or in combination with any other race/ethnicity. Disparity ratio is calculated by dividing the rate for a given population (American Indian) by the White rate. Source: MDH Health Economics Program and University of Minnesota School of Public Health, Minnesota Health Access Surveys. Last updated 01/12/2011. Retrieved from: [https://pqc.health.state.mn.us/mnha/Welcome.action](https://pqc.health.state.mn.us/mnha/Welcome.action).


health outcomes among the LGBTQ population. Disparities in mental health are among the most persistent and severe.

According to the Boynton survey, students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey, report statistically significantly higher rates of being diagnosed with a mental health condition within their lifetime compared to students who identify as heterosexual (56.6, 62.1, and 34.9 percent, respectively).

**Table 16: Any mental health condition diagnosis — lifetime all students by sexual identity and gender, Minnesota 2007–2011**

<table>
<thead>
<tr>
<th>Sexual Identity</th>
<th>Percent of Postsecondary Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>34.9</td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>56.6</td>
</tr>
<tr>
<td>Bisexual</td>
<td>62.1</td>
</tr>
</tbody>
</table>

**Figure 20: Any mental health condition diagnosis — lifetime all students by sexual identity and gender, Minnesota 2007–2011**

---


**Mental illness and median age at death**

Findings from a number of recent national studies indicate that adults with a serious and persistent mental illness are dying, on average, 25 years earlier than the general public. The leading causes of these premature deaths are heart disease, lung disease, diabetes and cancer. One of the basic reasons for premature death among persons with bipolar disorder or schizophrenia is that very few routinely see their primary care physicians for annual physical health screenings.

Table 17: Median age at death for Minnesota Health Care Program (MHCP) covered populations 18 years and older, 2003–2007

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age at Death for MHCP Populations</th>
<th>Difference in Age at Death (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>85</td>
<td>63</td>
</tr>
<tr>
<td>Male</td>
<td>74</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>58</td>
</tr>
</tbody>
</table>

Figure 21: Median age at death for MHCP covered populations (18 years and older), 2003–2007

---

140 SMI — Serious mental illnesses (there were 1,177 females and 1,029 males with SMI in the MHCP programs). Populations are 18 years and older. Median age at death for the Minnesota population at large (18 years and older) was 83 years for females, 77 for males and 80 for the total population (2003–2007). NOTE: The article did not compare the MN population at large to the MHCP population with SMI. It compared the MHCP populations to each other.


The Advancing Health Equity Inquiry and Findings

The central component of the development of this legislative report on advancing health equity was a facilitated public inquiry process. After an internal MDH “launch” event tested a series of questions, hundreds of individuals and dozens of groups were contacted and conversations were held to discuss the issues of health equity, what is working, what is needed, and where to go next. An online survey form was created so that the notes from these conversations could be recorded. Individuals were also invited to submit their knowledge and ideas via the survey. Some information was also shared via email communications.

Over 180 conversations were held, with over 1,000 participants. Nearly 100 responses to the online survey were submitted, generating approximately 200 single-spaced pages of comments. It is impossible to do justice to the passion and commitment expressed in those pages in this brief summary; the interest and energy of people throughout Minnesota on the issue of health equity is enormous.

Inquiry questions

Following are the questions used to guide the discussions and get input via the online survey. Those who led discussions had the freedom to elaborate on the questions to get more and richer input. The questions below show both the originals and some of the adaptations to the questions that were made to encourage comments from a wide range of perspectives.

**Question 1:** Describe current efforts that are working well to advance health equity in Minnesota. *(What current efforts within MDH and/or its partners are working well to advance health equity? How are race/racism considered in these efforts? Is structured racism being identified and are changes being made? What features of these activities make a particular contribution to health equity?)*

**Question 2:** Based on your experience what are some specific practices, policies or processes that create health inequities in Minnesota? *(Are there practices, policies or processes in MDH that may contribute to inequitable opportunities for health, particularly for American Indians, African Americans, and persons of Hispanic, Asian, Pacific Islander, Middle Eastern, and African descent? Are any of these practices, policies, or processes the result of historical racism? Please provide specific examples.)*

**Question 3:** Where else do policies, processes and systems exist that have an impact on health equity, beyond MDH and its programs? *(Where else do policies and systems exist that have an impact on health equity — especially for American Indians, African Americans, and persons of Hispanic, Asian, Pacific Islander, Middle Eastern, and African descent — beyond MDH and its programs? Where is structural racism at work in these policies, processes and systems? What is the impact of these policies, processes and systems on health in different populations? Please identify some Minnesota-specific examples.)*

**Question 4:** What kind of leadership is needed to advance health equity and address structural racism in Minnesota? What would that kind of leadership look like? What prevents this from happening? *(How could MDH provide more effective leadership to advance health equity and address structural racism in Minnesota? What would that kind of leadership look like? What prevents this from happening?)*
**Question 5:** Please include other information or ideas for how health equity can be advanced in Minnesota.

**Question 6:** How can data be better used to document, monitor and better understand health disparities? How can data be better used to evaluate efforts to advance health equity?

**Summary of inquiry responses**

The nearly 200 pages of comments from the open-ended survey responses are briefly summarized here. A lot of detail was provided in the survey, and there was much repetition of certain issues (e.g., cultural competence, data disaggregation, organizational silos, and workforce issues). The notes below were gleaned from these conversations and summarized for this legislative report, and does not claim to adequately represent every viewpoint or reflect every sentiment. Nonetheless it is hoped that the essential points have been captured and communicated.

**What are the barriers to health equity in Minnesota?**

The inquiry survey yielded the largest number of responses to the questions about what is needed, what is missing, what the barriers are to health equity in Minnesota. The issues mentioned the most frequently here included issues of race and racism; organizational and professional “silos” and fragmentation; cultural and linguistic competence; community leadership and shared decision-making; barriers to a diverse workforce; grants and community capacity; and a number of comments about issues in a range of other policy areas.

**Comments about race and racism**

- Racism is important to discuss but often dismissed at MDH; takes courage to bring it up and to keep talking about it.
- “We are talking about race and racism out loud!”
- “Cultural humility” is a process of self-reflection and self-critique, being willing to examine your own assumptions, beliefs and understandings. Cultural humility is needed to advance health equity, especially to talk about racism.
- Individual racism of policy makers; ability to block needed policy changes.
- MDH puts money into diseases that affect the white population, people of European descent, but not those that affect primarily or only African American or other populations of color (e.g., sickle-cell anemia). Designated funds to address the chlamydia epidemic have not made it into the MDH budget; this is an issue of particular concern for African American female youth.
- MDH is primarily white middle-class with white middle-class values and beliefs; these assume and take for granted much that is not necessarily shared by low-income persons and populations of color/American Indians. Programs get designed from white, middle-class perspective and populations of color/American Indians are blamed for poor outcomes.
- Unconscious bias in hiring practices: interviewing, programming, promotions.

“We put people of color in our brochures and posters but these are not reflected in staff.”

- MDH reports will mention poverty but avoid connecting issues of poverty and race.
- Fear causes people to misconstrue the actions/intents of African American youth and adults (and other populations of color and new immigrants), resulting in overuse of incarceration, underuse of culturally competent health and mental health services and barriers to competent education and employment opportunities.
• Low-income, racially diverse communities are more likely to have no choice but to live by [toxic] facilities or along major roadways with exposure to air-borne toxins.
• Property owners are responsible for dealing with [environmental] contaminants but renters do not get information, little ability to do anything about contaminants or afford remediation, especially if low-income. Populations of color, especially African Americans, are more likely to be renters and affected by lack of information about environmental health hazards.

“How do we address disparities without stereotyping and losing the ability to see each other as individuals?”

Comments about “silos” and fragmentation

• All levels of government operate in silos: the federal, state and local government as well as within agencies, which creates barriers to determining underlying problems or creating health solutions; need for better intra- and inter-agency efforts around health and coordination among state, federal and private agencies.
• The divisions, sections, and units within MDH work in silos even when addressing a specific disease condition.
• MDH is divided into sectors that focus on a specific disease or issue and has not had a consistent or agency-wide effort to address health disparities, despite having had EHDI in place for over ten years; health disparities are seen only as the job of the Office of Minority and Multicultural Health.
• The priority of addressing health disparities has not been consistent across changes in government administrations.
• There is a tension between targeting specific race/ethnicity populations and creating silos, and recognizing that “the community” is a multi-cultural whole, made up of diverse cultures and populations.
• Minneapolis is very segregated; does not have a sense of “whole community” compared to many other places; perceived “bad places” are kept apart and separate from other parts, not allowed to be part of the whole.
• Minnesota is a state of “parts” and does not have a good sense of the whole as made up of many diverse parts.
• Silos in programs and lack of cultural competence can lead to unintended consequences when decisions are made, for example, about regulations, not understanding how these play out in specific communities.

“Some neighborhood grocery stores might be forced to close due to regulations that demand costly upgrades in equipment, and yet provide no financial assistance for the owners to pay for those upgrades. For example, a local neighborhood grocery store by one attendee is going to close next year because a lot of their profit is in butchering their own meat, but the City is requiring that they upgrade all of their equipment to stainless steel. The owners of that neighborhood grocery store cannot afford those upgrades, so the store is closing. Most of the store’s traffic is from people within walking distance, and the most of the customers are minorities.”
Comments about cultural and linguistic competence

- There are myths and policies, both historical and current, about American Indians that continue to impact health outcomes. Some of these policies include: the reservation system, U.S. food commodities, lack of access and recognition of spiritual healers, the sterilization of women, lack of respect and humanity toward American Indians, removing children from their mother/family, violence against American Indian women, lack of access to American Indian health care practitioners, income disparities, failure to engage in meaningful dialogue on health policies and failure to teach American Indian history in the United States.

- Programs developed by non-Indians rely heavily on frameworks of operation that interpret responses in a way that is alien to the Indian mind. American Indians are constantly pressed to modify their methods, which results in lack of a cultural essence or practices within programs.

- Respectful attention can and should be focused on how better to interact with American Indians so that meaningful assessments, practices and evaluations occur.

- Health for indigenous peoples needs to include mental, spiritual, emotional and physical health: the whole being of a person.

- Trauma, military/paramilitary experience, factors in countries of origin not considered or well understood.

- Current systems were set up in decades past to address needs of European population and have not been carefully examined since then, e.g., need culturally appropriate Meals on Wheels; long-term care plans, nursing homes, food back choices appropriate for immigrants.

- More is needed to treat mental health, particularly in communities of color and new immigrants. Lack of appropriate and culturally competent care leads to a disproportionate number of people and youth who are placed in the juvenile and criminal justice systems.

- Communities of color and American Indians do not receive high quality health care as compared to the white population.

- Eastern and Western, American Indian and white, different economic classes, and so on have different ideas and values about health, well-being, medicine, best approaches, etc., and need to be discussed openly.

- Stereotyped assumptions are made about populations (e.g., “Asians have good eating habits”), which then in a lack of information about, for example, diabetes prevention and treatment for this population.

- MDH employees, including senior staff, management and supervisors, generally do not understand diverse communities and what resonates with them; MDH and local health department staff need cultural and linguistically-appropriate training.

- MDH does not have a consistent policy regarding translation of documents.

- MDH employees need more opportunities to learn about how to address disparities more effectively, including “one-on-one conversations between staff of different races.

- MDH uses professional, insider-oriented jargon; issues are framed in ways that are not readily understood by the community and can be off-putting, especially to other cultures, communities of color and American Indians.

- MDH information only provided in written formats; non-existent or limited opportunities for oral education, spoken or video “fact sheets.”

- Health professions, boards and other agencies need to expand on cultural competence in accreditation standards and licensing policy.

- MDH does not push local public health partners enough to identify and work with diverse racial populations, and/or to prepare for increasing diversity in Greater Minnesota.
• MDH works with counties (e.g., community health boards) but communities may be defined in other ways.
• We build systems with the expectation that “they will come” rather than designing systems (such as health care) around the community. Western approach does not work for everyone.
• There are assumptions the Office of Minority and Multicultural Health is responsible for all issues related to diversity and multiculturalism, rather than infusing the ideals and practices through-out the agency.

“Researchers and evaluators have certain ‘professional’ ways of framing issues that are not readily understood by the community; developing this understanding takes time, collective action, and understanding.”

Comments about workforce issues
• There need to be more leaders that are from communities of color, the American Indian community and LGBTQ community. There are structural and organizational barriers within MDH that prevent this from happening.
• Human resource recruitment and management systems create barriers to a diverse workforce at all levels; complex and biased employment qualifications and screening processes.
• Need better ways to recruit students from diverse communities; no “pipeline” from people in diverse communities into public health jobs; internships and life (cultural, social) experiences not counted as experience or education; not clear path for student interns; lack of mentors for applicants and employees of color.
• Significant gaps in representation of all communities in many health occupations.
• Not able to hire people without advanced degrees and develop them “in place.”
• Hiring practices are outdated and restrictive; computer process makes it hard to use the “right words” even if you have advanced education.
• Preference for education in job requirements, which advantages white population.
• Unwritten rules (organizational culture) of MDH create barriers to success.
• Lack of mentoring opportunities and retention strategies to retain employees of color and American Indians.
• MDH needs better hiring practices and better working conditions at MDH for employees from various groups, including the LGBTQ community.
• Lack of integration between educational institutions and MDH to identify, develop and retain students in public health programs and professions.
• No recognition or policies related to health professionals who obtained their education from another state, jurisdiction or country.
• Medical education and licensing policies create barriers for American Indians, African Americans and other populations of color and foreign born practitioners.

“MDH is a white-led organization and has policies and practices that reflect its white culture. It is not enough to ask “how do we get more people of color involved” or “how do we end health disparities” without looking at the very institution that maintains these practices. None of the work that MDH does or will do in its programmatic efforts will make the changes needed until MDH itself comes to understand how whiteness benefits and maintains the current practices and policies. The department [state] must look at itself first.”
Comments about grants and community capacity

- Organizations that come from and serve disadvantaged/disparate/community:
  - May not have a professional grant writer on staff.
  - May not be ready for implementation; need development phase.
  - May not have sufficient funds or staff to implement programs without an advance in funds.
  - May not have capacity for evaluation.
- Some organizations are part of a community with an oral culture, not as skilled at putting things in writing.
- Restrictive grant requirements, such as need for a certain level of insurance, are not realistic for small non-profits.
- Focus of grants on “outcomes” inhibits capacity-building potential of grants and limits flexibility; also does not allow for “failing forward.”
- Grantees would benefit from funds supporting culturally-competent staff.
- Financial management policies, contracting services and the grant making processes and procedures designed to benefit larger institutions and that create barriers to smaller, non-profits and community agencies.

“The issues facing our community are incredibly complex and interconnected. It is no longer enough to provide services to community members without doing anything to change the structural barriers to opportunity and health. Many people in our community are powerless over many aspects of their lives and it is this powerlessness that causes poor health not bad decisions, lack of motivation, or lack of education. The WHO claims that in order to address health disparities we MUST redistribute power... The current way that MDH and DHS distribute grants does little to address underlying distributions of wealth or power.”

Comments about community leadership and decision making

- Communities are not involved in decision-making. Several comments included, “who is at the table when policy is decided?” Lack of participation in decisions contributes to lack of trust of MDH, which in turn affects research, data, information gathering.
- Communities of color, the American Indian community and LGBTQ community need to be involved in the review of data and information and they need to decide which issues or problems are most important to their community.
- MDH advisory committees and task forces do not have adequate representation from diverse communities.
- People who make the decisions are not the people affected by the decisions; those who are making the decisions do not know what it is like to have to make a choice between eating or paying a bill.

“We tend to treat [diverse] communities as monolithic... and most can’t be represented by a single person or organization. How do you figure out who to work with in the community?”

“There is an overall mistrust of state agencies from communities of color and the American Indian community. Until leaders in these communities are always at the
Comments about health equity issues in other areas

Mental health
- Stigma and neglect of mental illness.
- Mental health issues in correctional institutions; substance abuse treated as a crime and not an illness, especially for African Americans.
- LGBTQ older adults experience higher rates of mental distress and are more likely to smoke and engage in excessive drinking than heterosexuals.
- Scarcity of pediatric mental health professionals.
- Discrimination in housing based on mental health/disabilities/behavioral health issues.
- Homeless in the inner city, especially those with serious and persistent mental illness, move from shelter to jail and then back to shelters.

Education
- Teachers, administrators and school nurses need training and assistance to work effectively with growing diversity in school, and to help children navigate changing demographics as well. Not talking about it is not a solution and leads to next generation carrying on the structural racism and exclusionist burdens experienced by their parents.
- Education fails to embrace the history and facts about diverse cultures, from grade-school on.
- Different cultural (and individual) learning styles not accommodated in education.
- Extra-curricular activities for children are important for academic success but are not evenly available across income/race.

Employment and income
- People of color earn (on average) 65 cents to the dollar earned by a white person.
- People of color are held to a different standard in the workforce.
- Low wage employment, unemployment and lack of paid sick leave are serious issues for many.

Health care/health insurance
- DHS policies create enrollment barriers and barriers for continued health care.
- Cultural beliefs not understood, and if known, not accepted by many in health care; Western bias prevails.
- Need to study what prevents people from seeking primary care.
- Interpreter reimbursement insufficient to meet need.
- Health plans do not reimburse traditional healers/traditional healing practices.
- Oral health not considered part of health care but huge issue for diverse populations.
- Lack of access to health care for undocumented workers.
- Rural access to services, need for transportation; provider to population ratios.

Housing
- Historical racism created current inequities; ongoing practices by realtors and lenders maintain the great disparities by race/ethnicity.
- Racial/ethnic discrimination by landlords.
- Residential segregation by race persists in Minnesota.
- Homeless need a structured housing alternative; they now move from shelter to jail and back.
• Affordable housing not available for larger families, such as immigrant families.

**Neighborhoods and environmental conditions**
• Low-income, racially diverse communities are more likely to live by [toxic] facilities or along major roadways with exposure to air-borne toxins.
• Property owners are responsible for dealing with [environmental] contaminants; low-income owners face economic challenges; renters do not get information, little ability to do anything about contaminants, especially if low-income; populations of color more likely to be renters, especially African Americans.

**Transportation**
• Over-emphasis on cars and roads, lack of alternatives and limited public transit contributes to disparities in access to employment for low-income families.
• Communities not considered and not consulted in placement of bus and light rail stops, freeway exits (I-94 bypasses North Minneapolis).

**Early childhood care and education**
• Even with incentives such as Child Care Assistance and Early Learning Scholarships, many low income families of color have difficulty accessing high quality, culturally appropriate child care.
• The Child and Adult Care Food Program funds (USDA) in Minnesota serve only licensed child care providers — thus limiting nutrition opportunities for low income families who choose unlicensed or Family Friend and Neighbor care.
• There are limited numbers of high quality providers serving communities of color and American Indian families as well as affordable choices for infant and toddler care.
• Children of immigrants and American Indian children lose language of home country without early childhood care with providers from their own communities.

> “Poverty is financial, emotional, mental, spiritual, physical, support systems, relationship/role models, and knowledge of hidden rules. Knowing this, we have to work collectively to address this. It is not about government, charity, republicans, democrats, conservatives or liberals. It is about identifying the problems, developing alternatives, determining the impacts of the alternatives, evaluating the impacts and trying solutions.”

**What leadership is needed to advance health equity in Minnesota?**
The question about leadership yielded strong as well as hopeful responses. The adjectives seen below emphasize the need for courage to address the issues of structural racism and other forms of discrimination and inequities to get at the roots of health inequities and move Minnesota forward.

**Minnesota leadership needs to be**
• Bold, courageous, strong, energetic; champions of health equity.
• Authentic, humble, willing to learn, willing to admit mistakes.
• Good negotiators, tactful and assertive.
• Risk-takers; out-of-the-box, willing to offend “the establishment.”
• Shepherds of the movement across departments.
• Collaborative, holistic.
• From different cultures and generations.
• Creative, flexible, adaptable.
Leadership actions needed include

- Help current and future leaders understand the long-term consequences of not addressing health inequities. Commit to making sure young people learn about and “get” what structural racism is and how it affects them and the whole community; develop in them a vision for a different future.
- Create the case for health equity for multiple audiences (e.g., businesses, legislators, local elected officials, corporations, community decision makers).
- Model collaborative leadership and collective action; convene collaborative conversations about structural racism and health equity.
- Make sure race gets “baked in” everything.
- Combine data by race with geographic data (mapping) for more compelling analysis.
- Help develop leaders in communities; assure broad representation from communities in every decision-making body.
- Expect, encourage and support flexibility and cultural competency among managers.
- Always reflect on and analyze program designs, decisions, actions and results, from structural racism and equity perspectives.
- Work with communities; use professional expertise and resources to support community capacity to work on the issues and public health concerns that are of most importance to the community.

Comments for MDH in particular

- Change the MDH mission and goals to include health equity; devote resources to health equity.
- Evaluate MDH stated organizational values of integrity, collaboration, respect, science and accountability within the context of the current, increasingly multicultural society; consider how these values affect decisions at the policy level.
- Have material on MDH website explaining how racism, historical trauma, sexism, heterosexism contribute to health inequities. Assure an ongoing media campaign, regular news releases about the factors that create health and the conditions that contribute to health inequities.

“MDH leadership needs to advance health equity by providing cultural competence and leadership development training for all employees, starting at the top. Cultural competence starts with knowing each of us carries a cultural understanding based on lived experience, family, community, education, employment, class as well as ethnicity, nationality, race, gender, disability, disease, and sexual orientation. Employees need a safe place to explore these ideals so they may better understand persistent inequality within the agency, our external partners and move the agency and Minnesota toward health equity so that our mission is achieved.”

What data are needed to advance health equity in Minnesota?

For several years, MDH has been investigating and discussing the need for changes to data collection systems and analysis, especially with regard to race, ethnicity, and language. The section on data in this legislative report describes those issues in more detail. A question on the inquiry survey also yielded a number of similar comments about data.

Comments related to data collection and analysis

- MDH does an excellent job of data collection (e.g., demographic data) and the same data are available to the general public. However, there is need for improvement in terms of accessibility,
availability, and usability of community-specific data to help small community based organizations to plan and develop programs that are evidence-based and can produce desired outcomes.

- MDH lacks usable data as relates to the LGBTQ population, and there is greater need than ever to reach out to this particular segment of the population in order to address health inequities.
- We need state support for oral health data collection efforts, which will give a better picture of oral health inequity in MN.
- Most of the data collected in surveys are disjointed and do not directly address the issue of health equity in a manner that can be formulated into actionable steps.
- MDH does not collect data based on tribal affiliation, rather, health data is collected by county of residence; the assumption is made that data collected at the county level has the same value as tribal data.
- Lack of demographic data for all health occupations.
- Data collection is metro-centric (due to larger numbers).
- Lack of community input concerning the type of data to be collected and analyzed (e.g., HIV/AIDS).
- Data collection approaches do not recognize oral traditions (Eastern and Western cultures), e.g., storytelling as a valid form of information; lack of funding for qualitative data collection.
- MDH surveillance data does not include environmental factors, such as land use planning, safe neighborhoods, adequate places to walk and play.
- Lack of data on the smallest or rural populations.
- The many different Asian populations are grouped together for the purpose of data collection, analysis and programming, which can result in health inequities depending on the specific population.
- Data are derived from people who go to clinics, but not those who do not use the health care system.
- Health surveillance systems do not capture data affecting health outcomes, such as gun violence.
- A lack of adequate risk adjustment and culturally appropriate data collection methodology creates flaws in the statewide quality measurement and reporting system, which negatively impacts the most economically disadvantaged and culturally diverse populations and their service providers.
- Little to no data collection and analysis of demographic data in employment and health occupations.
- Little to no accountability and consistency in measuring program results in public and privatized health, including mental health.
- Limited investment in policy analysis and capacity to examine alternative approaches to advancing health equity.

“It is important to be counted.”

Lessons learned

While recognizing that the report is just one part of MDH efforts toward advancing health equity, after the inquiry process was complete, reflections were sought from the MDH staff who led this effort about how this process worked and what lessons should be carried forward (quotes from those who reflected on this process are included in italics).
People are willing to grow in leadership on these issues. The AHE inquiry process provided new opportunities and a positive channel for many at MDH to take on a leadership role not previously available to them, to take risks and to challenge the status quo. These doors were opened because the inquiry process provided a context for addressing health equity, structural racism and other systemic inequities in programs, practices and policies in a way that connects with many individuals’ personal values. The process also allowed for acknowledging mistakes and becoming more aware of personal biases as well as assumptions embedded in MDH programs, practices, policies and systems.

“The learning here within MDH I hope has been that we need to be leaders in the conversation. This doesn’t mean we’re always going to be right or that we won’t have bad days. Being a leader is just as much about how you get up as it is about how you run the race.”

New relationships are needed. The process consistently taught the importance of building the right kind of deep, credible relationships in the community, what voices are missing, what groups are empowered, which ones are marginalized, and how to ensure that an inclusive space is always made for all voices to be heard and included in the process.

“I witnessed conversations between individuals usually at odds with each other around basic values sit at the table and agree with each other about the basic premise of this work, actually agree.”

The compressed timeline for development of this report meant that MDH relied on existing partnerships and stakeholder relationships, with limited reach into deeply affected communities. This resulted in gaps in the ability of MDH to adequately solicit and include input from all the racial/ethnic populations impacted by deep and persistent health inequities. It also led to feelings of uncertainty about the vision, plan and leadership after the inquiry process was completed and the report submitted to the legislature.

“Externally and internally, we could have been more thoughtful about offering what’s next. We’ve had no strong answer for folks about where do we/will we go from here. Internally we need to have more to tell folks about how we are explicitly creating a new structure for how we get work done at MDH.”

Talking about racism is not — will not be — easy. Leaders in MDH encountered some internal resistance to the idea of opening the inquiry process with race and structural racism, as well as resistance to challenging and changing existing structures and practices. It is felt that people are not prepared for discussions about race, structural racism and other inequities and that engaging in these conversations can be uncomfortable and challenging across all levels of staff, supervisors and management.

“These things happened a long time ago before I was around” … “How is this going to be any different?” … “How will this process challenge current norms and not just lead to the same behavior that causes persistent disparities?” … “We don’t need another report; we already know the problem.”

Yet the inquiry discussions that focused on structural racism also created opportunities for a different kind of dialogue and interaction between colleagues and partners.
Appendix A: Laws of Minnesota 2013, Chapter 108, Article 12, Section 102

Sec. 102. HEALTH EQUITY REPORT.

581.12 By February 1, 2014, the commissioner of health, in consultation with local public
health, health care, and community partners, must submit a report to the chairs and ranking
minority members of the committees with jurisdiction over health policy and finance, on a
plan for advancing health equity in Minnesota. The report must include the following:

581.16 (1) assessment of health disparities that exist in the state and how these disparities
relate to health equity;

581.18 (2) identification of policies, processes, and systems that contribute to health
inequity in the state;

581.20 (3) recommendations for changes to policies, processes and systems within the
Department of Health that would increase the department's leadership in addressing health
inequities;

581.23 (4) identification of best practices for local public health, health care, and community
partners to provide culturally responsive services and advance health equity; and

581.25 (5) recommendations for strategies for the use of data to document and monitor
existing health inequities and to evaluate effectiveness of policies, processes, systems,
and environmental changes that will advance health equity.
Appendix B: Minnesota Department of Health
Mission, Vision, and Values

MDH Mission
Protecting, maintaining and improving the health of all Minnesotans\textsuperscript{142}

MDH Vision
Keeping ALL Minnesotans Healthy

MDH Values

**Integrity**
We are honest, trustworthy and transparent in all we do. We strive to do the right thing to achieve the best public health outcomes.

**Collaboration**
We value the diversity and unique contributions of our employees and partners. We develop positive relationships, foster innovative solutions, and strengthen our capacity to accomplish our mission.

**Respect**
We uphold a standard of conduct that recognizes and values the contributions of all. We foster a working environment in which listening to and understanding our differences is encouraged and confidences are protected.

**Science**
We use the best scientific data and methods available to guide our policies and actions to promote healthy living in Minnesota. We rely on the objective facts of evidence-based science to build a strong foundation to address health needs and concerns.

**Accountability**
We are effective and efficient managers of the public trust and public funds, and hold ourselves and others to appropriate high standards. We operate with open communication, transparency, timeliness, and continuous quality improvement.

\textsuperscript{142} Minnesota Statutes 144.05, Subdivision 1. Retrieved from: https://www.revisor.mn.gov/statutes/?id=144.05
Appendix C: Advancing Health Equity Participants

MDH Coordinating Committee
Jeanne Ayers, Project co-lead
Melanie Peterson-Hickey, Project co-lead
Ellen Benavides
Dorothy Bliss
Debra Burns
Jose Gonzalez
Aggie Leitheiser
Manny Munson-Regala
Jeannette Raymond
David Stroud
Megan Waltz

Organizations participating in the inquiry process
Over 1,000 people participated in the inquiry process, as individuals and as organizational representatives. This list of organizations may be incomplete as this information was not always provided. (*=EHDI Grantee)

American Association of Retired Persons (AARP)
Affiliated Community Medical Centers (ACMC)
African American Pastors Elders Council
African Chamber of Commerce
Alliance for Racial and Cultural Health Equity (ARCHe)
Allina Health
American Cancer Society - Health Equity Team
American Indian Family Center*
American Lung Association
Annex Teen Clinic*
Asian American & Pacific Islander Health Coalition
Asia-Pacific Academic Consortium for Public Health (APAC)

Austin Public Schools
Avera: Hospitals, Clinics, Physicians and Health Care Services
Axis Medical Center*
BCBS Center for Prevention
BCBS of Minnesota Foundation
Better Futures of Minnesota
Big Brothers Big Sisters*
Care Providers of Minnesota and Aging Services
Centracare Health
Centro Campesino
Check Yo' Self Health & Wellness Center at High School for Recording Arts
Chicano Latino Affairs Council
Children’s Health International
Children’s Hospital
Children’s Hope International /R & R Family Centers
Chinese Social Service Center
City of Minneapolis Public Health
Clayton County Public Health
ClearWay MN
Communidades Latinas Unidas En Servicio (CLUES)
Community University Health Care Center (CUHCC)*
Council on Asian Pacific Minnesotans
Courage Center/Kenny Rehab Institute
Crown Medical*
Department of Administration, Materials Management Division
Dream of Wild Health
Duluth District Office
Eagan Resource Center
Early Childhood Health Equity Group
Early Learning Council Rural and Special Populations Subcommittee
ECHO Minnesota
Edina Public Schools
Entira Family Clinic
Fairview Health Services
Girls, Inc. YWCA
Greater Minneapolis Council of Churches - Division of Indian Work*
HCMC Health Equity Roundtable
Headwaters Foundation for Justice and ClearWay Minnesota (Policy Champions Committees)
Health Care Homes Learning Collaborative Advisory Group
Health Equity Data Collection Collaborative
Health Equity for Young Children Workgroup
Health Equity Working Committee (HEWC)
Health, Human Services and Housing Policy Committee - Minnesota Legislature
HealthEast Care System
HealthFinders Collaborative*
HealthPartners (Institute for Health & Research)
Healthy Minnesota Partnership
Hennepin County APT
Hennepin County Human Services and Public Health Department (HSPHD)
Hennepin County Medical Center
Hennepin County Public Works
Indian Affairs Council
Indian Health Board
Indigenous Peoples Task Force
ISAIAH (Health Equity Core Team)
Itasca Project
Karen Organization of Minnesota
Lao Family Community of Minnesota*
Lao Family Wellshare
Leadership and Advocacy Institute to Advance Minnesota's Parity for Priority Populations (LAAMPP)

Legacy Family Center

Local Public Health Association (LPHA)

LPaC Alliance/Halleland Habicht

Lutheran Church of the Redeemer, St. Paul

Mayo Clinic

MDH Birth Defects Interest Group

MDH Center for Health Promotion and Chronic Disease Division

MDH Center for Health Promotion: Diabetes, Injury & Violence Prevention, Heart Disease & Stroke Prevention, Oral Health Program

MDH Child and Adolescent Health Units

MDH Community and Family Health Division

MDH Community and Family Health Division Management Team

MDH Compliance Monitoring Division

MDH Division of Compliance Monitoring

MDH Early Childhood Health, Children and Youth with Special Needs Interest Group

MDH Environmental Health, Health Promotion and Chronic Disease Divisions

MDH Grant Managers Workgroup

MDH Health Communicators

MDH Immunization Outreach Unit

MDH Division of Infectious Disease Epidemiology, Prevention and Control

MDH Leadership Team

MDH Maternal and Child Health Advisory Taskforce

MDH MN Climate and Health Group

MDH Office of Health Information Technology

MDH Office of Performance Improvement

MDH Office of Rural Health and Primary Care

MDH Office of Statewide Health Improvement Initiatives

MDH Oral Health Program

MDH OT Practitioner Advisory Council

MDH Public Health Nurse Consultants

MDH Race to the Top Workgroup

MDH STD/HIV Section and MN HIV Prevention Grantees

MDH Tuberculosis Prevention and Control Program

MDH WIC Program

MDH Workforce Team

MDH Tobacco Prevention and Control Program and community grantees

Metropolitan Council

MidWest Solidarity Movement

Minneapolis American Indian Center*

Minneapolis Health Department

Minnesota AIDS Project

Minnesota Association of Community Health Centers

Minnesota Cancer Surveillance System

Minnesota Council of Health Plans
Minnesota Council of Nonprofits
Minnesota Department of Education
Minnesota Department of Transportation
Minnesota Health Care Safety Net Coalition
Minnesota Hospital Association
Minnesota Legal Services
Minnesota Medical Association Minority & Cross-Cultural Affairs Committee
Minnesota Pollution Control Agency
Minnesota Public Health Association
Minnesota Transgender Health Coalition
Minnesota Visiting Nurse Association (MVNA)
Minnesota Chapters of the American Academy of Pediatricians and the Academy of Breastfeeding Medicine
National Asian Pacific American Women's Forum*
National Association of Mental Illness (NAMI)
Native American Center
Neighborhood HealthSource
Neighborhood House
North Memorial Hospital
North Metro Pediatrics P.A.
NorthPoint Health & Wellness Center*
NW Hennepin Family Service Collaborative
Occupational Therapy Council
Office of Governor Mark Dayton
Olmstead Medical Center
Outfront Minnesota
Park Nicollet
People’s Center
Pillsbury United Communities (PUC)*
Planned Parenthood
Power for Babies (Equity Conversation)
Prenatal to Three Regional Teams
Professors, researchers, staff and students from the University of Minnesota Center for Allied Health, Occupational Therapy Program and Department of Speech-Hearing-Language College of Liberal Arts
Rainbow Health Initiative Roundtable and Health Advocacy Coalition
Ramsey County
Red Lake Indian Health Service Hospital
Region's Hospital
Rural & Special Populations Subcommittee of Early Learning Council
Safety Net Coalition
Sagu Services
Saint Mary's Clinic*
Sanford Health
Second Harvest Heartland
SEIU Healthcare Minnesota
Senator Scott Dibble
Senator Al Franken’s staff
Southern Minnesota Initiative Foundation
Advancing Health Equity in Minnesota – 115 – February 2014

St. Catherine's University, Occupational Therapy
St. Cloud Medical Group
St. Paul Area Council of Churches (SPACC)*
Stairstep Foundation
State Community Health Services Advisory Committee (SCHSAC)
Stratis Health
Take Action
The Neighborhood Hub*
Tobacco Free Communities Grantees
Training to Serve
Tribal Health Directors
UM - Comprehensive Cancer Control Working Group
UM - MN Center for Cancer Collaborations and Center for Health Equity
UM - Prevention Research Center Advisory Network (CAN)
UM - School of Public Health
UMN, SLHS, Graduate Studies and Clinical Programs
United Way of West Central Minnesota
Vietnamese Social Services
Watonwan County Public Health
Wellshare International*
White Earth Service Unit, Indian Health Service
White Earth Substance Abuse Program
Wilder Foundation
WISE, Inc.
YWCA of Minneapolis*
Appendix D: Redlining and Infant Mortality in Minneapolis, Minnesota

Historical map of Minneapolis showing redlining

Redlining was used across the U.S. from the 1930s to the 1970s. It is “the practice of arbitrarily denying or limiting financial services to specific neighborhoods, generally because its residents are people of color or are poor.”\(^{143}\) Color-coded maps indicated which neighborhoods were considered lesser (green=best; blue=still desirable) or greater (yellow=declining; and red=hazardous), investment risks, which included the practice of mortgage lending. This historical map of Minneapolis is an example of this practice of redlining.\(^{144}\)

The consequences of financial disinvestment are closely linked to social and economic decline in neighborhoods across the country, which in turn is associated with poorer health outcomes. The map on the next page shows the infant mortality rate in Minneapolis in 2010. Higher infant mortality rates correspond very closely with the neighborhoods that were coded yellow and red.


Infant mortality rates in Minneapolis by neighborhood, 2001–2010

This map shows infant mortality rates by neighborhood in the City of Minneapolis. The areas with the higher rates of infant mortality correspond closely with the areas marked red and yellow on the previous “redlined” Minneapolis map.\footnote{Map provided by the Minneapolis Health Department Research and Evaluation Division, January 29, 2014.}

\[145\]
References


California WIC Association; UC Davis. (2013). *Policies, Promises, and Practice: Supporting Breastfeeding Across the Continuum of Care*.


King County, WA. (2013, December 2). *King County Equity and Social Justice.* Retrieved from King County, WA: http://www.kingcounty.gov/exec/equity/toolsandresources.aspx


